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MORDER-SERVER FOOD SERVICE

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
in
Computer Science


by
Chieh-Chou Chou
March 2004

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A Project
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March 2004

Approved by:



Dr. Richard Botting, Chair, Computer
Science

Mar 1st 2004
Date



Dr. David A. Turner



Dr. Ernesto Gomez

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ABSTRACT

mOrder-Server table service offers Point Of Sale functionality in a restaurant. It helps waitresses and waiters to make orders easily. Also, its management functions intuitively help the manager to manage the restaurant. The manager can easily edit the menu, check the sales report, discover the top sales, and so on. An intuitive touch screen puts the user in control with the touch of a finger, allows the manager to decrease training time and increase employee productivity.

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CHAPTER ONE

SOFTWARE REQUIREMENTS SPECIFICATION

1.1 Introduction

The content of Chapter One presents an overview of the project. The context of the problem is discussed followed by the purpose, significance of the project, and assumptions. Next, the limitations that apply to the project are reviewed. Finally, definitions of terms are presented.

1.2 Purpose of the Project

The goal of this Master's project is to develop a Point Of Sale system which helps owners to cut restaurant losses, improve customer service, reduce employee mistakes, and increase profitability. mOrder-server is touch screen operated Point Of Sale, easy to follow screen layouts, and the simplicity of Windows based interface, the user will be able to use the software in a matter of minutes. Moreover, there is no prior computer knowledge required from users so waitresses and waiters do not have to memorize product codes. It saves time and money training staff.

1.3 Context of the Problem

There are three major problems in the target restaurant. First, the restaurant uses a common cash register, a calculator with a receipt printer. Therefore, staffs have to memorize item prices and item codes. There are over 300 items in the restaurant providing the menu for my project. It takes about 2~3 weeks to train a new staff memorizing the most popular product codes. Second, the manager can not analyze the sales. The manager wants to eliminate slow-selling products but the cash register does not have statistical reports. Finally, in some cases, the staff does not charge for his/her friends, when they eat at the restaurant. It is a loss for the restaurant.

1.4 Significance of the Project

mOrder-Server is designed for touch screen operated Point Of Sale terminal. Intuitive touch screens put the staff in control with the touch of a finger. The staffs easily follow screen layouts. They do not have to memorize any product codes and prices. It can reduce employee mistakes and increase profitability. Moreover, the manager knows what items are popular. The last one and most important is that because all orders have to be inputted to the mOrder-Server system, order information will be

sent to mOrder-Kitchen[1] through a network. Cooks have to follow mOrder-Kitchen to cook. mOrder-Server can record every order. It can prevent losses like when staff do not charge his/her friends.

1.5 Assumptions

The following assumptions were made regarding the project:

1. All waitresses only serve the tables that they are responsible for.
2. All cooks only cook the orders showing in the mOrder-Kitchen which is developed by Li Qiu[1].

1.6 Limitations

For mOrder-Server, it is useful for managers to manage business. However, to be commercial, it must have good looks.

1.7 Definition of Terms

The following terms are defined as they apply to the project.

Table 1. Definition, Acronyms and Abbreviations

GUI	Graphical User Interface. The graphical representation of physical or pseudo-physical objects (such as buttons, trees, and lists) that allow the user to direct the flow of the program through the use of a mouse or other pointing device.
.NET	Microsoft® .NET is the Microsoft XML Web services platform. XML Web services allow applications to communicate and share data over the Internet, regardless of operating system, device, or programming language.
SQL	SQL (Structured Query Language) is a standard interactive and programming language for getting information from and updating a database.
Visual Studio 6.0	It is an integrated development environment (IDE) from Microsoft in which a programmer uses a graphical user interface (GUI) to choose and modify preselected sections of code written in the choice programming language.
Windows XP	A member of the Microsoft Windows family of operating systems. Windows XP was released in 2001 in two versions: Windows XP Home Edition for home use and Windows XP Professional for advanced home computing, businesses, and larger organizations. Windows XP features a new visual design that simplifies navigation and search capabilities, improved file management, additional media and Web publishing capabilities, an improved system for device discovery and installation, and advanced features for mobile computing.
Microsoft Access	A Microsoft software product is primarily a data management tool (database software). Microsoft Access has tools to enter, edit, and index data and to retrieve data via custom forms and reports. It also contains Visual Basic for applications.
SQL Server	Structured Query Language server. A computer that provides client computers with highly efficient access to database files.
ADO	ADO provides developers with a powerful, logical object model for programmatically accessing, editing, and updating data from a wide variety of data sources through OLE DB system interfaces. The most common usage of ADO is to query a table or tables in a relational database, retrieve and display the results in an application, and perhaps allow users to make and save changes to the data.
POS	Point Of Sale

1.8 Organization of the Project

The project portion is divided into five chapters. Chapter One provides software requirements specification, an introduction to the context of the problem, purpose of the project, significance of the project, limitations, and definitions of terms. Chapter Two consists of the software design. Chapter Three documents the steps used in testing the project. Chapter Four presents the user's manual from the project. Chapter Five presents conclusions drawn from the development of the project. The Appendices containing the project follows Chapter Five. Finally, the references for the project are presented.

CHAPTER TWO

SOFTWARE DESIGN

2.1 Introduction

Chapter Two consists of a discussion of the software design. It includes preliminary design, detailed design, and software design.

2.2 Preliminary Design

Before doing the project, I considered which development tools and databases apply to the project. C++, comparing with Visual Basic, is more complex and takes more time to achieve the same goal. Also, C++ is hard to debug. The benefits of Visual Basic are that it is easy to develop an application and maintain the code. Therefore, I choose Visual Basic as the development tool. For database, I consider Microsoft SQL server and Microsoft Access. SQL server performs rapid, sophisticated analysis on large and complex data sets using multi-dimensional storage. The orders of the restaurant are not over 500 per day. Also, there are no more than 4 computers in the restaurant. Microsoft Access is enough to handle such data and much cheaper than SQL server. Therefore, I choose Microsoft Access as the database in my project.

2.3 Detailed Design

There are two major parts of the mOrder-Server. One is the order function and another one is management. A waitress logins with his/her ID and password, places orders and then checks out. Another one is management. A manager logins as "Administrator" and s/he can add, delete, or update data (store information, employees, menus and so on) in mOrder-Server system. The order functions of a manager is the same as a waitress. Figure 1 is the state diagram of order function.

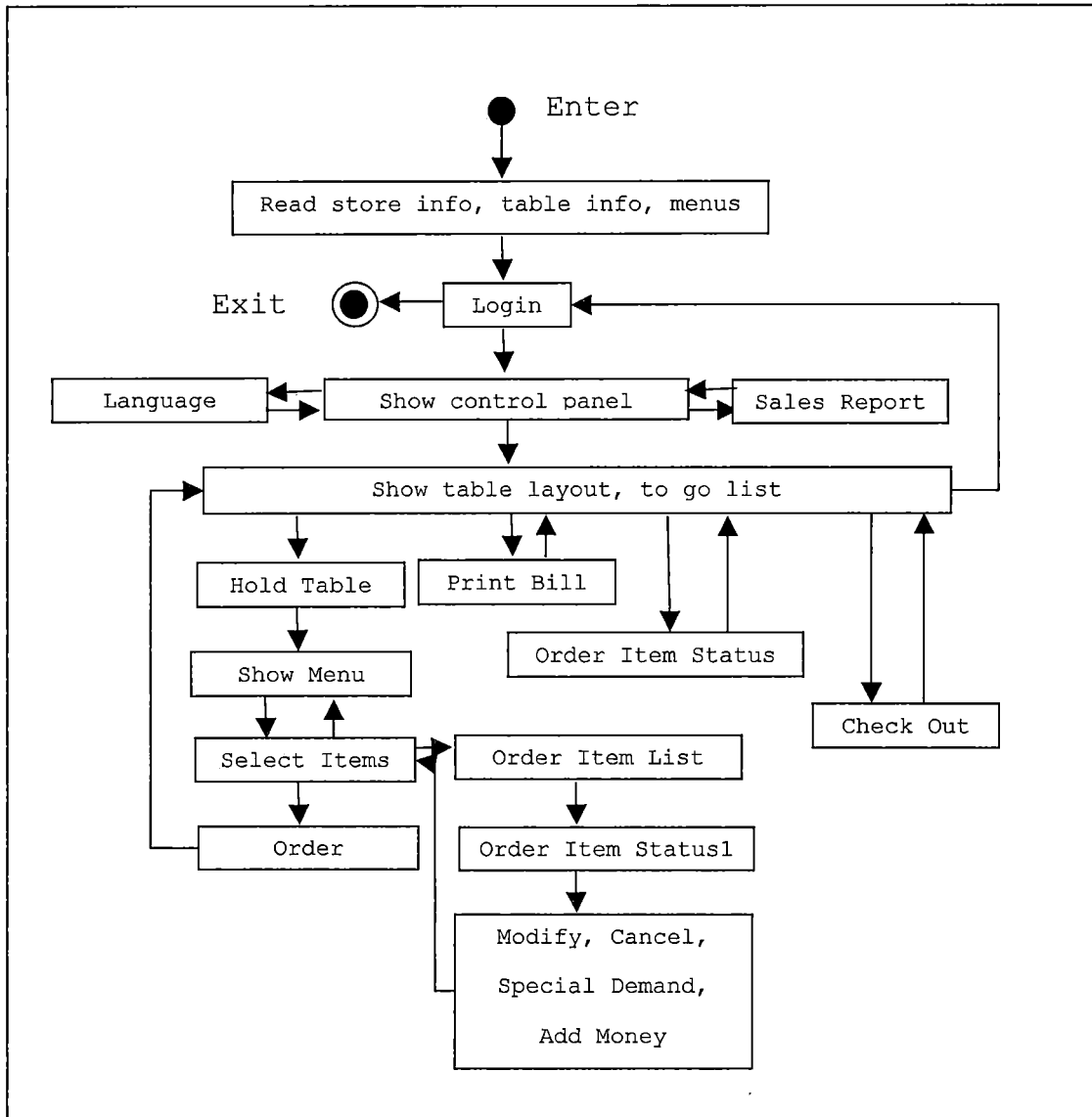


Figure 1. Waitress State Diagram

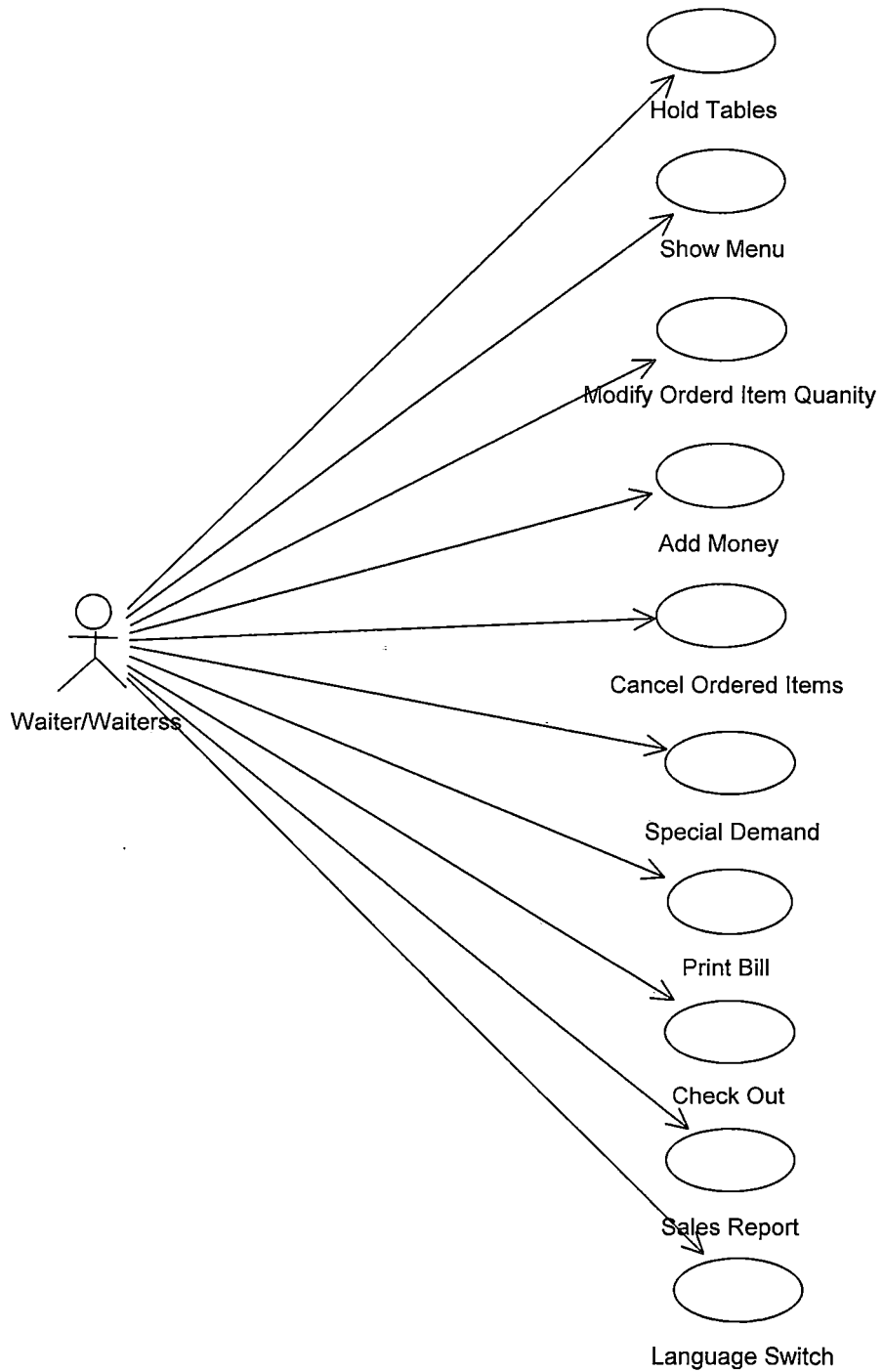


Figure 2. Waitress Use Case Diagram

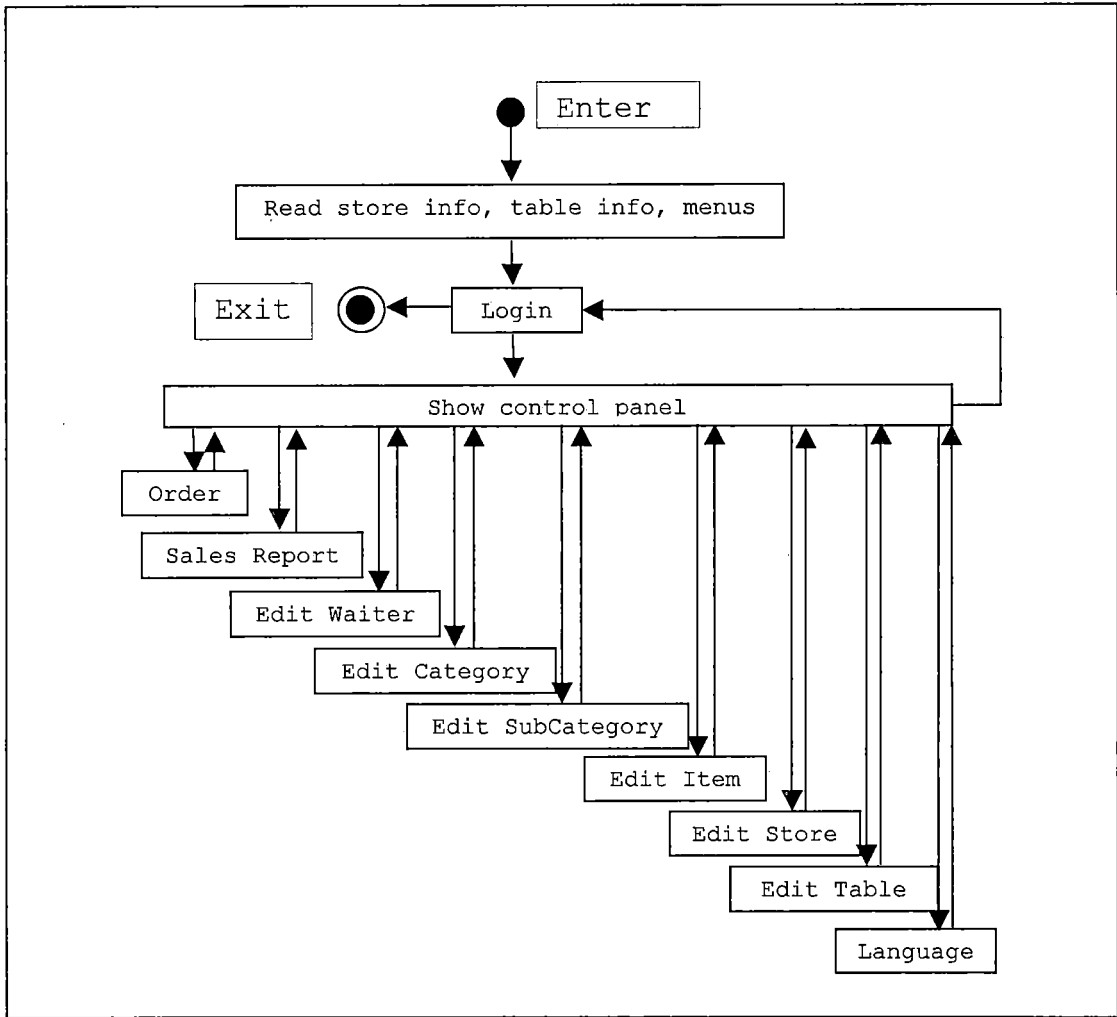


Figure 3. Manager State Diagram

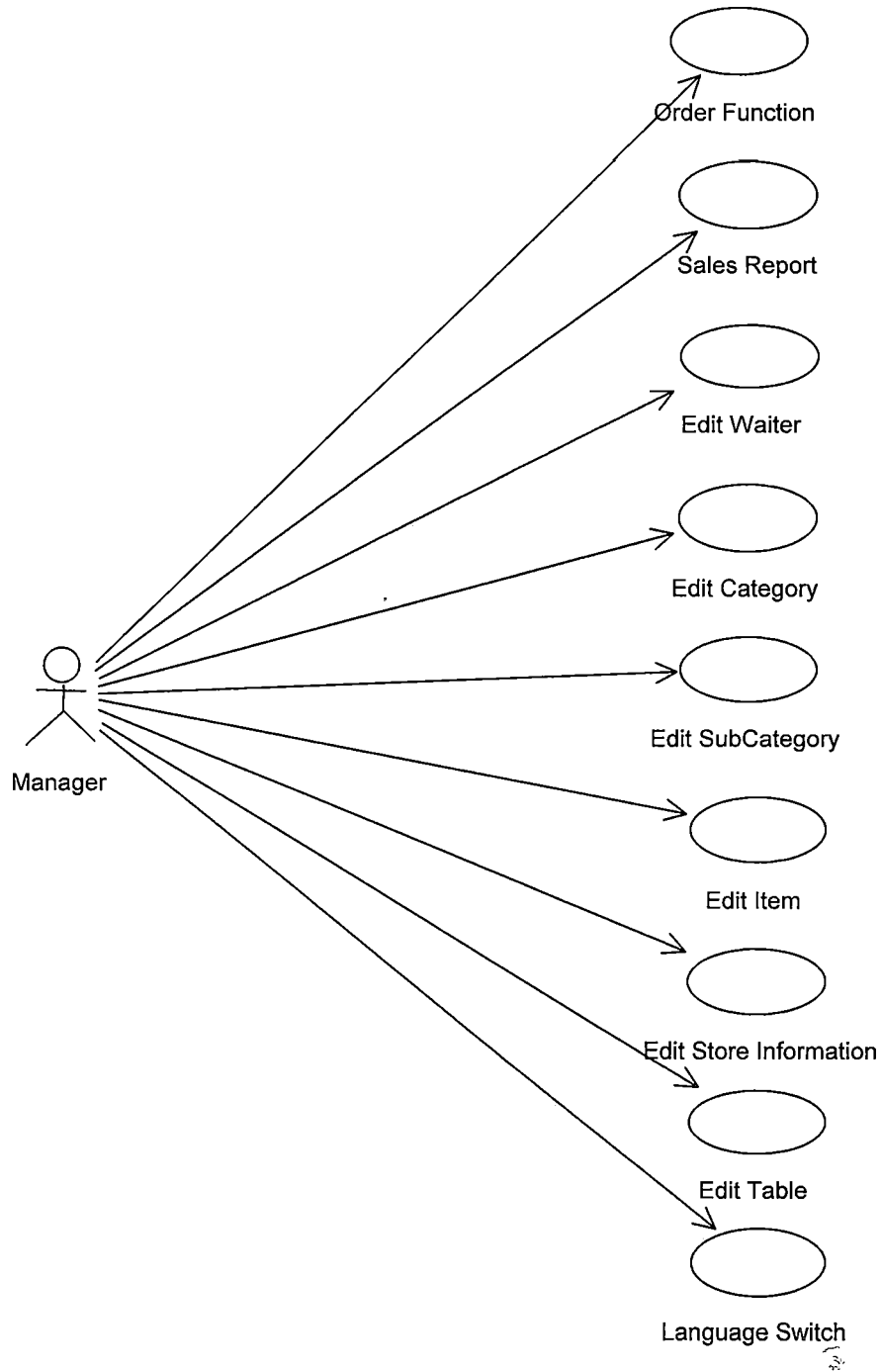


Figure 4. Manager Use Case Diagram

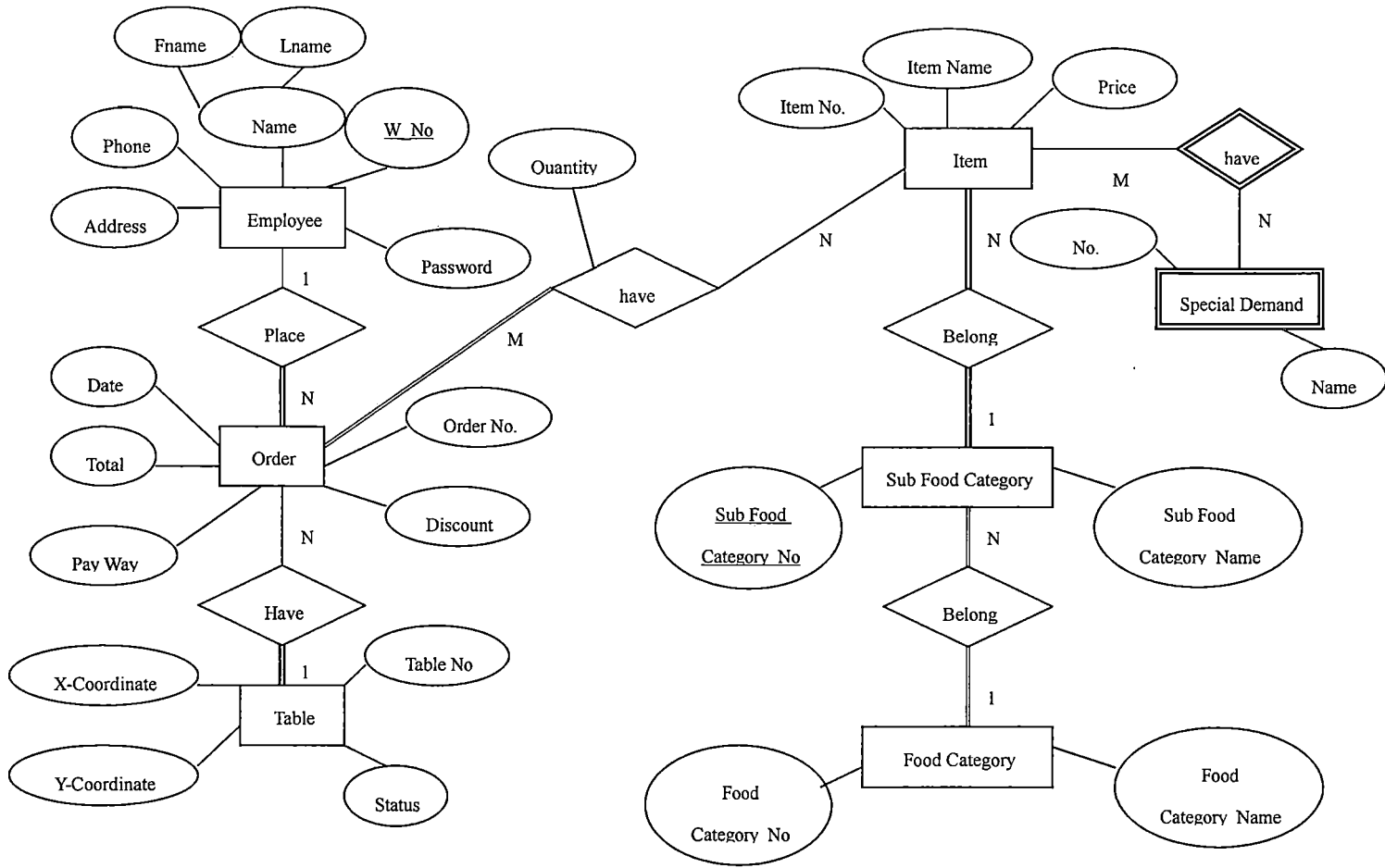
2.4 Software Design

Software design of mOrder-Server system is divided into three parts. They are database design, waitress order function and manager management.

2.4.1 Database Design

For mOrder-Server database application, the restaurant database that keeps track of order items, ordered item status. It stores employee information, store information, category, subcategory and item information. The ER diagram is shown in Figure 5.

Figure 5. mOrder-Server ER Diagram



For each employee, the database maintains password, name, address and phone number. A waitress can place many orders, but an order can be only placed by one waitress. So, the relationship between an order and waitress is N: 1. The participation of order is total, whereas that of employee is partial.

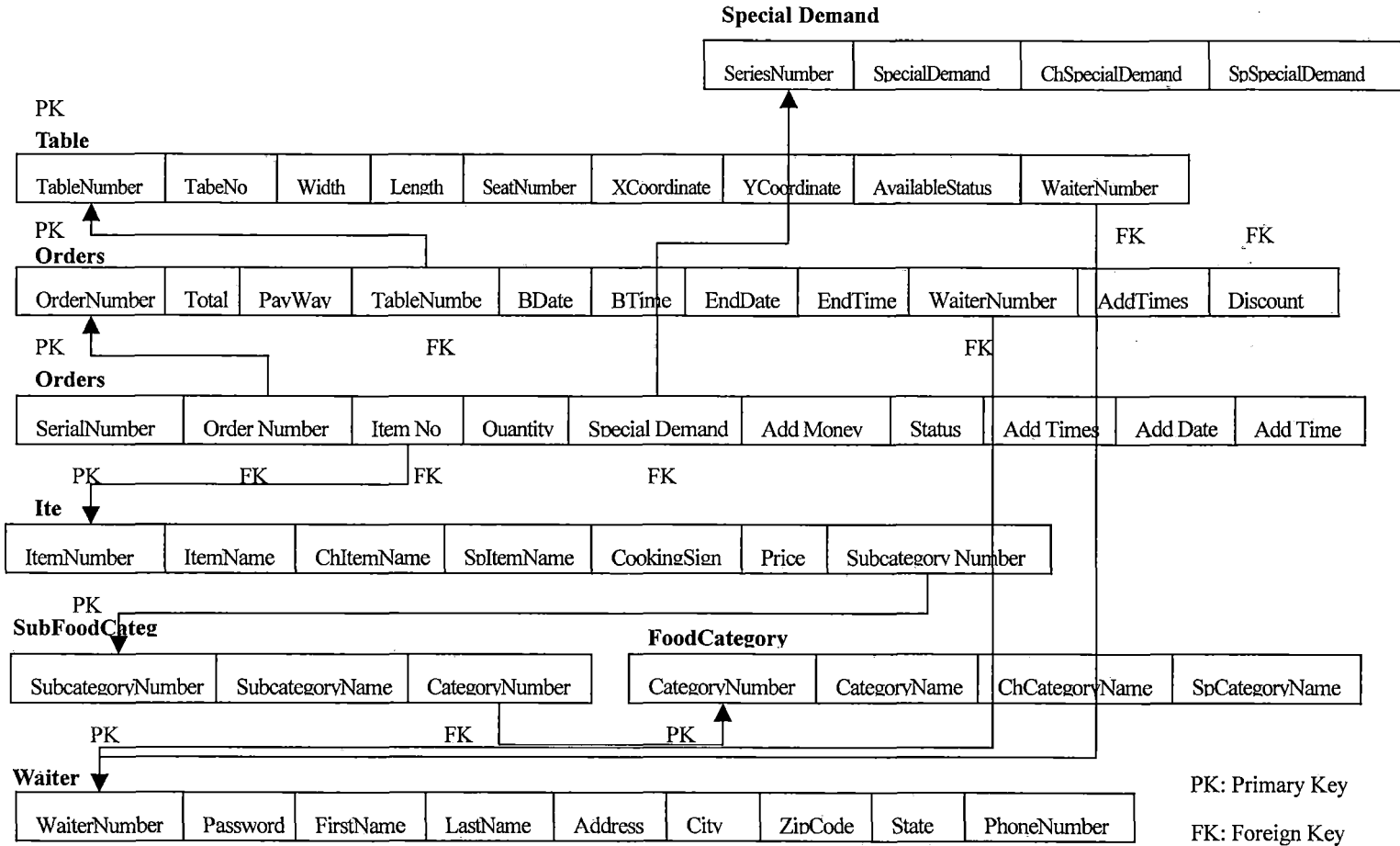
An order has the attributes order number, total, pay way, date, and discount. Each order is related to a table whose attributes are table number, X coordinate, Y coordinate, and available status. An order is for one table, but a table can have many orders. The relation between table and order is 1:M. The participation of table and order are total.

Each order has at least one item and an item can be in many orders. So, the relationship between order and item is M: N. Both participations are total. An item has the attributes, item number, item name, cooking sign (show the item which is cooking or not), and price. Each item belongs to a sub category and each sub category belongs to a category.

The relationship between item and sub category is 1:1. Both participations are total. The relationship between sub category and category is 1:1. Both participations are total. In the order items table, order number and item

number is a composite key. It is more complex if a customer orders the same item more than once. For example, a customer orders a cake first time and he wants to order again. The system has to check if the order number and item number exist. If yes, mOrder-Server updates the quantity of the database. It makes the program more complex and easy to make mistakes. I create a primary key, called serial number (automatically generated by database), replacing composite key (order number and item number). Therefore, mOrder-Server does not have to check if the order number and item number exist or not. The job only inserts a new order number, item number and quantity into the database. See figure 6. the relationship diagram.

Figure 6. Relationship Diagram



2.4.2 Waitress Function

mOrder-Server has two functions for a waitress, order function and sales report. First, mOrder-Server reads table information and menus. The SQL is as follows:

```
sTableQuery = "SELECT TableNumber, TableNo, AvailableStatus, SeatNumber,  
XCoordinate, YCoordinate, Width, Length, Shape FROM Tables WHERE  
HallNumber=1"
```

Figure 7. Read Table Information

```
sReadFoodCategory Query = "SELECT CategoryName, ChCategoryName FROM  
FOODCATEGORY"
```

Figure 8. Read Food Category

```
sReadItemInfoQuery = "SELECT ItemNumber, ItemName, Price FROM Item,  
Subfoodcategory WHERE item.SubcategoryNumber =  
Subfoodcategory.SubcategoryNumber AND CategoryNumber= CStr(j) ORDER BY  
ItemNumber ASC"
```

Figure 9. Read Item Information

```
sReadToGoOrderInfoQuery = "SELECT OrderNumber, BeginningDate,  
BeginningTime, Total, AddTimes FROM Orders WHERE EndDate IS NULL AND  
TableNumber= (SELECT TableNumber FROM Tables WHERE SeatNumber='0')"
```

Figure 10. Read To Go Order Information

A waitress has to login to the system. If this passes, the control panel will show up. It has two options for a waitress. In order function, it will show table layout and to go list.

The next step, a waitress has four choices. The first one is "add item". mOrder-Server shows up menus and items. All ordered items are stored in memory before pressing "confirm" button. After pressing "confirm" button, all ordered items are inserted to the database.

```
sInsertOrderItems2DBQuery = "INSERT INTO OrderItem(OrderNumber,  
ItemNumber, Quantity, SpecialDemand, CookingSpecialDemand, AddMoney,  
Status, AddTimes, AddDate, AddTime) VALUES (orderNumber ,  
OrderItemNumberLabel(i).Caption ,OrderItemQuantityLabel(i).Caption ,oderItemD  
emandLabel(i).Caption' ,PrOrderItemDemandLabel(i).Caption',  
OrderItemAddMoneyLabel(i).Caption ,0, CStr(addTimes), 'CStr(Date)',  
CStr(Time))"
```

Figure 11. Insert Ordered Items to Database

The second one is printing bills. The printer object in VB can not accurately get printer information. So, the output is not automatically at the correct position. I refer to the programmer's manual [5] for the codes to

position it correctly. The following table shows the Star Mode commands that are supported by the Star receipt printer.

Table 2. Control Code List

Function	Control Codes	Hexadecimal Codes
Centering	<ESC><GS>"a" "1"	1B 1D 61 31
LeftJustification	<ESC><GS>"a" "0"	1B 1D 61 30
FontSize(Width)	<ESC>"W" "1 or 0"	1B 57 31
FontSize(Height)	<ESC>"h" "1 or 0"	1B 68 31
Full Cut Command to the auto cutter	<ESC>"d" "2"	1B 64 32
Linefeed	<LF>	0A

The major code of the printer object is as follows:

```

Public Sub OpenPrinter()
    Open "lpt1" For Output As #1
End Sub

Public Sub Center()
    Print #1, Chr(&H1B); Chr(&H1D); Chr(&H61); Chr(&H31);
End Sub

Public Sub LeftJustification()
    Print #1, Chr(&H1B); Chr(&H1D); Chr(&H61); Chr(&H30);
End Sub

Public Sub FontSize(s As Integer)
    Print #1, Chr(&H1B); Chr(&H57); Chr(s); Chr(&H1B); Chr(&H68); Chr(s);
End Sub

Public Sub ClosePrinter()
    Print #1, Chr(&H1B); Chr(&H64); Chr(&H32) 'cut function
    Close #1
End Sub

```

Figure 12. StarPrinter Object

The third one is checking order item status. In this function, a waitress can check what items have already ordered. A waitress can also cancel the items which are not yet cooked.

The last one is the payment function. In the function, the database will be updated by the following SQL:

```
sPaymentQuery = "UPDATE Orders SET Total =  
FormatNumber(TotalLabel.Caption, , vbTrue, , vbFalse), PayWay ='str1',  
Cashier='WaiterNumber' WHERE OrderNumber = orderNumber"
```

Figure 13. Update Order

and then update table status as available.

```
sSQLQuery = "UPDATE Tables SET AvailableStatus = str2 , WaiterNumber =str4  
WHERE TableNumber = str3 AND AvailableStatus = Not (str2)"
```

Figure 14. Update Table Status

2.4.3 Management Function

A manager can access all functions that a waitress has. Besides, a manager has additional functions, editing waiter, editing category, editing sub category, editing item, editing store information, and editing table. The editing function uses ADO data control to manage the connection between mOrder-Server and the database and allows the data-aware control to view and manipulate the data in a database.

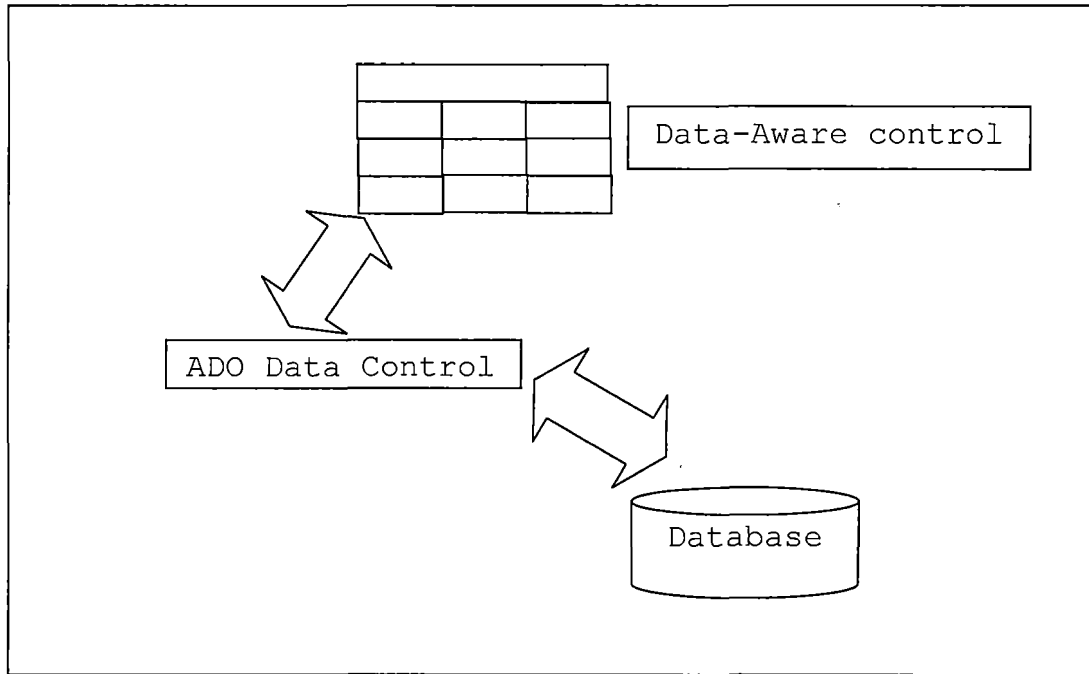


Figure 15. ADO Data Control

CHAPTER THREE

SOFTWARE QUALITY ASSURANCE

3.1 Introduction

Chapter three documents software quality assurance. mOrder-Server is a database server. In this chapter, I record checking the database and application. It includes the unit test plan and the integration test plan.

3.2 Unit Test Plan

Table 3. Database Unit Test Plan

Unit Tested	Test Performed	Results
Access database engine	Check the Microsoft Jet engine.	Pass

Table 4. Waitress Unit Test Plan

Read Table Information	Show table layout and available status	Pass
Read Category, Subcategory and Item Information	Show items by different subcategory.	Pass
Read Waitress Information	The users login to the system	Pass
Control Panel	Different users have different functions	Pass
Order Function	Place order and ordered items will show on order item list.	Pass
Cancel Order	Click ordered item list and cancel items.	Pass
Special Demand	Click ordered item list and add special demand to selected items.	Pass
Modify Quantity	Change the quantity of the ordered items.	Pass
Add Money	Add additional money to selected orders.	Pass
Print Receipt	Ordered items, subtotal, tax, and total output to the printer.	Pass
Ordered Item Status	Show ordered item status.	Pass
Payment	Show methods of payment, and numerical keyboard.	Pass
Order Confirm	Insert ordered items to database.	Pass
Check Out	Insert total to order table and update table available status as true.	Pass
Sales Report	Read daily sales information	Pass

Table 5. Manager Unit Test Plan

Order Function	The same as waitress order function	Pass
Sales Report	The same as waitress order function	Pass
Quantity Chart	Show top 5 items quantity.	Pass
Monetary Chart	Show the amount of top 5 items.	Pass
Delete orders	Delete orders from order history	Pass
Deleted order item list	Show the history of deleted items.	Pass
Edit Waitress	Show, add, delete, and edit waitress information.	Pass
Edit Category	Show, delete, and edit category information.	Pass
Edit Sub Category	Show, add, delete, and edit sub category information.	Pass
Edit Item	Show, add, delete, and edit item information.	Pass
Edit Table	Show, add, delete, and edit table information.	Pass
Edit Store Information	Show, add, delete, and edit store information.	Pass
Language Switch	Select English or Chinese	Pass

3.3 Integration Test Plan

mOrder-Server integrates with mOrder-Pocket PC[1] and mOrder-Kitchen[1]. The integration test plan tests as follows:

Table 6. Integration Test Plan

<p>mOrder-Server with kitchen computer</p>	<p>Place an order in mOrder-Server, and the ordered items information will be inserted into database. The ordered items information will be sent to kitchen computer.</p>	<p>Pass</p>
<p>mOrder-Server with pocket PC</p>	<p>Hold a table or place an order on pocket PC, and the ordered item information will be sent to mOrder-Server. Press a refresh button in mOrder-Server, the table is hold and ordered item information shows on ordered item list.</p>	<p>Pass</p>

CHAPTER FOUR

USERS MANUAL

4.1 Introduction

Included in chapter four was a presentation of the user's manual of the project. The manual includes waitress function and management function.

4.2 Waitress Function

4.2.1 Login

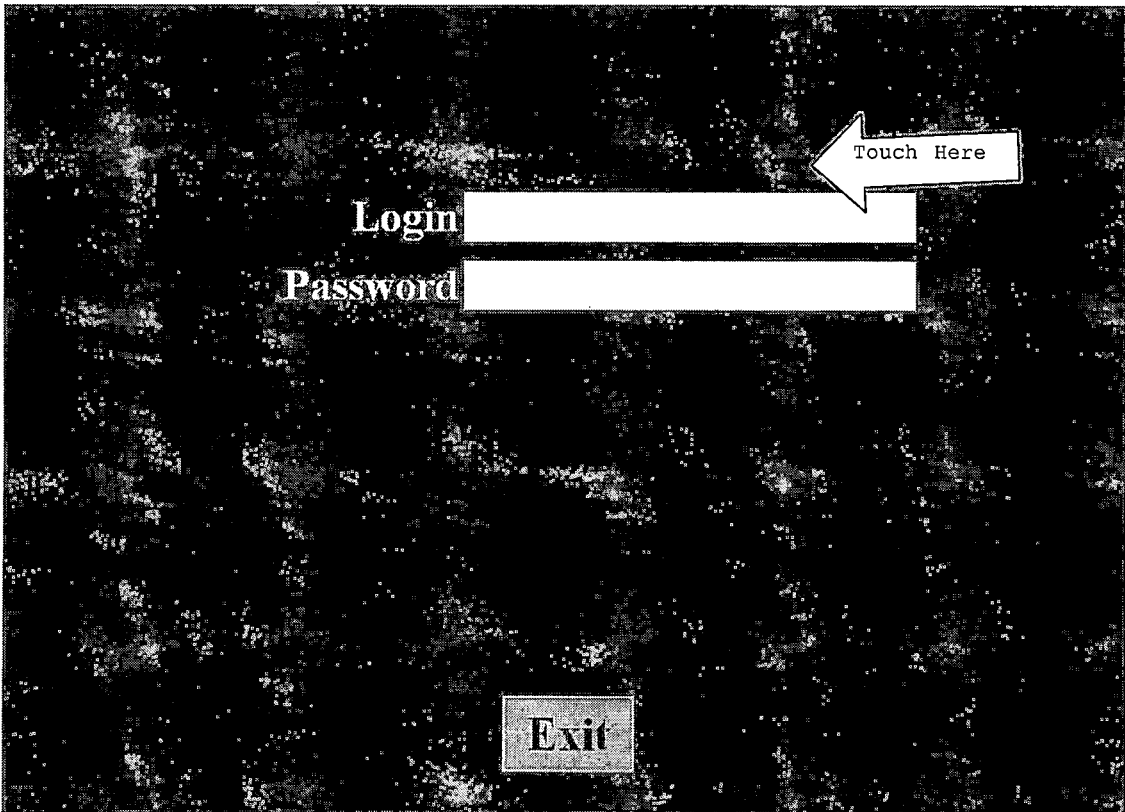


Figure 16. Login

If mOrder server operates on touch screen monitor, touch login label. If mOrder server operates on non touch monitor, click the login label. It will show a keyboard as follows:



Figure 17. Login_1

Input the username and password. If username and password do not match, login and password label will be cleared. Please input again.

4.2.2 Control Panel



Figure 18. Control Panel

A waitress has two functions for mOrder server. One is order function and another is sales report.

4.2.3 Order Function

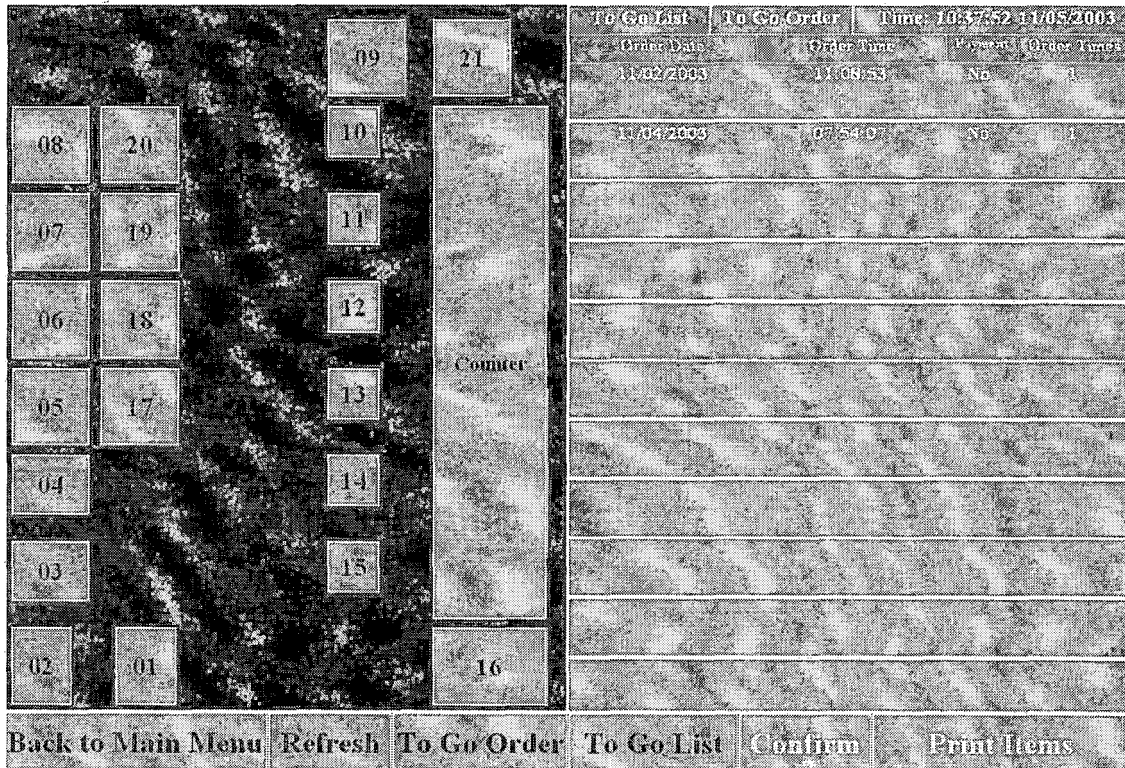


Figure 19. Order Function

The left side is the restaurant table layout and the right side is the to go order list or ordered item list.

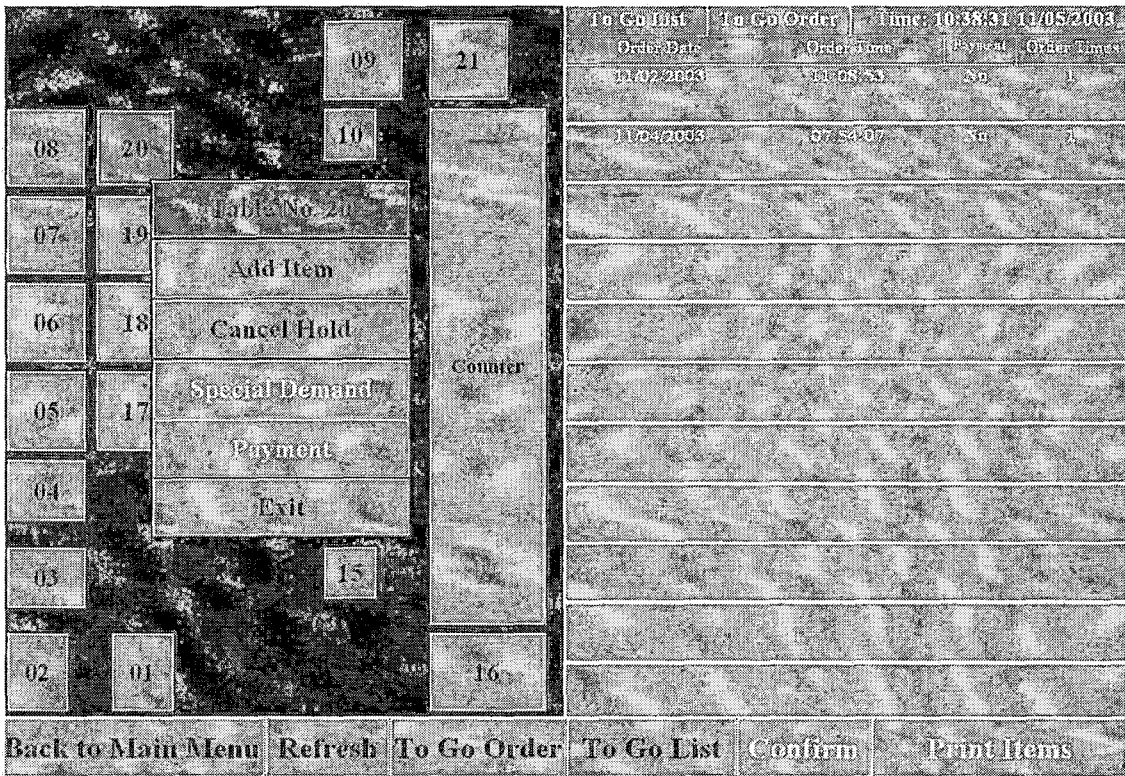


Figure 20. Order Function_1

If customers want to eat in the restaurant, a waitress clicks the table number from 01 to 21. It will pop up a menu and the color of the table will become unavailable status.

Click "Add Item", the menu will show up.

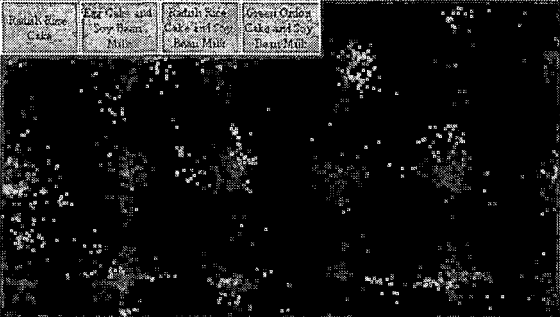
Order Server							Order List	Table No. 20	Time: 20:58:53 11/03/2003
Order Menu							Item Name	Special Demand	Qty
BF	Cafe	Dev	Des	ND	FD	SS	Category	Items	
Hot Tea	Hot Tea	Toy Bean Milk	Chocolate Milk	Hot Yelw Milk	Orange Milk from concentrate	Family Coffee			
House Coffee	House Coffee Refill	Cappuccino	Cafe Mocha	Café Latte	Specialty Coffee	Ice Cappuccino			
Household Hygiene	Two Slices of Toast	Fresh Toast	Extra Thick Cofee Gator	Extra Thick Toasty Dairy	Extra Thick Toasty Peanut Butter	Toast Change Extra Thick Toast			
Breakfast Steam Pot	A Breakfast	B One Egg and Ham	B Bacon	B Sausage	C Breakfast Panc	C Breakfast Bacon			
C Breakfast sausage	Egg	Ham	Bacon	Sausage	Green Onion Cake	Egg Cake			
Breakfast Cake	Egg Cake and Soy Bean Milk	Breakfast Cake and Soy Bean Milk	Green Onion Cake and Soy Bean Milk						
									

Figure 21. Menu

Click different categories and show different items.

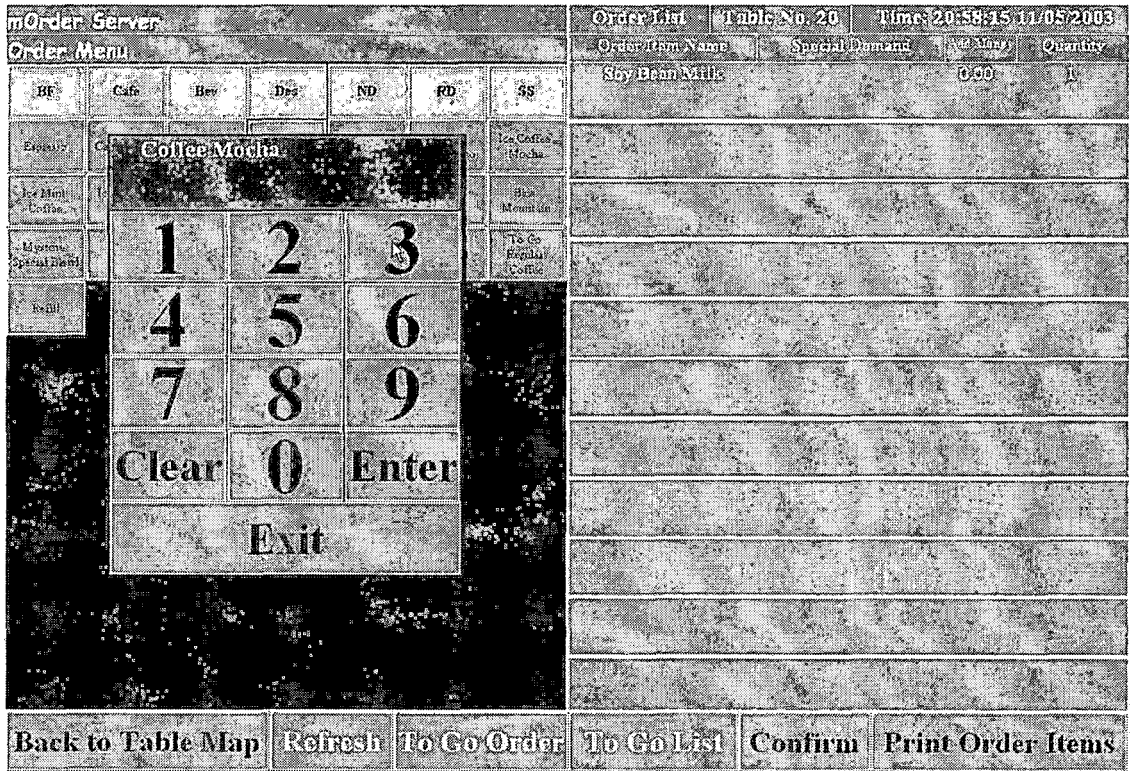


Figure 22. Place Order

Click item button, input quantity and press enter button.
The ordered item will show on the order list.

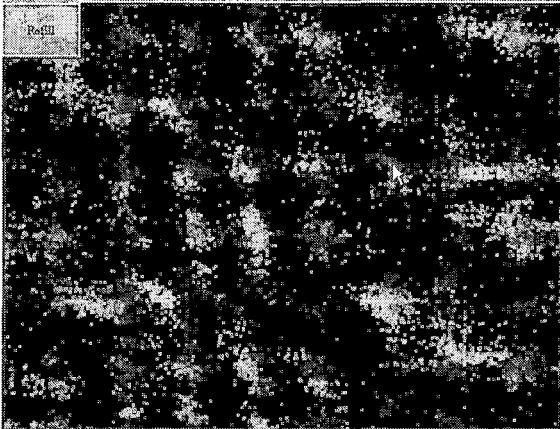
Order Server							Order List	Table No. 20	Time: 20:58:49 11/05/2003
Order Menu							Order Item Name	Special Demand	Quantity
BP	Cap	Bev	Des	ND	RD	SS	Soy Bean Milk	0.00	1
Espresso	Cappuccino	Coffee Latte	Coffee Mocha	Ica Coffee	Ica Cappuccino	Ica Coffee Mocha	Coffee Mocha	0.00	1
Ica Latte Coffee	Ica Cream Coffee	Mocha Java	Columbia	Somalia	Peru	Blue Mountain			
Mystic Special Blend	Vanilla	Straw	Imit Cream	Tiramisu	Butter	To Go Regular Coffee			
Pastry									
Back to Table Map							Refresh	To Go Order	To Go List
							Confirm	Print Order Items	

Figure 23. Order Confirmation

Click confirm button, and ordered item list will input to the database. The menu frame changes to table map frame.

4.2.4 Modify Quantity

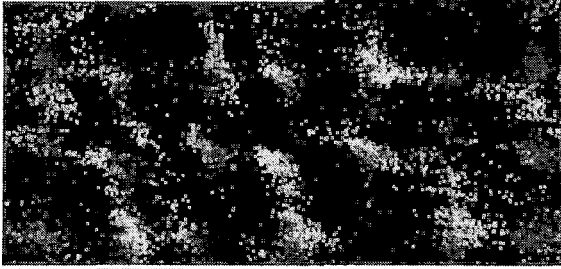
mOrder Server							Order List	Table No. 19	Time: 21:00:58 11/05/2003							
Order Menu							Order Item Name	Special Demand	Add Money	Quantity						
BP	Cafe	Bev	Des	RD	RD	SS	Cafe Latte		0.00	1						
Milk	Hot Tea	Soy Bean Milk	Chocolate Milk	Hot Tea w Milk	Orange Juice (on demand)	Regular Coffee										
Hot Coffee	Hot Coffee Refill	Cappuccino	Cafe Mocha	Cafe Latte	Special Ice Coffee	Ice Cappuccino	Cafe Latte									
Whipped Special Mocha	Doublets of Toast	French Toast	Extra Thick Toast w Juice	Extra Thick Toast w Juice	Extra Thick Toast w French Fries	Toast Change Kites Thick Toast	Modify Quantity									
Pork or Vegetable Steam Roll	A Breakfast	W Ome Zegg and Ham	E Bacon	E Scramles	C Breakfast Ham	C Breakfast Bacon	Cancel Item									
Breakfast sausage	Egg	Ham	Bacon	Sausage	Green Onion Cafe	Egg Cake	Special Demand									
Radish Rice Cup	Egg Cake and Soy Bean Milk	Radish Rice Cafe and Soy Bean Milk	Great Omelet Cafe and Soy Bean Milk													
														Add Money		
														Exit		
Back to Table Map			Refresh	To Go Order	To Go List	Confirm	Print Order Items									

Figure 24. Modify Quantity

Click items on the order list.

Click "Modify Quantity".

mOrder Server							Order Ref:	Table No. 19	Time: 21:01:34 1/05/2003
Order Menu							Order Item Name	Special Demand	QTY
BF	Cafe	Brk	Des	MD	RD	SS	Cafelatte	0.00	5
MIL	Hot Tea	Soy Bean Milk	Chocolate Milk	Hot Tea w Milk	Orange Juice concentrate	Regular Coffee			
House Coffee	House Coffee Retail	Cappuccino	Cafe Mocha	Earl Grey	Special Ice Coffee	Ice Cappuccino			
Specialty M	Two Slices of Toast	French Toast	Extra Thick Toast w Grains	Extra Thick Toast w Butter	Extra Thick Toast w Peanut Butter	Toast Change Extra Thick Toast			
French Fry	A Breakfast	B Breakfast and Ham	B Breakfast	B Breakfast	C Breakfast w Ham	C Breakfast w Bacon			
Breakfast Sandwich	Egg	Ham	Bacon	Sausage	Green Onion & Cheese	Egg Cake			
Raffle Pick Cake	Egg Cake and Soy Bean Milk	Edible Rice Cake and Soy Bean Milk	Green Onion Cake and Soy Bean Milk						

Cafelatte			5
1	2	3	
4	5	6	
7	8	9	
Clear	0	Enter	
Exit			

Back to Table Map	Refresh	To Go Order	To Go List	Confirm	Print Order Items
-------------------	---------	-------------	------------	---------	-------------------

Figure 25. Modify Quantity_1

Click the number and then press enter. The quantities of the selected items will be modified.

4.2.5 Cancel Ordered Items

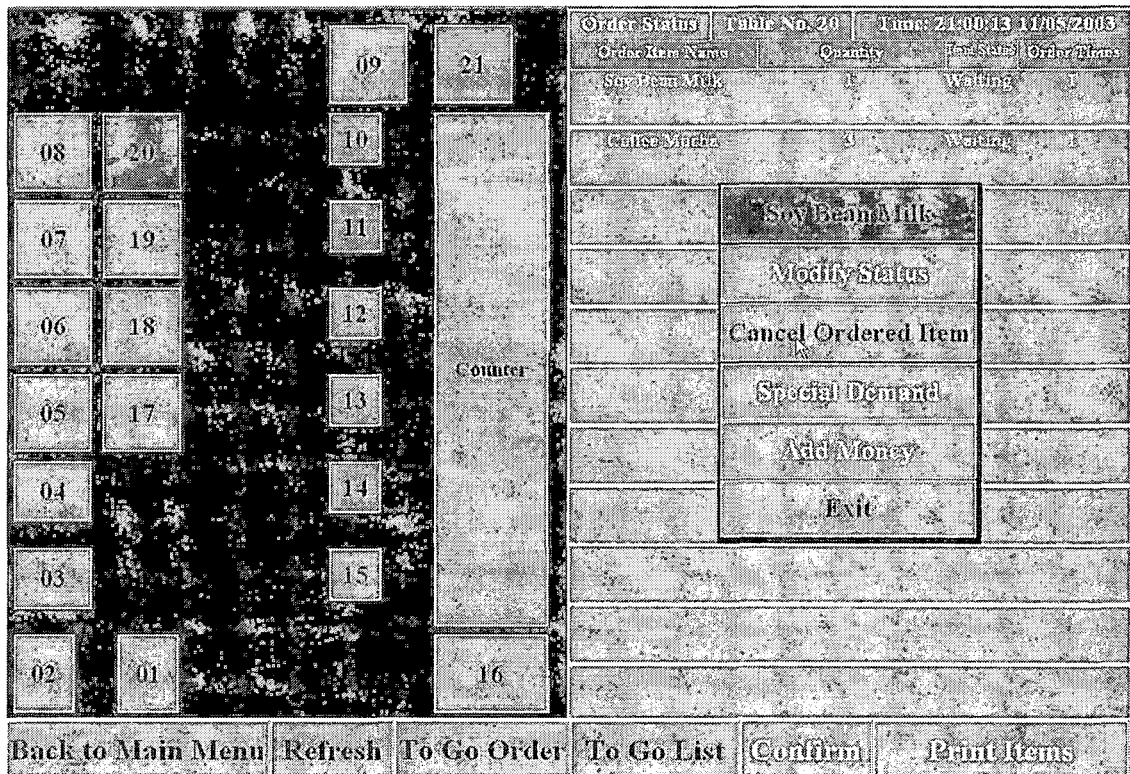


Figure 26. Cancel Ordered Items

Click ordered items, and "Cancel Ordered Item". The selected ordered item will be canceled. If the "Item Status" shows cooking, the selected item can not be canceled.

4.2.6 Special Demand

mOrder Server							Order List	Table No: 19	Time: 21:00:38 11/05/2003		
Order Menu							Order Item Name	Special Demand	Add Money	Quantity	
BF	Cafe	Bev	Des	ND	RD	SS	Cafe Latte	0.00	1		
Milk	Hot Tea	Soy Bean Milk	Chocolate Milk	Hot Tea w Milk	Orange Juice from concentrate	Apple Cider					
Hot Coffee	Hot Coffee Refill	Cappuccino	Cafe Mocha	Cafe Latte	Specialty Coffee	Ice Cappuccino	Cafe Latte				
Specialty Breakfast	Two Slices of Toast	French Toast	Extra Thick Toast w Grubs	Extra Thick Toast w Butter	Extra Thick Toast w Peanut Butter	Roast Cheese Extra Thick Toast	Modify Quantity				
Panini	A Breakfast	B One Egg and Ham	B Bacon	B Sausage	C Breakfast w Ham	C Breakfast w Bacon	Cancel Item				
C Breakfast w Sausage	Egg	Ham	Bacon	Sausage	Cheese Omelet	Egg Cake	Special Demand				
Radih Rice Cake	Egg Cake and Soy Bean Milk	Radih Rice Cake and Soy Bean Milk	Cheese Omelet and Soy Bean Milk				Add Money				
							Exit				
Back to Table Map							Refresh	To Go Order	To Go List	Confirm	Print Order Items

Figure 27. Special Demand

Click "Special Demand"

Order Server							Order List	Table No. 19	Time: 21:02:32 11/05/2003			
Order Menu							Order Item Name	Special Demand	Qty	Price	Quantity	
BP	Cafe	Qty	Des	ND	RD	SS	Café Latte					
Milk	Hot Tea	Soy Bean Milk	Chocolate Milk	Hot Tea w Milk	Orange Juice from concentrate	Panada Coffee	Little Salt	Little Sugar	Little Oil	Little Hot Pepper	Little MSG	No MSG
House Coffee	House Coffee Refill	Cappuccino	Cafe Mocha	Cafe Latte	Specialty Coffee	Cappuccino	No Cilantro	No Garlic	No Green Onion	No Parsa	No Soup	No Shrimp
Orange Special Myrtle	Two Slices of Toast	French Toast	Extra Thick Toast w Garlic	Extra Thick Toast w Butter	Extra Thick Toast w Peanut Butter	Toast Upgrade Extra Thick Toast	3 Well Down	5 Well Down	7 Well Down	10 Well Down		
Porter Breakfast Special Item	A Breakfast	B One Egg and Ham	B Bacon	B Sausage	C Breakfast w Ham	C Breakfast w Bacon						
C Breakfast w Ham	Egg	Ham	Bacon	Sausage	Green Onion Cab	Egg Lake						
Rolls Rice Cake	Egg Cake and Soy Bean Milk	Banana Rice Cake and Soy Bean Milk	Crust Onion Cake and Soy Bean Milk									
							ESC	Clear	Others	Enter		
Back to Table Map			Refresh		To Go Order		To Go List		Confirm		Print Order Items	

Figure 28. Special Demand_1

- Click special demand options and the click "Enter".
- Click "Esc" to exit special demand screen.
- Click "Clear" to clear all selected special demand options.
- Click "Others" to manually input special demand options and then click "Enter".

4.2.7 Add Money

mOrder Server							Order List	Table No. 20	Time: 20:31:43 11/19/2008																																																			
Order Menu							Order Item Name	Special Demand	Net Amount	Quantity																																																		
BF	Cafe	Rev	Des	ND	RD	SS	Extra Thick Toast w Garlic		0.00	1																																																		
Milk	Hot Tea	Soy Bean Milk	Chocolate Milk	Hot Tea w/ Milk	Orange Juice from concentrate	Regular Coffee																																																						
House Coffee	House Coffee (Full)	Cappuccino	Cafe Mocha	Cafe Latte	Specialty Coffee	Ice Cappuccino																																																						
Waffles	Two Slices of Toast	French Toast	Extra Thick Toast w/ Garlic	Extra Thick Toast w/ Butter	Extra Thick Toast w/ Peanut Butter	Toast Cinnamon Extra Thick Toast																																																						
French Fry	A Small Pot	3 Ome Eggs and Hash	3 Eggs	2 Pancakes	1 English Muffin	2 Breakfast Bacon																																																						
Breakfast Sandwich	Extra Thick Toast w/ Garlic																																																											
Waffle House Cake	<table border="1"> <tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>0</td></tr> <tr><td>Q</td><td>W</td><td>E</td><td>R</td><td>T</td><td>Y</td><td>U</td><td>I</td><td>O</td><td>P</td></tr> <tr><td>A</td><td>S</td><td>D</td><td>F</td><td>G</td><td>H</td><td>J</td><td>K</td><td>L</td><td></td></tr> <tr><td>Z</td><td>X</td><td>C</td><td>V</td><td>B</td><td>N</td><td>M</td><td>,</td><td>Enter</td><td></td></tr> <tr><td>Exit</td><td>CL</td><td>Space</td><td>.</td><td>Backspace</td><td colspan="5"></td></tr> </table>										1	2	3	4	5	6	7	8	9	0	Q	W	E	R	T	Y	U	I	O	P	A	S	D	F	G	H	J	K	L		Z	X	C	V	B	N	M	,	Enter		Exit	CL	Space	.	Backspace					
1	2	3	4	5	6	7	8	9	0																																																			
Q	W	E	R	T	Y	U	I	O	P																																																			
A	S	D	F	G	H	J	K	L																																																				
Z	X	C	V	B	N	M	,	Enter																																																				
Exit	CL	Space	.	Backspace																																																								
Back to Table Map		Refresh	To Go Order	To Go List	Confirm	Print Order Items																																																						

Figure 29. Add Money

Click "Add Money" option.

Input the amount money and click "Enter".

4.2.8 Cancel Hold

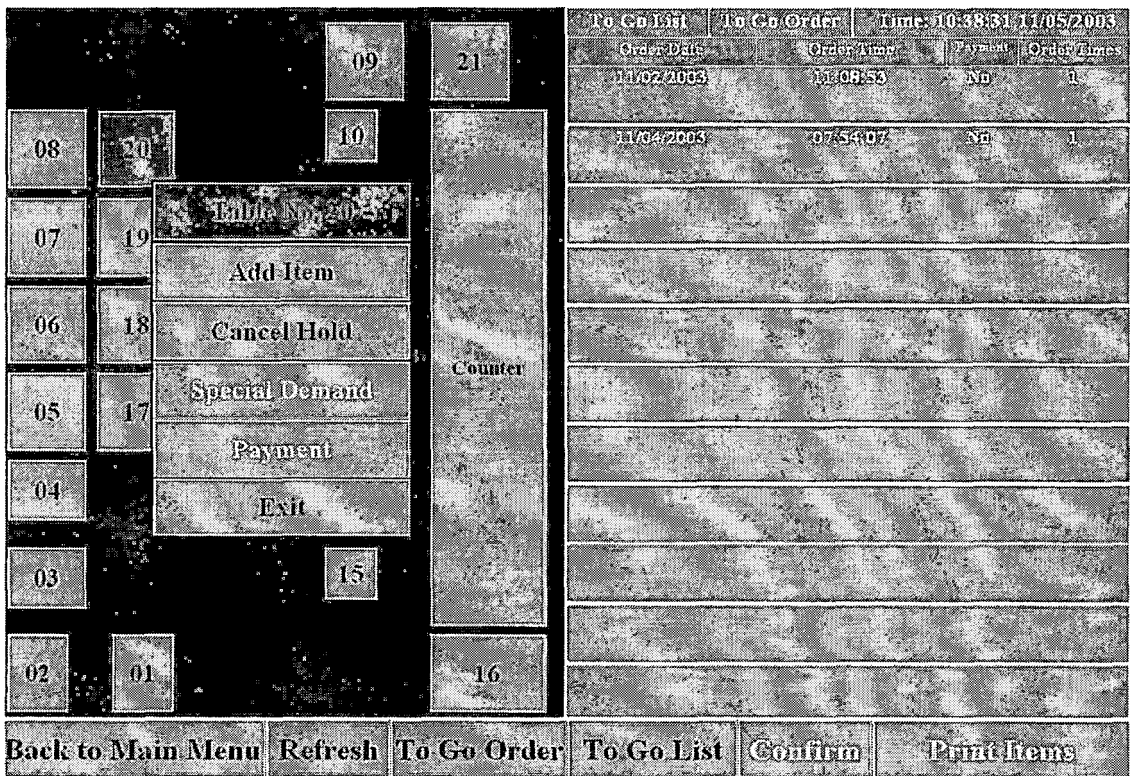


Figure 30. Cancel Hold

Click "Cancel Hold" button and the status of the table will become available.

4.2.9 Print Bill

The screenshot displays a POS system interface. On the left is a numeric keypad with buttons labeled 01 through 21. A central menu area contains the text "Print Table No. 20's Bill" and three options: "No Discount", "Discount", and "Exit". Below these options is a vertical "Counter" label. On the right side, a bill printout is visible, showing a table with columns for "Order Item Name", "Quantity", "Unit Price", and "Price". The bill lists two items: "B發蛋(香腸)" with a quantity of 1 and a price of 3.95, and another "B發蛋(香腸)" with a quantity of 1 and a price of 0.00. At the bottom of the bill, the following totals are shown: Subtotal: 66.90, Tax (8.25%): 5.52, Total: 72.42, Payment: (blank), and Change: (blank). At the very bottom of the screen is a row of navigation buttons: "Back to Main Menu", "Refresh", "To Go Order", "To Go List", "Confirm", and "Print Receipt".

Order Item Name	Quantity	Unit Price	Price
B發蛋(香腸)	1	3.95	3.95
B發蛋(香腸)	1	0.00	3.95

Subtotal:	66.90
Tax (8.25%):	5.52
Total:	72.42
Payment:	
Change:	

Figure 31. Print Bill

No Discount: Click "Print Bill".

4.2.10 Discount

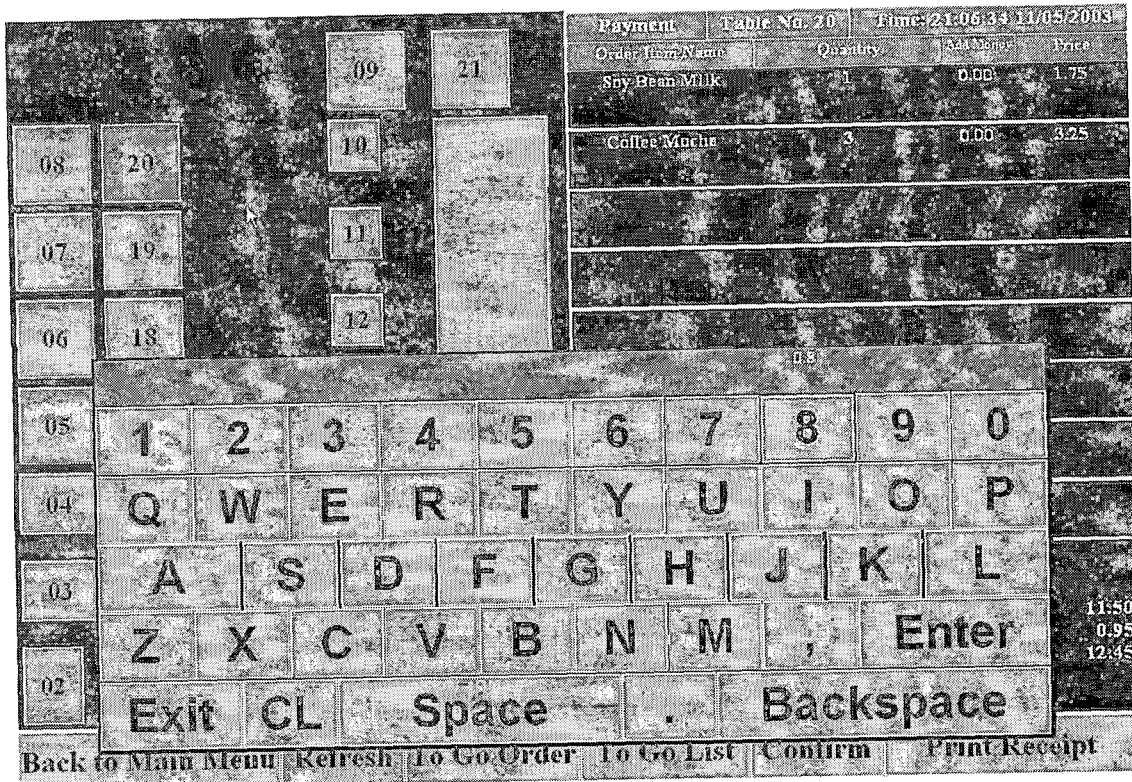


Figure 32. Discount

Discount: Click "Discount" and it will pop up a keyword. For example, if the discount is 20% off, input 0.8 and then click "Enter".

4.2.11 Order Item Status

The screenshot displays a user interface for managing orders. On the left, there is a grid of table numbers (01-21) and a vertical bar labeled 'Counter'. On the right, a table shows the current order status for 'Table No. 20' on 'Date: 20-09-09 11:08:2003'. The table lists ordered items, their quantities, and their current status (Waiting).

Order Item Name	Quantity	Item Status	Order Time
Soy Bean Milk	1	Waiting	1
Coffee Mocha	3	Waiting	1

At the bottom of the interface, there are several navigation buttons: Back to Main Menu, Refresh, To Go Order, To Go List, Confirm, and Print Items.

Figure 33. Order Item Status

Click "Order Item Status", and the right side will show the ordered item status.

4.2.12 Payment

Payment		Table No. 19	Time: 21:03:52 11/05/2008		
Order Item Name	Quantity	Unit Price	Price		
Cafe Latte	5	0.00	2.95		
Type of Payment of Table No. 19					
Cash		Credit Card	ATM Card	Discount	Exit
08 20		09 21	10		
07 19		Counter			
06 18		13			
05 17		14			
04		15			
03					
02 01		16			
Subtotal:				14.75	
Tax (8.25%):				1.22	
Total:				15.97	
Payment:					
Change:					
Back to Main Menu	Refresh	To Go Order	To Go List	Confirm	Print Receipt

Figure 34. Payment

There are four options in the payment function.

Click "Cash".

4.2.12.1 Payment-Cash.

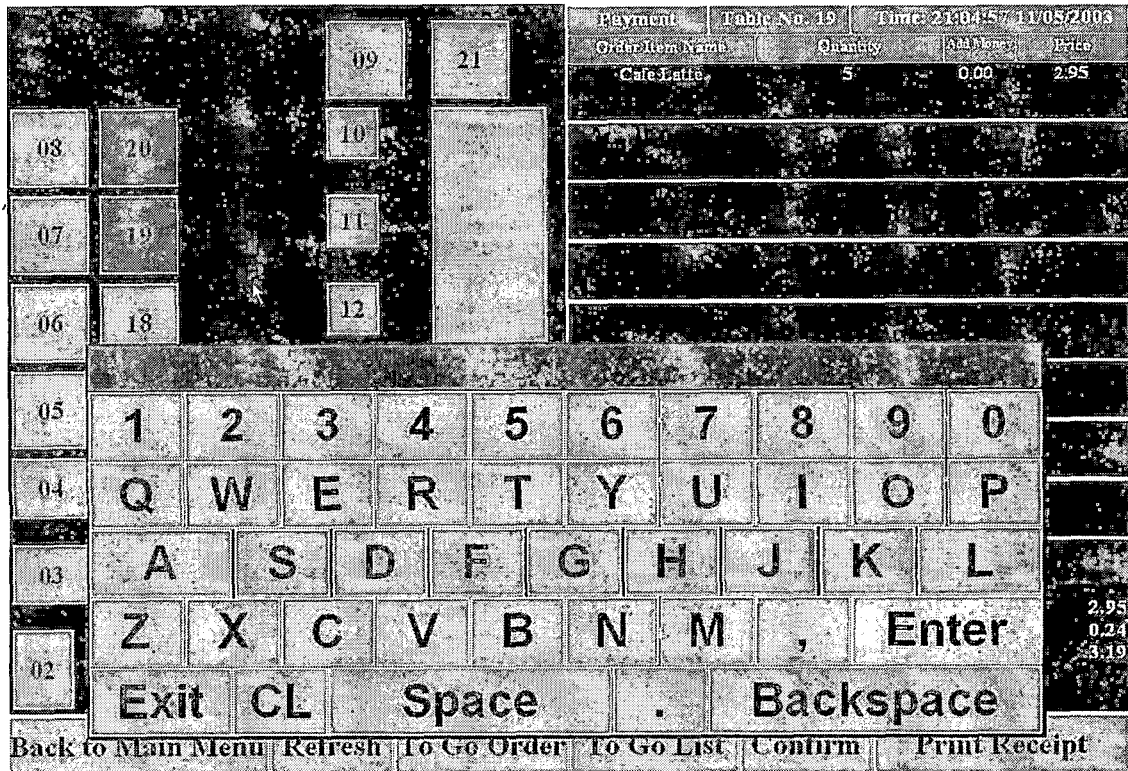


Figure 35. Payment-Cash

Input the amount that is greater or equal to the total.

Click "Enter".

Click "Confirm".

4.2.12.2 Payment-Credit or ATM.

Payment	Table No. 19	Time: 21:03:52 11/05/2008	
Order Item Name	Quantity	Unit Price	Price
Cafe Latte	5	0.00	2.95

Type of Payment of Table No. 19				
Cash	Credit Card	ATM Card	Discount	Exit

09	21	10		
08	20			
07	19			
06	18			
05	17	13		
04		14		
03		15		
02	01		16	

Counter	
Subtotal:	14.75
Tax (8.25%):	1.22
Total:	15.97
Payment:	
Change:	

Back to Main Menu	Refresh	To Go Order	To Go List	Confirm	Print Receipt
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Figure 36. Payment-Credit or ATM

Click "Credit Card" or "ATM".

Click "Confirm".

4.2.12.3 Discount. Please refer to 4.2.10 Print Bill-Discount.

4.2.13 To Go Order

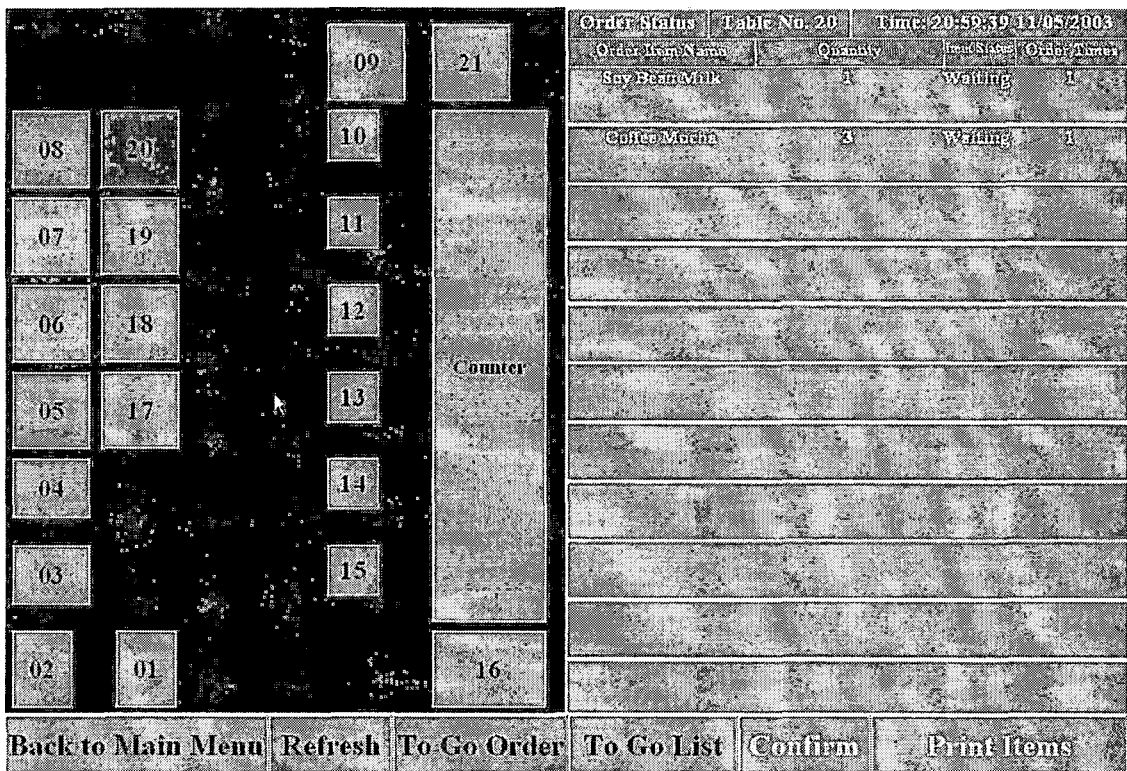


Figure 37. To Go Order

Click "To Go Order".

Please refer to "Menu", page 34.

4.2.14 To Go List

To Go List	To Go Order	Date	10:37:52 11/08/2003	Order Date	Order Time	Payment	Order Times
11/02/2003		11/08/03		No			
11/04/2003		07:54:07		No			

Back to Main Menu Refresh To Go Order To Go List Confirm Print Items

Figure 38. To Go List

Click "To Go List", and the right side will show all "To Go Orders".

4.2.15 Waitress Sales Report



Figure 39. Waitress Control Panel

In the waitress control panel, click "Sales Report".

Order Number	Total	Payment	Table Number	Waiter/Waitress	Order Date	Order Time	Discount	Special Mark	Order Number	Item Name	Quantity	Add Money
855	3.19	Cash	18	1	11/5/2003	9:06:18 PM	3000000001	False	855	Café Latte	5	0
854	9.96	Credit	20	1	11/5/2003	9:07:30 PM	3000000004	False	854	Soy Bean M	1	0
									854	Coffee Mcd	3	0
851	4.28	ATM	22	Administrato	11/5/2003	9:08:05 PM	0	False	851	B Bacon	1	0

Control Panel

Order Function

Sales Report

English

EXIT mOrder

Cash: Credit Cards: Total Sales: ATM:

Sales Report Daily Sales Report

Figure 40. Waitress Sales Report

Click "Sales Report", it will show total sales during the period from the last closed time till now.

Click "Daily Sales Report", it will show total sales from the first order till now today.

4.3 Manager Function

4.3.1 Login

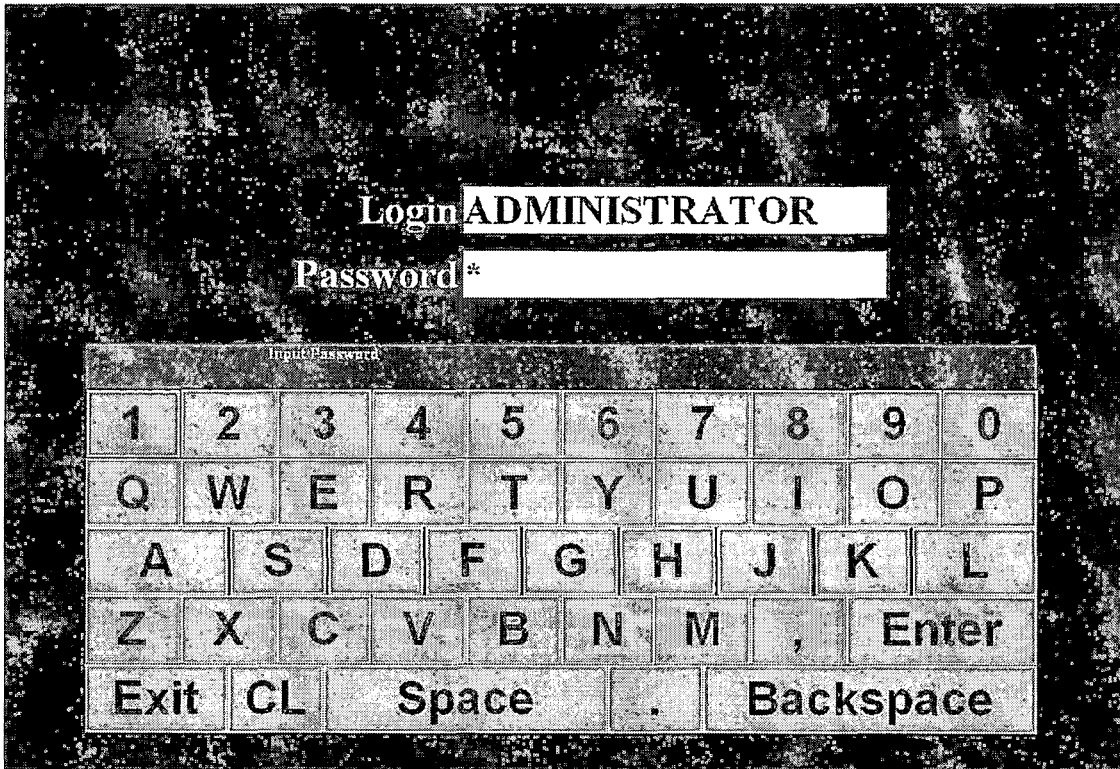


Figure 41. Manager Login

Click Login label and input "ADMINISTRATOR"

Click password label, input password and click "Enter".

4.3.2 Manager Control Panel



Figure 42. Manager Control Panel

There are 7 functions in the manager control panel. The order function is the same as waitress order function.

4.3.3 Manager Sales Report

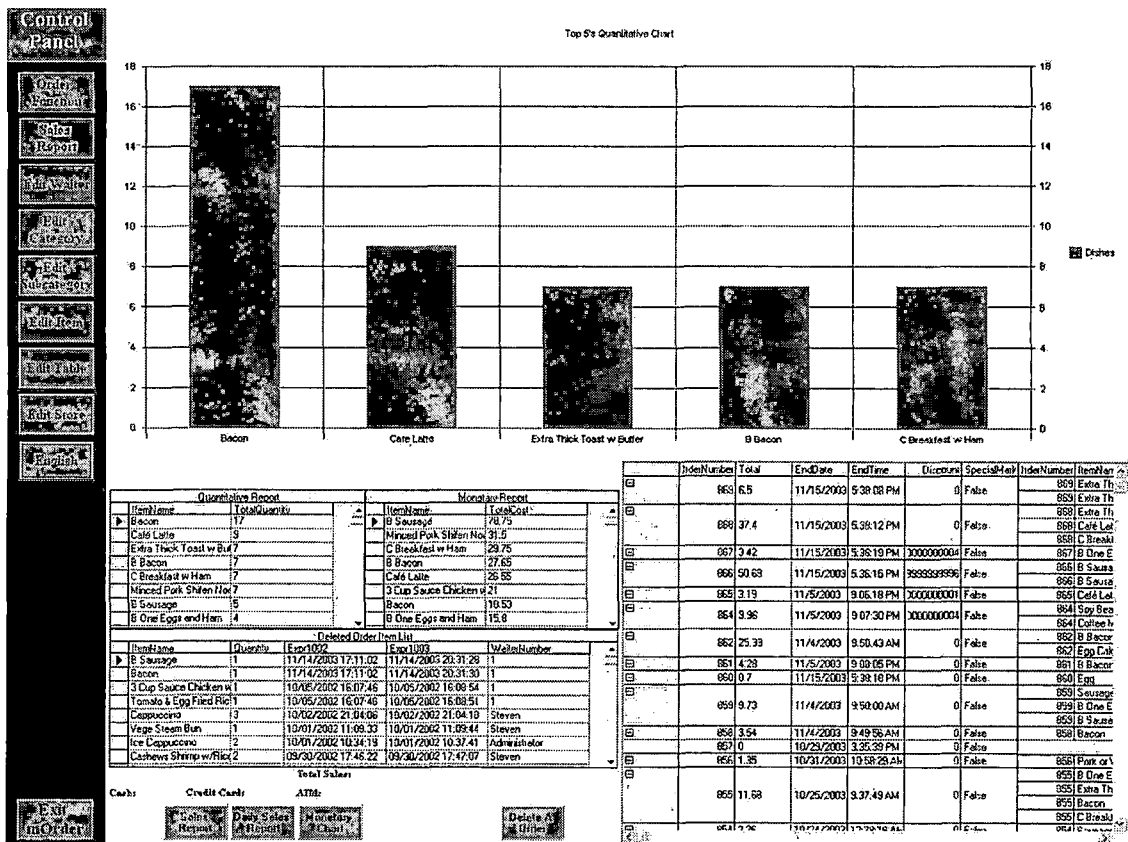


Figure 43. Manager Sales Report

Click "Sales Report".

"Sales Report" and "Daily Sales Report" are the same as waitress sales report.

Click "Monetary Chart" or "Quantitative Chart", the chart will show top 5 sales.

4.3.3.1 Delete Order History.

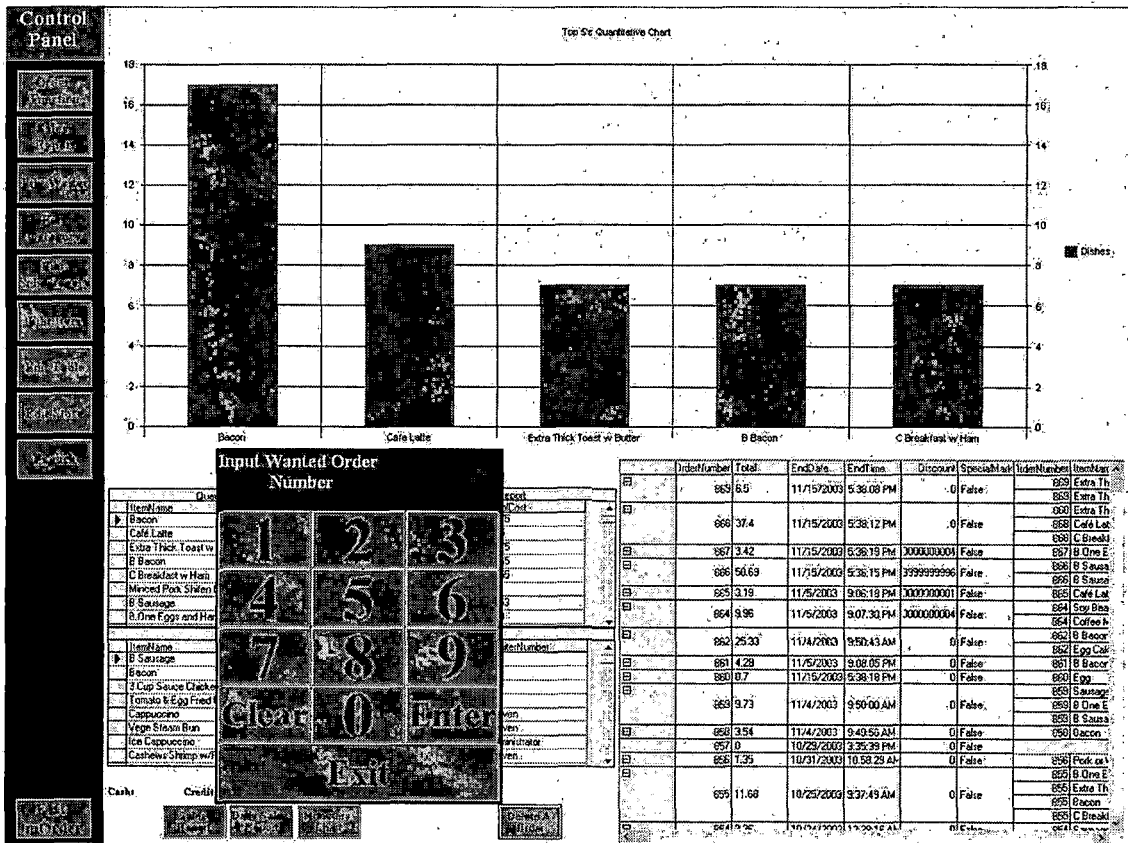


Figure 44. Delete Order History

Click "Delete a order".

Input the order number and click "Enter".

4.3.4 Edit Waiter

Control Panel							
Edit Waiter							
WaiterNumber	Position	First Name	Last Name	Phone Number	Address	City	State
1	1	1	1	1111111111	111	area	CA
2	2	2	2	6269649898	17880 Calle San Lucas	City of Industry	CA
Charlie	QA	Charlie	Qiu	6269649898	17880 Calle San Lucas	City of Industry	CA
Kitty	1	Kitty	Lin	11152838	1728 Yici	Udjak	CA
Administrator	1	Steven	Chou	9092345678	1811 Pinalo St.	San Bernardino	CA
Steven	manager	Steven	Chou	9097854321	1811 Pinalo St.	San Bernardino	CA
*							

Figure 45. Edit Waiter

Click "Edit Waiter".

Enter the employee information in the last row. In the WaiterNumber column, the data must be unique and it can include number or text.

4.3.5 Edit Category

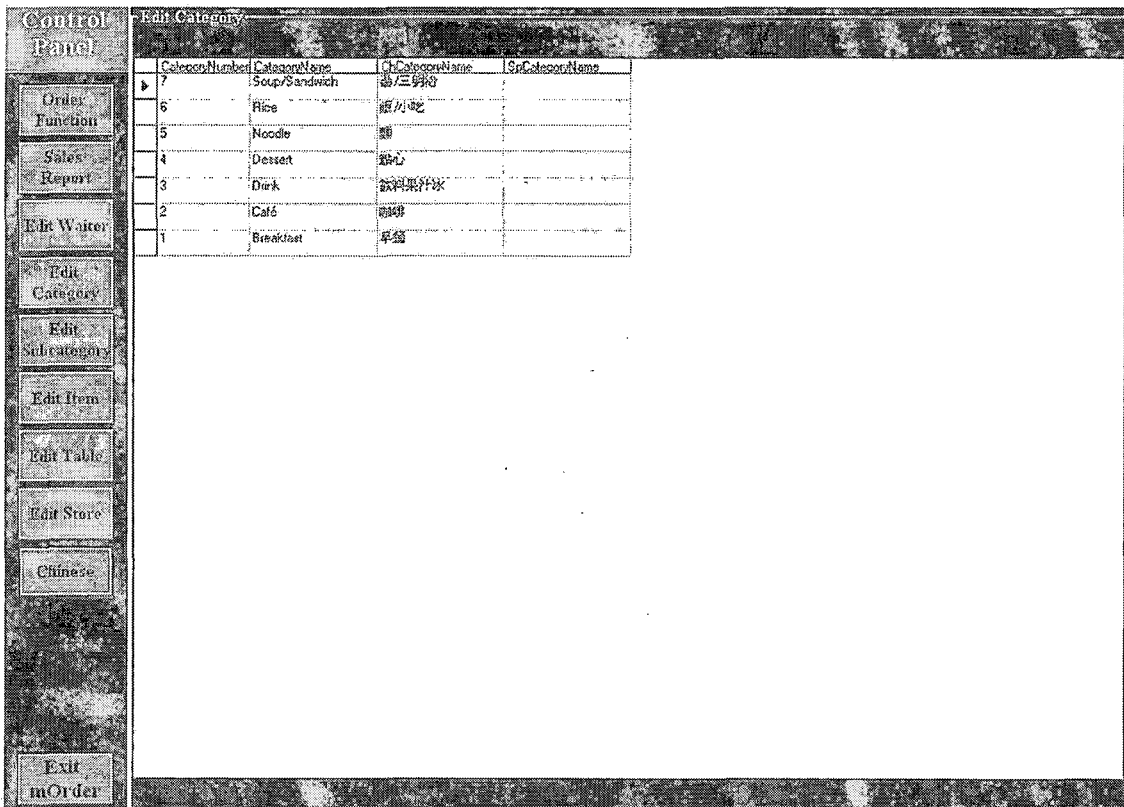


Figure 46. Edit Category

Click "Edit Category".

Edit "Category Name", "ChCategoryName", or

"SpCategoryName".

4.3.6 Edit Sub Category-Add, Edit, Delete

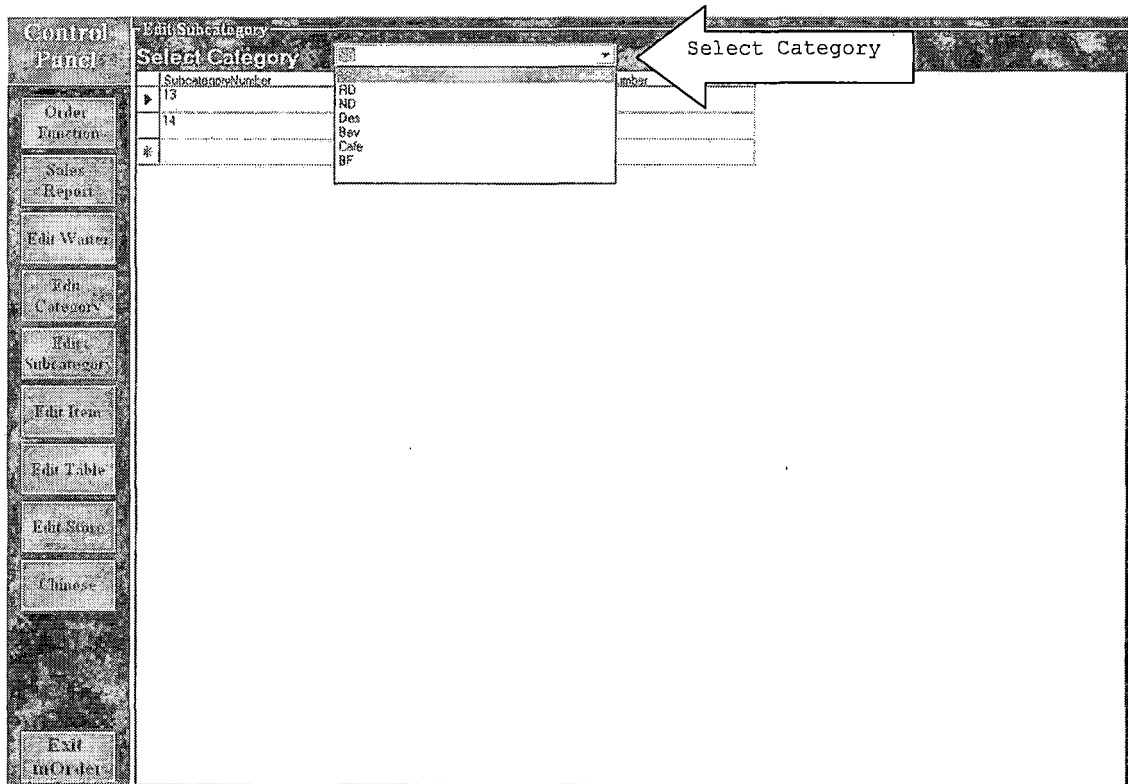


Figure 47. Edit Sub Category-Add, Edit, Delete

Add:

Select Category.

Enter "SubCategory" name and "Category" number. (Do not input any data in the SubCategoryNumber).

Edit:

Click the data and modify.

Delete

Select the row that want to delete.

Press "Delete" on the keyboard.

4.3.7 Edit Item-Add, Edit, Delete

ItemNumber	ItemName	WrittenName	CookingSign	Price	SubcategoryNumber
259	Fish Ball Soup	Bolas Pezadas	-1	3.25	13
260	Meat Ball Soup	Bolas Puerco	-1	3.25	13
261	Wonton Soup	Jordan Sopa	-1	3.5	13
262	Fried Pork Chop w/Soup	Payco So	-1	3.85	13
263	Pork w/Thick Soup	Roguen Sopa	-1	3.85	13
264	Squid w Thick Soup	Youquen	-1	3.95	13
265	Corn Thick Soup w/Ch	Any Sopy	-1	4.25	13
266	Cream of Mushroom So	Mico Sopy	-1	4.25	13
267	Seafood Thick Soup w/	Masico Sopy	-1	4.75	13
268	Preserved Egg & Meat	Pan Suroso	-1	4.95	13
269	Seafood Paridge	Mansco De Anoz	-1	5.25	13
270	Beef Soup	Nico Sopa	-1	4	13

Figure 48. Edit Item-Add, Edit, Delete

Add:

Select Category.

Select Sub Category.

Input data expect "ItemNumber" in the last row.

Edit:

Click the data and modify.

Delete

Select the row that want to delete.

Press "Delete" on the keyboard.

4.3.8 Edit Table-Add, Edit, Delete

Control Panel									
Edit Table									
Add									
TableNumber	TableNo	Width	Length	Shape	SeatNumber	XCoordinate	YCoordinate		
1	1	350	450	0	2	750	3550		
2	2	350	450	0	2	50	3550		
3	3	450	350	0	2	50	3050		
4	4	450	350	0	2	50	2550		
5	5	450	450	0	4	50	2050		
6	6	450	450	0	4	50	1550		
7	7	450	450	0	4	50	1050		
8	8	450	450	0	4	50	550		
9	9	450	450	0	4	2180	50		
10	10	300	300	1	1	2180	550		
11	11	300	300	1	1	2180	1050		
12	12	300	300	1	1	2180	1550		
13	13	300	300	1	1	2180	2050		
14	14	300	300	1	1	2180	2550		
15	15	300	300	1	1	2180	3050		
16	16	650	450	3	4	2850	3550		
17	17	450	450	0	2	650	2050		
18	18	450	450	0	2	650	1550		
19	19	450	450	0	2	650	1050		
20	20	450	450	0	2	650	550		
21	21	450	450	0	2	2850	50		
22	22	650	2550	0	0	2850	550		
*									

Figure 49. Edit Table-Add, Edit, Delete

Add:

Input data in the last row.

Edit:

Click the data and modify.

Delete

Select the row that want to delete.

Press "Delete" on the keyboard.

4.3.9 Edit Store

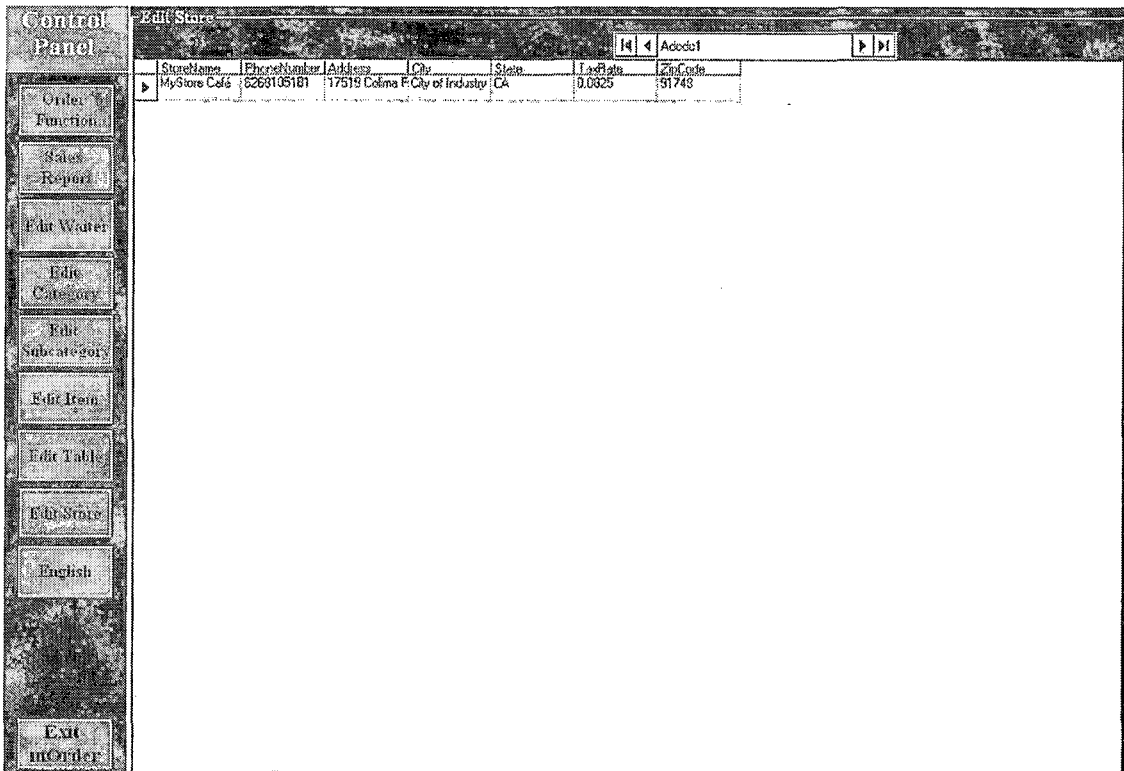


Figure 50. Edit Store

Click the data and modify.

CHAPTER FIVE

CONCLUSION

5.1 Summary

Because computers are becoming cheaper and cheaper, Point Of Sale systems are more and more popular among restaurants. There are many benefits to use POS instead of handwriting with cash register. For managers of restaurants, mOrder-Server helps them easily and quickly see sales statistics. It prevents stealing by employees and improves service for customers. For waitresses, mOrder-Server saves training time. Waitresses do not have to memorize all item numbers and prices. It saves time to serve customers. mOrder-Server with mOrder-Kitchen and Pocket PC, waitresses do not have to go back and forth between the counter and kitchen. It saves time to send ordered information through network. For cooks, mOrder-Server with mOrder-Kitchen makes cooks clearly know what meals they have not yet made. It prevents cooks from making wrong meals.

5.2 Future Developments

mOrder-Server is only for one restaurant environment. Now, a restaurant has more and more branches. In the future, mOrder-Server can integrate with Internet.

In a headquarter, managers can monitor all branches and edit item information. mOrder-Server will make it easy to manage restaurants.

APPENDIX
MORDER-SERVER SOURCE CODE

```

Const maxPPCNumber As Integer = 1
Const margin As Integer = 50
Const MaxTableNumber As Integer = 25
Const TableAvailableColor As Long = &H808000 &HFFFF00 &HC0C000
Const TableUnavailableColor As Long = &H404040
Const MaxFoodCategoryNumber As Integer = 10
Const MaxItemNumber As Integer = 100
Const ItemButtonHeight = 750 '13rows'812' 12 lines '950 '10 lines
Const MaxOrderItemNumber As Integer = 50
Const LabelHeight As Integer = 385
Const MaxSpecialDemandNumber As Integer = 68
Const MaxKeyNumber As Integer = 50
Const BeginningTime As String = "9:00:00"
Const MiddleTime As String = "17:00:00"
Const StopTime As String = "23:59:59"
Const WaitingCheckoutColor As Long = &H8080&
Const ButtonNonpressColor As Long = &H808000
Const BackgroundColor As Long = &HC00000
Const ButtonPressColor As Long = &H808080
Const CategoryButtonColor As Long = &H808080
Const CategoryButtonPressColor As Long = &H8080& &HC0C0& &HFFFF&
Const PrLanguageSwitch As String = "Spanish"
Const ReceiptLanguageSwitch As String = "English"
Const StartLanguageSwitch As String = "Chinese"
Const Administrator As String = "Administrator"

Dim editActionString As String
Dim cellNumber As Integer
Dim selectedItemString As String

Dim ItemButtonWidth As Integer
Dim orderItemButtonColor

Dim rPPCMessage() As String
Dim rkMessage As String

Dim Peedy As IAgentCtlCharacterEx
'----- Printer -----
Dim sPrinter As New StarPrinter
Dim sSQLQuery, oConn, rs
Dim dbEngine As String
Dim stringLength As Integer
Dim i, j, k, l As Integer

Dim itemName As String
Dim itemQuantity As String
Dim itemProduct As Double
Dim addMoney As Double
Dim subtotal As Double
Dim tax As Double
Dim total As Double
Dim tNumber As String
Dim WaiterNumber As String
Dim Password As String
Dim wNumber As String

Dim storeName As String
Dim phoneNumber As String
Dim Address As String
Dim City As String
Dim State As String
Dim zipCode As String
Dim taxRate As Double

Dim totalTableNumber As Integer
Dim tableNumber() As Integer
Dim tableNo() As Integer

```

Dim tableAvailableStatus() As Boolean
Dim tableSeatNumber() As Integer
Dim tableXCoordinate() As Long
Dim tableYCoordinate() As Long
Dim tableWidth() As Long
Dim tableLength() As Long
Dim tableShape() As Integer
Dim xRate, yRate As Double
Dim tableNumberString As String
Dim str0, str1, str2, str3, str4, str5, str6 As String
Dim orderTableNumber As Integer

'Dim itemAddTimes As String

Dim categoryName() As String
Dim totalCategoryNumber As Integer
Dim totalItemNumbers() As Integer
Dim itemNumbers() As String
Dim itemNames() As String
Dim itemPrices() As Double

Dim categoryIndex, itemIndex As Integer
Dim orderItemIndex As Integer

Dim orderNumber As String
Dim OrderItemNumber() As String
Dim orderItemAddMoney() As Double
Dim orderItemPromotion() As Double
Dim orderItemName() As String
Dim orderItemQuantity() As Integer
Dim orderItemSpecialDemand() As String
Dim orderSpecialDemand As String
Dim alreadyOrderItemNumber As Integer
Dim totalOrderItemNumber As Integer
Dim choiceItemName As String
Dim choiceSeriesNumber As String
Dim addTimes As Integer

Dim KeyboardNumber(10, 4) As String
Dim length As Integer
Dim actionSign As String

Dim startTime As String
Dim endTime As String
Dim timeString As String

Dim readOrderItemNumber As Integer
Dim maxHeight As Long

Dim totalCost As String

Dim totalSales As Double
Dim top5SalesName(5) As String
Dim top5SalesIncome(5) As Double

Dim discount As Double

Dim counterNumber As Integer
Dim counterTableNumber As Integer

Dim languageSwitch As String
Dim visibleStatus As Boolean

Dim delOrderNumber As String
Dim delItemNumber As String
Dim delQuantity As String
Dim delAddMoney As String

```

Dim delAddDate As String
Dim delAddTime As String
Dim delTotalCost As String

Dim prSpecialDemand(100) As String
Dim prOrderItemSpecialDemand() As String
Dim prSPFrameInputLabel As String

Dim Top20SalesArray()
Const Top20Sales As Integer = 5

Dim specialMark As Boolean
Dim bigSales As String
Dim smallSales As String

Dim itemLanguage As String

```

```
'StarPrinter-1
```

```
Public Sub OpenPrinter()
    Open "lpt1" For Output As #1
End Sub
```

```
Public Sub Center()
    Print #1, Chr$(&H1B); Chr$(&H1D); Chr$(&H61); Chr$(&H31);
End Sub
```

```
Public Sub LeftJustification()
    Print #1, Chr$(&H1B); Chr$(&H1D); Chr$(&H61); Chr$(&H30);
End Sub
```

```
Public Sub FontSize(s As Integer)
    Print #1, Chr$(&H1B); Chr$(&H57); Chr(s); Chr$(&H1B); Chr$(&H68); Chr$(s);
End Sub
```

```
Public Sub ClosePrinter()
    Print #1, Chr$(&H1B); Chr$(&H64); Chr$(&H32)
    Close #1
End Sub
```

```
Private Sub AddButton_Click()
    If AddButton.Caption = "Add Item" Then
        totalOrderItemNumber = 0
        If orderNumber = "" Then
            alreadyOrderItemNumber = 0
        Else
            ReadAlreadyOrderItemNumber
        End If
        ShowTableMapFrame False
        ShowMenuFrame True
        ClearOrderItemLabels
        ShowOrderItemFrame True
    ElseIf AddButton.Caption = "Modify Quantity" Then
        ShowNumericalFrame True
    End If
    ShowStatusFrame False
End Sub
```

```

Private Sub AddMoneyButton_Click()
    If AddMoneyButton.Caption = "Add Money" Then
        NumericalFrameTitle.Caption = OrderItemNameLabel(orderItemIndex)
        actionSign = AddMoneyButton.Caption
        ShowKeyboardFrame True
    ElseIf AddMoneyButton.Caption = "Order Item Status" Then
    ElseIf AddMoneyButton.Caption = "Payment" Then
        ShowPaymentFrame True
        mOrderForm.Caption = AddMoneyButton.Caption
        If Mid(StatusTitleButton.Caption, 1, 5) <> "Table" Then
            TableNoLabel.Caption = tableNumberString
        End If
        ClearOrderItemLabels
        ReadOrderItem2Checkout
        ShowOrderItemFrame True
    End If
    ShowStatusFrame False
End Sub

```

```

Private Sub AfternoonButton_Click()
    If Not NumericalFrame.Visible Then
        totalSales = 0
        startTime = "12:00:00"
        endTime = "16:59:59"
        ReportLabel.Caption = "Afternoon Sales Report"
        ReadAllOrderItems
    End If
End Sub

```

```

Private Sub CancelButton_Click()
    If CancelButton.Caption = "Cancel Hold" Then
        str2 = "True"
        str3 = tableNumber(orderTableNumber)
        str4 = ""
        UpdateTableavailableStatus
        ShowTable True
    ElseIf CancelButton.Caption = "Check Out" Then
        If mOrderForm.Caption = "Table Map" Then
            str2 = "True"
            str3 = tableNumber(orderTableNumber)
            str4 = ""
            UpdateTableavailableStatus
            ShowTable True
            Checkout
        Else
            mOrderForm.Caption = "To Go List"
            tableNumberString = "To Go Order"
            Checkout
            ClearOrderItemLabels
            ReadToGoOrderInfo
            ShowOrderItemFrame True
        End If
    ElseIf CancelButton.Caption = "Cancel Item" Then
        OrderItemQuantityLabel(orderItemIndex).Caption = ""
        ShowOrderItems
        readOrderItemNumber = totalOrderItemNumber
        ShowOrderItemFrame True
    ElseIf CancelButton.Caption = "Cancel Ordered Item" Then
        DeleteOrderedItem
        mOrderForm.Caption = "Order Status"
        ClearOrderItemLabels
        ReadOrderItemStatus
        ShowOrderItemFrame True
        If delTotalCost <> "" Then
            ShowCheckoutFrame True
            ChangeLabel.Caption = delTotalCost
        End If
    End If
End Sub

```

```

Elseif CancelButton.Caption = "Print Bill" Then
    mOrderForm.Caption = CancelButton.Caption
    ShowDiscountFrame True
    If Mid(StatusTitleButton.Caption, 1, 5) <> "Table" Then
        TableNoLabel.Caption = tableNumberString
    End If
    ClearOrderItemLabels
    ReadOrderItem2Checkout
    ShowOrderItemFrame True
End If
ShowStatusFrame False
End Sub

Private Sub CategoryButton_Click(Index As Integer)
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Then
    Else
        categoryIndex = Index
        For i = 1 To totalCategoryNumber
            CategoryButton(i).BackColor = CategoryButtonColor
        Next i
        CategoryButton(Index).BackColor = CategoryButtonPressColor
        ShowItem
    End If
End Sub

Private Sub Checkout()
    sSQLQuery = "UPDATE Orders SET EndDate=" + CStr(Date) + ", EndTime=" + CStr(Time) + _
        " WHERE OrderNumber =" & orderNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close
End Sub

Private Sub ClearOrderItemLabels()
    For i = 1 To MaxOrderItemNumber
        OrderItemNameLabel(i).Caption = ""
        OrderItemDemandLabel(i).Caption = ""
        PrOrderItemDemandLabel(i).Caption = ""
        OrderItemQuantityLabel(i).Caption = ""
        OrderItemNumberLabel(i).Caption = ""
        OrderItemAddMoneyLabel(i).Caption = ""
        OrderItemPromotionLabel(i).Caption = ""
    Next i
End Sub

Private Sub CategoryDataCombo_Change()
    sSQLQuery = "SELECT * FROM SubfoodCategory " + _
        "WHERE CategoryNumber IN (Select CategoryNumber FROM FoodCategory " + _
        "WHERE CategoryName =" + CategoryDataCombo.Text + ")"
    SubcategoryAdodc.RecordSource = sSQLQuery
    SubcategoryAdodc.Refresh
    If editActionString = "Edit Menu" Then
        sSQLQuery = "SELECT * FROM Item " + _
            "WHERE SubcategoryNumber IN (Select SubcategoryNumber FROM SubfoodCategory " + _
            "WHERE SubcategoryName =" + SubcategoryDataCombo.Text + ")"
        ItemAdodc.RecordSource = sSQLQuery
        ItemAdodc.Refresh
    End If
End Sub

Private Sub ConfirmButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        If mOrderForm.Caption = "Payment" Then
            If PaymentLabel.Caption = "" Then

```

```

        ShowPaymentFrame True
    Else
        PaymentFunction
        'ShowSpecialMarkFrame True
    End If
ElseIf mOrderForm.Caption = "Order Menu" Or mOrderForm.Caption = "Order List" Then
    If orderNumber = "" Then
        addTimes = 0
        GetOrderNumber
        InsertOrderItems2DB
    Else
        InsertOrderItems2DB
    End If
    'PrintOrderList orderNumber
    ShowMenuFrame False
    ShowTableMapFrame True
End If
End If
End Sub

Private Sub DaytimeButton_Click()
    If Not NumericalFrame.Visible Then
        totalSales = 0
        ReadAccountingInfo
        ReportLabel.Caption = "Sales Report " + "From " + startTime + " To " + endTime
        ReadAllOrderItems
        UpdateAccountingInfo
    End If
End Sub

Private Sub DeleteAOrder(wantedOrderNumber As String)
    sSQLQuery = "DELETE FROM Orders WHERE OrderNumber=" + wantedOrderNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close
    OrderListAdodc.Refresh
    QuantitativeStatisticsAdodc.Refresh
    MonetaryStatisticsAdodc.Refresh
    DeletedOrderItemAdodc.Refresh
End Sub

Private Sub DeleteOrderedItem()
    sSQLQuery = "SELECT OrderNumber, ItemNumber, Quantity, AddMoney, AddDate, AddTime " + _
        "FROM OrderItem " + _
        "WHERE SeriesNumber=" + choiceSeriesNumber
    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    delOrderNumber = rs("OrderNumber")
    delItemNumber = rs("ItemNumber")
    delQuantity = rs("Quantity")
    delAddMoney = rs("AddMoney")
    delAddDate = rs("AddDate")
    delAddTime = rs("AddTime")
    oConn.Close

    sSQLQuery = "DELETE FROM OrderItem WHERE SeriesNumber=" + choiceSeriesNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close

    sSQLQuery = "INSERT INTO DeletedOrderItem(OrderNumber, ItemNumber, Quantity, " + _
        "AddMoney, AddDate, AddTime, DeletedDate, DeletedTime, WaiterNumber) " + _
        "VALUES (" + delOrderNumber + "," + delItemNumber + "," + delQuantity + "," + _
        delAddMoney + "," + delAddDate + "," + delAddTime + "," + _
        CStr(Date) + "," + CStr(Time) + "," + _
        WaiterNumber + ")"
    oConn.Open dbEngine

```



```

oConn.Execute sSQLQuery
oConn.Close

'----- Already pay money -----
On Error Resume Next
totalCost = ""
discount = 0#
delTotalCost = ""
sSQLQuery = "SELECT Total, Discount FROM Orders WHERE OrderNumber=" + delOrderNumber
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalCost = rs("Total")
discount = rs("Discount")
oConn.Close

If totalCost <> "" Then
    sSQLQuery = "SELECT Price FROM Item WHERE ItemNumber=" + delItemNumber
    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    delTotalCost = FormatNumber(delQuantity * (rs("Price") + delAddMoney) * (1 + taxRate), 2, vbTrue)
    totalCost = totalCost - delTotalCost
    oConn.Close

    sSQLQuery = "UPDATE Orders SET Total=" + FormatNumber(totalCost, , vbTrue, , vbFalse) + _
        " WHERE OrderNumber =" & delOrderNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close

    SubtotalLabel.Caption = ""
    TaxLabel.Caption = ""
    TotalLabel.Caption = ""
    PaymentLabel.Caption = ""
End If
End Sub

Private Sub DeleteAOrderButton_Click()
    If Not NumericalFrame.Visible And WaiterNumber = Administrator Then
        mOrderForm.Caption = "Sales Report"
        ShowNumericalFrame True
    End If
End Sub

Private Sub DemandButton_Click()
    If DemandButton.Caption = "Order Item Status" Then
        mOrderForm.Caption = "Order Status"
        ClearOrderItemLabels
        ReadOrderItemStatus
        ShowOrderItemFrame True
    ElseIf DemandButton.Caption = "Special Demand" Then
        ShowSPFrame True
    End If
    ShowStatusFrame False
End Sub

Private Sub DiscountButton_Click()
    actionSign = "Discount Print"
    ShowKeyboardFrame True
    ShowDiscountFrame False
    mOrderForm.Caption = CancelButton.Caption
    If Mid(StatusTitleButton.Caption, 1, 5) <> "Table" Then
        TableNoLabel.Caption = tableNumberString
    End If
    ClearOrderItemLabels
    ReadOrderItem2Checkout
    ShowOrderItemFrame True
End Sub

```

```

Private Sub DiscountTitle_Click()
    'ShowDiscountFrame False
End Sub

Private Sub EditCategory_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        CategoryAdodc.Refresh
        editActionString = "Edit Category"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub EditMenuButton_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Edit Menu"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub EditStoreButton_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Edit Store"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub EditSubcategory_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Edit Subcategory"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub EditTableButton_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Edit Table"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub EditWaiterButton_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Edit Waiter"
        ShowEditFrame True
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub ExitButton_Click()
    If Not NumericalFrame.Visible Then
        'ExitFrame.Visible = True
        'No.SetFocus
        'End
        ShowLoginFrame True
        ShowSalesReportFrame False
    End If
End Sub

```

```

        ShowOrderFrame False
        ShowEditFrame False
    End If
End Sub

Private Sub ExitOrderButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        If mOrderForm.Caption = "Order List" Or mOrderForm.Caption = "Order Menu" Then
            ShowTableMapFrame True
        ElseIf mOrderForm.Caption = "Table Map" Or mOrderForm.Caption = "Check Out" Or _
            mOrderForm.Caption = "Payment" Or mOrderForm.Caption = "Print Bill" Or _
            mOrderForm.Caption = "Order Status" Or mOrderForm.Caption = "To Go List" Then
            ShowOrderFrame False
            ShowTableMapFrame False
        End If
        ShowStatusFrame False
        ShowMenuFrame False
        ShowNumericalFrame False
        ShowSPFrame False
        ShowPaymentFrame False
        ShowKeyboardFrame False
    End If
End Sub

Public Function FixedLengthString(aString As String, anInteger As Integer)
    stringLength = Len(aString)
    If stringLength >= anInteger Then
        FixedLengthString = Mid(aString, 1, anInteger)
    Else
        FixedLengthString = aString
        stringLength = anInteger - stringLength
        For i = 1 To stringLength
            If anInteger > 8 Then
                FixedLengthString = FixedLengthString + " "
            Else
                FixedLengthString = " " + FixedLengthString
            End If
        Next i
    End If
End Function

Private Sub Form_Load()

    ReDim rPPCMessage(maxPPCNumber)

    ReDim tableNumber(MaxTableNumber)
    ReDim tableNo(MaxTableNumber)
    ReDim tableAvailableStatus(MaxTableNumber)
    ReDim tableSeatNumber(MaxTableNumber)
    ReDim tableXCoordinate(MaxTableNumber)
    ReDim tableYCoordinate(MaxTableNumber)
    ReDim tableWidth(MaxTableNumber)
    ReDim tableLength(MaxTableNumber)
    ReDim tableShape(MaxTableNumber)

    ReDim categoryName(MaxFoodCategoryNumber)
    ReDim totalItemNumbers(MaxFoodCategoryNumber)
    ReDim itemNumbers(MaxItemNumber, MaxFoodCategoryNumber)
    ReDim itemNames(MaxItemNumber, MaxFoodCategoryNumber)
    ReDim itemPrices(MaxItemNumber, MaxFoodCategoryNumber)

    ReDim OrderItemNumber(MaxOrderItemNumber)
    ReDim OrderItemNumber(MaxOrderItemNumber)
    ReDim orderItemAddMoney(MaxOrderItemNumber)
    ReDim orderItemPromotion(MaxOrderItemNumber)

```

```

ReDim orderItemName(MaxOrderItemNumber)
ReDim orderItemQuantity(MaxOrderItemNumber)
ReDim orderItemSpecialDemand(MaxOrderItemNumber)
ReDim prOrderItemSpecialDemand(MaxOrderItemNumber)
ReDim listOrderItemNumber(MaxOrderItemNumber)
ReDim listOrderItemAddMoney(MaxOrderItemNumber)
ReDim listOrderItemPromotion(MaxOrderItemNumber)

ReDim specialDemandNumber(MaxSpecialDemandNumber)
ReDim specialDemandString(MaxSpecialDemandNumber)

ReDim Top20SalesArray(1 To Top20Sales, 1 To 2)

taxRate = 0.078
If StartLanguageSwitch = "Chinese" Then
    languageSwitch = "Chinese"
    LanguageButton.Caption = "Chinese"
    itemLanguage = "ChItemName"
Else
    languageSwitch = "English"
    LanguageButton.Caption = "English"
    itemLanguage = "ItemName"
End If

For i = 1 To MaxTableNumber
    Load TableButtons(i)
Next i

If mOrderForm.WindowState = Normal Then
    Move Screen.Width - Width, Screen.Height - Height
End If
Set oConn = CreateObject("ADODB.Connection")
Set rs = CreateObject("ADODB.Recordset")
dbEngine = "Provider=Microsoft.Jet.OLEDB.4.0;Data Source=c:\morder\mOrderDatabase.mdb"

ESC = Chr$(27)
Cutter = Chr$(100)
lineFeed = Chr$(10)

Agent1.Characters.Load "Peedy", DATAPATH
Set Peedy = Agent1.Characters("Peedy")
Peedy.LanguageID = &H409

For i = 1 To maxPPCNumber
    Load PPCSocket(i)
    PPCSocket(i).LocalPort = ServerIPPort
    PPCSocket(i).Listen
Next i

KitchenSocket.LocalPort = kPCIPPort
KitchenSocket.Listen

ReadFoodCategory
ReadItemInfo

For i = 1 To totalCategoryNumber
    Load CategoryButton(i)
Next i
For i = 1 To MaxItemNumber
    Load ItemButton(i)
Next i

For i = 1 To MaxItemNumber
    Load OrderItemNameLabel(i)
    Load OrderItemDemandLabel(i)
    Load PrOrderItemDemandLabel(i)

```

```

    Load OrderItemQuantityLabel(i)
    Load OrderItemNumberLabel(i)
    Load OrderItemAddMoneyLabel(i)
    Load OrderItemPromotionLabel(i)
Next i

```

```

For i = 1 To MaxSpecialDemandNumber + 4
    Load SPButton(i)
Next i

```

```

ReadStoreInfo
ReadSpecialDemand

```

```

For i = 1 To MaxKeyNumber
    Load Key(i)
Next i

```

```

KeyboardNumber(1, 1) = "Q"
KeyboardNumber(2, 1) = "W"
KeyboardNumber(3, 1) = "E"
KeyboardNumber(4, 1) = "R"
KeyboardNumber(5, 1) = "T"
KeyboardNumber(6, 1) = "Y"
KeyboardNumber(7, 1) = "U"
KeyboardNumber(8, 1) = "I"
KeyboardNumber(9, 1) = "O"
KeyboardNumber(10, 1) = "P"
KeyboardNumber(1, 2) = "A"
KeyboardNumber(2, 2) = "S"
KeyboardNumber(3, 2) = "D"
KeyboardNumber(4, 2) = "F"
KeyboardNumber(5, 2) = "G"
KeyboardNumber(6, 2) = "H"
KeyboardNumber(7, 2) = "J"
KeyboardNumber(8, 2) = "K"
KeyboardNumber(9, 2) = "L"
KeyboardNumber(1, 3) = "Z"
KeyboardNumber(2, 3) = "X"
KeyboardNumber(3, 3) = "C"
KeyboardNumber(4, 3) = "V"
KeyboardNumber(5, 3) = "B"
KeyboardNumber(6, 3) = "N"
KeyboardNumber(7, 3) = "M"
KeyboardNumber(8, 3) = " "
KeyboardNumber(9, 3) = "Enter"
KeyboardNumber(1, 4) = "Exit"
KeyboardNumber(2, 4) = "CL"
KeyboardNumber(3, 4) = "Space"
KeyboardNumber(4, 4) = "."
KeyboardNumber(5, 4) = "Backspace"

```

```

ReadTableInfo
ReadCounterNumber
End Sub

```

```

Private Sub Form_Resize()
    ShowLoginFrame True
    ControlFrame.Height = ScaleHeight
    ExitButton.Top = ScaleHeight - ExitButton.Height - 100
    ExitButton.Left = (ControlFrame.Width - ExitButton.Width) / 2

```

```

'Peedy.Left = mOrderForm.CurrentX
'Peedy.Top = mOrderForm.CurrentY
'If playAgent Then Peedy.Show
'Peedy.Speak "\Spd=150\Welcome to use \spd=100\mOrder System \spd=150\Counter \Pit=50\side!"
'Peedy.Hide

```

```

For i = 0 To 3
    If i = 0 Then
        Picture1(0).Left = ScaleWidth / 2 - Picture1(0).Width * 1.5
        Picture1(0).Top = (ScaleHeight / 2 - Picture1(0).Height * 1.5 - Picture1(1).Height)
    Elseif i = 1 Then
        Picture1(i).Left = (ScaleWidth - Picture1(1).Width - Picture1(2).Width - Picture1(3).Width) / 2
    Else
        Picture1(i).Left = Picture1(i - 1).Left + Picture1(i - 1).Width
    End If
    Picture1(i).Top = Picture1(0).Top + Picture1(0).Height
Next i
MystoreLabel.Left = Picture1(2).Left * ScaleWidth - MystoreLabel.Width - Picture1(2).Width / 2
MystoreLabel.Top = Picture1(1).Top + Picture1(1).Height + margin * 5
End Sub

Private Sub GetOrderNumber()
    sSQLQuery = "INSERT INTO Orders(TableNumber, BeginningDate, BeginningTime," + _
        "WaiterNumber, SpecialDemand, AddTimes, PocketPCIPAddress) " + _
        "VALUES (" + CStr(tableNumber(orderTableNumber)) + "," + _
        CStr(Date) + "," + CStr(Time) + "," + _
        WaiterNumber + "," + orderSpecialDemand + ",1," + CPCIPAddress + ")"
    oConn.Open dbEngine
    oConn.Execute sSQLQuery

    sSQLQuery = "SELECT MAX(OrderNumber) AS NewOrder FROM Orders WHERE TableNumber=" &
tableNumber(orderTableNumber)
    rs.Open sSQLQuery, oConn
    orderNumber = rs("NewOrder")

    oConn.Close
End Sub

Private Sub HideDiscountFrameButton_Click()
    ShowDiscountFrame False
End Sub

Private Sub HidePaymentFrameButton_Click()
    ShowPaymentFrame False
End Sub

Private Sub HideStatusFrameButton_Click()
    ShowStatusFrame False
End Sub

Private Sub InsertOrderItems2DB()
    addTimes = addTimes + 1
    sSQLQuery = "UPDATE Orders SET AddTimes=" + CStr(addTimes) + _
        " WHERE OrderNumber=" + orderNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close

    oConn.Open dbEngine
    i = 1
    Do Until OrderItemNameLabel(i).Caption = ""
        sSQLQuery = "INSERT INTO OrderItem(OrderNumber, ItemNumber, Quantity, " + _
            "SpecialDemand, CookingSpecialDemand, AddMoney, Status, AddTimes, Promotion, AddDate, AddTime)
" + _
            "VALUES (" & orderNumber & "," & OrderItemNumberLabel(i).Caption + "," + _
            OrderItemQuantityLabel(i).Caption + "," + _
            OrderItemDemandLabel(i).Caption + "," + _
            PrOrderItemDemandLabel(i).Caption + "," + _
            OrderItemAddMoneyLabel(i).Caption + ",0," + _
            CStr(addTimes) + "," + OrderItemPromotionLabel(i).Caption + "," + _
            CStr(Date) + "," + CStr(Time) + ")"
    End Sub

```

```

oConn.Execute sSQLQuery
i = i + 1
Loop
oConn.Close
End Sub

```

```

Private Sub ItemButton_Click(Index As Integer)
If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
StatusFrame.Visible Or DiscountFrame.Visible Then
Else
itemIndex = Index
For i = 1 To totalItemNumbers(category/Index)
ItemButton(i).BackColor = &H808000
Next i
ItemButton(Index).BackColor = &H8080&
mOrderForm.Caption = "Order Menu"

ShowNumericalFrame True
End If
End Sub

```

```

Private Sub Key_Click(Index As Integer)
For i = 1 To MaxKeyNumber
Key(i).BackColor = ButtonNonpressColor
Next i
If keyboardFrameTitle.Caption <> "Input Password" Then Key(Index).BackColor = ButtonPressColor

If Key(Index).Caption = "Exit" Then
KeyboardFrameInputLabel.Caption = ""
keyboardFrameTitle.Caption = ""
ShowKeyboardFrame False
Elseif Key(Index).Caption = "CL" Then
If actionSign = "Login" Then
LoginLabel.Caption = ""
Elseif actionSign = "Password" Then
PasswordLabel.Caption = ""
Password = ""
Else
KeyboardFrameInputLabel.Caption = ""
End If
Elseif Key(Index).Caption = "Enter" Then
If actionSign = "Add Money" Or actionSign = "Cash" Or Mid(actionSign, 1, 8) = "Discount" Then
If IsNumeric(KeyboardFrameInputLabel.Caption) Then
If actionSign = "Add Money" Then
OrderItemAddMoneyLabel(orderItemIndex) = FormatNumber(KeyboardFrameInputLabel.Caption, 2,
vbTrue)
SPFrameInputLabel.Caption = ""
keyboardFrameTitle.Caption = ""
ShowKeyboardFrame False
SPFrameTitle.Caption = OrderItemNameLabel(orderItemIndex).Caption
'ShowSPFrame True
Elseif actionSign = "Cash" Then
If CDbI(KeyboardFrameInputLabel.Caption - TotalLabel.Caption) >= 0 Then
keyboardFrameTitle.Caption = ""
ShowKeyboardFrame False
PaymentLabel.Caption = FormatNumber(KeyboardFrameInputLabel.Caption, 2, vbTrue)
ChangeLabel.Caption = FormatNumber(PaymentLabel.Caption - TotalLabel.Caption, 2, vbTrue)
Else
Peedy.Show
Peedy.Speak "Sorry, the cash is less than total money $" + TotalLabel.Caption + "!"
Peedy.Hide
End If
Elseif Mid(actionSign, 1, 8) = "Discount" Then
If CDbI(KeyboardFrameInputLabel.Caption) < 1# And CDbI(KeyboardFrameInputLabel.Caption) > 0 Then
keyboardFrameTitle.Caption = ""
ShowKeyboardFrame False

```

```

        discount = CDbI(FormatNumber(KeyboardFrameInputLabel.Caption, 2, vbTrue))
        SubtotalLabel.Caption = FormatNumber(SubtotalLabel.Caption * KeyboardFrameInputLabel.Caption, 2,
vbTrue)
        TaxLabel.Caption = FormatNumber(SubtotalLabel.Caption * taxRate, 2, vbTrue)
        TotalLabel.Caption = FormatNumber(CDbI(SubtotalLabel.Caption) + CDbI(TaxLabel.Caption), 2,
vbTrue)
        PaymentDiscountButton.Enabled = False
        If actionSign = "Discount" Then ShowPaymentFrame True
        WriteOrderDiscount
        If actionSign = "Discount Print" Then PrintBill orderNumber
    Else
        Peedy.Show
        Peedy.Speak "Sorry, the discount must be greater than 0 and less than 1!"
        Peedy.Hide
    End If
End If
Else
    Peedy.Show
    Peedy.Speak "Sorry, you must input a number!"
    Peedy.Hide
End If
ElseIf actionSign = "Special Demand" And mOrderForm.Caption = "Order List" Then
    OrderItemDemandLabel(orderItemIndex).Caption = SPFrameInputLabel.Caption + " " + _
        KeyboardFrameInputLabel.Caption
    PrOrderItemDemandLabel(orderItemIndex).Caption = prSPFrameInputLabel + " " + _
        KeyboardFrameInputLabel.Caption
    SPFrameInputLabel.Caption = ""
    prSPFrameInputLabel = ""
    keyboardFrameTitle.Caption = ""
    ShowKeyboardFrame False
ElseIf actionSign = "Login" Then
    If LoginLabel.Caption <> "" Then
        keyboardFrameTitle.Caption = ""
        ShowKeyboardFrame False
    End If
ElseIf actionSign = "Password" Then
    If Password <> "" Then
        keyboardFrameTitle.Caption = ""
        ShowKeyboardFrame False
        ReadWaiterInfo
    End If
End If
KeyboardFrameInputLabel.Caption = ""
ElseIf Key(Index).Caption = "SH" Then
ElseIf Key(Index).Caption = "Backspace" Then
    If actionSign = "Login" Then
        length = Len(LoginLabel.Caption)
    ElseIf actionSign = "Password" Then
        length = Len(Password)
    Else
        length = Len(KeyboardFrameInputLabel.Caption)
    End If
    If length > 0 Then
        If actionSign = "Login" Then
            LoginLabel.Caption = Mid(LoginLabel.Caption, 1, length - 1)
        ElseIf actionSign = "Password" Then
            PasswordLabel.Caption = Mid(PasswordLabel.Caption, 1, length - 1)
            Password = Mid(Password, 1, length - 1)
        Else
            KeyboardFrameInputLabel.Caption = Mid(KeyboardFrameInputLabel.Caption, 1, length - 1)
        End If
    End If
ElseIf Key(Index).Caption = "Space" Then
    If actionSign = "Login" Then
        LoginLabel.Caption = LoginLabel.Caption + " "
    ElseIf actionSign = "Password" Then
        PasswordLabel.Caption = PasswordLabel.Caption + "*"

```



```

        Password = Password + " "
    Else
        KeyboardFrameInputLabel.Caption = KeyboardFrameInputLabel.Caption + " "
    End If
Else
    If actionSign = "Login" Then
        LoginLabel.Caption = LoginLabel.Caption + Key(Index).Caption
    ElseIf actionSign = "Password" Then
        PasswordLabel.Caption = PasswordLabel.Caption + ""
        Password = Password + Key(Index).Caption
    Else
        KeyboardFrameInputLabel.Caption = KeyboardFrameInputLabel.Caption + Key(Index).Caption
    End If
End If
End Sub

Private Sub KitchenSocket_Close()
    Call KitchenSocket.Close
    Call KitchenSocket.Listen
End Sub

Private Sub KitchenSocket_ConnectionRequest(ByVal requestID As Long)
    If KitchenSocket.State <> sckClosed Then
        Call KitchenSocket.Close
    End If

    Call KitchenSocket.Accept(requestID)
End Sub

Private Sub KitchenSocket_DataArrival(ByVal bytesTotal As Long)
    Call KitchenSocket.GetData(rkMessage)
    If Mid(rkMessage, 1, 8) = "\emp\Hi," Then
        Peedy.Show
        Peedy.Speak rkMessage
        Peedy.Hide
    End If
End Sub

Private Sub LanguageButton_Click()
    If Not NumericalFrame.Visible Then
        If LanguageButton.Caption = "Chinese" Then
            LanguageButton.Caption = "English"
            itemLanguage = "ItemName"
        ElseIf LanguageButton.Caption = "English" Then
            LanguageButton.Caption = "Chinese"
            itemLanguage = "ChItemName"
        End If

        languageSwitch = LanguageButton.Caption
        ReadFoodCategory
        ReadItemInfo
        ReadSpecialDemand
        If mOrderForm.Caption = "Sales Report" Then
            If WaiterNumber = Administrator Then
                ShowSalesReportFrame True
            Else
                ShowSampleSalesReportFrame True
            End If
        End If
    End If
End Sub

Private Sub LoginLabel_Click()
    LoginLabel.Caption = ""
    PasswordLabel.Caption = ""
    actionSign = "Login"
    keyboardFrameTitle.Caption = "Input Login Name"

```

```

    ShowKeyboardFrame True
End Sub

Private Sub LogoffButton_Click()
    End
End Sub

Private Sub NighttimeButton_Click()
    If Not NumericalFrame.Visible Then
        totalSales = 0
        startTime = "17:00:00"
        endTime = "23:59:59"
        ReportLabel.Caption = "Night Sales Report"
        ReadAllOrderItems
    End If
End Sub

Private Sub No_Click()
    ExitFrame.Visible = False
End Sub

Private Sub NoDiscountButton_Click()
    ShowDiscountFrame False
    mOrderForm.Caption = CancelButton.Caption
    If Mid(StatusTitleButton.Caption, 1, 5) <> "Table" Then
        TableNoLabel.Caption = tableNumberString
    End If
    ClearOrderItemLabels
    ReadOrderItem2Checkout
    ShowOrderItemFrame True
    PrintBill orderNumber
End Sub

'Private Sub NumericalFrameTitle_Click()
' NumericalInputLabel.Caption = ""
' ShowNumericalFrame False
'End Sub

'Private Sub NumericalInputLabel_Click()
' NumericalInputLabel.Caption = ""
' ShowNumericalFrame False
'End Sub

Private Sub NumericalKeys_Click(Index As Integer)
    If Index = 10 Then
        NumericalInputLabel.Caption = ""
        ShowNumericalFrame False
    ElseIf Index = 11 Then
        NumericalInputLabel.Caption = ""
    ElseIf Index = 12 Then
        If NumericalInputLabel.Caption <> "" Then
            If Cint(NumericalInputLabel.Caption) <> 0 Then
                If mOrderForm.Caption = "Order Menu" Then
                    If totalOrderItemNumber + alreadyOrderItemNumber < MaxOrderItemNumber Then
                        totalOrderItemNumber = totalOrderItemNumber + 1
                        OrderItemNameLabel(totalOrderItemNumber).Caption = itemNames(itemIndex, categoryIndex)
                        OrderItemQuantityLabel(totalOrderItemNumber).Caption = NumericalInputLabel.Caption
                        OrderItemDemandLabel(totalOrderItemNumber).Caption = ""
                        PrOrderItemDemandLabel(totalOrderItemNumber).Caption = ""
                        OrderItemNumberLabel(totalOrderItemNumber).Caption = itemNumbers(itemIndex, categoryIndex)
                        OrderItemAddMoneyLabel(totalOrderItemNumber).Caption = "0.00"
                        OrderItemPromotionLabel(totalOrderItemNumber).Caption = "0.00"
                        readOrderItemNumber = totalOrderItemNumber
                        ShowOrderItemFrame True
                    End If
                    ConfirmButton.Enabled = True
                ElseIf mOrderForm.Caption = "Order List" Then

```

```

        OrderItemQuantityLabel(orderItemIndex).Caption = NumericalInputLabel.Caption
    ElseIf mOrderForm.Caption = "Sales Report" Then
        DeleteAOrder NumericalInputLabel.Caption
    End If
    NumericalInputLabel.Caption = ""
    ShowNumericalFrame False
Else
    NumericalInputLabel.Caption = ""
    Peedy.Show
    Peedy.Speak "Sorry, you must input a non-zero number!"
    Peedy.Hide
End If
Else
    Peedy.Show
    Peedy.Speak "Sorry, you must input a number!"
    Peedy.Hide
End If
Else
    NumericalInputLabel.Caption = NumericalInputLabel.Caption + CStr(Index)
End If
End Sub

Private Sub OrderButton_Click()
    If Not NumericalFrame.Visible Then
        ShowOrderFrame True
        ShowSalesReportFrame False
        ShowEditFrame False
    End If
End Sub

Private Sub OrderItemAddMoneyLabel_Click(Index As Integer)
    If Not NumericalFrame.Visible Then
        orderItemIndex = Index
        UpdateOrderItem
    End If
End Sub

Private Sub OrderItemDemandLabel_Click(Index As Integer)
    If Not NumericalFrame.Visible Then
        orderItemIndex = Index
        UpdateOrderItem
    End If
End Sub

Private Sub OrderItemNameLabel_Click(Index As Integer)
    If Not NumericalFrame.Visible Then
        MsgBox (mOrderForm.Caption)
        orderItemIndex = Index
        UpdateOrderItem
    End If
End Sub

Private Sub OrderItemQuantityLabel_Click(Index As Integer)
    If Not NumericalFrame.Visible Then
        orderItemIndex = Index
        UpdateOrderItem
    End If
End Sub

Private Sub OrderVScroll_Change()
    OrderItemScrollFrame.Move 0, -OrderVScroll.Value + OrderTitleFrame.Height + margin / 4
End Sub

Private Sub PasswordLabel_Click()
    If LoginLabel.Caption <> "" Then
        PasswordLabel.Caption = ""
    End If
End Sub

```

```

        Password = ""
        actionSign = "Password"
        keyboardFrameTitle = "Input Password"
        ShowKeyboardFrame True
    End If
End Sub

Private Sub Payment()
    sSQLQuery = "UPDATE Orders SET Total=" + FormatNumber(TotalLabel.Caption, , vbTrue, , vbFalse) + ", PayWay
    =" + str1 + _
        ", Cashier=" + WaiterNumber + ", SpecialMark=" + CStr(specialMark) + _
        " WHERE OrderNumber =" & orderNumber
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close
End Sub

Private Sub PaymentATMCardButton_Click()
    ShowPaymentFrame False
    str1 = "ATM"
    PaymentLabel.Caption = TotalLabel.Caption
    ChangeLabel.Caption = "0.00"
End Sub

Private Sub PaymentCashButton_Click()
    str1 = "Cash"
    actionSign = str1
    ShowKeyboardFrame True
    ShowPaymentFrame False
End Sub

Private Sub PaymentCreditCardButton_Click()
    ShowPaymentFrame False
    str1 = "Credit"
    PaymentLabel.Caption = TotalLabel.Caption
    ChangeLabel.Caption = "0.00"
End Sub

Private Sub PaymentDiscountButton_Click()
    actionSign = "Discount"
    ShowPaymentFrame False
    ShowKeyboardFrame True
End Sub

Private Sub PaymentFrameTitle_Click()
    ShowPaymentFrame False
End Sub

Private Sub PaymentFunction()
    Payment
    TableButtons(orderTableNumber).BackColor = WaitingCheckoutColor
    ShowTableMapFrame True
    '---check out---
    If orderTableNumber <> counterTableNumber Then
        str2 = "True"
        str3 = tableNumber(orderTableNumber)
        str4 = ""
        UpdateTableavailableStatus
        ShowTable True
        Checkout
    End If
End Sub

Private Sub PPCSocket_Close(Index As Integer)
    Call PPCSocket(Index).Close
    Call PPCSocket(Index).Listen
End Sub

```

```

Private Sub PPCSocket_ConnectionRequest(Index As Integer, ByVal requestID As Long)
    If PPCSocket(Index).State <> sckClosed Then
        Call PPCSocket(Index).Close
    End If

    Call PPCSocket(Index).Accept(requestID)
End Sub

Private Sub PPCSocket_DataArrival(Index As Integer, ByVal bytesTotal As Long)
    Call PPCSocket(Index).GetData(rPPCMessage(Index))
    If rPPCMessage(Index) <> "O" Then
        'PrintReceipt rPPCMessage(Index)
    End If
End Sub

Private Sub PrintButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
    StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        If PrintButton.Caption = "Print Receipt" Then
            PrintReceipt orderNumber
        ElseIf PrintButton.Caption = "Print Order Items" Then
            If orderNumber = "" Then
                addTimes = 0
                GetOrderNumber
                InsertOrderItems2DB
            Else
                InsertOrderItems2DB
            End If
            PrintOrderList orderNumber
            ShowMenuFrame False
            ShowTableMapFrame True
        ElseIf PrintButton.Caption = "Print Order" Then
            PrintOrderList orderNumber
        End If
    End If
End Sub

Private Sub PrintOrderList(orderNo As String)
    oConn.Open dbEngine
    sSQLQuery = "SELECT TableNo, Orders.WaiterNumber AS WN FROM Orders, Tables " + _
        "WHERE OrderNumber=" + orderNo + _
        " AND Orders.TableNumber=Tables.TableNumber"
    rs.Open sSQLQuery, oConn
    tNumber = rs("TableNo")
    wNumber = rs("WN")
    oConn.Close

    If tNumber = counterTableNumber Then
        tNumber = "To Go"
    End If

    oConn.Open dbEngine
    If PrLanguageSwitch = "English" Then
        sSQLQuery = "SELECT ItemName, CookingSpecialDemand, Quantity, AddMoney FROM ORDERITEM, ITEM " +
        "WHERE OrderNumber=" & orderNo & " AND OrderItem.AddTimes=" + CStr(addTimes) + _
        " AND ORDERITEM.ItemNumber = ITEM.ItemNumber AND CookingSign=TRUE"
    ElseIf PrLanguageSwitch = "Chinese" Then
        sSQLQuery = "SELECT ChItemName AS ItemName, CookingSpecialDemand, Quantity, AddMoney FROM
ORDERITEM, ITEM " +
        "WHERE OrderNumber=" & orderNo & " AND OrderItem.AddTimes=" + CStr(addTimes) + _
        " AND ORDERITEM.ItemNumber = ITEM.ItemNumber AND CookingSign=TRUE"
    ElseIf PrLanguageSwitch = "Spanish" Then
        sSQLQuery = "SELECT SplItemName AS ItemName, CookingSpecialDemand, Quantity, AddMoney FROM
ORDERITEM, ITEM " +

```

```

        "WHERE OrderNumber=" & orderNo & " AND OrderItem.AddTimes=" + CStr(addTimes) + _
        " AND ORDERITEM.ItemNumber = ITEM.ItemNumber AND CookingSign=TRUE"
    End If
    rs.Open sSQLQuery, oConn

    sPrinter.OpenPrinter
    sPrinter.Center
    sPrinter.FontSize (1)
    Print #1, "Order List"; lineFeed;
    sPrinter.FontSize (0)
    Print #1, "Print Time: " + CStr(Now)
    Print #1, "Table No. " + tNumber + " Waiter: " + wNumber
    sPrinter.LeftJustification

    Do Until rs.EOF
        itemName = rs("ItemName")
        itemQuantity = rs("Quantity")
        Print #1, "NAME: " + FixedLengthString(itemName, 36)
        Print #1, "QUANTITY: " + FixedLengthString(itemQuantity, 4) + _
            " ADD MONEY:" + FixedLengthString(FormatNumber(rs("AddMoney"), 2, vbTrue), 7)
        If tNumber = "To Go" Then
            Print #1, "DEMAND: " + rs("CookingSpecialDemand") + " To Go" + lineFeed; ""
        Else
            Print #1, "DEMAND: " + rs("CookingSpecialDemand") + lineFeed
        End If
        rs.MoveNext
    Loop
    sPrinter.ClosePrinter
End Sub

Private Sub PrintBill(PPCorderNumber As String)
On Error Resume Next

    oConn.Open dbEngine
    sSQLQuery = "SELECT TableNo, Orders.WaiterNumber AS WN, Discount FROM Orders, Tables " + _
        "WHERE OrderNumber=" + PPCorderNumber + _
        " AND Orders.TableNumber=Tables.TableNumber"
    rs.Open sSQLQuery, oConn
    tNumber = rs("TableNo")
    wNumber = rs("WN")
    oConn.Close

    If tNumber = counterTableNumber Then
        tNumber = "To Go"
    End If

    oConn.Open dbEngine
    If ReceiptLanguageSwitch = "English" Then
        sSQLQuery = "SELECT ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
            "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
    ElseIf ReceiptLanguageSwitch = "Chinese" Then
        sSQLQuery = "SELECT ChItemName AS ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
            "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
    ElseIf ReceiptLanguageSwitch = "Spanish" Then
        sSQLQuery = "SELECT SplItemName AS ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
            "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
    End If
    rs.Open sSQLQuery, oConn

    sPrinter.OpenPrinter
    sPrinter.Center
    sPrinter.FontSize (1)
    Print #1, storeName; lineFeed;
    sPrinter.FontSize (0)
    Print #1, "(" + Mid(phoneNumber, 1, 3) + ")" + Mid(phoneNumber, 4, 7); lineFeed;
    Print #1, Address; lineFeed;
    Print #1, City + ", " + State + zipCode; lineFeed

```

```

Print #1, "Printing Time: " + CStr(Now)
Print #1, "Table No. " + tNumber + " Waiter: " + wNumber
Print #1, "OrderNumber: " + PPCorderNumber
sPrinter.LeftJustification

subtotal = 0
Do Until rs.EOF
    itemName = rs("ItemName")
    itemQuantity = rs("Quantity")
    addMoney = rs("AddMoney")
    itemProduct = rs("Quantity") * (rs("Price") + addMoney)
    subtotal = subtotal + itemProduct
    Print #1, FixedLengthString(itemName, 28) + _
        " " + FixedLengthString(itemQuantity, 4) + _
        " " + FixedLengthString(FormatNumber(itemProduct, 2, vbTrue), 8)
    rs.MoveNext
Loop
If discount <> 0# Then
    subtotal = round(subtotal * discount,2)
End If
tax = round(subtotal * taxRate,2)
total = subtotal + tax
Print #1, ""
Print #1, FixedLengthString("SUBTOTAL", 34) + FixedLengthString(FormatNumber(subtotal, 2, vbTrue), 8)
Print #1, FixedLengthString("TAX (" + FormatNumber(taxRate * 100, 2, vbTrue) + "%)", 34) +
FixedLengthString(FormatNumber(tax, 2, vbTrue), 8)
Print #1, FixedLengthString("TOTAL", 34) + FixedLengthString("$" + FormatNumber(total, 2, vbTrue), 8)
sPrinter.ClosePrinter
oConn.Close
End Sub

Private Sub PrintReceipt(PPCorderNumber As String)
On Error Resume Next

oConn.Open dbEngine
sSQLQuery = "SELECT TableNo, Orders.WaiterNumber AS WN, Discount FROM Orders, Tables " + _
    "WHERE OrderNumber=" + PPCorderNumber + _
    " AND Orders.TableNumber=Tables.TableNumber"
rs.Open sSQLQuery, oConn
tNumber = rs("TableNo")
wNumber = rs("WN")
oConn.Close

If tNumber = counterTableNumber Then
    tNumber = "To Go"
End If

oConn.Open dbEngine
If ReceiptLanguageSwitch = "English" Then
    sSQLQuery = "SELECT ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
        "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
ElseIf ReceiptLanguageSwitch = "Chinese" Then
    sSQLQuery = "SELECT ChItemName AS ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
        "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
ElseIf ReceiptLanguageSwitch = "Spanish" Then
    sSQLQuery = "SELECT SplItemName AS ItemName, Price, Quantity, AddMoney FROM ORDERITEM, ITEM " + _
        "WHERE OrderNumber=" & PPCorderNumber & " AND ORDERITEM.ItemNumber = ITEM.ItemNumber "
End If
rs.Open sSQLQuery, oConn

sPrinter.OpenPrinter
sPrinter.Center
sPrinter.FontSize (1)
Print #1, storeName; lineFeed;
sPrinter.FontSize (0)
Print #1, "(" + Mid(phoneNumber, 1, 3) + ")" + Mid(phoneNumber, 4, 7); lineFeed;
Print #1, Address; lineFeed;

```

```

Print #1, City + ", " + State + zipCode; lineFeed
Print #1, "Checkout Time: " + CStr(Now)
Print #1, "Table No. " + tNumber + " Cashier: " + WaiterNumber
Print #1, "OrderNumber: " + PPCorderNumber
sPrinter.LeftJustification

subtotal = 0
Do Until rs.EOF
    itemName = rs("ItemName")
    itemQuantity = rs("Quantity")
    addMoney = rs("AddMoney")
    itemProduct = rs("Quantity") * (rs("Price") + addMoney)
    subtotal = subtotal + itemProduct
    Print #1, FixedLengthString(itemName, 28) + _
        " " + FixedLengthString(itemQuantity, 4) + _
        " " + FixedLengthString(FormatNumber(itemProduct, 2, vbTrue), 8)
    rs.MoveNext
Loop
If discount <> 0# Then
    subtotal = round(subtotal * discount,2)
End If
tax = round(subtotal * taxRate,2)
total = subtotal + tax
Print #1, ""
Print #1, FixedLengthString("SUBTOTAL", 34) + FixedLengthString(FormatNumber(subtotal, 2, vbTrue), 8)
Print #1, FixedLengthString("TAX (" + FormatNumber(taxRate * 100, 2, vbTrue) + "%)", 34) +
FixedLengthString(FormatNumber(tax, 2, vbTrue), 8)
Print #1, FixedLengthString("TOTAL", 34) + FixedLengthString("$" + FormatNumber(total, 2, vbTrue), 8)

Print #1, FixedLengthString("Type of Payment: ", 34) + FixedLengthString(CStr(str1), 8)
If str1 = "Cash" Then
    Print #1, FixedLengthString("Payment: ", 34) + FixedLengthString(FormatNumber(PaymentLabel.Caption, 2,
vbTrue), 8)
    Print #1, FixedLengthString("Change: ", 34) + FixedLengthString(FormatNumber(ChangeLabel.Caption, 2,
vbTrue), 8)
End If

sPrinter.ClosePrinter
oConn.Close
End Sub

Private Sub ReadAccountingInfo()
sSQLQuery = "SELECT EndDate, EndTime FROM Accounting WHERE AccountingID=1"
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
If rs("EndDate") <> Date Then
    startTime = "00:00:00"
Else
    startTime = rs("EndTime")
End If
endTime = Time
oConn.Close
End Sub

Private Sub ReadAllOrderItems()
On Error Resume Next
timeString = "EndDate=#" + CStr(Date) + "# AND EndTime BETWEEN " + _
    "#" + startTime + "# AND #" + endTime + "#"

totalSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalSales FROM Orders WHERE " + timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalSales = rs("totalSales")
oConn.Close
SaleLabel.Caption = FormatNumber(totalSales, 2, vbTrue)

```



```

bigSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalSales FROM Orders WHERE SpecialMark=TRUE AND " + timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
bigSales = rs("totalSales")
oConn.Close
SaleLabel.Caption = SaleLabel.Caption + "(B:" + FormatNumber(bigSales, 2, vbTrue)

smallSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalSales FROM Orders WHERE SpecialMark=FALSE AND " + timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
smallSales = rs("totalSales")
oConn.Close
SaleLabel.Caption = SaleLabel.Caption + " S:" + FormatNumber(smallSales, 2, vbTrue) + ")"

totalSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalMoneySales FROM Orders WHERE " + "PayWay='Cash' AND " +
timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalSales = rs("totalMoneySales")
oConn.Close
CashMoneyLabel.Caption = FormatNumber(totalSales, 2, vbTrue)

totalSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalMoneySales FROM Orders WHERE " + "PayWay='Credit' AND " +
timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalSales = rs("totalMoneySales")
oConn.Close
CreditMoneyLabel.Caption = FormatNumber(totalSales, 2, vbTrue)

totalSales = 0
sSQLQuery = "SELECT Sum(Total) AS totalMoneySales FROM Orders WHERE " + "PayWay='ATM' AND " +
timeString
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalSales = rs("totalMoneySales")
oConn.Close
ATMMoneyLabel.Caption = FormatNumber(totalSales, 2, vbTrue)

timeString = "AddDate=#" + CStr(Date) + "# AND AddTime BETWEEN " + _
            "#" + startTime + "# AND #" + endTime + "#"
If languageSwitch = "English" Then
    sSQLQuery = "SELECT ItemName, Quantity, Price, AddMoney FROM OrderItem, Item " + _
                "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + timeString
Elseif languageSwitch = "Chinese" Then
    sSQLQuery = "SELECT ChItemName AS ItemName, Quantity, Price, AddMoney FROM OrderItem, Item " + _
                "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + timeString
Elseif languageSwitch = "Spanish" Then
    sSQLQuery = "SELECT SplItemName AS ItemName, Quantity, Price, AddMoney FROM OrderItem, Item " + _
                "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + timeString
End If
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
i = 0
Do Until rs.EOF
    i = i + 1
    OrderItemNameLabel(i).Caption = rs("ItemName")
    OrderItemDemandLabel(i).Caption = rs("Quantity")
    rs.MoveNext
Loop
oConn.Close
readOrderItemNumber = i

```

End Sub

```
Private Sub ReadAlreadyOrderItemNumber()  
    sSQLQuery = "SELECT COUNT(OrderNumber) as TotalNumber FROM OrderItem " + _  
        "WHERE OrderNumber=" + orderNumber  
    oConn.Open dbEngine  
    rs.Open sSQLQuery, oConn  
    alreadyOrderItemNumber = rs("TotalNumber")  
    oConn.Close
```

```
    sSQLQuery = "SELECT AddTimes FROM Orders " + _  
        "WHERE OrderNumber=" + orderNumber  
    oConn.Open dbEngine  
    rs.Open sSQLQuery, oConn  
    addTimes = rs("AddTimes")  
    oConn.Close
```

End Sub

```
Private Sub ReadCounterNumber()  
    sSQLQuery = "SELECT TableNumber FROM Tables WHERE SeatNumber=0"  
    oConn.Open dbEngine  
    rs.Open sSQLQuery, oConn  
    counterNumber = rs("TableNumber")  
    oConn.Close
```

```
    For i = 1 To totalTableNumber  
        If counterNumber = tableNumber(i) Then  
            counterTableNumber = tableNo(i)  
        End If
```

```
    Next i
```

End Sub

```
Private Sub ReadFoodCategory()  
    sSQLQuery = "SELECT CategoryName, ChCategoryName FROM FOODCATEGORY"  
    oConn.Open dbEngine  
    rs.Open sSQLQuery, oConn
```

```
    i = 0
```

```
    Do Until rs.EOF
```

```
        i = i + 1
```

```
        If languageSwitch = "English" Then
```

```
            CategoryName(i) = rs("CategoryName")
```

```
        ElseIf languageSwitch = "Chinese" Then
```

```
            CategoryName(i) = rs("ChCategoryName")
```

```
        ElseIf languageSwitch = "Spanish" Then
```

```
            CategoryName(i) = rs("SpCategoryName")
```

```
        End If
```

```
        rs.MoveNext
```

```
    Loop
```

```
    totalCategoryNumber = i
```

```
    oConn.Close
```

End Sub

```
Private Sub ReadItemInfo()
```

```
    For j = 1 To totalCategoryNumber
```

```
        If languageSwitch = "English" Then
```

```
            sSQLQuery = "SELECT ItemNumber, ItemName, Price " + _
```

```
                "FROM Item, Subfoodcategory " + _
```

```
                "WHERE Item.SubcategoryNumber=Subfoodcategory.SubcategoryNumber AND " + _
```

```
                "CategoryNumber=" + CStr(j) + " ORDER BY ItemNumber ASC"
```

```
        ElseIf languageSwitch = "Chinese" Then
```

```
            sSQLQuery = "SELECT ItemNumber, ChItemName AS ItemName, Price " + _
```

```
                "FROM Item, Subfoodcategory " + _
```

```
                "WHERE Item.SubcategoryNumber=Subfoodcategory.SubcategoryNumber AND " + _
```

```
                "CategoryNumber=" + CStr(j) + " ORDER BY ItemNumber ASC"
```

```
        ElseIf languageSwitch = "Spanish" Then
```

```
            sSQLQuery = "SELECT ItemNumber, SplItemName AS ItemName, Price " + _
```

```

        "FROM Item, Subfoodcategory " + _
        "WHERE Item.SubcategoryNumber=Subfoodcategory.SubcategoryNumber AND " + _
        "CategoryNumber=" + CStr(j) + " ORDER BY ItemNumber ASC"
    End If
    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn

    i = 0
    Do Until rs.EOF
        i = i + 1
        itemNumbers(i, j) = rs("ItemNumber")
        itemNames(i, j) = rs("ItemName")
        itemPrices(i, j) = rs("Price")
        rs.MoveNext
    Loop
    totalItemNumbers(j) = i
    oConn.Close
Next j
End Sub

Private Sub ReadMonthlyInfo()
    sSQLQuery = "SELECT ItemNumber, AddDate, SUM(Quantity) AS TotalQuantity " + _
        "FROM OrderItem " + _
        "GROUP BY ItemNumber, AddDate " + _
        "ORDER BY AddDate DESC"

    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    oConn.Close
End Sub

Private Sub ReadOrderItemStatus()
    If languageSwitch = "English" Then
        sSQLQuery = "SELECT SeriesNumber, ItemName, Quantity, Status, OrderItem.AddTimes AS oiAddTimes " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    ElseIf languageSwitch = "Chinese" Then
        sSQLQuery = "SELECT SeriesNumber, ChItemName AS ItemName, Quantity, Status, OrderItem.AddTimes AS
oiAddTimes " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    ElseIf languageSwitch = "Spanish" Then
        sSQLQuery = "SELECT SeriesNumber, SplItemName AS ItemName, Quantity, Status, OrderItem.AddTimes AS
oiAddTimes " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    End If
    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    i = 0
    Do Until rs.EOF
        i = i + 1
        OrderItemNumberLabel(i).Caption = rs("SeriesNumber")
        OrderItemNameLabel(i).Caption = rs("ItemName")
        OrderItemDemandLabel(i).Caption = rs("Quantity")
        OrderItemQuantityLabel(i).Caption = rs("oiAddTimes")
        Select Case rs("Status")
            Case 0
                OrderItemAddMoneyLabel(i).Caption = "Waiting"
            Case 1
                OrderItemAddMoneyLabel(i).Caption = "Cooking"
            Case 2
                OrderItemAddMoneyLabel(i).Caption = "Ready"
            Case 3

```

```

        OrderItemAddMoneyLabel(i).Caption = "Offer"
    End Select
    rs.MoveNext
Loop
readOrderItemNumber = i
oConn.Close
End Sub

Private Sub ReadOrderItem2Checkout()
    If languageSwitch = "English" Then
        sSQLQuery = "SELECT ItemName, Quantity, Price, AddMoney " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    ElseIf languageSwitch = "Chinese" Then
        sSQLQuery = "SELECT ChItemName AS ItemName, Quantity, Price, AddMoney " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    ElseIf languageSwitch = "Spanish" Then
        sSQLQuery = "SELECT SplItemName AS ItemName, Quantity, Price, AddMoney " + _
            "FROM OrderItem, Item " + _
            "WHERE OrderItem.ItemNumber=Item.ItemNumber AND " + _
            "    OrderNumber=" + orderNumber
    End If
    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    i = 0
    subtotal = 0
    Do Until rs.EOF
        i = i + 1
        OrderItemNameLabel(i).Caption = rs("ItemName")
        OrderItemDemandLabel(i).Caption = rs("Quantity")
        OrderItemQuantityLabel(i).Caption = FormatNumber(rs("Price"), 2, vbTrue)
        OrderItemAddMoneyLabel(i).Caption = FormatNumber(rs("AddMoney"), 2, vbTrue)
        subtotal = subtotal + rs("quantity") * (rs("price") + rs("AddMoney"))
        rs.MoveNext
    Loop
    readOrderItemNumber = i
    oConn.Close
    If discount <> 0 Then
        subtotal = round(subtotal * discount,2)
    End If
    SubtotalLabel.Caption = FormatNumber(subtotal, 2, vbTrue)
    TaxLabel.Caption = FormatNumber(subtotal * taxRate, 2, vbTrue)
    TotalLabel.Caption = FormatNumber(CDbI(SubtotalLabel.Caption) + CDbI(TaxLabel.Caption), 2, vbTrue)
    TaxTitle.Caption = "Tax (" + CStr(taxRate * 100) + "%):"
End Sub

Private Sub ReadOrderPaymentInfo()
On Error Resume Next
totalCost = ""
discount = 0#
sSQLQuery = "SELECT Total, Discount FROM Orders WHERE OrderNumber=" + orderNumber
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalCost = rs("Total")
discount = rs("Discount")
oConn.Close
End Sub

Private Sub ReadSpecialDemand()
On Error Resume Next
sSQLQuery = "SELECT SpecialDemand, ChSpecialDemand, SpSpecialDemand FROM SpecialDemand"
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
i = 0

```

```

Do Until rs.EOF
    i = i + 1
    If languageSwitch = "Chinese" Then
        SPButton(i).Caption = rs("ChSpecialDemand")
    ElseIf languageSwitch = "Spanish" Then
        SPButton(i).Caption = rs("SpSpecialDemand")
    ElseIf languageSwitch = "English" Then
        SPButton(i).Caption = rs("SpecialDemand")
    End If

    If PrLanguageSwitch = "Spanish" Then
        prSpecialDemand(i) = rs("SpSpecialDemand")
    ElseIf PrLanguageSwitch = "Chinese" Then
        prSpecialDemand(i) = rs("ChSpecialDemand")
    ElseIf PrLanguageSwitch = "English" Then
        prSpecialDemand(i) = rs("SpecialDemand")
    End If
    rs.MoveNext
Loop
oConn.Close
SPButton(MaxSpecialDemandNumber + 1).Caption = "ESC"
SPButton(MaxSpecialDemandNumber + 2).Caption = "Clear"
SPButton(MaxSpecialDemandNumber + 3).Caption = "Others"
SPButton(MaxSpecialDemandNumber + 4).Caption = "Enter"
End Sub

Private Sub ReadStoreInfo()
    oConn.Open dbEngine
    sSQLQuery = "SELECT StoreName, PhoneNumber, Address, City, State, ZipCode, TaxRate FROM STORE"
    rs.Open sSQLQuery, oConn
    storeName = rs("StoreName")
    phoneNumber = rs("PhoneNumber")
    Address = rs("Address")
    City = rs("City")
    State = rs("State")
    zipCode = rs("ZipCode")
    taxRate = rs("TaxRate")
    oConn.Close
End Sub

Private Sub ReadTableInfo()
    On Error Resume Next

    oConn.Open dbEngine
    sSQLQuery = "SELECT TableNumber, TableNo, AvailableStatus, SeatNumber, XCoordinate, YCoordinate, Width,
Length, Shape FROM Tables WHERE HallNumber=1"
    rs.Open sSQLQuery, oConn
    i = 0
    Do Until rs.EOF
        i = i + 1
        tableNumber(i) = rs("TableNumber")
        tableNo(i) = rs("TableNO")
        tableAvailableStatus(i) = rs("Availablestatus")
        tableSeatNumber(i) = rs("SeatNumber")
        tableXCoordinate(i) = rs("XCoordinate")
        tableYCoordinate(i) = rs("YCoordinate")
        tableWidth(i) = rs("Width")
        tableLength(i) = rs("Length")
        tableShape(i) = rs("Shape")
    rs.MoveNext
    Loop
    oConn.Close
    totalTableNumber = i
    TableCoordinateConversion
End Sub

Private Sub ReadToGoOrderInfo()

```

```

sSQLQuery = "SELECT OrderNumber, BeginningDate, BeginningTime, Total, AddTimes " + _
            "FROM Orders " + _
            "WHERE EndDate IS NULL AND TableNumber= (SELECT TableNumber " + _
            "FROM Tables " + _
            "WHERE SeatNumber='0')

oConn.Open dbEngine
rs.Open sSQLQuery, oConn
i = 0
Do Until rs.EOF
    i = i + 1
    OrderItemNameLabel(i).Caption = rs("BeginningDate")
    OrderItemDemandLabel(i).Caption = rs("BeginningTime")
    OrderItemQuantityLabel(i).Caption = rs("AddTimes")
    OrderItemNumberLabel(i).Caption = rs("OrderNumber")
    If rs("Total") <> "" Then
        OrderItemAddMoneyLabel(i).Caption = "Yes"
    Else
        OrderItemAddMoneyLabel(i).Caption = "No"
    End If
    rs.MoveNext
Loop
readOrderItemNumber = i
oConn.Close
End Sub

Private Sub ReadTop20SalesInfo()
    If ShowTop20Button.Caption = "Quantitative Chart" Then
        If languageSwitch = "Chinese" Then
            sSQLQuery = _
                "SELECT ChItemName, TotalQuantity " + _
                "FROM Item, (SELECT ItemNumber, SUM(Quantity) AS TotalQuantity " + _
                "FROM OrderItem " + _
                "GROUP BY ItemNumber) AS A " + _
                "WHERE A.ItemNumber=Item.ItemNumber " + _
                "ORDER BY TotalQuantity DESC"
        ElseIf languageSwitch = "English" Then
            sSQLQuery = _
                "SELECT ItemName, TotalQuantity " + _
                "FROM Item, (SELECT ItemNumber, SUM(Quantity) AS TotalQuantity " + _
                "FROM OrderItem " + _
                "GROUP BY ItemNumber) AS A " + _
                "WHERE A.ItemNumber=Item.ItemNumber " + _
                "ORDER BY TotalQuantity DESC"
        End If
    Else
        If languageSwitch = "Chinese" Then
            sSQLQuery = _
                "SELECT ChItemName, TotalCost " + _
                "FROM (SELECT ChItemName, SUM(Quantity*(Price+AddMoney)) AS TotalCost " + _
                "FROM Item, (SELECT SeriesNumber, ItemNumber, Quantity, AddMoney " + _
                "FROM OrderItem) AS A " + _
                "WHERE A.ItemNumber=Item.ItemNumber GROUP BY ChItemName) " + _
                "ORDER BY TotalCost DESC"
        ElseIf languageSwitch = "English" Then
            sSQLQuery = _
                "SELECT ItemName, TotalCost " + _
                "FROM (SELECT ItemName, SUM(Quantity*(Price+AddMoney)) AS TotalCost " + _
                "FROM Item, (SELECT SeriesNumber, ItemNumber, Quantity, AddMoney " + _
                "FROM OrderItem) AS A " + _
                "WHERE A.ItemNumber=Item.ItemNumber GROUP BY ItemName) " + _
                "ORDER BY TotalCost DESC"
        End If
    End If

    oConn.Open dbEngine
    rs.Open sSQLQuery, oConn
    i = 0

```

```

Do Until rs.EOF
    i = i + 1
    If i <= Top20Sales Then
        If languageSwitch = "Chinese" Then
            Top20SalesArray(i, 1) = rs("ChItemName")
        Else
            Top20SalesArray(i, 1) = rs("ItemName")
        End If
        If ShowTop20Button.Caption = "Monetary Chart" Then
            Top20SalesArray(i, 2) = rs("TotalCost")
        Else
            Top20SalesArray(i, 2) = rs("TotalQuantity")
        End If
    End If
    rs.MoveNext
Loop
oConn.Close
With StatisticalChart
    .ChartData = Top20SalesArray
    .TitleText = "Top 5's " + ShowTop20Button.Caption
    If ShowTop20Button.Caption = "Monetary Chart" Then
        .ColumnLabel = "Dollars"
    Else
        .ColumnLabel = "Dishes"
    End If
End With
End Sub

Private Sub ReadUncheckoutOrderInfo()
On Error Resume Next
totalCost = ""
discount = 0#
sSQLQuery = "SELECT MAX(OrderNumber) AS IOrderNumber FROM Orders " + _
    "WHERE EndDate IS NULL AND TableNumber=" + CStr(tableNumber(orderTableNumber))
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
Do Until rs.EOF
    orderNumber = rs("IOrderNumber")
    rs.MoveNext
Loop
oConn.Close

totalCost = ""
sSQLQuery = "SELECT Total, Discount FROM Orders WHERE OrderNumber=" + orderNumber
oConn.Open dbEngine
rs.Open sSQLQuery, oConn
totalCost = rs("Total")
discount = rs("Discount")
oConn.Close
End Sub

Private Sub ReadWaiterInfo()
On Error Resume Next
oConn.Open dbEngine
sSQLQuery = "SELECT WaiterNumber FROM Waiter " + _
    "WHERE WaiterNumber=" + LoginLabel.Caption + " AND Password=" + Password + ""

rs.Open sSQLQuery, oConn
WaiterNumber = rs("WaiterNumber")
If Err.Number <> 0 Then
    Peedy.Show
    Peedy.Speak "Sorry, your \pit=150\login name \pau=100\or password \pit=100\pau=100\isn't correct, please try it again!"
    Peedy.Hide
Else
    ShowLoginFrame False
    LoginLabel.Caption = ""
End If
End Sub

```

```

Password = ""
PasswordLabel.Caption = ""
keyboardFrameTitle.Caption = ""
If WaiterNumber <> Administrator Then
    visibleStatus = False
Else
    visibleStatus = True
End If
StorageReportButton.Visible = visibleStatus
ScheduleButton.Visible = visibleStatus
EditWaiterButton.Visible = visibleStatus
EditCategory.Visible = visibleStatus
EditSubcategory.Visible = visibleStatus
EditMenuButton.Visible = visibleStatus
EditTableButton.Visible = visibleStatus
EditStoreButton.Visible = visibleStatus
RemoteMonitor.Visible = visibleStatus
End If
oConn.Close
End Sub

Private Sub RefreshButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        ShowTableMapFrame True
    End If
End Sub

Private Sub ShowCheckoutFrame(showStatus As Boolean)
    If showStatus Then
        CheckoutFrame.Width = OrderItemFrame.Width
        CheckoutFrame.Height = LabelHeight * 4
        Call CheckoutFrame.Move(0, OrderItemFrame.Height - CheckoutFrame.Height - margin)

        SubtotalTitle.Height = LabelHeight * 4 / 5
        SubtotalTitle.Width = OrderNameTitle.Width
        SubtotalTitle.Top = 0
        SubtotalTitle.Left = 0

        TaxTitle.Height = SubtotalTitle.Height
        TaxTitle.Width = SubtotalTitle.Width
        TaxTitle.Top = SubtotalTitle.Top + SubtotalTitle.Height
        TaxTitle.Left = 0

        TotalTitle.Height = SubtotalTitle.Height
        TotalTitle.Width = SubtotalTitle.Width
        TotalTitle.Top = TaxTitle.Top + TaxTitle.Height
        TotalTitle.Left = 0

        SubtotalLabel.Height = SubtotalTitle.Height
        SubtotalLabel.Width = OrderDemandTitle.Width
        SubtotalLabel.Left = CheckoutFrame.Width - SubtotalLabel.Width - margin
        SubtotalLabel.Top = SubtotalTitle.Top

        TaxLabel.Height = SubtotalTitle.Height
        TaxLabel.Width = SubtotalLabel.Width
        TaxLabel.Left = SubtotalLabel.Left
        TaxLabel.Top = TaxTitle.Top

        TotalLabel.Height = SubtotalTitle.Height
        TotalLabel.Width = SubtotalLabel.Width
        TotalLabel.Left = SubtotalLabel.Left
        TotalLabel.Top = TotalTitle.Top

        PaymentTitle.Height = SubtotalTitle.Height
        PaymentTitle.Width = SubtotalTitle.Width
    End If
End Sub

```



```

PaymentTitle.Left = 0
PaymentTitle.Top = TotalTitle.Top + TotalTitle.Height

ChangeTitle.Height = SubtotalTitle.Height
ChangeTitle.Width = SubtotalTitle.Width
ChangeTitle.Top = PaymentTitle.Top + PaymentTitle.Height
ChangeTitle.Left = SubtotalTitle.Left

PaymentLabel.Height = SubtotalTitle.Height
PaymentLabel.Width = SubtotalLabel.Width
PaymentLabel.Left = SubtotalLabel.Left
PaymentLabel.Top = PaymentTitle.Top

ChangeLabel.Height = SubtotalTitle.Height
ChangeLabel.Width = SubtotalLabel.Width
ChangeLabel.Left = SubtotalLabel.Left
ChangeLabel.Top = ChangeTitle.Top
Else
    PaymentLabel.Caption = ""
    ChangeLabel.Caption = ""
End If
CheckoutFrame.Visible = showStatus
End Sub

Private Sub ShowDiscountFrame(showStatus As Boolean)
    If showStatus Then
        DiscountTitle.Caption = "Print " + tableNumberString + "'s Bill"
        DiscountFrame.Top = StatusFrame.Top
        DiscountFrame.Left = StatusFrame.Top
    End If
    If discount = 0# Then
        DiscountButton.Enabled = True
    Else
        DiscountButton.Enabled = False
    End If
    DiscountFrame.Visible = showStatus
End Sub

Private Sub ShowEditFrame(showStatus As Boolean)
    If showStatus Then
        EditFrame.Caption = editActionString
        EditFrame.Move ControlFrame.Width + margin / 2, 0, ScaleWidth - ControlFrame.Width - margin / 2, ScaleHeight
        mOrderDataGrid.Move margin, CategoryDataCombo.Top + CategoryDataCombo.Height + margin,
        EditFrame.Width - margin * 2
        mOrderDataGrid.Height = EditFrame.Height - mOrderDataGrid.Top - margin
        mOrderDataGrid.AllowAddNew = True
        mOrderDataGrid.AllowDelete = True
        CategoryLabel.Visible = False
        SubcategoryLabel.Visible = False
        CategoryDataCombo.Visible = False
        SubcategoryDataCombo.Visible = False
        CategoryLabel.Move margin, margin * 7
        CategoryDataCombo.Move CategoryLabel.Left + CategoryLabel.Width, CategoryLabel.Top, EditFrame.Width / 2 -
        margin * 5 - CategoryLabel.Width
        SubcategoryAdodc.Move CategoryLabel.Left + CategoryLabel.Width + SubcategoryAdodc.Width,
        CategoryLabel.Top, EditFrame.Width / 2 - margin * 5 - CategoryLabel.Width
        SubcategoryLabel.Move CategoryDataCombo.Left + CategoryDataCombo.Width + margin * 5,
        CategoryLabel.Top
        SubcategoryDataCombo.Move SubcategoryLabel.Left + SubcategoryLabel.Width + margin,
        CategoryDataCombo.Top, CategoryDataCombo.Width
        Select Case editActionString
            Case "Edit Waiter"
                WaiterAdodc.Refresh
                Set mOrderDataGrid.DataSource = WaiterAdodc
                mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (WaiterAdodc.Recordset.Fields.Count + 1)
            Case "Edit Store"
                StoreAdodc.Refresh
        End Select
    End If
End Sub

```

```

        mOrderDataGrid.AllowAddNew = False
        mOrderDataGrid.AllowDelete = False
        Set mOrderDataGrid.DataSource = StoreAdodc
        mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (StoreAdodc.Recordset.Fields.Count + 1)
    Case "Edit Table"
        TableAdodc.Refresh
        Set mOrderDataGrid.DataSource = TableAdodc
        mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (TableAdodc.Recordset.Fields.Count + 1)
    Case "Edit Category"
        CategoryAdodc.Refresh
        Set mOrderDataGrid.DataSource = CategoryAdodc
        mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (CategoryAdodc.Recordset.Fields.Count + 1)
    Case "Edit Subcategory"
        SubcategoryAdodc.Refresh
        CategoryLabel.Visible = True
        CategoryDataCombo.Visible = True
        SubcategoryAdodc.Visible = True
        SubcategoryAdodc.Top = 350
        SubcategoryAdodc.Left = 8550
        Set mOrderDataGrid.DataSource = SubcategoryAdodc
        mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (CategoryAdodc.Recordset.Fields.Count + 1)
    Case "Edit Menu"
        CategoryAdodc.Refresh
        SubcategoryAdodc.Refresh
        CategoryLabel.Visible = True
        CategoryDataCombo.Visible = True
        SubcategoryLabel.Visible = True
        SubcategoryDataCombo.Visible = True
        Set mOrderDataGrid.DataSource = ItemAdodc
        mOrderDataGrid.DefColWidth = mOrderDataGrid.Width / (ItemAdodc.Recordset.Fields.Count + 1)
    End Select
    'mOrderDataGrid.Visible = showStatus
End If
EditFrame.Visible = showStatus
End Sub

Private Sub ShowItem()
    j = 0
    k = 1
    For i = 1 To MaxItemNumber
        ItemButton(i).Visible = False
    Next i
    For i = 1 To totalItemNumbers(categoryIndex)
        ItemButton(i).Caption = itemNames(i, categoryIndex)
        ItemButton(i).Width = ItemButtonWidth
        ItemButton(i).Height = ItemButtonHeight
        ItemButton(i).Left = j * ItemButtonWidth
        ItemButton(i).Top = CategoryButton(1).Top + k * (ItemButtonHeight)
        ItemButton(i).BackColor = &H808000
        ItemButton(i).Visible = True
        j = j + 1
        If j = totalCategoryNumber Then
            j = 0
            k = k + 1
        End If
    Next i
End Sub

Private Sub ShowKeyboardFrame(showStatus As Boolean)
    If showStatus Then
        KeyboardFrame.Width = Key(0).Width * 10 + margin * 2
        KeyboardFrame.Height = Key(0).Height * 5 + keyboardFrameTitle.Height + margin * 2
        KeyboardFrame.Left = (ScaleWidth - KeyboardFrame.Width) / 2
        KeyboardFrame.Top = ScaleHeight - KeyboardFrame.Height - margin * 10

        keyboardFrameTitle.Width = KeyboardFrame.Width / 2 - margin
        keyboardFrameTitle.Top = margin / 2
    End If
End Sub

```

```

keyboardFrameTitle.Left = margin * 2 / 3

KeyboardFrameInputLabel.Width = keyboardFrameTitle.Width
KeyboardFrameInputLabel.Top = keyboardFrameTitle.Top
KeyboardFrameInputLabel.Left = keyboardFrameTitle.Left + keyboardFrameTitle.Width - margin / 4

For i = 1 To 10
    Key(i).Left = margin * 2 / 3 + (i - 1) * Key(0).Width
    Key(i).Top = margin / 2 + keyboardFrameTitle.Height + keyboardFrameTitle.Top
    If i <> 10 Then
        Key(i).Caption = CStr(i)
    Else
        Key(i).Caption = "0"
    End If
    Key(i).Visible = True
Next i

For i = 1 To 10
    Key(i + 10).Left = margin * 2 / 3 + (i - 1) * Key(0).Width
    Key(i + 10).Top = margin / 2 + keyboardFrameTitle.Height + keyboardFrameTitle.Top + Key(0).Height
    Key(i + 10).Caption = KeyboardNumber(i, 1)
    Key(i + 10).Visible = True
Next i

For i = 1 To 9
    If i = 1 Then Key(i + 20).Width = Key(0).Width * 1.5
    If i = 9 Then Key(i + 20).Width = Key(0).Width * 1.3
    If i <> 1 Then
        Key(i + 20).Left = margin * 2 / 3 + Key(i + 20 - 1).Left + Key(i + 20 - 1).Width
    Else
        Key(i + 20).Left = margin * 2 / 3
    End If
    Key(i + 20).Top = margin / 2 + keyboardFrameTitle.Height + keyboardFrameTitle.Top + Key(0).Height * 2
    Key(i + 20).Caption = KeyboardNumber(i, 2)
    Key(i + 20).Visible = True
Next i

For i = 1 To 9
    Key(i + 30).Left = margin * 2 / 3 + (i - 1) * Key(0).Width
    Key(i + 30).Top = margin / 2 + keyboardFrameTitle.Height + keyboardFrameTitle.Top + Key(0).Height * 3
    Key(i + 30).Caption = KeyboardNumber(i, 3)
    Key(i + 30).Visible = True
    If i = 9 Then Key(i + 30).Width = Key(0).Width * 2
Next i

For i = 1 To 5
    If i = 1 Then Key(i + 40).Width = Key(0).Width * 1.5
    If i = 3 Then Key(i + 40).Width = Key(0).Width * 3
    If i = 5 Then Key(i + 40).Width = Key(0).Width * 3.5
    If i <> 1 Then
        Key(i + 40).Left = Key(i + 40 - 1).Left + Key(i + 40 - 1).Width
    Else
        Key(i + 40).Left = margin * 2 / 3
    End If
    Key(i + 40).Top = margin / 2 + keyboardFrameTitle.Height + keyboardFrameTitle.Top + Key(0).Height * 4
    Key(i + 40).Caption = KeyboardNumber(i, 4)
    Key(i + 40).Visible = True
Next i

If mOrderForm.Caption = "Order List" Then
    keyboardFrameTitle.Caption = OrderItemNameLabel(orderItemIndex).Caption
End If
End If
KeyboardFrame.Visible = showStatus
End Sub

Private Sub ShowLoginFrame(showStatus As Boolean)
    Dim leftMargin
    If showStatus Then

```

```

LoginFrame.Move 0, 0, ScaleWidth, ScaleHeight
leftMargin = (LoginFrame.Width - LoginTitle.Width * 3 - margin) / 2 + ControlFrame.Left + margin

LoginTitle.Move leftMargin, margin * 50
PasswordTitle.Move leftMargin, LoginTitle.Top + LoginTitle.Height + margin * 5
LoginLabel.Move leftMargin + LoginTitle.Width + margin, LoginTitle.Top, LoginTitle.Width * 2, LoginTitle.Height
PasswordLabel.Move leftMargin + LoginTitle.Width + margin, PasswordTitle.Top, LoginTitle.Width * 2,
LoginTitle.Height

LogoffButton.Left = (ScaleWidth - LogoffButton.Width) / 2
LogoffButton.Top = ScaleHeight - LogoffButton.Height - margin * 12
End If
LoginFrame.Visible = showStatus
End Sub

Private Sub ShowMenuFrame(showStatus As Boolean)
If showStatus Then
ExitOrderButton.Caption = "Back to Table Map"
mOrderForm.Caption = "Order Menu"
MenuFrame.Height = ScaleHeight - ExitOrderButton.Height - margin * 1
MenuFrame.Width = ScaleWidth / 2 * 3 / 5
Call MenuFrame.Move(0, 0)
ItemButtonWidth = MenuFrame.Width / totalCategoryNumber

MenuTitleFrame.Width = MenuFrame.Width
MenuTitleFrame.Height = LabelHeight * 2 + margin / 4 + 50
MenuTitleFrame.Top = 0
MenuTitleFrame.Left = 0

mOrderTitle.Width = MenuTitleFrame.Width
mOrderTitle.Height = LabelHeight
mOrderTitle.Top = 50
mOrderTitle.Left = 0

MenuTitle.Width = MenuTitleFrame.Width
MenuTitle.Height = LabelHeight
MenuTitle.Top = mOrderTitle.Height + mOrderTitle.Top + margin / 4
MenuTitle.Left = 0

For i = 1 To totalCategoryNumber
CategoryButton(i).Caption = CategoryName(i)
CategoryButton(i).Height = ItemButtonHeight
CategoryButton(i).Width = ItemButtonWidth
CategoryButton(i).Top = MenuTitleFrame.Height + margin / 2
CategoryButton(i).Left = (i - 1) * ItemButtonWidth
CategoryButton(i).Visible = True
CategoryButton(i).BackColor = &H808080
Next i
CategoryButton(1).BackColor = &H8080& '&HFFFF&' &HC0C0&

categoryIndex = 1
ShowItem
End If
MenuFrame.Visible = showStatus
End Sub

Private Sub ShowNumericalFrame(showStatus As Boolean)
If showStatus Then
If mOrderForm.Caption = "Order Menu" Then
NumericalFrame.Left = (MenuFrame.Width - NumericalFrame.Width) / 2
NumericalFrame.Top = (MenuFrame.Height - NumericalFrame.Height) / 2
NumericalFrameTitle = itemNames(itemIndex, categoryIndex)
Elseif mOrderForm.Caption = "Order List" Then
NumericalFrame.Left = (OrderItemFrame.Width - NumericalFrame.Width) / 2 + MenuFrame.Width
NumericalFrame.Top = (OrderItemFrame.Height - NumericalFrame.Height) / 2
NumericalFrameTitle = itemNames(itemIndex, categoryIndex)
Elseif mOrderForm.Caption = "Sales Report" Then

```

```

        NumericalFrame.Left = (SalesReportFrame.Width / 2 - NumericalFrame.Width) / 2 + ControlFrame.Width
        NumericalFrame.Top = DeleteAOrderButton.Top - NumericalFrame.Height
        NumericalFrame.Title = "Input Wanted Order Number"
    End If
End If
    NumericalFrame.Visible = showStatus
End Sub

```

```

Private Sub ShowOrderFrame(showStatus As Boolean)
    If showStatus Then
        OrderFrame.Height = ScaleHeight
        OrderFrame.Width = ScaleWidth
        Call PrintButton.Move(ScaleWidth - PrintButton.Width, _
            ScaleHeight - PrintButton.Height - margin / 4)
        Call OrderFrame.Move(0, 0)
        ExitOrderButton.Top = PrintButton.Top
        ExitOrderButton.Left = 0
        ConfirmButton.Top = PrintButton.Top
        ConfirmButton.Left = PrintButton.Left - ConfirmButton.Width
        ConfirmButton.Enabled = False
        PrintButton.Enabled = False
        RefreshButton.Top = PrintButton.Top
        RefreshButton.Left = ExitOrderButton.Width
        TogoButton.Top = PrintButton.Top
        TogoButton.Left = ExitOrderButton.Width + RefreshButton.Width
        ToGoListButton.Top = PrintButton.Top
        ToGoListButton.Width = ScaleWidth - ExitOrderButton.Width - RefreshButton.Width - _
            ConfirmButton.Width - PrintButton.Width - TogoButton.Width
        ToGoListButton.Left = ExitOrderButton.Width + RefreshButton.Width + TogoButton.Width
    End If
    OrderFrame.Visible = showStatus
    ShowTableMapFrame True
End Sub

```

```

Private Sub ShowOrderItems()
    j = 0
    For i = 1 To totalOrderItemNumber
        If OrderItemQuantityLabel(i).Caption <> "" Then
            j = j + 1
            orderItemName(j) = OrderItemNameLabel(i).Caption
            orderItemSpecialDemand(j) = OrderItemDemandLabel(i).Caption
            prOrderItemSpecialDemand(j) = PrOrderItemDemandLabel(i).Caption
            orderItemQuantity(j) = OrderItemQuantityLabel(i).Caption
            OrderItemNumber(j) = OrderItemNumberLabel(i).Caption
            orderItemAddMoney(j) = OrderItemAddMoneyLabel(i).Caption
            orderItemPromotion(j) = OrderItemPromotionLabel(i).Caption
        End If

        OrderItemNameLabel(i).Caption = ""
        OrderItemDemandLabel(i).Caption = ""
        PrOrderItemDemandLabel(i).Caption = ""
        OrderItemQuantityLabel(i).Caption = ""
        OrderItemNumberLabel(i).Caption = ""
        OrderItemAddMoneyLabel(i).Caption = ""
        OrderItemPromotionLabel(i).Caption = ""
    Next i

    totalOrderItemNumber = j
    If totalOrderItemNumber <> 0 Then
        For i = 1 To totalOrderItemNumber
            OrderItemNameLabel(i).Caption = orderItemName(i)
            OrderItemDemandLabel(i).Caption = orderItemSpecialDemand(i)
            PrOrderItemDemandLabel(i).Caption = prOrderItemSpecialDemand(i)
            OrderItemQuantityLabel(i).Caption = orderItemQuantity(i)
            OrderItemNumberLabel(i).Caption = OrderItemNumber(i)
            OrderItemAddMoneyLabel(i).Caption = FormatNumber(orderItemAddMoney(i), 2, vbTrue)
            OrderItemPromotionLabel(i).Caption = orderItemPromotion(i)
        Next i
    End If
End Sub

```

```

Next i
Else
    ConfirmButton.Enabled = False
End If
End Sub

Private Sub ShowOrderItemFrame(showStatus As Boolean)
    If showStatus Then
        'paymentdiscount.Enabled = True
        If mOrderForm.Caption = "Check Out" Or mOrderForm.Caption = "Payment" Or mOrderForm.Caption = "Print Bill"
Then
            ShowCheckoutFrame True
        Else
            ShowCheckoutFrame False
        End If
        If mOrderForm.Caption = "Order List" Or mOrderForm.Caption = "Order Menu" Then
            OrderNameTitle.Caption = "Order Item Name"
            OrderDemandTitle.Caption = "Special Demand"
            OrderQuantityTitle.Caption = "Quantity"
            OrderAddMoneytitle.Caption = "Add Money"
            OrderFrameTitleLabel.Caption = "Order List"
            OrderItemFrame.Width = ScaleWidth - MenuFrame.Width - margin
            OrderVScroll.Height = OrderItemFrame.Height - OrderTitleFrame.Height
            Call OrderItemFrame.Move(MenuFrame.Width + margin, 0)
            PrintButton.Caption = "Print Order Items"
            If readOrderItemNumber = 0 Then
                PrintButton.Enabled = False
                ConfirmButton.Enabled = False
            Else
                PrintButton.Enabled = True
                ConfirmButton.Enabled = True
            End If
            TogoButton.Enabled = False
            RefreshButton.Enabled = False
            ToGoListButton.Enabled = False
            orderItemButtonColor = ButtonNonpressColor
        'Elseif mOrderForm.Caption = "Check Out" Then
        ' OrderNameTitle.Caption = "Order Item Name"
        ' OrderDemandTitle.Caption = "Quantity"
        ' OrderQuantityTitle.Caption = "Price"
        ' OrderAddMoneytitle.Caption = "Add Money"
        ' OrderFrameTitleLabel.Caption = "Check Out"
        ' OrderItemFrame.Width = ScaleWidth - TableMapFrame.Width - margin
        ' OrderVScroll.Height = OrderItemFrame.Height - _
        ' OrderTitleFrame.Height - CheckoutFrame.Height - margin
        ' Call OrderItemFrame.Move(TableMapFrame.Width + margin, 0)
        ' PrintButton.Caption = "Print Receipt"
        ' PrintButton.Enabled = True
        ' TogoButton.Enabled = True
        ' ConfirmButton.Enabled = True
        ' RefreshButton.Enabled = True
        ' ToGoListButton.Enabled = True
        ' orderItemButtonColor = BackgroundColor
        Elseif mOrderForm.Caption = "Payment" Or mOrderForm.Caption = "Print Bill" Then
            OrderNameTitle.Caption = "Order Item Name"
            OrderDemandTitle.Caption = "Quantity"
            OrderQuantityTitle.Caption = "Price"
            OrderAddMoneytitle.Caption = "Add Money"
            OrderFrameTitleLabel.Caption = mOrderForm.Caption
            OrderItemFrame.Width = ScaleWidth - TableMapFrame.Width - margin
            OrderVScroll.Height = OrderItemFrame.Height - _
            OrderTitleFrame.Height - CheckoutFrame.Height - margin
            Call OrderItemFrame.Move(TableMapFrame.Width + margin, 0)
            PrintButton.Caption = "Print Receipt"
            TogoButton.Enabled = True
            If mOrderForm.Caption = "Payment" Then
                PrintButton.Enabled = True
            End If
        End If
    End Sub

```

```

    ConfirmButton.Enabled = True
Else
    PrintButton.Enabled = False
    ConfirmButton.Enabled = False
End If
RefreshButton.Enabled = True
ToGoListButton.Enabled = True
orderItemButtonColor = BackgroundColor
Elseif mOrderForm.Caption = "Order Status" Then
    OrderNameTitle.Caption = "Order Item Name"
    OrderDemandTitle.Caption = "Quantity"
    OrderQuantityTitle.Caption = "Order Times"
    OrderAddMoneytitle.Caption = "Item Status"
    OrderFrameTitleLabel.Caption = "Order Status"
    OrderItemFrame.Width = ScaleWidth - TableMapFrame.Width - margin
    OrderVScroll.Height = OrderItemFrame.Height - OrderTitleFrame.Height
    Call OrderItemFrame.Move(TableMapFrame.Width + margin, 0)
    'PrintButton.Caption = "Print Items"
    PrintButton.Enabled = False
    TogoButton.Enabled = True
    ConfirmButton.Enabled = False
    RefreshButton.Enabled = True
    ToGoListButton.Enabled = True
    'orderItemButtonColor = BackgroundColor
    orderItemButtonColor = ButtonNonpressColor
Elseif mOrderForm.Caption = "Table Map" Or mOrderForm.Caption = "To Go List" Then
    OrderNameTitle.Caption = "Order Date"
    OrderDemandTitle.Caption = "Order Time"
    OrderQuantityTitle.Caption = "Order Times"
    OrderAddMoneytitle.Caption = "Payment"
    OrderFrameTitleLabel.Caption = "To Go List"
    OrderItemFrame.Width = ScaleWidth - TableMapFrame.Width - margin
    OrderVScroll.Height = OrderItemFrame.Height - OrderTitleFrame.Height
    Call OrderItemFrame.Move(TableMapFrame.Width + margin, 0)
    PrintButton.Caption = "Print Items"
    PrintButton.Enabled = False
    TogoButton.Enabled = True
    ConfirmButton.Enabled = False
    RefreshButton.Enabled = True
    ToGoListButton.Enabled = True
    orderItemButtonColor = ButtonNonpressColor
End If

OrderItemFrame.Height = ScaleHeight - ExitOrderButton.Height - margin * 1
OrderTitleFrame.Width = OrderItemFrame.Width
OrderTitleFrame.Height = LabelHeight * 2 + margin / 4 + 50
OrderTitleFrame.Top = 0
OrderTitleFrame.Left = 0
TableNoLabel.Caption = tableNumberString

OrderFrameTitleLabel.Top = 50
OrderFrameTitleLabel.Left = 0
OrderFrameTitleLabel.Height = LabelHeight
OrderFrameTitleLabel.Width = OrderItemFrame.Width / 4

TableNoLabel.Top = OrderFrameTitleLabel.Top
TableNoLabel.Left = OrderFrameTitleLabel.Width + margin / 2
TableNoLabel.Height = LabelHeight
TableNoLabel.Width = OrderItemFrame.Width / 4

TimeLabel.Caption = " Time: " + CStr(Time) + " " + CStr(Date)
TimeLabel.Top = OrderFrameTitleLabel.Top
TimeLabel.Left = TableNoLabel.Left + TableNoLabel.Width + margin / 2
TimeLabel.Height = LabelHeight
TimeLabel.Width = OrderItemFrame.Width - TableNoLabel.Width - OrderFrameTitleLabel.Width

```

```

OrderNameTitle.Top = TableNoLabel.Top + TableNoLabel.Height + margin / 4
OrderNameTitle.Left = 0
OrderNameTitle.Height = LabelHeight
OrderNameTitle.Width = OrderItemFrame.Width * 2 / 6

OrderDemandTitle.Top = OrderNameTitle.Top
OrderDemandTitle.Left = OrderNameTitle.Width + margin / 2
OrderDemandTitle.Height = LabelHeight
OrderDemandTitle.Width = OrderItemFrame.Width * 2 / 6

OrderAddMoneytitle.Top = OrderNameTitle.Top
OrderAddMoneytitle.Left = OrderNameTitle.Width + OrderDemandTitle.Width + margin
OrderAddMoneytitle.Height = LabelHeight
OrderAddMoneytitle.Width = OrderItemFrame.Width / 8

OrderQuantityTitle.Top = OrderNameTitle.Top
OrderQuantityTitle.Left = OrderNameTitle.Width + OrderDemandTitle.Width + _
    OrderAddMoneytitle.Width + margin * 1.4
OrderQuantityTitle.Height = LabelHeight
OrderQuantityTitle.Width = OrderItemFrame.Width - OrderQuantityTitle.Left + margin / 4

OrderVScroll.Top = OrderTitleFrame.Height
OrderVScroll.Left = OrderItemScrollFrame.Width - OrderVScroll.Width
OrderVScroll.SmallChange = LabelHeight * 2 + margin
If readOrderItemNumber > 10 And mOrderForm.Caption = "Payment" Then
    OrderVScroll.Visible = True
    maxHeight = (LabelHeight * 2 + margin) * readOrderItemNumber
    OrderVScroll.Max = maxHeight - (LabelHeight * 2 + margin) * 10
    'OrderVScroll.LargeChange = OrderVScroll.Max / (maxHeight / (LabelHeight * 2 + margin) * 10)
Elseif readOrderItemNumber > 12 Then
    If mOrderForm.Caption = "Order Menu" Or mOrderForm.Caption = "Order List" Or mOrderForm.Caption = "To
Go List" Or mOrderForm.Caption = "Order Status" Then
        OrderVScroll.Visible = True
        maxHeight = (LabelHeight * 2 + margin) * readOrderItemNumber
        OrderVScroll.Max = maxHeight - (LabelHeight * 2 + margin) * 12
        'OrderVScroll.LargeChange = OrderVScroll.Max / (maxHeight / (LabelHeight * 2 + margin) * 12)
    End If
Else
    OrderVScroll.Visible = False
    maxHeight = (OrderItemNameLabel(1).Height + margin) * 12
End If
OrderVScroll.LargeChange = OrderVScroll.SmallChange

OrderVScroll.Value = 0
OrderItemScrollFrame.Height = maxHeight
OrderItemScrollFrame.Width = OrderItemFrame.Width
OrderItemScrollFrame.Top = OrderTitleFrame.Height + margin / 4
OrderItemScrollFrame.Left = 0

For i = 1 To MaxOrderItemNumber
    OrderItemNameLabel(i).Top = (i - 1) * (LabelHeight * 2 + margin)
    OrderItemNameLabel(i).Left = 0
    OrderItemNameLabel(i).Height = LabelHeight * 2
    OrderItemNameLabel(i).Width = OrderNameTitle.Width
    OrderItemNameLabel(i).BackColor = orderItemButtonColor
    OrderItemNameLabel(i).Visible = True

    OrderItemDemandLabel(i).Top = OrderItemNameLabel(i).Top
    OrderItemDemandLabel(i).Left = OrderDemandTitle.Left - margin / 2
    OrderItemDemandLabel(i).Height = OrderItemNameLabel(i).Height
    OrderItemDemandLabel(i).Width = OrderDemandTitle.Width
    OrderItemDemandLabel(i).BackColor = orderItemButtonColor
    OrderItemDemandLabel(i).Visible = True

    OrderItemAddMoneyLabel(i).Top = OrderItemNameLabel(i).Top
    OrderItemAddMoneyLabel(i).Left = OrderAddMoneytitle.Left - margin

```



```

OrderItemAddMoneyLabel(i).Height = OrderItemNameLabel(i).Height
OrderItemAddMoneyLabel(i).Width = OrderAddMoneyTitle.Width
OrderItemAddMoneyLabel(i).BackColor = orderItemButtonColor
OrderItemAddMoneyLabel(i).Visible = True

OrderItemQuantityLabel(i).Top = OrderItemNameLabel(i).Top
OrderItemQuantityLabel(i).Left = OrderQuantityTitle.Left - margin * 1.4
OrderItemQuantityLabel(i).Height = OrderItemNameLabel(i).Height
OrderItemQuantityLabel(i).Width = OrderQuantityTitle.Width +
    OrderVScroll.Visible * OrderVScroll.Width + margin * 1.4
OrderItemQuantityLabel(i).BackColor = orderItemButtonColor
OrderItemQuantityLabel(i).Visible = True
Next i

If mOrderForm.Caption = "Table Map" Then
    mOrderForm.Caption = "To Go List"
    tableNumberString = "To Go Order"
    ClearOrderItemLabels
    ReadToGoOrderInfo
    ShowOrderItemFrame True
End If
End If
OrderItemFrame.Visible = showStatus
End Sub

Private Sub ShowPaymentFrame(showStatus As Boolean)
    If showStatus Then
        PaymentFrame.Left = StatusFrame.Top
        PaymentFrame.Top = StatusFrame.Top
    End If
    If discount = 0# Then
        PaymentDiscountButton.Enabled = True
    Else
        PaymentDiscountButton.Enabled = False
    End If
    PaymentFrameTitle.Caption = "Type of Payment of " + tableNumberString
    PaymentFrame.Visible = showStatus
End Sub

Private Sub ShowSalesReportFrame(showStatus As Boolean)

    If showStatus Then
        mOrderForm.Caption = "Sales Report"
        SaleLabel.Caption = ""
        SalesReportFrame.Move ControlFrame.Width + margin / 2, 0, ScaleWidth - ControlFrame.Width - margin / 2,
        ScaleHeight

        DaytimeButton.Top = ScaleHeight - DaytimeButton.Height - margin * 2
        WholeDayButton.Top = DaytimeButton.Top
        DeleteAOrderButton.Top = DaytimeButton.Top
        ShowTop20Button.Top = DaytimeButton.Top
        MonthlyChartButton.Top = DaytimeButton.Top
        MarkReportButton.Top = DaytimeButton.Top

        If WaiterNumber = Administrator Then
            DaytimeButton.Left = (SalesReportFrame.Width / 2 - DaytimeButton.Width * 6 - margin * 4) / 2
            WholeDayButton.Left = DaytimeButton.Left + DaytimeButton.Width + margin
            ShowTop20Button.Left = WholeDayButton.Left + WholeDayButton.Width + margin
            MonthlyChartButton.Left = ShowTop20Button.Left + ShowTop20Button.Width + margin
            MarkReportButton.Left = MonthlyChartButton.Left + MonthlyChartButton.Width + margin
            DeleteAOrderButton.Left = MarkReportButton.Left + MarkReportButton.Width + margin
            DeleteAOrderButton.Visible = True
            MarkReportButton.Visible = False
            ShowTop20Button.Visible = True
            MonthlyChartButton.Visible = False
        Else

```

```

DaytimeButton.Left = (SalesReportFrame.Width / 2 - DaytimeButton.Width * 4 - margin * 3) / 2
WholeDayButton.Left = DaytimeButton.Left + DaytimeButton.Width + margin
ShowTop20Button.Left = WholeDayButton.Left + WholeDayButton.Width + margin
MonthlyChartButton.Left = ShowTop20Button.Left + ShowTop20Button.Width + margin
DeleteAOrderButton.Visible = False
MarkReportButton.Visible = False
End If

TotalSalesLabel.Top = DaytimeButton.Top - TotalSalesLabel.Height - margin / 2
TotalSalesLabel.Left = margin
SaleLabel.Top = TotalSalesLabel.Top
SaleLabel.Left = TotalSalesLabel.Width + margin
CashLabel.Top = TotalSalesLabel.Top
CashLabel.Left = margin
CashMoneyLabel.Top = TotalSalesLabel.Top
CashMoneyLabel.Left = CashLabel.Left + CashLabel.Width + margin
CreditCardLabel.Top = TotalSalesLabel.Top
CreditCardLabel.Left = CashMoneyLabel.Left + CashMoneyLabel.Width + margin
CreditMoneyLabel.Top = TotalSalesLabel.Top
CreditMoneyLabel.Left = CreditCardLabel.Left + CreditCardLabel.Width + margin
ATMLLabel.Top = TotalSalesLabel.Top
ATMLLabel.Left = CreditMoneyLabel.Left + CreditMoneyLabel.Width + margin
ATMMoneyLabel.Top = TotalSalesLabel.Top
ATMMoneyLabel.Left = ATMLLabel.Left + ATMLLabel.Width + margin
ReportLabel.Top = TotalSalesLabel.Top - ReportLabel.Height - margin / 2
ReportLabel.Left = TotalSalesLabel.Left

TotalSalesLabel.Top = ReportLabel.Top
TotalSalesLabel.Left = ReportLabel.Left + ReportLabel.Width
SaleLabel.Top = ReportLabel.Top
SaleLabel.Left = TotalSalesLabel.Left + TotalSalesLabel.Width + margin

If languageSwitch = "Chinese" Then
    DeletedOrderItemAdodc.RecordSource = _
        "SELECT ChItemName, Quantity, AddDate+AddTime AS AddedTime, " + _
            "DeletedDate+DeletedTime AS DeletedTime, WaiterNumber " + _
        "FROM DeletedOrderItem, Item " + _
        "WHERE Item.ItemNumber=DeletedOrderItem.ItemNumber " + _
        "ORDER BY DeletedDate DESC"
Elseif languageSwitch = "English" Then
    DeletedOrderItemAdodc.RecordSource = _
        "SELECT ItemName, Quantity, AddDate+AddTime, " + _
            "DeletedDate+DeletedTime, WaiterNumber " + _
        "FROM DeletedOrderItem, Item " + _
        "WHERE Item.ItemNumber=DeletedOrderItem.ItemNumber " + _
        "ORDER BY DeletedDate DESC"
End If
DeletedOrderItemAdodc.Refresh
Set DeletedOrderItemDataGrid.DataSource = DeletedOrderItemAdodc
DeletedOrderItemDataGrid.Height = SalesReportFrame.Height / 6
DeletedOrderItemDataGrid.Move margin, ReportLabel.Top - DeletedOrderItemDataGrid.Height,
SalesReportFrame.Width / 2 - margin

With OrderListAdodc
    .ConnectionString = "Provider=MSDataShape;Data Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=c:\morder\mOrderDatabase.mdb;"
    .RecordSource = "SHAPE {SELECT OrderNumber, Total, " + _
        "EndDate,EndTime, Discount, SpecialMark " + _
        "FROM Orders " + _
        "ORDER BY OrderNumber DESC} AS Orders " + _
        "APPEND({SELECT OrderNumber, " + itemLanguage + ", Quantity, " + _
        "SpecialDemand, AddMoney " + _
        "FROM OrderItem, Item " + _
        "WHERE Item.ItemNumber=OrderItem.ItemNumber} " + _
        "AS OrderItem RELATE " + _
        "OrderNumber TO OrderNumber) AS Orders"
End With

```

```

OrderListAdodc.Refresh
Set OrderListGrid.DataSource = OrderListAdodc
OrderListGrid.Width = SalesReportFrame.Width / 2 - margin * 2
OrderListGrid.Height = SalesReportFrame.Height / 2 - margin * 11
OrderListGrid.Move SalesReportFrame.Width / 2 + margin, SalesReportFrame.Height - OrderListGrid.Height

If languageSwitch = "Chinese" Then
    QuantitativeStatisticsAdodc.RecordSource = _
        "SELECT ChItemName, TotalQuantity " + _
        "FROM Item, (SELECT ItemNumber, SUM(Quantity) AS TotalQuantity " + _
        "FROM OrderItem " + _
        "GROUP BY ItemNumber) AS A " + _
        "WHERE A.ItemNumber=Item.ItemNumber " + _
        "ORDER BY TotalQuantity DESC"
Elseif languageSwitch = "English" Then
    QuantitativeStatisticsAdodc.RecordSource = _
        "SELECT ItemName, TotalQuantity " + _
        "FROM Item, (SELECT ItemNumber, SUM(Quantity) AS TotalQuantity " + _
        "FROM OrderItem " + _
        "GROUP BY ItemNumber) AS A " + _
        "WHERE A.ItemNumber=Item.ItemNumber " + _
        "ORDER BY TotalQuantity DESC"
End If
QuantitativeStatisticsAdodc.Refresh
Set QuantitativeStatisticalGrid.DataSource = QuantitativeStatisticsAdodc
QuantitativeStatisticalGrid.Width = DeletedOrderItemDataGrid.Width / 2
QuantitativeStatisticalGrid.Height = SalesReportFrame.Height / 6
QuantitativeStatisticalGrid.Move DeletedOrderItemDataGrid.Left, DeletedOrderItemDataGrid.Top -
DeletedOrderItemDataGrid.Height

If languageSwitch = "Chinese" Then
    MonetaryStatisticsAdodc.RecordSource = _
        "SELECT ChItemName, TotalCost " + _
        "FROM (SELECT ChItemName, SUM(Quantity*(Price+AddMoney)) AS TotalCost " + _
        "FROM Item, (SELECT SeriesNumber, ItemNumber, Quantity, AddMoney " + _
        "FROM OrderItem) AS A " + _
        "WHERE A.ItemNumber=Item.ItemNumber GROUP BY ChItemName) " + _
        "ORDER BY TotalCost DESC"
Elseif languageSwitch = "English" Then
    MonetaryStatisticsAdodc.RecordSource = _
        "SELECT ItemName, TotalCost " + _
        "FROM (SELECT ItemName, SUM(Quantity*(Price+AddMoney)) AS TotalCost " + _
        "FROM Item, (SELECT SeriesNumber, ItemNumber, Quantity, AddMoney " + _
        "FROM OrderItem) AS A " + _
        "WHERE A.ItemNumber=Item.ItemNumber GROUP BY ItemName) " + _
        "ORDER BY TotalCost DESC"
End If
MonetaryStatisticsAdodc.Refresh
Set MonetaryStatisticalGrid.DataSource = MonetaryStatisticsAdodc
MonetaryStatisticalGrid.Width = DeletedOrderItemDataGrid.Width / 2
MonetaryStatisticalGrid.Height = QuantitativeStatisticalGrid.Height
MonetaryStatisticalGrid.Move DeletedOrderItemDataGrid.Left +
    QuantitativeStatisticalGrid.Width, DeletedOrderItemDataGrid.Top -
    DeletedOrderItemDataGrid.Height

StatisticalChart.Width = SalesReportFrame.Width - margin
StatisticalChart.Height = (SalesReportFrame.Width / 5 + margin * 8) * 2
StatisticalChart.Move margin, 0
ReadTop20SalesInfo
If ShowTop20Button.Caption = "Monetary Chart" Then
    ShowTop20Button.Caption = "Quantitative Chart"
Else
    ShowTop20Button.Caption = "Monetary Chart"
End If
Else
    SaleLabel.Caption = ""

```

```

CashMoneyLabel.Caption = ""
CreditMoneyLabel.Caption = ""
ATMMoneyLabel.Caption = ""
End If
SalesReportFrame.Visible = showStatus
End Sub

```

```

Private Sub ShowSampleSalesReportFrame(showStatus As Boolean)

```

```

    If showStatus Then
        mOrderForm.Caption = "Sales Report"
        SaleLabel.Caption = ""
        SalesReportFrame.Move ControlFrame.Width + margin / 2, 0, ScaleWidth - ControlFrame.Width - margin / 2,
ScaleHeight

```

```

        DaytimeButton.Top = ScaleHeight - DaytimeButton.Height - margin * 2
        WholeDayButton.Top = DaytimeButton.Top
        DeleteAOrderButton.Top = DaytimeButton.Top
        ShowTop20Button.Top = DaytimeButton.Top
        MonthlyChartButton.Top = DaytimeButton.Top
        MarkReportButton.Top = DaytimeButton.Top

```

```

        If WaiterNumber = Administrator Then
            DaytimeButton.Left = (SalesReportFrame.Width / 2 - DaytimeButton.Width * 6 - margin * 4) / 2
            WholeDayButton.Left = DaytimeButton.Left + DaytimeButton.Width + margin
            ShowTop20Button.Left = WholeDayButton.Left + WholeDayButton.Width + margin
            MonthlyChartButton.Left = ShowTop20Button.Left + ShowTop20Button.Width + margin
            MarkReportButton.Left = MonthlyChartButton.Left + MonthlyChartButton.Width + margin
            DeleteAOrderButton.Left = MarkReportButton.Left + MarkReportButton.Width + margin
            DeleteAOrderButton.Visible = True
            MarkReportButton.Visible = False

```

```

        Else
            DaytimeButton.Left = (SalesReportFrame.Width / 2 - DaytimeButton.Width * 2 - margin) / 2
            WholeDayButton.Left = DaytimeButton.Left + DaytimeButton.Width + margin
            ShowTop20Button.Left = WholeDayButton.Left + WholeDayButton.Width + margin
            MonthlyChartButton.Left = ShowTop20Button.Left + ShowTop20Button.Width + margin
            ShowTop20Button.Visible = False
            MonthlyChartButton.Visible = False
            DeleteAOrderButton.Visible = False
            MarkReportButton.Visible = False

```

```

        End If

```

```

        TotalSalesLabel.Top = DaytimeButton.Top - TotalSalesLabel.Height - margin / 2
        TotalSalesLabel.Left = margin

```

```

        SaleLabel.Top = TotalSalesLabel.Top
        SaleLabel.Left = TotalSalesLabel.Width + margin
        CashLabel.Top = TotalSalesLabel.Top
        CashLabel.Left = SaleLabel.Left + SaleLabel.Width + margin
        CashLabel.Left = margin
        CashMoneyLabel.Top = TotalSalesLabel.Top
        CashMoneyLabel.Left = CashLabel.Left + CashLabel.Width + margin
        CreditCardLabel.Top = TotalSalesLabel.Top
        CreditCardLabel.Left = CashMoneyLabel.Left + CashMoneyLabel.Width + margin
        CreditMoneyLabel.Top = TotalSalesLabel.Top
        CreditMoneyLabel.Left = CreditCardLabel.Left + CreditCardLabel.Width + margin
        ATMLabel.Top = TotalSalesLabel.Top
        ATMLabel.Left = CreditMoneyLabel.Left + CreditMoneyLabel.Width + margin
        ATMMoneyLabel.Top = TotalSalesLabel.Top
        ATMMoneyLabel.Left = ATMLabel.Left + ATMLabel.Width + margin
        ReportLabel.Top = TotalSalesLabel.Top - ReportLabel.Height - margin / 2
        ReportLabel.Left = TotalSalesLabel.Left

```

```

        TotalSalesLabel.Top = ReportLabel.Top
        TotalSalesLabel.Left = ReportLabel.Left + ReportLabel.Width
        SaleLabel.Top = ReportLabel.Top
        SaleLabel.Left = TotalSalesLabel.Left + TotalSalesLabel.Width + margin

```

```

With OrderListAdodc
.ConnectionString = "Provider=MSDataShape;Data Provider=Microsoft.Jet.OLEDB.4.0;Data
Source=c:\morder\mOrderDatabase.mdb;"
.RecordSource = "SHAPE {SELECT OrderNumber, Total, Payway, TableNumber, WaiterNumber, " + _
                "EndDate, EndTime, Discount, SpecialMark " + _
                "FROM Orders " + _
                "WHERE EndDate=#" + CStr(Date) + "#" + _
                "ORDER BY OrderNumber DESC} AS Orders " + _
                "APPEND({SELECT OrderNumber, " + itemLanguage + ", Quantity, " + _
                "AddMoney " + _
                "FROM OrderItem, Item " + _
                "WHERE Item.ItemNumber=OrderItem.ItemNumber} " + _
                "AS OrderItem RELATE " + _
                "OrderNumber TO OrderNumber) AS Orders"
End With

OrderListAdodc.Refresh
Set OrderListGrid.DataSource = OrderListAdodc
With OrderListGrid
.Width = SalesReportFrame.Width - margin
.Height = ReportLabel.Top - margin
.Move 0, margin
End With
OrderListGrid.Refresh
Else
SaleLabel.Caption = ""
CashMoneyLabel.Caption = ""
CreditMoneyLabel.Caption = ""
ATMMoneyLabel.Caption = ""
End If
SalesReportFrame.Visible = showStatus
End Sub

Private Sub ShowSPFrame(showStatus As Boolean)
If showStatus Then
SPFrame.Width = SPButton(0).Width * 6 + margin * 2
SPFrame.Height = SPButton(0).Height * (MaxSpecialDemandNumber + 4) / 6 + SPFrameTitle.Height + margin *
2
SPFrame.Top = (ScaleHeight - SPFrame.Height) / 2
SPFrame.Left = (OrderItemFrame.Width - SPFrame.Width) / 2 + OrderItemFrame.Left

SPFrameTitle.Caption = OrderItemNameLabel(orderItemIndex).Caption
SPFrameTitle.Width = SPFrame.Width / 2 - margin * 2
SPFrameInputLabel.Width = SPFrame.Width / 2
SPFrameTitle.Top = margin / 2
SPFrameTitle.Left = margin / 2
SPFrameInputLabel.Top = SPFrameTitle.Top
SPFrameInputLabel.Left = SPFrameTitle.Width + SPFrameTitle.Left
SPFrameInputLabel.Caption = ""
j = 0
k = 0
For i = 1 To MaxSpecialDemandNumber + 4
SPButton(i).Top = SPFrameTitle.Top + SPFrameTitle.Height + margin / 2 + k * SPButton(0).Height
SPButton(i).Left = SPFrameTitle.Left + j * SPButton(0).Width
SPButton(i).Visible = True
j = j + 1
If j = 6 Then
j = 0
k = k + 1
End If
Next i
End If
SPFrame.Visible = showStatus
End Sub

```

```

Private Sub ShowSpecialMarkFrame(showStatus As Boolean)
    If showStatus Then
        With SpecialMarkFrame
            .Left = (OrderFrame.Width - .Width) / 2
            .Top = (OrderFrame.Height - .Height) / 2
        End With
    End If
    SpecialMarkFrame.Visible = showStatus
End Sub

Private Sub ShowStatusFrame(showStatus As Boolean)
    If showStatus Then
        If mOrderForm.Caption = "Table Map" Or mOrderForm.Caption = "To Go List" Then
            StatusTitleButton.Caption = tableNumberString
            If Mid(StatusTitleButton.Caption, 1, 5) = "Table" Then
                StatusFrame.Left = (TableMapFrame.Width - StatusFrame.Width) / 2
            Else
                StatusFrame.Left = TableMapFrame.Width + (OrderItemFrame.Width - StatusFrame.Width) / 2
            End If
            StatusFrame.Top = (TableMapFrame.Height - StatusFrame.Height) / 2
            'If orderNumber = "" Then
            ' AddButton.Caption = "Add Item"
            ' CancelButton.Caption = "Cancel Hold"
            ' DemandButton.Caption = "Special Demand"
            ' AddMoneyButton.Caption = "Payment"
            ' AddButton.Enabled = True
            ' DemandButton.Enabled = False
            ' AddMoneyButton.Enabled = False
            'Else
            ' AddButton.Caption = "Add Item"
            ' CancelButton.Caption = "Print Bill"
            ' DemandButton.Caption = "Order Item Status"
            ' AddButton.Enabled = True
            ' DemandButton.Enabled = True
            ' CancelButton.Enabled = True
            ' AddMoneyButton.Enabled = True
            'End If
            -----
            AddButton.Caption = "Add Item"
            AddMoneyButton.Caption = "Payment"
            AddMoneyButton.Enabled = True
            If orderNumber = "" Then
                CancelButton.Caption = "Cancel Hold"
                DemandButton.Caption = "Special Demand"
                addTimes = 0
            Else
                CancelButton.Caption = "Check Out"
                DemandButton.Caption = "Order Item Status"
                itemAddTimes = "1"
            End If
            If totalCost = "" Then
                AddButton.Enabled = True
                AddMoneyButton.Enabled = True
                CancelButton.Enabled = False
                DemandButton.Enabled = True
            Else
                AddButton.Enabled = False
                AddMoneyButton.Enabled = False
                CancelButton.Enabled = True
                If mOrderForm.Caption = "To Go List" Then
                    DemandButton.Enabled = True
                Else
                    DemandButton.Enabled = False
                End If
            End If
            If orderNumber = "" Then

```

```

        AddButton.Enabled = True
        AddMoneyButton.Enabled = False
        CancelButton.Enabled = True
        DemandButton.Enabled = False
    End If
    If totalCost = "" And orderNumber <> "" Then
        CancelButton.Enabled = True
        CancelButton.Caption = "Print Bill"
    End If
    ElseIf mOrderForm.Caption = "Order List" Then
        StatusFrame.Top = (OrderItemFrame.Height - StatusFrame.Height) / 2
        StatusFrame.Left = (OrderItemFrame.Width - StatusFrame.Width) / 2 + OrderItemFrame.Left
        StatusTitleButton.Caption = choiceItemName
        AddButton.Caption = "Modify Quantity"
        CancelButton.Caption = "Cancel Item"
        DemandButton.Caption = "Special Demand"
        AddMoneyButton.Caption = "Add Money"
        AddButton.Enabled = True
        AddMoneyButton.Enabled = True
        CancelButton.Enabled = True
        DemandButton.Enabled = True
    ElseIf mOrderForm.Caption = "Order Status" Then
        StatusFrame.Top = (OrderItemFrame.Height - StatusFrame.Height) / 2
        StatusFrame.Left = (OrderItemFrame.Width - StatusFrame.Width) / 2 + OrderItemFrame.Left
        StatusTitleButton.Caption = choiceItemName
        AddButton.Caption = "Modify Status"
        CancelButton.Caption = "Cancel Ordered Item"
        DemandButton.Caption = "Special Demand"
        AddMoneyButton.Caption = "Add Money"
        AddButton.Enabled = False
        AddMoneyButton.Enabled = False
        CancelButton.Enabled = True
        DemandButton.Enabled = False
    End If
End If
StatusFrame.Visible = showStatus
End Sub

Private Sub ShowTable(showStatus As Boolean)
    If showStatus Then
        ReadTableInfo
        For i = 1 To totalTableNumber
            TableButtons(i).Left = tableXCoordinate(i)
            TableButtons(i).Top = tableYCoordinate(i)
            TableButtons(i).Width = tableWidth(i)
            TableButtons(i).Height = tableLength(i)
            If tableNo(i) < 10 Then
                tableNumberString = "0" + CStr(tableNo(i))
            Else
                tableNumberString = CStr(tableNo(i))
            End If
            If tableSeatNumber(i) = 0 Then
                tableNumberString = "Counter"
                TableButtons(i).FontSize = 14
            End If
            TableButtons(i).Caption = tableNumberString
            If tableAvailableStatus(i) Then
                TableButtons(i).BackColor = TableAvailableColor
            Else
                TableButtons(i).BackColor = TableUnavailableColor
            End If
            TableButtons(i).Visible = True
        Next i
    Else
        For i = 1 To totalTableNumber
            TableButtons(i).Visible = False
        Next i
    End If
End Sub

```

```
End If
End Sub
```

```
Private Sub ShowTableMapFrame(showStatus As Boolean)
```

```
    TableMapFrame.Visible = showStatus
    If showStatus Then
        ExitOrderButton.Caption = "Back to Main Menu"
        mOrderForm.Caption = "Table Map"
        TableMapFrame.Height = ScaleHeight - ExitOrderButton.Height - margin
        TableMapFrame.Width = ScaleWidth / 2
        Call TableMapFrame.Move(0, 0)
        ShowTable showStatus
        tableNumberString = "To Go Order"
        ClearOrderItemLabels
        ShowOrderItemFrame showStatus
        TogoButton.Enabled = True
    End If
End Sub
```

```
Private Sub SalesReportButton_Click()
```

```
    If Not NumericalFrame.Visible Then
        ShowOrderFrame False
        If WaiterNumber = Administrator Then
            ShowSalesReportFrame True
        Else
            ShowSampleSalesReportFrame True
        End If
        ShowEditFrame False
    End If
End Sub
```

```
Private Sub ScheduleButton_Click()
```

```
    If Not NumericalFrame.Visible Then
        End If
End Sub
```

```
Private Sub ShowTop20Button_Click()
```

```
    If Not NumericalFrame.Visible Then
        ReadTop20SalesInfo
        If ShowTop20Button.Caption = "Monetary Chart" Then
            ShowTop20Button.Caption = "Quantitative Chart"
        Else
            ShowTop20Button.Caption = "Monetary Chart"
        End If
    End If
End Sub
```

```
Private Sub SMNOButton_Click()
```

```
    specialMark = False
    ShowSpecialMarkFrame False
    PaymentFunction
End Sub
```

```
Private Sub SMYESButton_Click()
```

```
    specialMark = True
    ShowSpecialMarkFrame False
    PaymentFunction
End Sub
```

```
Private Sub SPButton_Click(Index As Integer)
```

```
    If Index = MaxSpecialDemandNumber + 1 Then
        ShowSPFrame False
    ElseIf Index = MaxSpecialDemandNumber + 2 Then
        SPFrameInputLabel.Caption = ""
    End If
End Sub
```



```

    prSPFrameInputLabel = ""
Elseif Index = MaxSpecialDemandNumber + 3 Then
    actionSign = DemandButton.Caption
    ShowKeyboardFrame True
    ShowSPFrame False
Elseif Index = MaxSpecialDemandNumber + 4 Then
    OrderItemDemandLabel(orderItemIndex).Caption = SPFrameInputLabel.Caption
    PrOrderItemDemandLabel(orderItemIndex).Caption = prSPFrameInputLabel
    SPFrameInputLabel.Caption = ""
    prSPFrameInputLabel = ""
    ShowSPFrame False
Else
    If SPFrameInputLabel.Caption = "" Then
        SPFrameInputLabel.Caption = SPButton(Index).Caption
        prSPFrameInputLabel = prSpecialDemand(Index)
    Else
        SPFrameInputLabel.Caption = SPFrameInputLabel.Caption + ", " + SPButton(Index).Caption
        prSPFrameInputLabel = prSPFrameInputLabel + ", " + prSpecialDemand(Index)
    End If
End If
End Sub

Private Sub SubmitButton_Click()
    ShowLoginFrame False
End Sub

Private Sub StatusTitleButton_Click()
    'ShowStatusFrame False
End Sub

Private Sub StorageReportButton_Click()
    If WaiterNumber = Administrator And Not NumericalFrame.Visible Then
        editActionString = "Storage Report"
        ShowEditFrame False
        ShowOrderFrame False
        ShowSalesReportFrame False
    End If
End Sub

Private Sub SubcategoryDataCombo_Change()
    sSQLQuery = "SELECT * FROM Item " + _
        "WHERE SubcategoryNumber IN (Select SubcategoryNumber FROM SubfoodCategory " + _
        "WHERE SubcategoryName = " + SubcategoryDataCombo.Text + ")"
    ItemAdodc.RecordSource = sSQLQuery
    ItemAdodc.Refresh
End Sub

Private Sub TableButtons_Click(Index As Integer)
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        If tableSeatNumber(Index) <> 0 Then
            orderNumber = ""
            orderTableNumber = Index
            totalOrderItemNumber = 0
            readOrderItemNumber = 0
            mOrderForm.Caption = "Table Map"
            If TableButtons(Index).BackColor = TableAvailableColor Then
                str2 = "False"
                str3 = tableNumber(orderTableNumber)
                str4 = "charlie"
                UpdateTableavailableStatus
                ShowTable True
            End If
            If tableNo(orderTableNumber) < 10 Then
                tableNumberString = "Table No. 0" + CStr(tableNo(orderTableNumber))
            Else

```

```

        tableNumberString = "Table No. " + CStr(tableNo(orderTableNumber))
    End If
    ReadUncheckoutOrderInfo
    ShowStatusFrame True
'End If
End If
End Sub

Private Sub TableCoordinateConversion()
    xRate = (TableMapFrame.Width - 8 * margin) / 3600
    yRate = (TableMapFrame.Height - 2 * margin) / 4020
    For i = 1 To totalTableNumber
        tableXCoordinate(i) = tableXCoordinate(i) * xRate
        tableYCoordinate(i) = tableYCoordinate(i) * yRate + 2 * margin
        tableWidth(i) = tableWidth(i) * yRate
        tableLength(i) = tableLength(i) * yRate
    Next i
End Sub

Private Sub Timer1_Timer()
    TimeLabel.Caption = " Time: " + CStr(Time) + " " + CStr(Date)
End Sub

Private Sub TogoButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        'PaymentButton(3).Enabled = True
        tableNumberString = "To Go Order"
        orderTableNumber = counterTableNumber
        orderNumber = ""
        totalOrderItemNumber = 0
        alreadyOrderItemNumber = 0
        readOrderItemNumber = 0
        ShowTableMapFrame False
        ShowMenuFrame True
        ClearOrderItemLabels
        ShowOrderItemFrame True
    End If
End Sub

Private Sub ToGoListButton_Click()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Or SpecialMarkFrame.Visible Then
    Else
        'PaymentButton(3).Enabled = True
        mOrderForm.Caption = "To Go List"
        tableNumberString = "To Go Order"
        ClearOrderItemLabels
        ReadToGoOrderInfo
        ShowOrderItemFrame True
    End If
End Sub

Private Sub UpdateAccountingInfo()
    sSQLQuery = "UPDATE Accounting SET EndDate ='" & CStr(Date) & "', EndTime ='" & CStr(endTime) & _
        "' WHERE AccountingID =1"
    oConn.Open dbEngine
    oConn.Execute sSQLQuery
    oConn.Close
End Sub

Private Sub UpdateOrderItem()
    If SPFrame.Visible Or KeyboardFrame.Visible Or PaymentFrame.Visible Or NumericalFrame.Visible Or _
        StatusFrame.Visible Or DiscountFrame.Visible Then

```

```

Elseif OrderItemNameLabel(orderItemIndex) <> "" Then
  If OrderFrameTitleLabel.Caption = "Order List" Then
    mOrderForm.Caption = "Order List"
    choiceItemName = OrderItemNameLabel(orderItemIndex)
    ShowStatusFrame True
  Elseif OrderFrameTitleLabel.Caption = "Order Status" Then
    mOrderForm.Caption = "Order Status"
    choiceSeriesNumber = OrderItemNumberLabel(orderItemIndex)
    choiceItemName = OrderItemNameLabel(orderItemIndex)
    ShowStatusFrame True
  Elseif TableNoLabel.Caption = "To Go Order" Then
    orderTableNumber = counterTableNumber
    totalOrderItemNumber = 0
    readOrderItemNumber = 0
    mOrderForm.Caption = "To Go List"
    choiceItemName = OrderItemDemandLabel(orderItemIndex)
    tableNumberString = choiceItemName
    orderNumber = OrderItemNumberLabel(orderItemIndex).Caption
    ReadOrderPaymentInfo
    ShowStatusFrame True
  End If
End If
End Sub

Private Sub UpdateTableavailableStatus()
  sSQLQuery = "UPDATE Tables SET AvailableStatus =" & str2 & _
    ", WaiterNumber =" & str4 & _
    " WHERE TableNumber =" & str3 & _
    " AND AvailableStatus =" & Not (str2)
  oConn.Open dbEngine
  oConn.Execute sSQLQuery
  oConn.Close
End Sub

Private Sub WriteOrderDiscount()
  sSQLQuery = "UPDATE Orders SET Discount =" + CStr(discount) + " WHERE OrderNumber=" + orderNumber
  oConn.Open dbEngine
  oConn.Execute sSQLQuery
  oConn.Close
End Sub

Private Sub WholeDayButton_Click()
  If Not NumericalFrame.Visible Then
    totalSales = 0
    startTime = "00:00:00"
    endTime = "23:59:59"
    ReportLabel.Caption = CStr(Date) + " Daily Sales Report"
    ReadAllOrderItems
  End If
End Sub

Private Sub Yes_Click()
  End
End Sub

```

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