

Palestine Polytechnic University



College of Engineering & Technology
Computer & Electrical Engineering Department

E-Warehouse

Project Team

Amnah Sufian Sultan

Sireen Abd-almajed Nazeer

Project Supervisor
Dr.Salman Talahemah

Hebron – Palestine

January 2005



Abstract

This project aims at designing and implementing program by using one of the new programming languages for Arabi Food stuff Company in Hebron.

The project's functionality is displaying items to the customers. This customer can choose any item either in terms of quantity and size. The administrator adds this information and displays it at any time through the program that contains internal database. The administrator can generate order, then generate bill that contains all the customer's requested items with total cost of the bill. Also, the administrator can add new categories and items with its quantities and displays it as a report.

This program can save the administrator's times and effort by automatically, generating orders and bills, and reduces calculation error. It is also, easy to search about any item, category, customer and supplier through this program.

هذا المشروع يهدف إلى تصميم برنامج وتطبيقه في إحدى الشركات التابعة للمواد الغذائية في مدينة الخليل و تجدر أهمية هذا المشروع في تطبيق تكنولوجيا حديثة و هي استخدام (ASP Dot NET).

هذا المشروع يعمل على عرض صور المواد الغذائية للزبائن حيث يقوم الزبون باختيار الأصناف و الكمية التي يريدھا، حيث يقوم المسؤول بتخزين تلك المعلومات و استرجاعها متى يشاء من قاعدة بيانات مبنية داخليا، يستطيع المسؤول أيضا أن يصدر طلبية و من ثم فاتورة تحتوي على جميع التصنيفات التي يطلبها الزبون بالإضافة إلى قمة الفاتورة.

يستطيع المسؤول أن يدخل تصنيفات و أصناف جديدة إلى داخل المخزن و ان يعرض تقارير شاملة عن المخزن، الزبائن و الموردین.

يتميز هذا المشروع بتوفير الوقت و الجهد للمسؤول و خاصة في إصدار الطلبات و الفواتير التي أصبحت تصدر بشكل أوتوماتيكي، و أيضا عمل على تقليل الأخطاء في العمليات الحسابية بالإضافة إلى انه يسهل البحث عن أي مدخلات في هذا النظام و يعمل على إصدار تقارير شاملة سواء للمخزن أو للزبائن و الموردون.

Initiation

The Arabi Trading is a small business Company located in Hebron , Palestine , and owned by the Eng. Saleem Sharawi . It was established in 1997 as a small grocery store that started to develop it self to be wholesaler for chocolate, canned food, and other food stuff.

The company is facing several problems such as registering order, profile for (customer, supplier, and inventory), generate order bills, pricing, accounting every thing manually the customer also save time.

There is a need to design, develop, and implement an E-commerce portal system called as "E-warehouse" by using one of the programming language that helps to registering order and generate bills by using the computer without any paperwork. Any information about customer, supplier, and inventory are stored in the database and can get any of its reports any time .The design corporate website will be used by the customers by sending E-mail.

Table of Contents

Abstract.....	III
Dedication.....	IV
Acknowledgement.....	V
Initiation.....	VI
Table of Contents.....	VII
List of Tables.....	IX
List of Figures.....	X
Chapter One : Introduction	
1.1 Introduction.....	1
Chapter Two : system spesification	
2.1 Intoduction.....	5
2.2 Objectives.....	6
2.3 Benefits.....	7
2.3.1 Project benfites for administrator.....	7
2.3.2 Project benefits for the development teams.....	7
2.3.3 project benifites for the society.....	7
2.4 Requirements.....	8
2.4.1 Functional requirement.....	8
2.4.2 Non-functional requirement.....	11
2.5 Constrains and validation.....	12
2.6 Allocation and trade offs.....	13
2.7 Development Requirements and Cost.....	15
2.8 Costs-Benefit Analysis.....	17
2.9 Feasibility Study.....	18
2.10 Risk Evaluation.....	19
2.11Time Scheduling.....	20
2.12 Summary and recommendation.....	21
Chapter Three : Software requirement spesification	
3.1 Introduction.....	23
3.2 Functional detail description.....	24
3.3 Project constrains details.....	41
3.4 System dataflow diagram.....	42
3.5 Data dictionary.....	43
3.6 Database requirements.....	45
3.7 Summary and recommendation.....	50
Chapter Four : Design	
4.1 Introduction.....	52
4.2 Output design.....	52
4.3 Input design.....	56
4.4 Database design (ER diagram).....	67
4.5 Functinal design (flowchart).....	68
4.6 Summary and recommendation.....	102
Chapter Five : Coding and Implementation	
5.1 Introduction.....	104
5.2 Coding programming language.....	104
5.2.1 ASP Dot Net.....	104

5.3 Database system.....	105
5.4 Establishment of development environment.....	109
5.4.1 Software environment.....	109
5.4.2 Hardware environment.....	109
5.5 Database creation and configuration.....	110
5.5.1 Database creation.....	110
5.5.2 Tables creation.....	110
5.5.3 Views.....	112
5.6 Coding and unit testing.....	114
5.7 Summary and recommendation.....	119
Chapter Six : Testing	
6.1 Introduction.....	121
6.2 Testing plan.....	121
6.2.1 Unit code testing.....	121
6.2.2 System integration test	129
6.2.3 System testing.....	129
6.2.4 Acceptance testing.....	132
6.3 Summary and recommendation.....	133
Chapter Seven : Maintenance	
7.1 Introduction.....	135
7.2 Establishment of production environment.....	136
7.3 Migration and deployment plan.....	136
7.4 Maintenance plan.....	137
7.4 Summary and recommendation.....	140

List of Tables

Table 2.1(a) Allocation functions.....	13
Table 2.1(b) Allocation functions.....	14
Table 2.2 Hardware cost.....	15
Table 2.3 Software cost.....	15
Table 2.4 Human cost.....	15
Table 2.5 Book cost.....	16
Table 2.6 Total cost of project.....	16
Table 2.7 Time scheduling.....	20
Table 5.1 SQL server database objects.....	106
Table 5.2 Database tables.....	110
Table 5.3 System view.....	113
Table 5.4 Screen testing.....	114
Table 6.1 Login test cases.....	121
Table 6.2 Change password test cases.....	123
Table 6.3 Customer payment test cases.....	125
Table 6.4 Add new category test cases.....	127
Table 7.1 Software change request form.....	138
Table 7.2 Maintenance log.....	139
Table 7.3 Maintenance log-detail status information.....	

List of Figures

Figure 3.1 Administrator data flow diagram.....	42
Figure 4.1 Generate order.....	52
Figure 4.2 Supplier report.....	53
Figure 4.3 Supplier search.....	53
Figure 4.4 Customer report.....	54
Figure 4.5 Generate bill.....	54
Figure 4.6 Item search.....	55
Figure 4.7 Store report.....	55
Figure 4.8 Customer search.....	56
Figure 4.9 Enter password.....	56
Figure 4.10 Change password.....	57
Figure 4.11 Store.....	57
Figure 4.12 Bills.....	58
Figure 4.13 Orders.....	58
Figure 4.14 Customers.....	59
Figure 4.15 Suppliers.....	59
Figure 4.16 Choose customer.....	60
Figure 4.17 Display items.....	60
Figure 4.18 Generate order.....	61
Figure 4.19 Add new customer.....	61
Figure 4.20 Add new category.....	62
Figure 4.21 Add new quantities.....	62
Figure 4.22 Add new item.....	63
Figure 4.23 Delete customer.....	63
Figure 4.24 Add customer payment.....	64
Figure 4.25 Add new supplier.....	64
Figure 4.26 Delete supplier.....	65
Figure 4.27 Add supplier payment.....	65
Figure 4.28 Advertisement page.....	66
Figure 4.29 ER diagram.....	67
Figure 4.30 Administrator login flowchart.....	69
Figure 4.31 Change password flowchart.....	71
Figure 4.32 Add new category flowchart.....	73
Figure 4.33 Displaying item flowchart.....	75
Figure 4.34 Inventory entries flowchart.....	77
Figure 4.35 Customer profile maintenance flowchart.....	79
Figure 4.36 Supplier profile maintenance flowchart.....	81
Figure 4.37 Take customer order flowchart.....	83
Figure 4.38 Generate bill flowchart.....	85
Figure 4.39 Customer payment flowchart.....	87
Figure 4.40 Supplier payment flowchart.....	89

Chapter One

Introduction

"Electronic commerce uses information technology to enhance communications and transactions with all of an organization's stakeholders. Such stakeholders include customers, suppliers, government regulators, financial institutions, managers, employees, electronic commerce is a strategic perspective that all firms must adopt, both in the present and in the future. The E commerce can save time and money in many ways, records can be managed more easily using appropriate computer programs; the need to reduce using papers, and the amount of physical storage space can be minimized." [1]

Benefits of Electronic Commerce:

choosing to build an e-commerce website does much more for your company than simply expand sales to a growing, online market.

A well-designed e-commerce site...

- Has a lower overhead, which means lower prices. Many consumers have turned to purchasing products online, due to the enormous savings they can enjoy.
- Is convenient for consumers short on time.
- Brings your company to a global market. With one e-commerce site, you can sell to clients in Paris, Texas or Paris, France.
- Is safe. After some initial problems with security and credit card sales, Secure Server Lines (SSL) and new security programs promise worry-free sales and purchases.
- Increases the automation of specific tasks.

- Will typically include reporting functions to generate reports crucial to sound financial planning.
- Brings an increase in sales. Companies of all sizes, from large corporations down to "mom-and-pop" stores have proven that opening an e-commerce site does increase sales.
- Benefits consumers with direct services and immediate information.

"A well designed e-commerce website acts as a Sales Consultant and Customer Service officer. Although it will not replace all of your staff, it can supplement them or even replace the need to hire more people." [2]

"E-commerce solution for a business is the incorporation of all aspects of the business operation into an electronic format, when a business has incorporated an e-commerce solution the business will experience a lower operation cost while at the same time increasing its profit. The e-commerce solution will allow businesses to eliminate unnecessary paperwork. All paperwork and data can be transformed into an electronic format. Thus, it will eliminate valuable shelf space, and data can be searched and accessed in seconds." [3]

"E-commerce will also automate the sales process. Customers can "point & click" on the products they wish to purchase, fill out the customer information, and the product will be shipped and received in few days. The administration department does not have to fill out any paperwork because the customer had done it already. Thus, the efficiency will be greatly improved. With an e-commerce solution, the business will be open 24 hours a day, 7 days a week. People will be able to visit the site at any time. They will not be restricted to the "normal" business operating hours. A "brick + mortar" business is normally limited to serving the customers in its local geographical location. With an e-commerce solution, that business will not be limited to a geographical restriction, rather it opens itself to the global on-line market. Essentially, the business' market exposure will be greatly increased." [4]

In addition the business can benefit from using computers in many ways. They can help you to manage resources, speed up processes production of customer bills and invoices and cut costs.

Features such as a marketing database, access to the Internet, email and setting up a website can all help improve your business' image, prospects and quality of service.

"The Internet is the primary research medium, because the e-commerce is still a fairly new technology and the Internet will provide the most recent data available. Printed publications will not be able to adapt to changes as fast and efficient as electronic publications. Some e-commerce web sites are E-Commerce Times, E-Retail, and E-Marketer." [5]

The implementation of an e-commerce solution will generate a brand new revenue stream, expand the market exposure, and decrease the operation cost.

"The Internet has changed the way we do business. Establishing the right fundamentals for your business today is critical for your success in the future.

The Internet is a great place to sell both products and services. It has brought new modes of businesses to the real estate agency, insurance and betting service businesses. In addition, e-commerce includes business-to-business connections that make purchasing casier for companies.

The Internet connects you into your customer's home or workplace. The adult internet community, as a group, still has higher then the average spending potential. Activate Internet Marketing can help you set out your stall." [6]

"Secure Sockets Layer is a protocol which encrypts the data communicated between the client and the server to ensure that there can be no intercepts of the data by third parties. Techtrade uses anonymous Secure IDs for clients use, so that clients may take advantage of SSL on their website without being associated with Techtrade." [7]

Chapter Two

System specification

- 2.1 Introduction**
- 2.2 Objectives**
- 2.3 benefits**
- 2.4 Requirements**
- 2.5 Constrains and Validation**
- 2.6 allocation and trade offs**
- 2.7 Development Requirements and Cost**
- 2.8 Costs-Benefit Analysis**
- 2.9 Feasibility Study**
- 2.10 Risk Evaluation**
- 2.11 Time Scheduling**
- 2.12 Summary and Recommendation:**

Chapter Two

System specification

2.1 Introduction

Information was collected after visiting the company several times. These visits revealed the problem that faced the company during its work. These problems have been studied and analyzed.

This chapter will cover the following:

- Objectives of the project.
- Benefit of the users, benefit of the development team, and benefit of the society.
- Functional requirement define the services that the system provide, and Non-functional requirement that define constraints of this services.
- Constrains and validation: There are several constraints must be available in the system.
- Allocating functions to SW, HW, and Manual.
- Development Requirements and Cost This section lists the cost needed to implement this project such as (SW, HW, Humans, books and other costs).
- Costs-Benefits Analysis (tangible and non-tangible benefits).
- Feasibility Study: Economic Feasibility, Technical Feasibility, Legal Feasibility.
- Risk evaluation: This section contains risks that may appear in the project and the possible solution.
- Project Plan and Scheduling of the project.
- Summary and Recommendation.

2.2 Objectives

The main objectives of the project:

- Making work less error in bills calculation.
- The system allows the customer to get bills.
- The system reduces cost by making orders online instead of using paperwork and reduces number of employee.
- The system allows making advertisement on the company website for all people in the world.
- Displaying products to the customer by using laptop screen.
- This project provides customer sending e-mail to administrator about any thing he needed
- Search for category or item.
- Generate balance reports for each customer and supplier.
- Generate inventory reports.
- Add new category or item to the company store.

2.3 benefits

The project has several benefits to the administrator, developers, and the society:

2.3.1 Project benefits for administrator:

- Increased productivity.
- Decreased training and support costs.
- Increased sales and revenues.
- Reduced development time and costs.
- Reduced maintenance costs.
- Increased customer satisfaction.

2.3.2 Project benefits for the development Team:

- Increase knowledge in programming language.
- Increase scientific experience.
- Increase capability to analysis any problem, collecting information and training to write project

2.3.3 Project benefits for the Society

- Transfer from behind hand society to advance society.
- Organize society work in companies and other places.
- Increase capability of intelligence.
- Increase investment on computer and internet.

2.4 Requirements

2.4.1 Functional requirement:

Functional requirement define the services that the system provide.

- **Administrator login**

This function allows the administrator to login the system by putting username and password.

- **Change password**

This function enables the administrator to change his password.

- **Add new category**

This function allows adding new category with its items.

- **Displaying item**

This function allows the administrator displaying items to customers by using computer.

- **Inventory entry**

This function allows the administrator to add new item quantity for any category in the store.

- **Customer profile maintenance**

This function enables the administrator to add, delete, or search about any customer.

- **Supplier profile maintenance**

This function enables the administrator to add, delete, or search about any supplier.

- **Take customer order**

This function enables the administrator to display and generate orders to the customers.

- **Generate a bill**

This function allows the administrator to generate bill for each order.

- **Customer payment**

This function allows adding customer payment from administrator that includes Customer name, date of customer payment, paid out cost.

- **Supplier payment**

This function allows adding supplier payment from administrator that includes Supplier name, date of supplier payment, paid out cost.

- **Generate customer report**

The system provides customer report that includes :(customer information, customer payment, customer bills, total cost of bills, paid out cost, and remainder cost).

- **Generate supplier report**

The system provides supplier report that includes :(supplier information, supplier payment, supplier bills, total cost of bills, paid out cost, and remainder cost).

- **Inventory report**

The system provides reports that contain information about all category or items available in the store such as (category name, item name, expired date, quantity, total quantity, unit price that contain 4-price a, b, c and d, and purchase price).

- **Making advertisement**

The system allows making advertisement on the company website for all people in the world.

- **Sending E-mail**

This function provides customer sending e-mail to administrator about any thing he needed.

- **Administrator help**

This function provides the administrator who to use the system by using help button.

2.4.2 Non-Functional Requirements:

Non-functional requirements define constraints of the services or functions offered by the system.

❖ Product requirements

- **Speed:** the system must be very fast.
- **Size:** amount of physical storage space must be minimized
- **Ease of use:** the system must provide an administrator friendly interface to make it easy to deal with
- **Integrity:** the system must integrate with the existing systems in the company.
- **Reliability:** the system must provide high level of reliability and accuracy.
- **Robustness:** the system must provide high level of robustness, and work the longest time before coming down.

❖ Process requirements

- The system and documentation must be delivered at the end of semester.

❖ External requirements

- **Ethical requirement:** the system must prevent the unethical transaction.

❖ Legislative requirements

- **Security:** the system must contain username and password to protect it from other users.

2.5 Constrains and Validation

Many constraints must be enforced in the system:

- User name should contain more than six characters.
- Password should contain more than six characters; no special character must be used in the password.
- Quantity and price must be digit.
- All dates must be valid.
- All inputs must be validated.
- All data must be validated before sending to DB.
- Web form application using ASP.NET.

2.6 Allocation and Trade offs

A) Functional requirements:

Functional requirement	SW/HW
Administrator login	SW
Change password	SW
Add new category	SW
Displaying item	SW
Inventory entry	SW
Customer profile maintenance	SW
Supplier profile maintenance	SW
Take customer order	SW
Generate a bill	SW
Customer payment	SW
Supplier payment	SW
Generate customer report	SW
Generate supplier report	SW
Inventory report	SW
Making advertisement	SW
Sending E-mail	SW
Administrator help	SW

Table 2.1 (a) Allocation functions

B) Non-Functional requirement:

Non-Functional requirement	SW/HW
Speed	SW
Size	SW
Ease of use	SW
Integrity	SW
Reliability	SW
Robustness	SW
Security	SW

Table 2.1 (b) Allocation functions

B) Non-Functional requirement:

Non-Functional requirement	SW/HW
Speed	SW
Size	SW
Ease of use	SW
Integrity	SW
Reliability	SW
Robustness	SW
Security	SW

Table 2.1 (h) Allocation functions

2.7 Development Requirements and Cost

This section lists the cost needed to implement this project:

Hardware cost:

Item	Number of units	Cost of unit(NIS)	Total cost(NIS)
Computer p4 2400 40G HD,256 RAM	2	3000	6000
Printer	1	1000	1000
Camera	1	600	600
Total=			7600

Table 2.2 Hardware cost

Software cost:

Item	Number of unit	Unit cost (NIS)
ASP.NET 2003	1	450
Acrobat reader	1	450
Office XP	1	450
Total=		1350

Table 2.3 Software cost

Humans:

Member	Number	Cost(NIS)	Total cost(NIS)
Computer Eng.Student	2	2000	4000
supervisor	1	0	0

Table 2.4 human cost

Books:

Book Name	Number	Unit cost(NIS)	Total cost(NIS)
ASP.NET	1	60	60
Developing Microsoft ASP.NET Web Application	2	100	200
Total=			260

Table 2.5 book cost**Others:**

There are other 700NIS costs such as (papers, transportation, ink...)

The following tables include the total costs.

Cost type	Cost (NIS)
HW costs	7600
SW costs	1350
Human costs	4000
Books costs	260
Others	700
Total=	13,910

Table 2.6 Total cost of project

2.8 Costs-Benefit Analysis

❖ **Tangible benefits:**

There are no tangible benefits in this project.

❖ **Non-tangible benefits:**

The new system improve the efficiency of the company work, it also gives many benefits for the users.

- **Speed:** reduce the time of selling cycle that started with displaying the goods and finish with deliver the order to the customer.
- **Accuracy:** reducing error by using computer instead of paperwork.
- Reduce duplication in data.
- Increase prestige by using laptop computer.
- Increase the customer trust of the administrator.

2.9 Feasibility Study

- **Economic feasibility:**

As shown in table 2.6 the total cost of the project is 13,910NIS,

Development team can cover this cost so this cost is feasible.

- **Technical feasibility:**

All resources that include :(HW, SW, development team, books, and supervisor) are available, so the project is technically feasible.

- **Legal feasibility:**

Up to our knowledge, this system does not violate copyright rules or country regulations, so we believe that there is no legal restriction to build or implement this project.

2.10 Risk Evaluation

This section contains the risk may appear during project development and the possible solution.

- **Staff illness:**

If any person in the group become ill the best solution is reorganize team so that there is more overlap of work and people therefore understand each other's jobs.

- **Requirements change:**

If the administrator changes its requirement after adapted the best solution is weekly meeting the administrator and supervisor to sure that the requirement does not change.

- **Shortage implement time:**

If the time of the project is not enough to complete as we hope because of politic situation and other condition the best solution is divided the course time in a schedule to finish this project at its time or adding one or two weeks over scheduling time of the project.

- **Lost data:**

To avoid losing data there must keeping back up on different data storage.

- **Difficulties in determine the requirement :**

Difficulties in determining the requirement, the best solution is collect the common information that we needed from more than one person in the company

2.11 Time Scheduling

- System definition = 3 week
- Requirement analysis = 2 week
- System design = 3 week
- Implementation = 5 week
- Testing = 3 week
- Documentation all the time

Task \ Weeks	Weeks														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
System requirement	■	■	■												
Software specification				■	■	■									
System design						■	■	■							
Implementation									■	■	■	■	■		
Maintenance planning (Testing)													■	■	■
Documentation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Table 2.7: Time scheduling

2.12 Summary and Recommendation

the objectives of the project , benefits and all requirements of the company (functional and non-functional requirements) are covered in this chapter in addition studied the cost for each system (old system and new system),also studied the problems that faced the company in its work and suggest software (SW) system solution to solve these problems.

Chapter Three

Software Requirement Specification

3.1 Introductions

3.2 Functional Detail Description

3.3 Project constrains details

3.4 System Data Flow Diagram

3.5 Data Dictionary

3.6 Database requirements

3.7 Summary and Recommendation

Chapter Three

Software Requirement Specification

3.1 Introduction

In this chapter the software specification will be identified in more details:

This chapter will cover the following:

- Functional detail description of our project that contain function name, description, input, source, output, destination, require, pre-condition, post-condition, procedure and validation.
- Project constraints and validation details.
- Dataflow diagram that show the behavior of the system.
- Data dictionary of each system entry.
- Database requirements.
- Summary and recommendation.

3.2 Functional Detail Description

This section lists the major functions in the project and the specification for each one.

Name: administrator login.

Description: this function allows the administrator to login the system by putting username and password.

Input: username, password.

Source: web form.

Output: main menu screen, or error message.

Destination: screen.

Require: nothing.

Precondition: administrator can not do any thing.

Post condition: administrator can access the system.

Procedure: this function will request username and password from administrator to login the system; if the username and password is available in the DB the administrator can enter the system else error message will be displayed.

Validation: username must have more than six characters.

Password must have more than six characters.

Name: change password.

Description: this function enables the administrator to change his password.

Input: username, password, new password, password confirmation.

Source: web form.

Output: new password is available.

Destination: database.

Require: login page.

Precondition: already logged.

Post condition: new password can be used.

Procedure: this function will request username, password, new password, and password confirmation then an expression validation will be applied on the password, if the validation succeeds the new password will be sent to the database else an error message will be displayed.

Validation: username and old password must be available.

Name: add new category.

Description: This function allows adding new category with its items.

Input: category name.

Source: web form.

Output: new category in DB.

Destination: database.

Require: login page.

Precondition: can not add new category.

Post condition: can add new category.

Procedure: this function allows adding new category from textbox, this category will be saved in DB.

Validation: none.

Name: displaying item.

Description: This function allows the administrator displaying items to customers by using computer.

Input: menu selection.

Source: web form

Output: items pictures, names and quantities.

Destination: screen.

Require: items must be available.

Precondition: administrator login and choose customer.

Post condition: display all items.

Procedure: in this function the administrator choose the customer from DB by using dropdown, click on the button "عرض البضائع". On the page display items the administrator can display all items that stored in the DB.

Validation: Logged to the system and choose customer.

Name: inventory entry

Description: This function allows the administrator to add new item quantity for any category in the store.

Source: web form.

Input: item name, category name, Quantity, Sale price A, B, C and D, purchase cost and expire date.

Output: new item quantity.

Destination: database.

Require: item must be available.

Precondition: fixed quantity in the store.

Post condition: enter the new item quantity.

Procedure: this function demand to choose item and category name from DB by using dropdown, add quantity, sale price, purchase price and expire date from administrator to add new item quantity in DB.

Validation: item name, category name, quantity, sale price, purchase price, and expires date must be available.

Name: Customer profile maintenance.

Description: This function enables the administrator to add, delete, or search about any customer.

Input: customer name, company name, city, address, telephone #1, telephone #2, fax, customer E-mail.

Source: web form

Output: add new customer, or delete any customer.

Destination: database.

Require: new customer to add, or old customer to search or delete.

Precondition: can not add new customer, can not delete or search for old customer.

Post condition: can add new customer, can delete or search for old customer.

Procedure: this function demand to enter the customer name, company name, address, city, telephone #1, telephone #2, fax, customer E-mail from administrator then click on the button "إضافة" to add new customer to DB , and can delete customer by click on the button "حذف".

Validation: customer not available in DB when add, customer available when delete or search.

Name: supplier profile maintenance.

Description: This function enables the administrator to add, delete, or search about any supplier

Input: supplier name, company name, address, city, telephone #1, telephone #2, fax, supplier E-mail.

Source: web form

Output: add new supplier, or delete supplier.

Destination: database.

Require: new supplier to add, or old supplier to delete or search.

Precondition: can not add new supplier, can not delete or search old supplier from DB.

Post condition: can add new supplier, can delete or search for old supplier.

Procedure: this function demand to enter the supplier name, company name, address, city, telephone #1, telephone #2, fax, supplier E-mail from administrator then click on the button "إضافة" to add new supplier to DB , and can delete supplier by click on the button "حذف".

Validation: supplier not available in DB when add, supplier available when delete or search.

Name: take customer order

Description: This function enables the administrator to display and generate orders to the customers.

Input: order date, customer name.

Source: web form

Output: generate order.

Destination: database.

Require: new order.

Precondition: no order is done.

Post condition: customer has new order.

Procedure: this function demand to enter order date, customer name from dropdown then when select the order the system automatically generate customer order.

Validation: for each item there must be price and order date.

Name: generate a bill.

Description: this function allows the administrator to generate bill for each order.

Input: customer name, date of bill.

Source: web form.

Output: generate customer bill.

Destination: screen, print.

Require: making order.

Precondition: there is no order.

Post condition: generate a bill.

Procedure: this function read the order # then access to the database to read all order items after that making calculation to generate a bill finally display the bill on the screen and print it.

Validation: there must be customer name and order items to make a bill.

Name: customer payment.

Description: This function allows adding customer payment from administrator that includes Customer name, date of customer payment, paid out cost.

Input: customer payment.

Source: web form.

Our part: add new customer payment.

Destination: database, screen.

Require: customer request order.

Precondition: administrator can not limit customer payment.

Post condition: administrator can limit customer payment.

Procedure: This function allow to add customer payment from administrator by click on the button "Add" then customer payment will be stored in DB.

Validation: customer must take order or orders.

Name: supplier payment.
Description: This function allows adding supplier payment from administrator that includes Supplier name, date of supplier payment, paid out cost
Input: supplier payment.
Source: web form.
Output: add new supplier payment.
Destination: database, screen.
Require: take order from supplier.
Precondition: administrator can not limit supplier payment.
Post condition: administrator can limit supplier payment.
Procedure: This function allow to add supplier payment from administrator by click on the button "إضافة" then supplier payment will be stored in DB
Validation: administrator must take goods from supplier.

<u>Name:</u> generate customer report
<u>Description:</u> The system provides customer report that includes : (customer information, customer payment, customer bills, total cost of bills, paid out cost, and remainder cost).
<u>Input:</u> select customer report button.
<u>Source:</u> web form.
<u>Output:</u> customer report.
<u>Destination:</u> screen, printer.
<u>Require:</u> customer profile, customer payment, customer bills.
<u>Precondition:</u> none.
<u>Post condition:</u> printing customer report.
<u>Procedure:</u> this function request to click on the button "تقرير العميل" to access the DB and read customer information then display it on the screen as report.
<u>Validation:</u> there must be customer profile, customer payment, customer bills.

Name: generate supplier report

Description: The system provides supplier report that includes :(supplier information, supplier payment, supplier bills, total cost of bills, paid out cost, and remainder cost).

Input: select supplier button.

Source: web form.

Output: supplier report.

Destination: screen, printer.

Require: supplier profile, supplier payment, supplier bills.

Precondition: none.

Post condition: printing supplier report.

Procedure: this function request to click on the button "تقرير المورد" to access the DB and read supplier information then display it on the screen as report.

Validation: there must be supplier profile, supplier payment, Supplier bills.

Name: inventory report.

Description: The system provides reports that contain information about all category or items available in the store such as (category name, item name, expired date, quantity, total quantity, unit price that contain 4-price a, b, c and d, and purchase price).

Input: select inventory report button.

Source: web form.

Output: inventory report.

Destination: screen, printer.

Require: administrator login, items available.

Precondition: none.

Post condition: none.

Procedure: this function request to click on the button "تقرير المخزن" to access the DB and read inventory items with information then display it on the screen.

Validation: none.

Name: making advertisement.

Description: The system allows making advertisement on the company website for all people in the world.

Input: enter to company website.

Source: web form.

Output: advertisement website.

Destination: screen.

Require: none.

Precondition: none.

Post condition: none.

Procedure: this function allows making advertisement on the company website for all people in the world.

Validation: none.

Name: sending e-mail.

Description: this function provides customer sending e-mail to administrator about any thing he needed.

Input: click a button to sending e-mail.

Source: web form.

Output: acknowledgment from administrator.

Destination: screen.

Require: none.

Precondition: none.

Post condition: none.

Procedure: this function allows the client to click on the button "e-mail" for sending it to the administrator.

Validation: none.

Name: Administrator help.

Description: this function provides the administrator who to use the system by using help button.

Input: click help button.

Source: web form.

Output: help menu screen.

Destination: screen.

Require: nothing.

Precondition: none.

Post condition: none.

Procedure: this function allows to click on" help" button to display help menu screen that help the administrator who to use the system.

Validation: none.

3.3 Project constrains details

Many constraints must be available in the system:

- User name should contain more than six characters.
- Password should contain more than six characters; no special character must be used in the password.
- Quantity and price must be digit.
- All dates must be valid.
- All inputs must be validated.
- All data must be validated before sending to DB.
- Web form application using ASP.NET.

3.4 System Flow Diagram

In this section we talk about data flow diagram that used to describe the overall behavior of the system.

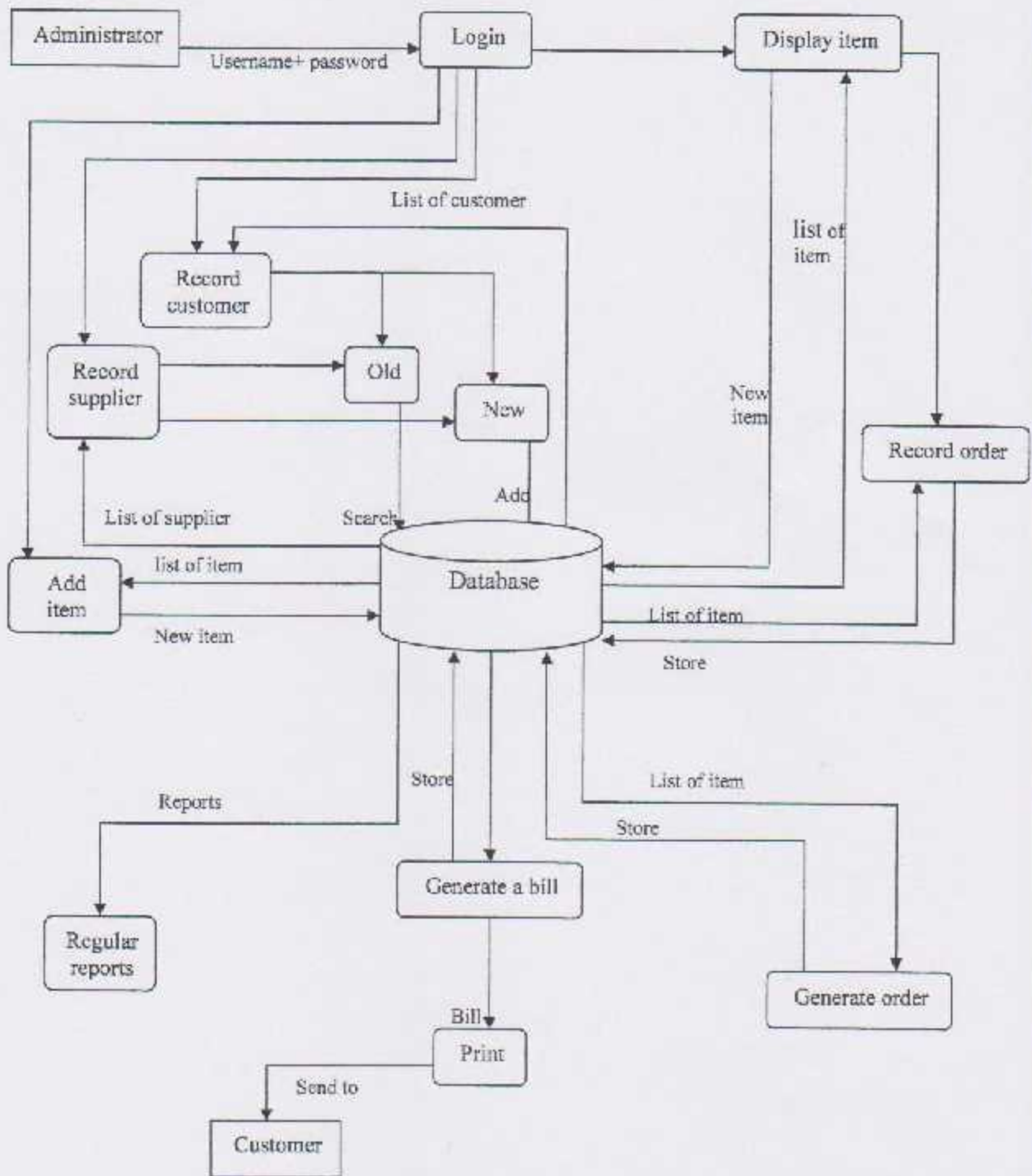


Figure 3.1 administrator data flow diagram (FD)

3.5 Data Dictionary

Entry name	Description
Administrator Login	This function allows the administrator to login the system by putting username and password
Change password	This function enables the administrator to change his password
Add new category	This function allows adding new category with its items.
Displaying item	This function allows the administrator displaying items to customers by using computer.
Inventory entry	This function allows the administrator to add new item quantity for any category in the store.
Customer profile maintenance	This function enables the administrator to add, delete, or search about any customer.
Supplier profile maintenance	This function enables the administrator to add, delete, or search about any supplier.
Take customer order	This function enables the administrator to display and generate orders to the customers.
Generate a bill	This function allows the administrator to generate bill for each order.
Customer payment	This function allows adding customer payment from administrator that includes Customer name, date of customer payment, paid out cost.
Supplier payment	This function allows adding supplier payment from administrator that includes Supplier name, date of supplier payment, paid out cost.

Generate customer report	The system provides customer report that includes :(customer information, customer payment, customer bills, total cost of bills, paid out cost, and remainder cost).
Generate supplier report	The system provides supplier report that includes :(supplier information, supplier payment, supplier bills, total cost of bills, paid out cost cost) , and remainder.
Inventory report	The system provides reports that contain information about all category or items available in the store such as (category name, item name, expired date, quantity, total quantity, unit price that contain 4-price a, b, c and d, and purchase price).
Making advertisement	The system allows making advertisement on the company website for all people in the world.
Sending E-mail	This function provides customer sending e-mail to administrator about any thing he needed.
Administrator help	This function provides the administrator who to use the system by using help button.

3.6 Database requirements

We will explain the needed data to be stored in the database:

❖ Customer information

Customer ID: customer number.

Customer name: the name of the customer.

Company name: the name of the customer company.

Address: the address of the company.

City#: customer city number.

Telephone#1: company telephone.

Telephone#2: customer telephone.

Fax: company or customer fax.

E-mail: customer or company e-mail.

❖ Supplier information

Supplier ID: supplier number.

Supplier name: the name of the supplier.

Company name: the name of the supplier company.

Address: the address of the company.

City#: supplier city number.

Telephone#1: company telephone.

Telephone#2: supplier telephone.

Fax: supplier or company fax.

E-mail: supplier or company e-mail.

❖ Orders information

Sequential #: sequential number.

Order #: the number of order.

Item#: number of item.

Description: order Description such as small or capital.

Quantity: quantity of order.

Unit price: price of one unit.

Total cost: total cost of each item.

❖ **Order1 information**

Order #: the number of order.

Customer ID: customer number.

Order date: date of generate order.

❖ **Category information**

Category #: number of category that is available in the store.

Category name: name of category.

❖ **Bill information**

Bill #: number of bill.

Customer ID: customer number.

Bill date: generating bill date.

Order#: the number of order.

Bill cost: total cost of bill.

❖ **Items information**

Item #: number of item.

Item name: name of item.

Category#: number of category.

Total quantity: the total quantity for each item in the store.

Image: image path of item.

❖ **Item details information**

Sequential #: sequential number.

Category #: number of category that is available in the store.

Item #: number of item.

Unit price A: price A for each item.

Unit price B: price B for each item.

Unit price C: price C for each item.

Unit price D: another price putting from administrator.

Purchase price: purchase price for each item.

Expired date: the expired date for each category inside the store.

❖ **City information**

City#: city number.

City name: name of city.

❖ **Customer payment information**

Customer ID: customer number.

Payment#: payment number.

Payment date: date of payment.

Paid out cost.

❖ **Supplier payment information**

Supplier ID: supplier number.

Payment#: payment number.

Payment date: date of payment.

Paid out cost.

❖ **Supplier bill information**

Supplier ID: supplier number.

Bill cost: total cost of bill.

Bill date: date of each bill.

Bill #: the number of bill.

❖ **Password information**

Username.

Password.

Database Data Dictionary

This dictionary describes the database fields, their names, types, and description.

Field Name	Type	Description
password	nvarchar	administrator password
Username	nvarchar	Username of administrator
Customer and supplier name	nvarchar	Name of customer Or supplier
Customer ID and supplier ID	int	Customer or supplier number
Address	nvarchar	Address of the company
Tel	nvarchar	Telephone number
E-mail	nvarchar	Supplier/customer e-mail
Company name	nvarchar	name of the company
Order#	int	number of order
Date	datetime	Date of order/bill
Expired. Date	datetime	expire date of product
Quantity	Int	Quantity of category and item
Bill #	Int	bill number
Category #	Int	The number of category
Category name	nvarchar	name of the category
Unit price	Money	The price of one unit
Item name	nvarchar	name of item
Image	nvarchar	image for each item
Item #	int	Item number
Fax	varchar	customer or supplier fax
Total cost	Money	The total cost for (bill/order)
description	nvarchar	Description of items



3.7 Summary and Recommendation

All details of functional requirements that contain (function name, description, input, source, output, destination, require, pre-condition, post-condition, procedure and validation) are covered in this chapter.

The details for each validation and constraint in the project are showed. Also data flow diagram that used to describe the overall behavior of the system is covered, in addition data dictionary of the project are showed. The database requirements that include all data item needed to store in the database.

Chapter Four

Design

- 4.1 Introduction**
- 4.2 Output Design**
- 4.3 Input Design**
- 4.4 Database Design(ER diagram)**
- 4.5 Functional Design (Flowchart)**
- 4.6 Summary and Recommendations**

Design

4.1 Introduction

This chapter will cover the following:

- Output design
- Input design
- Database design(ER diagram)
- Functional design(Flowchart)
- Summary and recommendation.

4.2 Output design

x : character

9 : number

المصممون : فريق العمل		العنوان : اصدار طلبية جديدة	
النوع : صفحة تترنت		التاريخ : ٢٠٠٤-١١-٣	
			
اصدار طلبية جديدة			
اسم الزبون		محل	
تاريخ الطلبية		17/8/2005 12:45:34 AM	
المجموع	اسم المصنف	الوصف	الكمية
9999999	XXXXXX	XXXXXX	9999999
9999999	XXXXXX	XXXXXX	9999999

X

Figure 4.1 Generate Order

العنوان : تقرير المورد
التاريخ : ٢٠٠٤-١١-٣

المصممون : فريق العمل
النوع : صفحة انترنت

الجمهورية العربية السورية - دمشق



تقرير المورد

الرقم الإلكتروني	العنوان	الاسم	الهاتف	الاسم المدينة	الاسم الشركة
XXXXXX	999999	999999	999999	XXXXXX	XXXXXX

رقم الطلب	تاريخ الفاتورة	قيمة الفاتورة
99999999	99999999	99999999

المبلغ الكلي للفواتر

تاريخ الاستلام	المبلغ المقبوض
99999999	99999999

المبلغ المتبقى

المبلغ الكلي المقبوض

X ١٧٤

Figure 4.2 Supplier Report

العنوان : البحث عن مورد
التاريخ : ٢٠٠٤-١١-٣

المصممون : فريق العمل
النوع : صفحة انترنت

الجمهورية العربية السورية - دمشق



البحث عن مورد

اسم المورد

الرقم الإلكتروني	العنوان	الاسم	الهاتف	العنوان	اسم المدينة	اسم الشركة
XXXXXX	999999	999999	999999	XXXXXX	XXXXXX	XXXXXX

X ١٧٤

Figure 4.3 Supplier Search

المصممون : فريق العمل
النوع : صفحة الشركة

العنوان : تقرير الزبون
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

اسم العميل
رقم العميل

الرقم	اسم المدينة	العنوان	الهاتف	المحمول	المسكن	البريد الإلكتروني
XXXXXX	XXXXXX	XXXXXX	999999	999999	999999	XXXXXX

رقم الطلبية	تاريخ الفاتورة	قيمة الفاتورة
99999999	99999999	99999999

المبلغ الكلي للفواتير

تاريخ الاستلام	المبلغ المطلوب
9999999999	9999999999

المبلغ الكلي المطلوب
المبلغ المتبقى

X ()

Figure 4.4 Customer Report

المصممون : فريق العمل
النوع : صفحة الشركة

العنوان : إصدار فاتورة
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

INVOICE الفاتورة

رقم الفاتورة : 32
تاريخ : 1/26/2005 12:33:33 AM
تمت كتابته من : حسن

المجموع	اسم العميل	الوصف	لكمية	سعر الوحدة
99999999	XXXXXX	XXXXXX	99999999	99999999
99999999	XXXXXX	XXXXXX	99999999	99999999

المجموع الكلي : 2105

Figure 4.5 Generate Bill

المصممون : فريق العمل
النوع : صفحة للترت

العنوان : لبحث عن صنف معين
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

البحث عن صنف معين

التصنيف شركة الصنف من

الكمية الكلية	اسم التصنيف	اسم الصنف
999999999	XXXXXXXX	XXXXXXXX
999999999	XXXXXXXX	XXXXXXXX

X

Figure 4.6 Item Search

المصممون : فريق العمل
النوع : صفحة لترت

العنوان : تقرير المخزن
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

تقرير المخزن

التصنيف شركة الصنف من

اسم التصنيف	اسم الصنف	الكمية	الكمية الكلية	سعر البيع	سعر الشراء	تاريخ الانتهاء
XXXXXXXX	XXXXXXXX	99999999	99999999	99999999	99999999	99999999
XXXXXXXX	XXXXXXXX	99999999	99999999	99999999	99999999	99999999

X

Figure 4.7 Store Report

المصممون : فريق العمل
التنوع : صفحة التركبات

العنوان : البحث عن زبون
التاريخ : ٢٠٠٤-١١-٢

العربي للمواد الغذائية

البحث عن زبون

اسم الزبون ✓ ✗

الشركة	اسم المنتج	العنوان	الهاتف	المسجل	الفاكس	البريد الإلكتروني
XXXXXX	XXXXXX	XXXXXX	999999	999999	999999	XXXXXX
XXXXXX	XXXXXX	XXXXXX	999999	999999	999999	XXXXXX

Figure 4.8 Customer Search

4.3 Input design

المصممون : فريق العمل
التنوع : صفحة التركبات

العنوان : كلمة المرور
التاريخ : ٢٠٠٣-١١-٣

العربي للمواد الغذائية

كلمة المرور

اسم المستخدم

كلمة المرور

جميع الحقوق محفوظة ٢٠٠٤

Figure 4.9 Enter Password

العنوان : تغيير كلمة المرور
التاريخ : ٢٠٠٤-١١-٣

المصممون : فريق العمل
النوع : صفحة انترنت

العربي للمواد الغذائية



تغيير كلمة المرور

اسم المستخدم

كلمة المرور الحالية

كلمة المرور الجديدة

تأكيد كلمة المرور



X إلغاء ✓ سير

Figure 4.10 Change Password

العنوان : المخازن
التاريخ : ٢٠٠٤-١١-٣

المصممون : فريق العمل
النوع : صفحة انترنت

العربي للمواد الغذائية



المخازن

المنتجات

الطلبات

المراسل

المعارف

إضافة تصفح جديد

إضافة تصفح جديد

تفعيل كتيبات جديدة

البحث عن تصفح جديد

تقرير المبيعات

مساعدة

X خروج



جميع الحقوق محفوظة ٢٠٠٤

Figure 4.11 Store



Figure 4.12 Bills

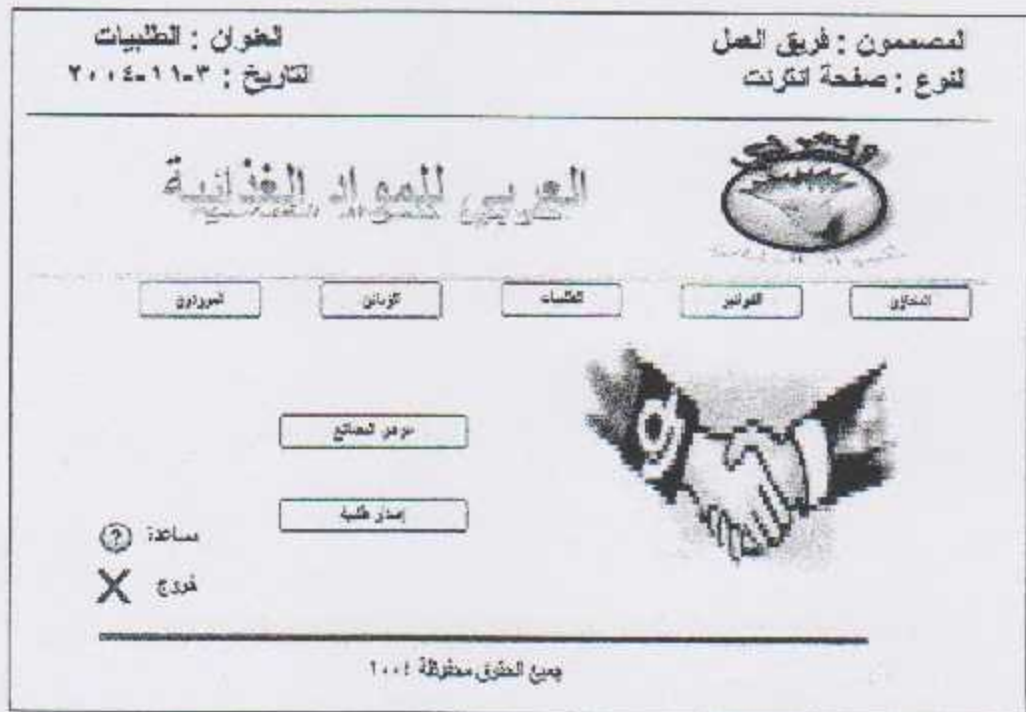



Figure 4.13 Orders

العنوان : الزبائن
التاريخ : ٢٠٠٤-١١-٣

لمصممون : فريق العمل
النوع : صفحة انترنت

العربي للمواد الغذائية



شعارنا كواليتي كالتبانه كالتبانه كالتبانه

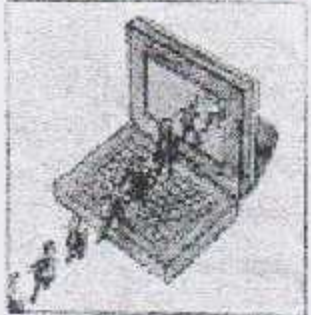
إرسال زبون جديد

إرسال الطرودات

إرسال تقرير

مساعدة ?

خروج X



جميع الحقوق محفوظة © ٢٠٠٤

4.14 Customers

العنوان : الموردون
التاريخ : ٢٠٠٤-١١-٣

لمصممون : فريق العمل
النوع : صفحة انترنت

العربي للمواد الغذائية



شعارنا كواليتي كالتبانه كالتبانه كالتبانه

إرسال مورد جديد

إرسال المدفوعات

إرسال تقرير

مساعدة ?

خروج X



جميع الحقوق محفوظة © ٢٠٠٤

4.15 Suppliers

المصممون : فريق العمل
 النوع : صفحة انترنت

العنوان : اختيار زبون
 التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية



اختيار زبون

اسم الزبون
 التاريخ

Figure 4.16 Choose Customer

المصممون : فريق العمل
 النوع : صفحة انترنت

العنوان : عرض البضائع
 التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية



الكمية: ٥٣١
 سكرت



Figure 4.17 Display Items

المصممون : فريق العمل
النوع : صفحة انترنت

العنوان : اصدار طلبية جديدة
التاريخ : ٢٠٠٤-١١-٣

العنوان للموارد الغذائية

اصول عامة محددة

اسم الزبون عدد تاريخ 1/27/2005 1:11:18 PM

		تاريخ الملائمة	رقم الملائمة
Select	Delete	999999	999999
Select	Delete	999999	999999

إلغاء

Figure 4.18 Generate Order

المصممون : فريق العمل
النوع : صفحة انترنت

العنوان : إدخال زبون جديد
التاريخ : ٢٠٠٤-١١-٣

العنوان للموارد الغذائية

إدخال زبون جديد

اسم الزبون

اسم الشركة

اسم كشركة

المدينة

العنوان

الهاتف

تصميم

تلفون

تاريخه الإلكتروني

إلغاء

Figure 4.19 Add New Customer

المصممون : فريق العمل
النوع : صفحة لترنت

العنوان : إضافة تصنيف جديد
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

إضافة تصنيف جديد

التصنيف

التصنيفات المتاحة

شركته

X

Figure 4.20 Add New Category

المصممون : فريق العمل
النوع : صفحة لترنت

العنوان : إدخال كميات جديدة
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

إدخال كميات جديدة

التصنيف

تاريخ الإضافة

اسم التصنيف

الكمية

شركته

شراء

بيع

السعر الأول

السعر الثاني

السعر الثالث

السعر الرابع

السنة

شركته

X

Figure 4.21 Add New Quantities

المصممون : فريق العمل
النوع : صفحة انترنت

العنوان : إضافة صنف جديد
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

إضافة صنف جديد

Label

التصنيف

اسم الصنف

شركته

الاصناف المتاحة

لا

اسم الصنف

Browse...

X

إضافة

إزالة

Figure 4.22 Add New Item

المصممون : فريق العمل
النوع : صفحة انترنت

العنوان : حذف زبون
التاريخ : ٢٠٠٤-١١-٣

العربي للمواد الغذائية

حذف زبون

اسم الزبون

X

إضافة

حذف

Figure 4.23 Delete Customer

العربي للمواد الغذائية

إدخال المقبوضات

اسم الزوج

تاريخ التسليم

المبلغ المقرض

Figure 4.24 Add Customer Payment

المصممون : فريق العمل
النوع : صفحة الانترنت
العنوان : إدخال مورد جديد
التاريخ : ٢٠٠٤-١١-٠٣

العربي للمواد الغذائية

إدخال مورد جديد

اسم المورد

اسم الشركة

العنوان

الهدف

المحصل

التقارير

البريد الإلكتروني

Figure 4.25 Add New Supplier

العربي للمواد الغذائية

حذف مورد

اسم المورد

سداد

حذف

X إلغاء

Figure 4.26 Delete Supplier

العنوان : إدخال المدفوعات
التاريخ : ٢٠٠٤-١١-٣

المصممون : فريق العمل
النوع : صفحة انترنت

العربي للمواد الغذائية

إدخال المدفوعات

اسم المورد

سداد

1/27/2005 11:34:19 PM

تاريخ الدفع

المبلغ المدفوع

حذف

X إلغاء

Figure 4.27 Add Supplier Payment



Arabi Trading company

CHOCOLATE makes a DIFFERENCE



Arabi Trading Company is a leading manufacturer and distributor of high quality chocolate products in the Middle East region. We are committed to providing our customers with the finest quality chocolate products at competitive prices.



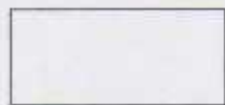
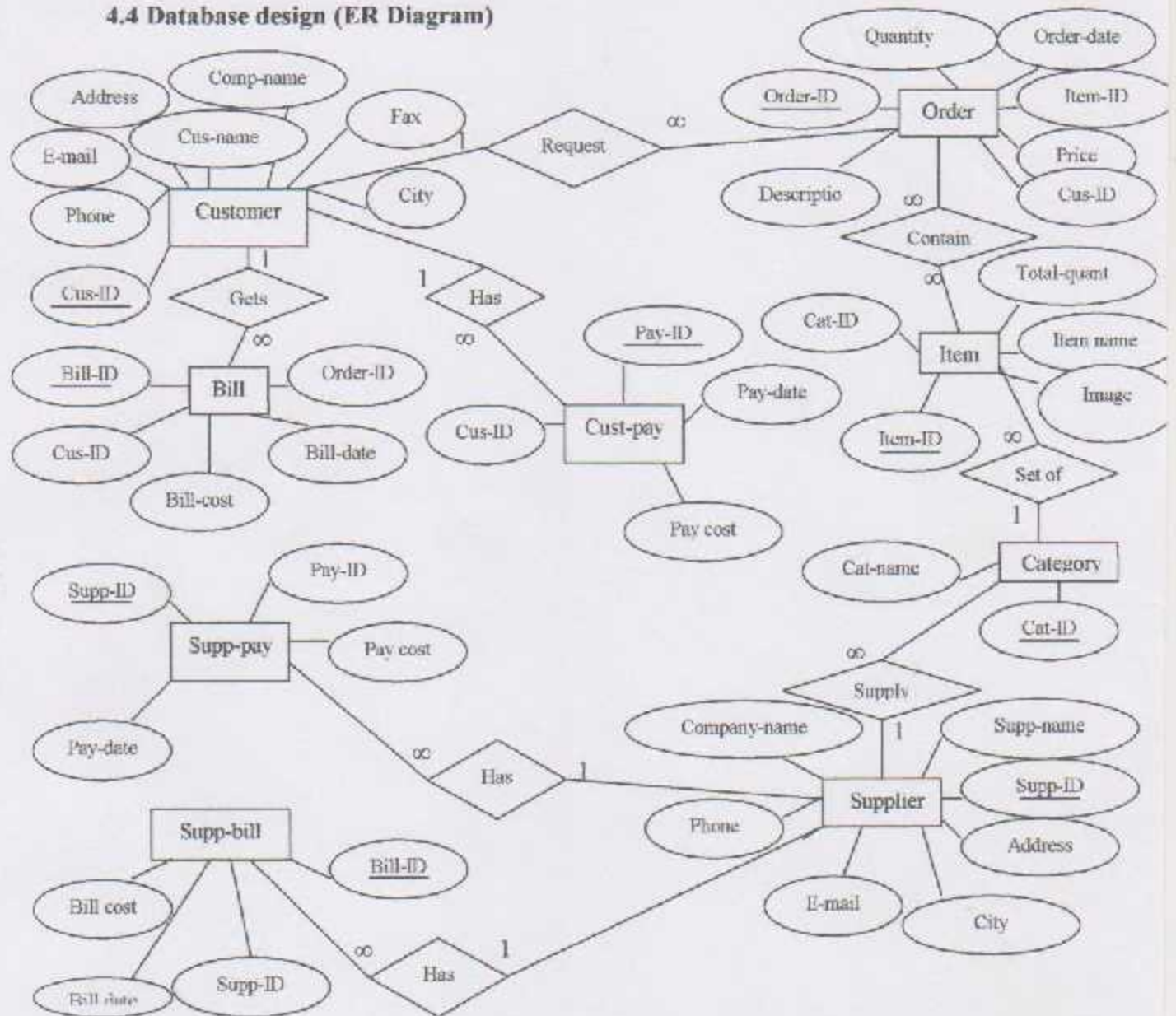
Arabi Trading Company (ATC)
P.O. Box 100
Riyadh, Saudi Arabia
Tel: +966 11 475 0000
Fax: +966 11 475 0001



copyright © 2004

Figure 4.28 Advertisement Page

4.4 Database design (ER Diagram)



Entity Type



Attribute



Relationship Type

4.5 Functional Design (Flowchart)

- **Administrator login.**

This function allows the administrator to login the system by putting username and password.

A) Interface:

Input: username, password.

Output: main menu screen, or error message.

B) Constrains:

Username must have more than six characters.

Password must have more than six characters.

Username and password must be sanitized.

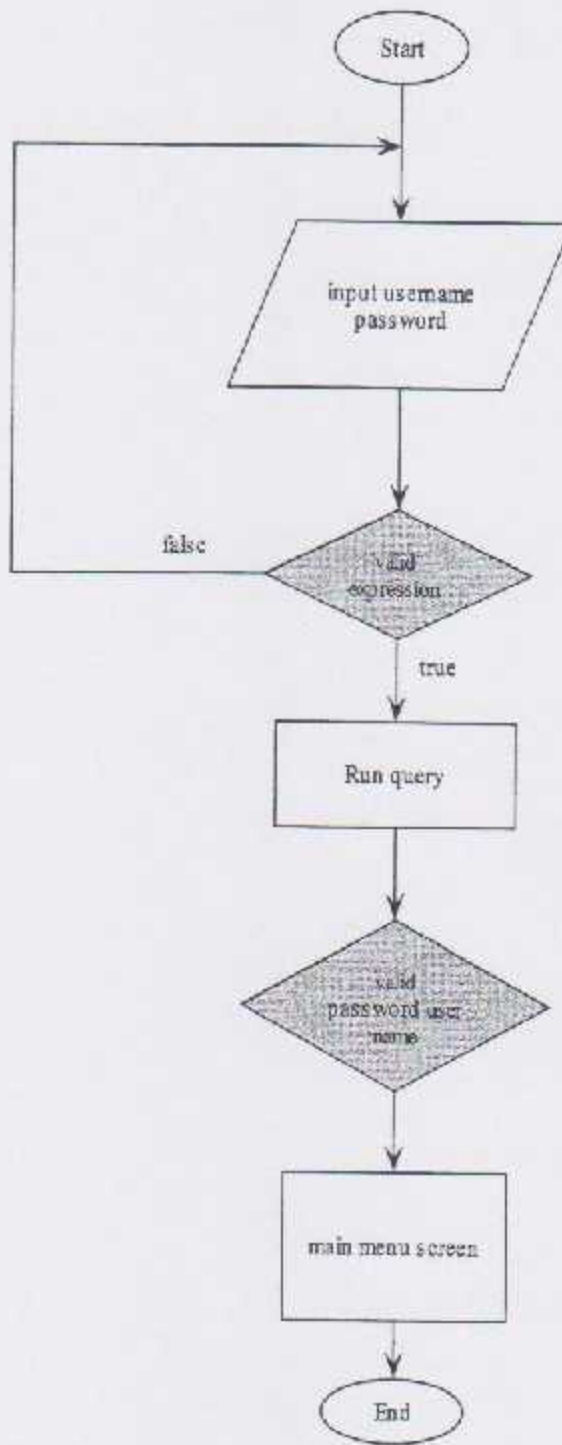


Figure 4.30 Administrator login Flowchart

- **Change password.**

This function enables the administrator to change his login password.

A) Interface:

Input: username, password, new password, password confirmation.

Output: new password.

B) Constrains:

Username must have more than six characters.

Password must have more than six characters.

Username and password must be sanitized.

Username and old password must be available

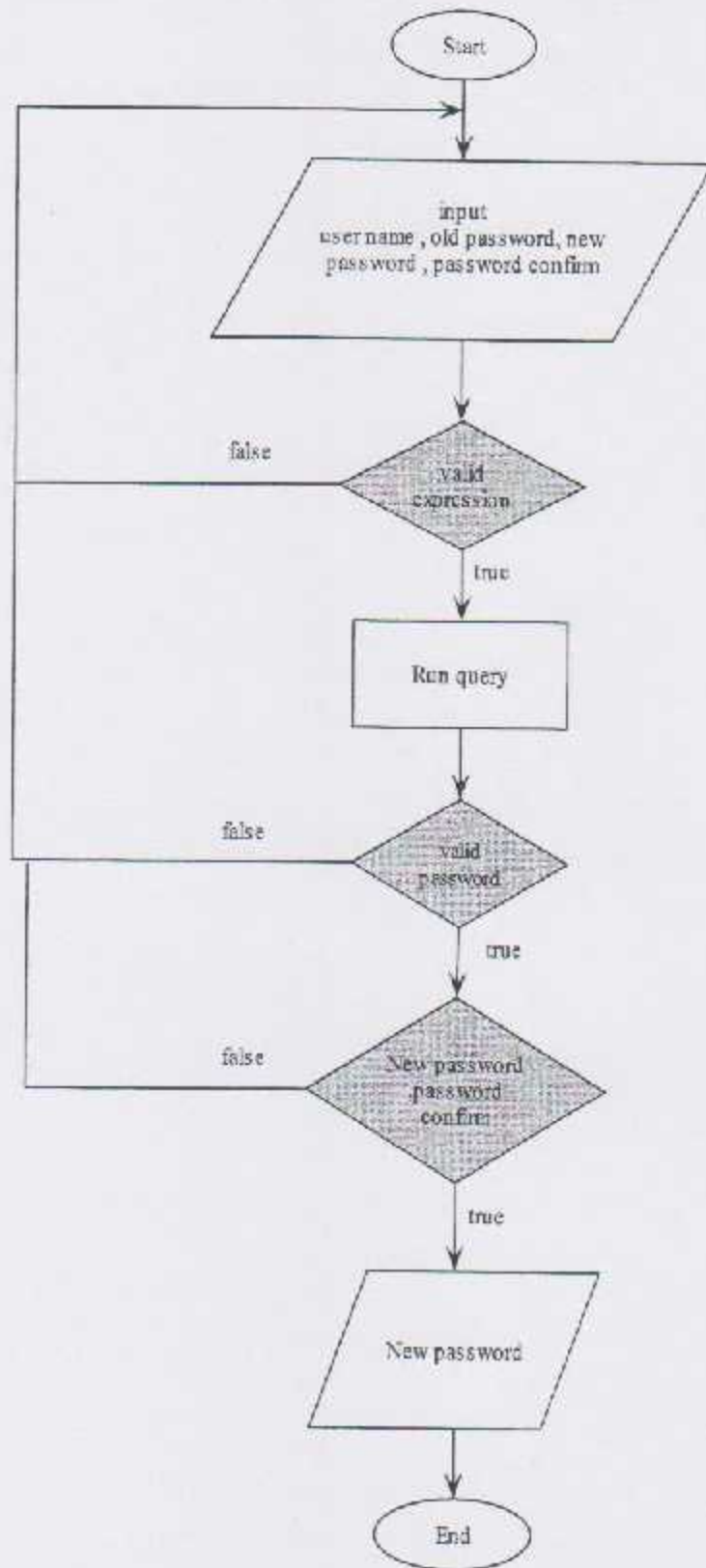


Figure 4.31 Change password Flowchart

- **Add new category**

This function allows adding new category with its items.

A) Interface:

Input: category name.

Output: new category in DB. .

B) constrains:

none.

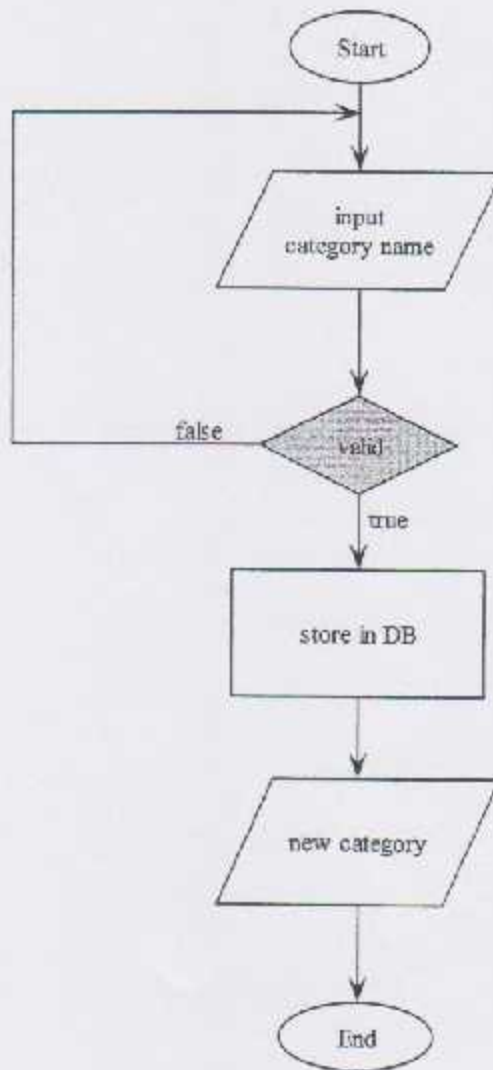


Figure 4.32 Add new category Flowchart

- **Displaying item.**

This function allows the administrator displaying items to customers by using computer.

C) Interface:

Input: menu selection

Output: items pictures, names and quantities.

D) Constrains:

Logged to the system and choose customer.

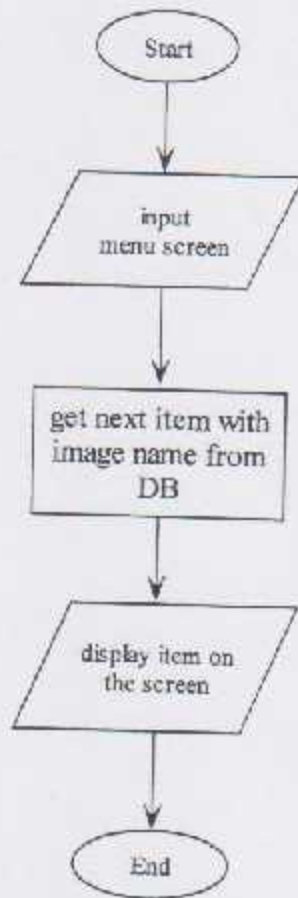


Figure 4.33 Displaying item Flowchart

- **Inventory entry**

This function allows the administrator to add new item quantity for any category in the store.

A) Interface:

Input: item name, category name, Quantity, Sale price A, B, C and D, purchase cost and expire date.

Output: new item quantity.

B) Constrains:

Item name, category name, quantity, sale price, purchase price, and expires date must be available.

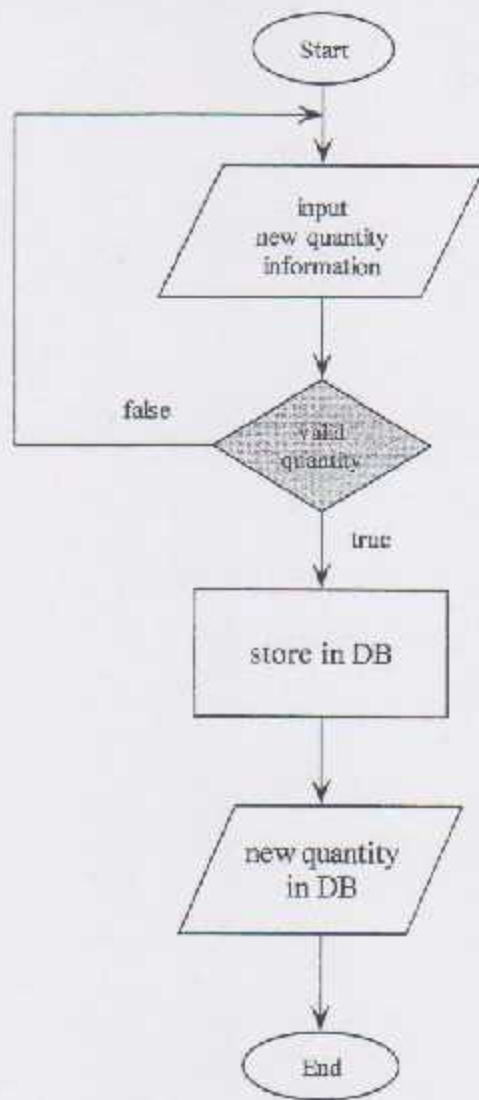


Figure 4.34 Inventory entries Flowchart

- **Customer profile maintenance.**

This function enables the administrator to add, delete, or search about any customer.

A) Interface:

Input: customer name, company name, city, address, telephone #1, telephone #2, fax, customer E-mail.

Output: add new customer, or delete any customer.

B) Constrains:

Customer not available in DB when add, customer available when delete or search.

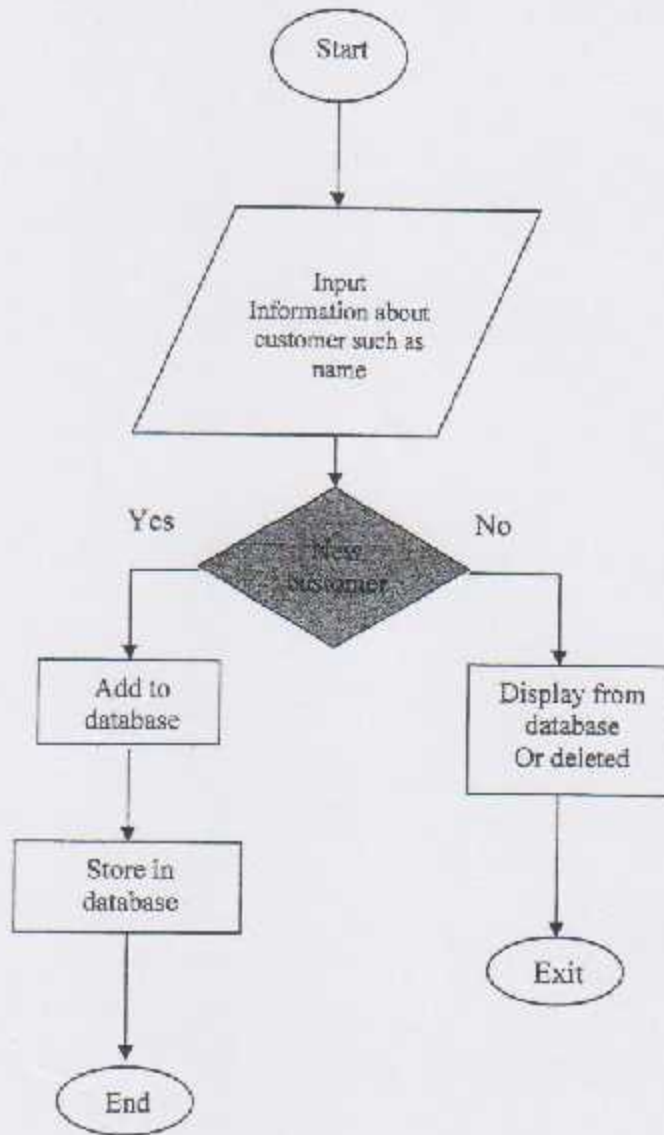


Figure 4.35 Customer profile maintenance Flowchart

- **Supplier profile maintenance.**

This function enables the administrator to add, delete, or search about any supplier.

A) Interface:

Input: supplier name, company name, address, city, telephone #1, telephone #2, fax, supplier E-mail.

Output: new supplier in DB, or delete supplier from DB.

B) Constrains:

Supplier not available in DB when add, supplier available when delete or search.

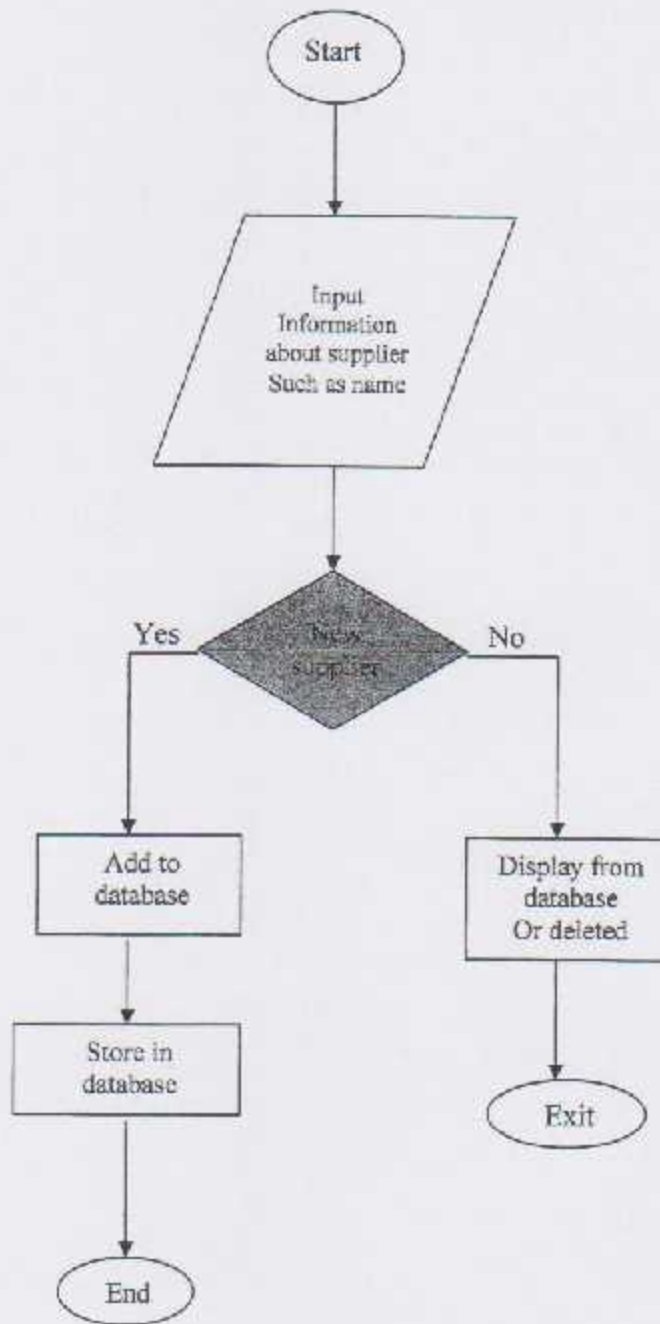


Figure 4.36 Supplier profile maintenance Flowchart

- **Take customer order.**

This function enables the administrator to display and generate orders to the customers.

A) Interface:

Input: order date, customer name.

Output: generate order.

B) Constrains:

For each item there must be price and order date.

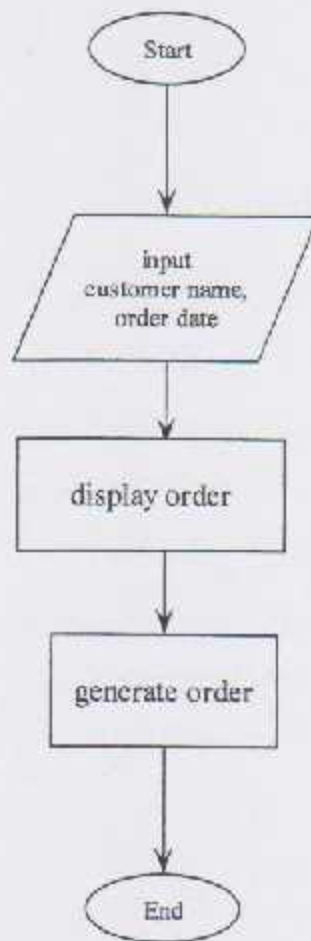


Figure 4.37 Take customer order flowchart

- **Generate a bill.**

This function allows the administrator to generate bill for each order.

A) Interface:

Input: customer name, date of bill.

Output: generate customer bill.

B) Constrains:

There must be customer name and order items to make a bill.

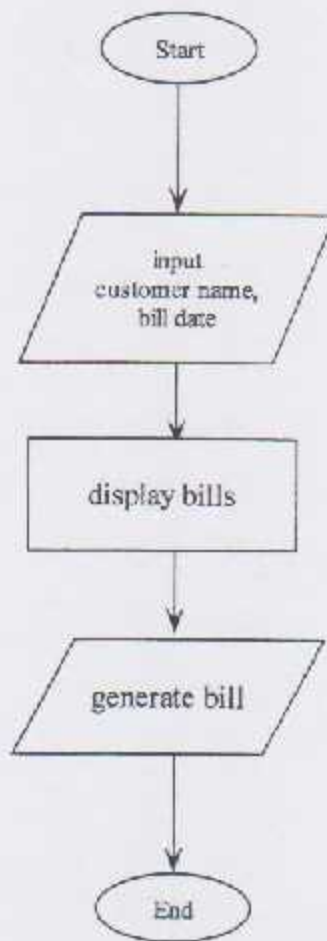


Figure 4.38 Generate a bill Flowchart

- **Customer payment.**

This function allows adding customer payment from administrator that includes Customer name, date of customer payment, paid out cost.

A) interface:

Input: customer payment.

Output: add new customer payment.

B) Constrains:

Customer must take order.

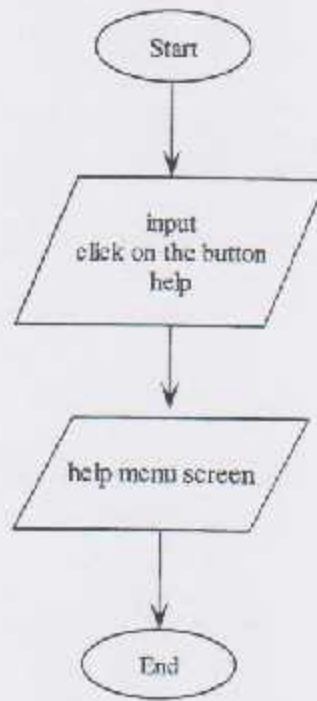


Figure 4.39 Customer payments Flowchart

- **Supplier payment**

This function allows adding supplier payment from administrator that includes Supplier name, date of supplier payment, paid out cost

A) Interface:

Input: supplier payment.

Output: add new supplier payment.

B) Constrains:

Administrator must take goods from supplier.

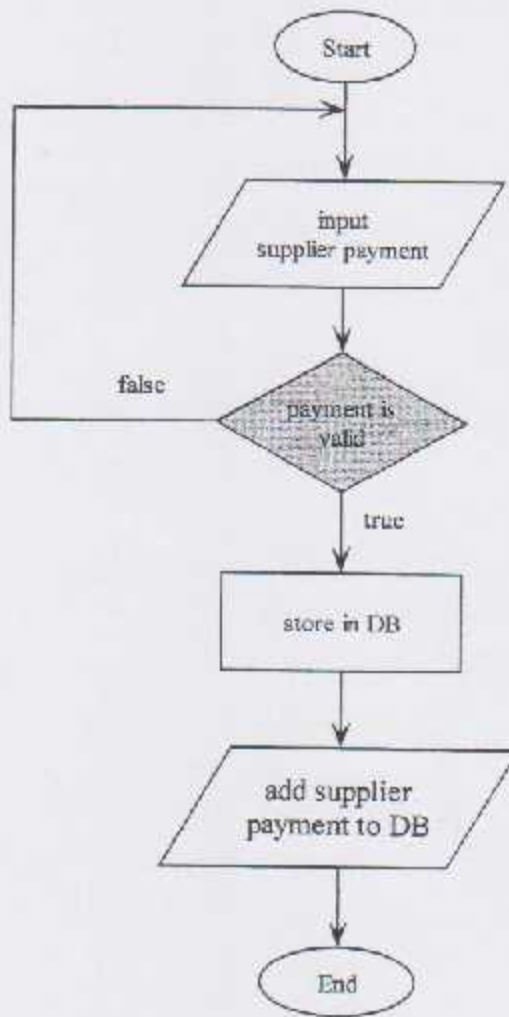


Figure 4.40 Supplier payments Flowchart

- **Generate customer report.**

The system provides customer report that includes :(customer information, customer payment, customer bills, total cost of bills, paid out cost, and remainder cost).

A) interface:

Input: select customer report button.

Output: customer report.

B) Constrains:

There must be customer profile, customer payment, customer bills.

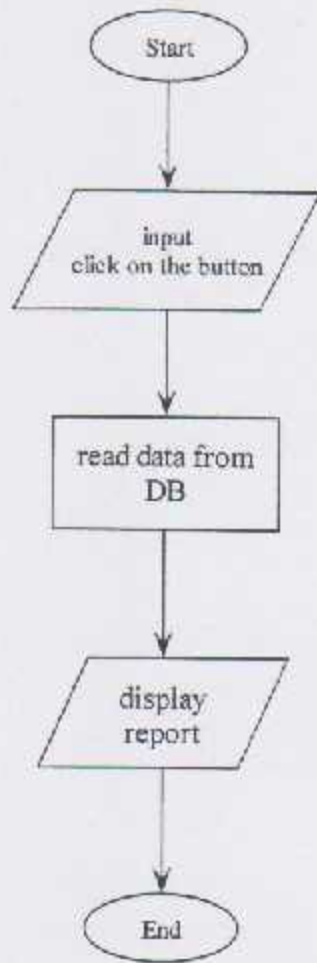


Figure 4.41 Customer report Flowchart

- **Generate supplier report.**

The system provides supplier report that includes : (supplier information, supplier payment, supplier bills, total cost of bills, paid out cost, and remainder cost).

A) Interface:

Input: select supplier button.

Output: supplier report.

B) Constrains:

There must be supplier profile, supplier payment, Supplier bills.

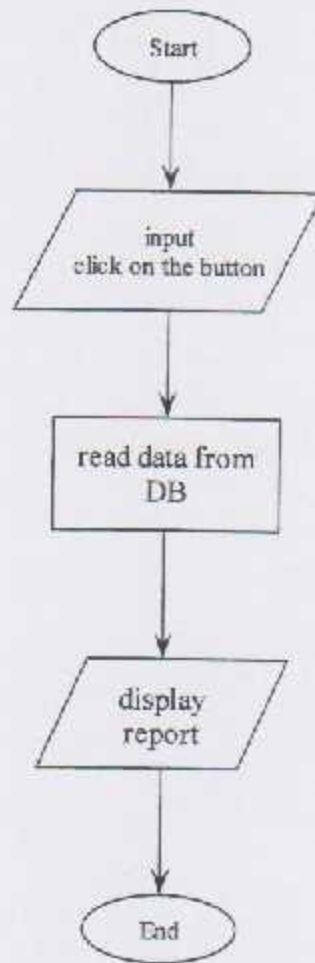


Figure 4.42 Supplier report Flowchart

- **Inventory report.**

The system provides reports that contain information about all category or items available in the store such as (category name, item name, expired date, quantity, total quantity, unit price that contain 4-price a, b, c and d, and purchase price).

A) Interface:

Input: select inventory report button.

Output: inventory report.

B) Constrains:

None.

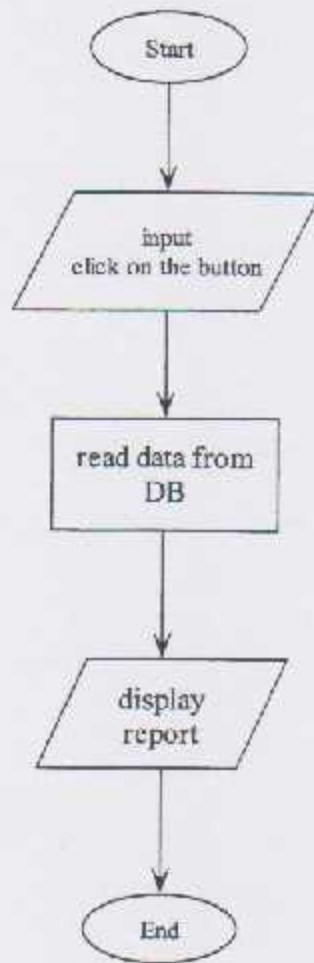


Figure 4.43 Inventory report Flowchart

- **Making advertisement.**

The system allows making advertisement on the company website for all people in the world.

A) Interface:

Input: enter to company website

Output: advertisement website.

B) Constrains:

None.

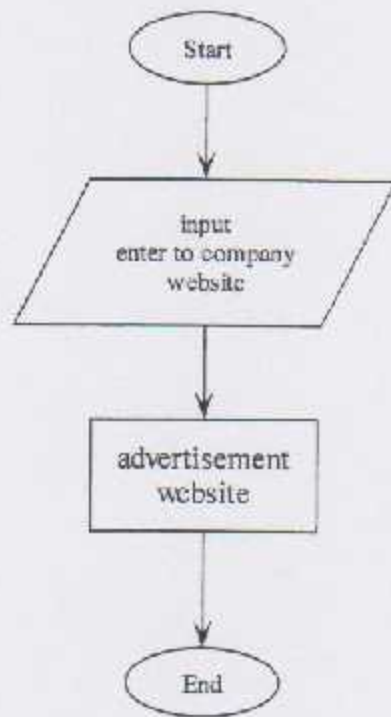


Figure 4.44 Making advertisements Flowchart

- **Sending e-mail.**

This function provides customer sending e-mail to administrator about any thing he needed.

C) Interface:

Input: click a button to sending e-mail.

Output: acknowledgment from administrator.

D) Constrains:

None.

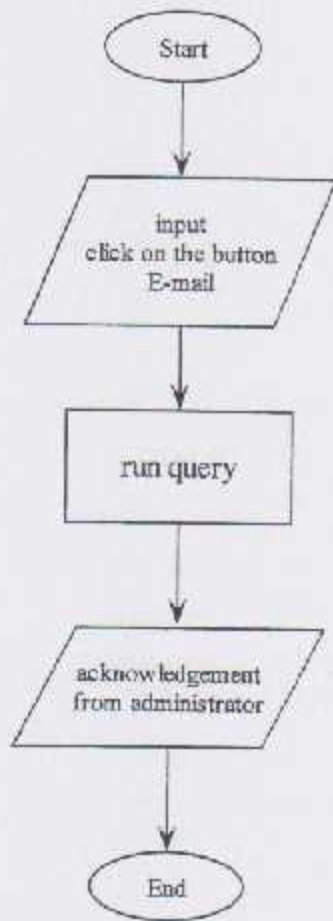


Figure 4.15 Sending e-mail Flowchart

- **Administrator help.**

This function provides the administrator who to use the system by using help button.

A) Interface:

Input: click help button.

Output: help menu screen.

B) Constrains:

None.

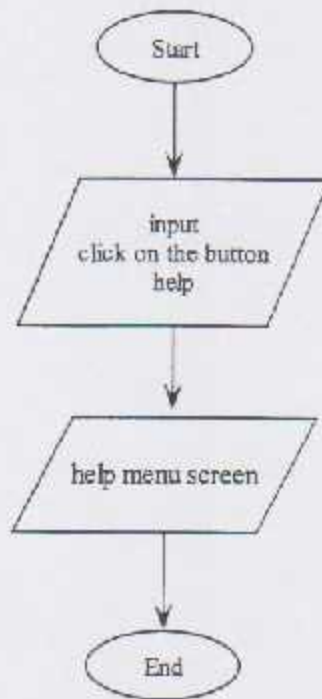


Figure 4.46 Administrator help Flowchart

4.6 Summary and Recommendations

All input and output design screen are covered in this chapter also database design are described by using ER diagram and the functional design are showed through flowchart.

Chapter Five

Coding and Implementation

- 5.1 Introduction**
- 5.2 Coding Programming language**
- 5.3 Database System**
- 5.4 Establishment of Development Environment**
- 5.5 Database Creation and Configuration**
- 5.6 Coding and Unit Testing**
- 5.7 Summary and Recommendations**

Chapter Five

Coding and Implementation

5.1 Introduction

In this chapter the coding and implementation of the system will be identified. This chapter will cover:

- Introduction
- Coding programming language.
- Database system
- Establishment of development environment
- Database creation and configuring
- Coding and unit testing
- Summary and recommendation

5.2 Coding programming language

5.2.1 Asp Dot Net

ASP.NET is a new rendition of the Active Server Pages (ASP) technology for the Microsoft Dot Net framework.

It is mostly backwards compatible with ASP. However, it has several new features that really make it a different technology:

- ASP.NET applications are compiled rather than interpreted; you can author applications in any .NET compatible language, including Visual Basic .NET, Csharp Language, and Jscript Dot Net.
- Direct access to the capabilities of the class libraries of the .NET Framework, including ADO.NET, file I/O, image manipulation, ...
- It is easier to write well-structured applications using "real object-oriented techniques". (No more need to use the kinds of hacks described in OoAsp Practices.)
- Support for building and using Web Services.
- Support for session management.
- Enhanced diagnostics, tracing, and debugging facilities.

5.3 Databases System:

A database is a collection of data, tables, and other objects. Database objects help to structure data and define data integrity mechanisms. The following table describes SQL Server database objects.

Database	Object Description
Table	Defines a collection of rows that have associated columns.
Data type	Defines the data values allowed for a column or variable. SQL Server provides system-supplied data types. Users create user-defined data types.
Constraint	Defines rules regarding the values allowed in columns and is the standard mechanism for enforcing data integrity.
Default	Defines a value that is stored in a column if no other value is supplied.

Rule	Contains information that defines valid values that are stored in a column or data type.
Index	<p>Is a storage structure that provides fast access for data retrieval and can enforce data integrity.</p> <p>In a clustered index, the logical or indexed order of the key values is the same as the physical, stored order of the corresponding rows that exist in the table.</p> <p>In a nonclustered index, the logical order of the index does not match the physical, stored order of the rows in the table.</p>
View	Provides a way to look at data from one or more tables or views in a database.
User-defined function	Can return either a scalar value or a table. Functions are used to encapsulate frequently performed logic. Any code that must perform the logic incorporated in a function can call the function rather than having to repeat all of the function logic.
Stored procedure	Is a named collection of precompiled Transact-SQL statements that execute together.
Trigger	Is a special form of a stored procedure that is executed automatically when a user modifies data in a table or a view.

Table 5.1 SQL Server database objects

- **Microsoft SQL Server 2000**

SQL Server stores information, called metadata, about the system and objects in databases for an instance of SQL Server. Metadata is information about data.

Metadata includes information about the properties of data, such as the type of data in a column (numeric, text, and so on), or the length of a column. It can also be information about the structure of data or information that specifies the design of objects.

SQL Server validates users at two levels of security. Login authentication and permissions validation on database user accounts and roles.

Authentication identifies the user who is using a login account and verifies the users the ability to connect with SQL Server. If authentication is successful, the user connects to SQL Server.

The user then must have permission to access databases on the server. The database administrator assigns database-specific permissions to user accounts and roles in order to access databases on the server. Permissions control the activities that the user is allowed to perform in the SQL Server database.

Login Authentication

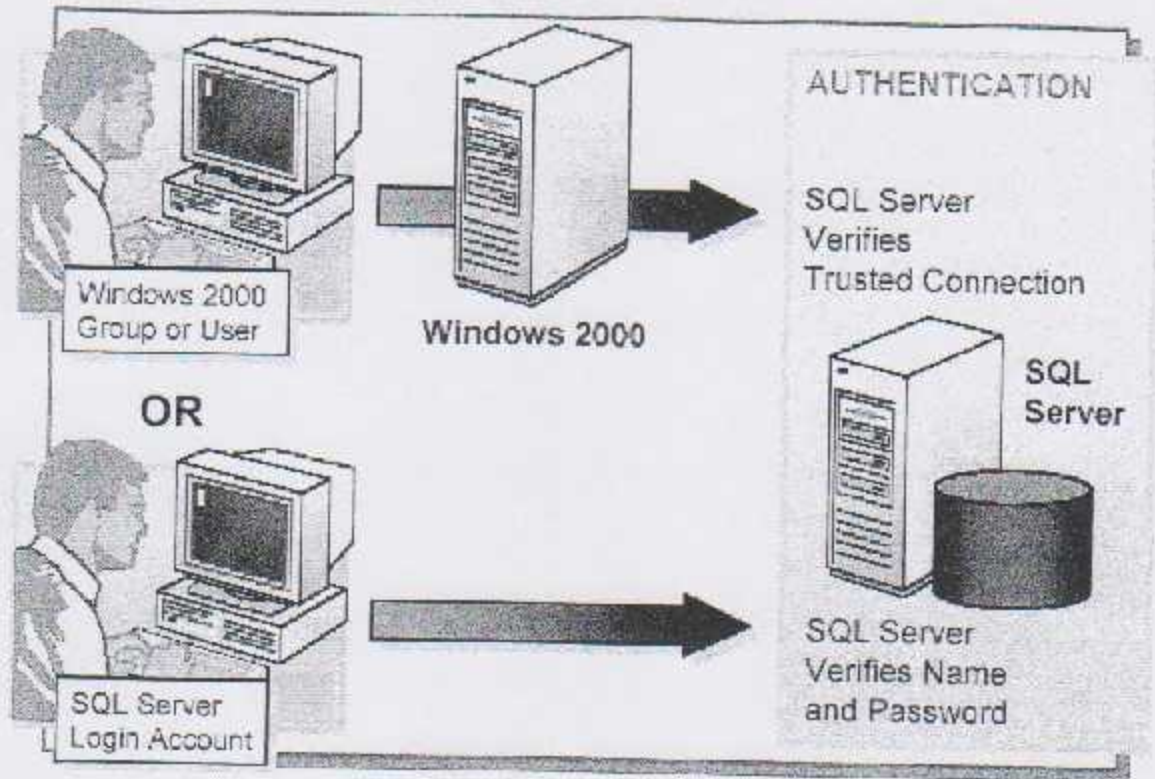


Figure 5.1: Login Authentication

A user must have a login account to connect to SQL Server. SQL Server recognizes two login authentication mechanisms. Windows Authentication and SQL Server Authentication. Each of which has a different type of login account.

Windows Authentication

When using Windows Authentication, a Windows 2000 account or group controls user access to SQL Server. A user does not provide a SQL Server login account when connecting. A SQL Server system administrator must define either the Windows 2000 account or the Windows 2000 group as a valid SQL Server login account.

SQL Server Authentication

When using SQL Server Authentication, a SQL Server system administrator defines a SQL Server login account and password. Users must supply both SQL Server logins and passwords when they connect to SQL Server.

Authentication Mode

When SQL Server is running on Windows 2000, a system administrator can specify that it run in one of two authentication modes:

- **Windows Authentication Mode**

Only Windows 2000 authentication is allowed.

Users cannot specify a SQL Server login account.

- **Mixed Mode**

Users can connect to SQL Server with Windows Authentication or SQL Server Authentication.

5.4 Establishment of Development Environment

5.4.1 Software Environment

The software development environment consists of the following:

1. windows XP
2. ASP Dot Net 2003 Designer.
3. Microsoft SQL Server.

5.4.2 Hardware Environment

Used hardware for development:

-Two Pentium IV PC's

5.5 Database Creation and Configuration

5.5.1 Database Creation

Right click on database select new database, enter the name of database "saleemproject", that "saleemproject" will created.

5.5.2 Tables Creation

Right click on table , select new table enter the all columns name and determine the data type of each column (int , char, datetime,...), every column has limiting length , the last field used to determine allowing using null or not , after typing all the column name in the table it is impotent to determine the primary key of the table that allow to manage relationship with other tables that has been created then we save the table and determine the name of the created table, In saleemproject there are multiple of tables (bill table, category table, city table, customer table, customer_payment table, item_details table, items table, orders table, password table, supplier table, supplier_bill table, supplier_payment table).

Name	Primary Key	Foreign key
Bill	رقم_الفاتورة	-----
Category	رقم_التصنيف	-----
Items	رقم_الصف	رقم_التصنيف
Item_details	رقم	رقم_الصف
Orders	رقم	رقم_الصف، رقم_الزبون
Customer	رقم_الزبون	رقم_المدينة
Customer_payment	رقم_المقبوضات	رقم_الزبون
City	رقم_المدينة	-----
Supplier	رقم_المورد	رقم_المدينة
Supplier_bill	رقم_الفاتورة_المستلمة	رقم_المورد
Supplier_payment	رقم_المدفوعات	رقم_المورد
Password	اسم_المستخدم	

Table 5.2: Database Tables

Database Diagram (ER diagram):

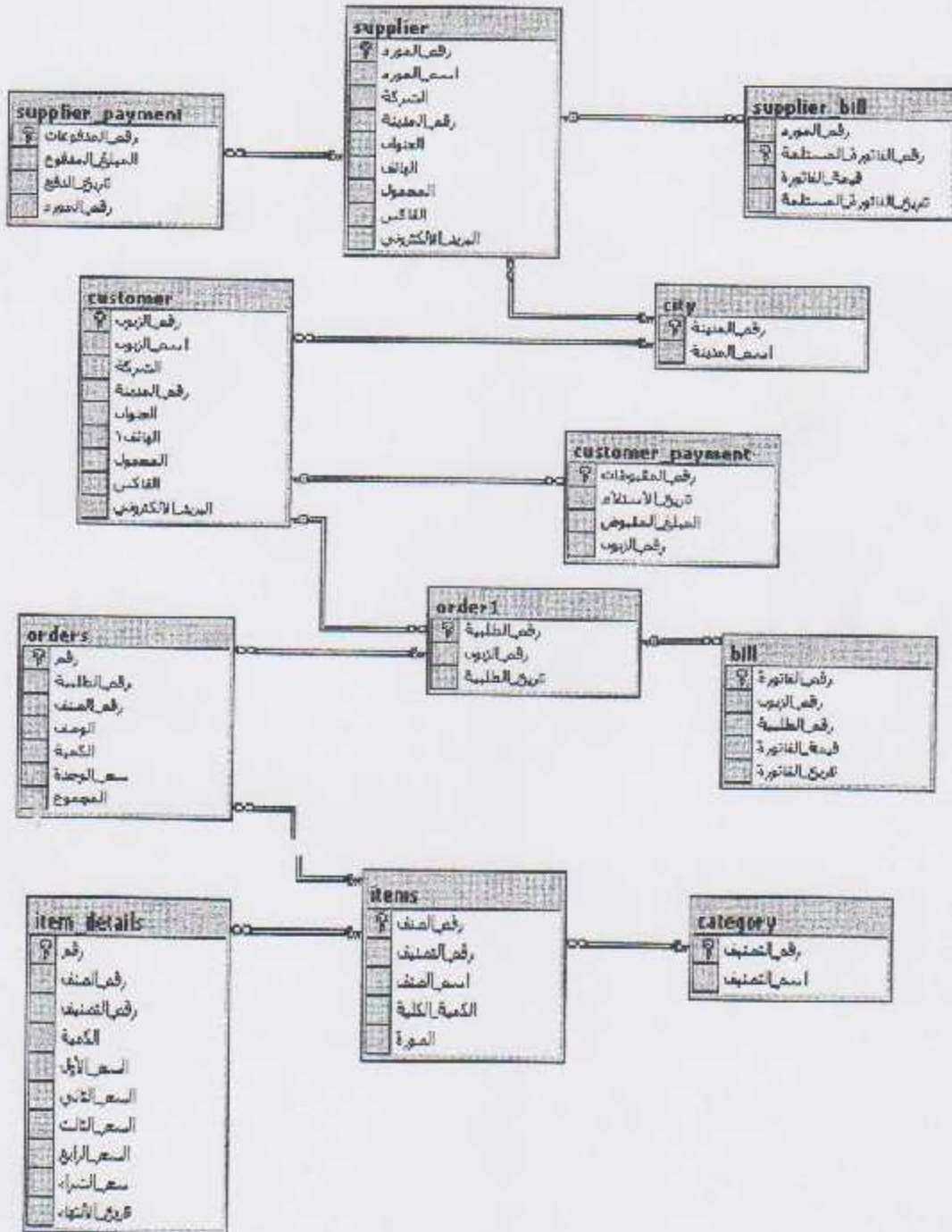


Figure 5.2: Database Diagram

One-to-many relationship: is the most common type of relationship, in relation databases, a relationship between two tables in which a single row in the first table can be related to one or more rows in the second table, but a row in the second table, but a row in the second table can be related only to one row in the first table.

Many-to-many relationship: a relationship between two tables in which rows in each table have multiple matching rows in the related table.

Many-to-many relationships are maintained by using a third table called a junction table and adding the primary key columns from each of the other two tables to this table.

One-to-one relationship: in relation database, a relationship between two tables in which a single row in the first table can be related only to one row in the second table, and a row in the second table can be related only to one row in the first table, this type of relationship is not common because most information related in this way would be all in one table

5.3.3 Views

A view is a virtual table whose contents are defined by a query. Like a real table, a view consists of a set of named columns and rows of data. However, a view does not exist as a stored set of data values in a database. The rows and columns of data come from tables referenced in the query defining the view and are produced dynamically when the view is referenced.

A view acts as a filter on the underlying tables referenced in the view. The query that defines the view can be from one or more tables or from other views in the current or other databases. Distributed queries can also be used to define views that use data from multiple heterogeneous sources. This is useful, for example, if you want to combine similarly structured data from different servers each of which stores data for a different region of your organization.

Name	Code
Item_category	<pre> CREATE VIEW dbo.items_category AS ,تاريخ_الإنهاء,SELECT dbo.item_details ,السعر_الرابع, dbo.item_details ,السعر_الشراء, dbo.item_details ,السعر_الثالث, dbo.item_details ,السعر_الثاني, ,السعر_الأول, dbo.item_details ,الكمية_الكلية, ,الكمية, dbo.item_details ,اسم_الصنف, ,اسم_التصنيف dbo.category FROM dbo.item_details INNER JOIN = رقم_الصنف, dbo.items ON dbo.item_details INNER JOIN رقم_الصنف, dbo.items = رقم_التصنيف, dbo.category ON dbo.items رقم_التصنيف, dbo.category </pre>
V_getitems	<pre> CREATE VIEW dbo.V_GetItems AS ,اسم_التصنيف,اسم_الصنف,SELECT dbo.items dbo.category FROM dbo.category INNER JOIN = رقم_التصنيف, dbo.items ON dbo.category رقم_التصنيف, dbo.items </pre>

Table 5.3: System View

5.6 Coding and Unit Testing:

Screen	Function	Status	Figure
Enter_password.aspx	Administrator login	Done	5.6.1
Enter_new_customer.aspx	insert a new customer	Done	5.6.2
Enter_customer_payment.aspx	insert the customer payment	Done	5.6.3
Add_new_category.aspx	Insert a new category	Done	5.6.4
Delete_customer.aspx	Delete a customer	Done	5.6.5

Table 5.4 Screen Testing

The following are some samples for module testing and its associated results

1. Testing for "enter_password" show that the user name and password entered is not valid

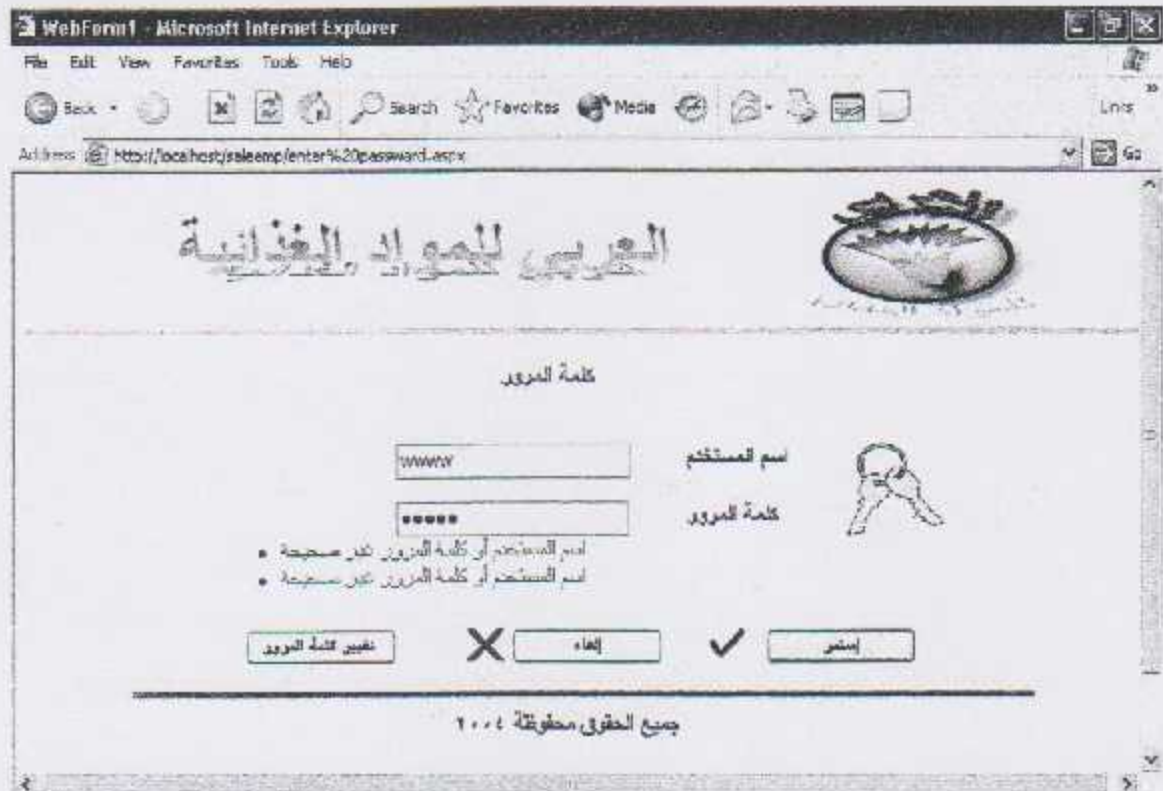


Figure 5.6.1 Enter_password

2-The testing for "enter_new customer" show that the company name , phone number , and E-mail are invalid

WebFarm1 - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Home Search Favorites Media Mail

Address http://localhost/saleemp/ENTER_NEW_CUSTOMER.aspx Go

العربي للمواد الغذائية

إدخال زبون جديد

اسم الزبون	<input type="text"/>
اسم الشركة	<input type="text" value="???"/> الرجاء إدخال اسم الشركة بشكل صحيح
المنطقة	<input type="text" value="البحرين"/>
العنوان	<input type="text" value="رفحاء"/>
الهاتف	<input type="text" value="22117896"/> الرقم الممثل غير صحيح
المحمول	<input type="text" value="000763422"/> الرقم الممثل غير صحيح
فاكس	<input type="text" value="2217321"/>
البريد الإلكتروني	<input type="text" value="hosamyahhc.com"/> الصفحة غير صحيحة

Figure 5.6.2 Enter_new_customer

3- The testing for "enter_customer_payment" show that the value of customer payment is invalidated

The screenshot shows a web browser window titled "WebForm1 - Microsoft Internet Explorer". The address bar displays "http://localhost/saleapp/enter_customer_payment.aspx". The page content includes the logo for "العربي للمواد الغذائية" (Arabian Foodstuffs) and a form titled "إدخال المقروضات" (Enter Loans). The form contains the following fields and values:

Field Label	Value
اسم الزبون (Customer Name)	عمر (Amer)
تاريخ الاستلام (Receipt Date)	1/30/2006 7:19:49 AM
المبلغ المقروض (Loan Amount)	24,500

At the bottom of the form, there are two buttons: "إلغاء" (Cancel) and "تسجيل" (Save).

Figure 5.6.3 enter_customer_payment

4. The testing for "add_new_category" show that the category name was invalided

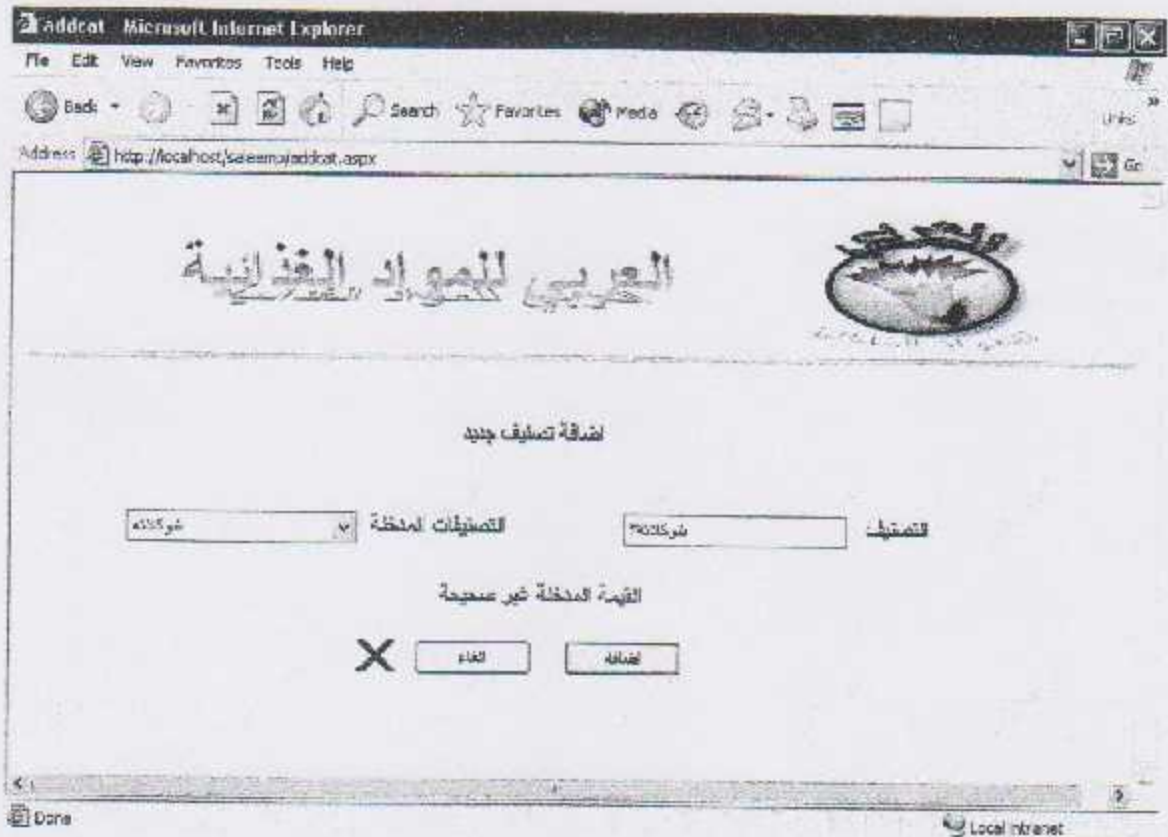


Figure 5.6.4 Enter_new_category

5- The testing for "delete_customer" show that the customer name does not deleted before click on the "OK"

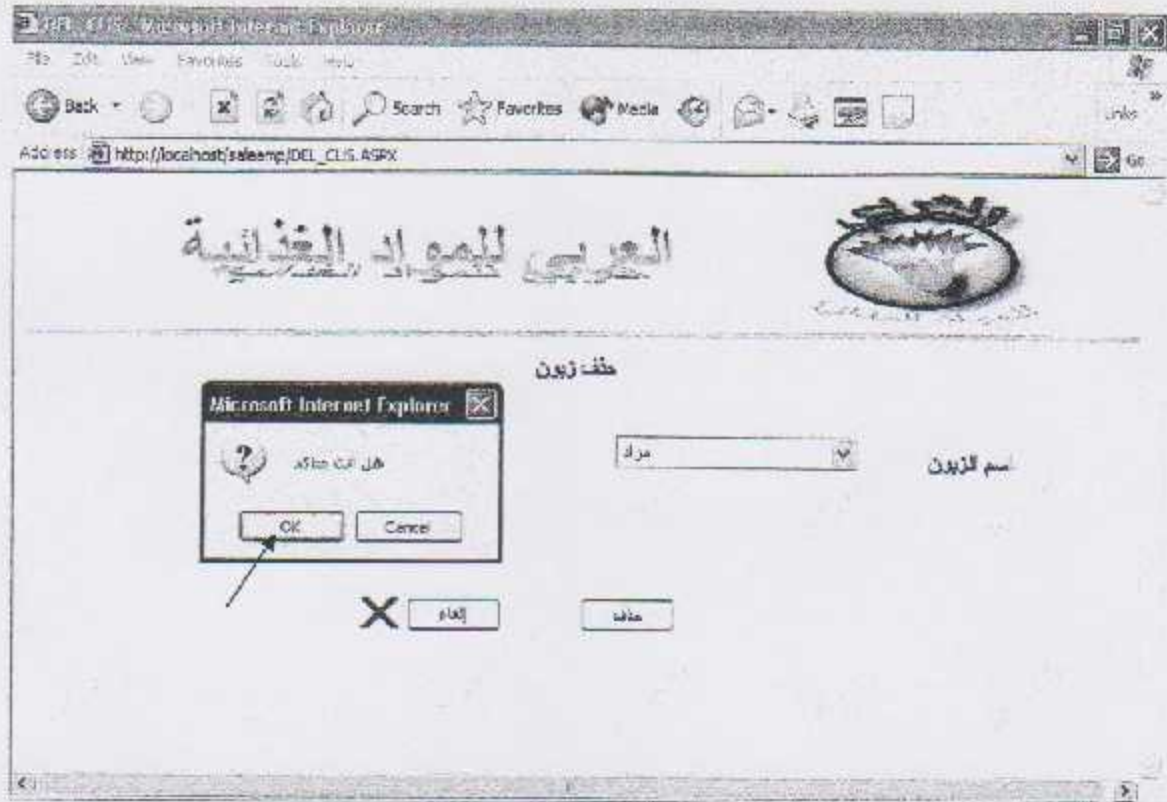


Figure 5.6.5 delete_customer

6.7 Summary and Recommendations

This chapter covers the coding programming language that used (ASP Dot NET) .also database components (tables, views and data diagram)are coverd in this chapter. In addition covers the Microsoft SQL server 2000 and login authentication.

The Establishment of development environment and Database creation and configuring are also covered in this chapter. Finally Coding and unit testing covered by takes some samples.

Chapter Six

Testing

6.1 Introduction

6.2 Testing plan

6.3 Summary and Recommendation

6.1 Introduction

After coding and implementation stage, the system must be tested so this section is concerned with testing the system to ensure that it performs as expected to be.

This section will cover the following:

- Testing plan
- Summary and recommendation

6.2 Testing plan

6.2.1 Unit code testing

All system unit where tested against its specifications using thread testing, the test showed that the unit performed as expected.

Some samples for unit testing and its associated results using thread testing:

1. the testing for "login" module

Testing method: thread testing.

Conformance to specifications testing result showed that the module performs as expected.

Test cases	Test data		Expected output	Actual output
	اسم المستخدم	كلمة المرور		
b-c-e-f-g-h	saleem	Salmant	Accepted اسم المستخدم و كلمة المرور	Accepted اسم المستخدم و كلمة المرور
b-c-d	adm	sal	Invalid اسم المستخدم و كلمة المرور	Invalid اسم المستخدم و كلمة المرور

Table 6.1 login test case

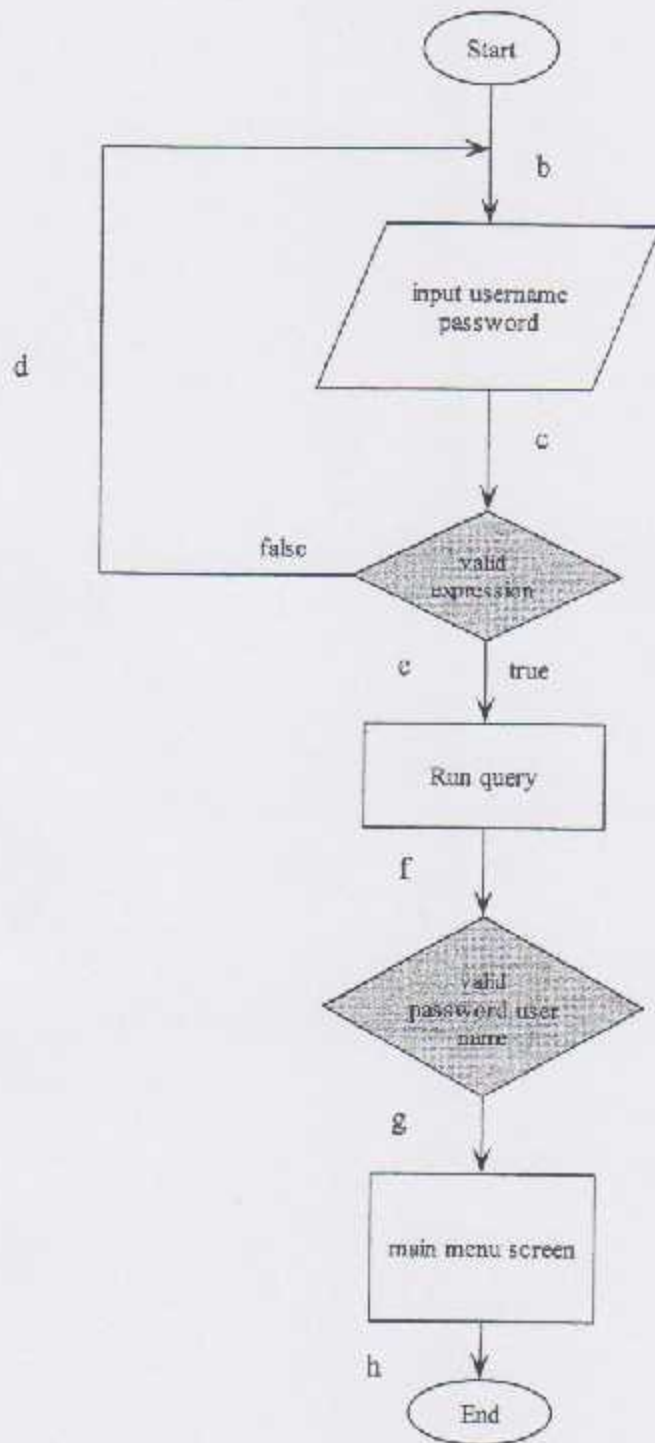


Figure 6.1 administrator login flowchart

2. The testing for "change password" module

Testing method: thread testing

Conformance to specifications testing result showed that the module performs as expected.

Test cases	Test data				Expected output	Actual output
	اسم المستخدم	كلمة المرور الحالية	كلمة المرور الجديدة	تأكيد كلمة المرور		
b-c-d-e-f-g-h	saleem	salmant	sososo	sososo	Set كلمة المرور الجديدة	Set كلمة المرور الجديدة
b-c-d-e-l-L	salemqw	salmanwq	sososo	sososo	Invalid اسم المستخدم و كلمة المرور الحالية	Invalid اسم المستخدم و كلمة المرور الحالية
b-c-k-l	saleem	salmant	??srtfdjk	??srtfdjk	Invalid format	Invalid format
b-c-d-e-f-i-l	saleem	salmant	sososo	SOSOSO	Invalid تأكيد كلمة المرور	Invalid تأكيد كلمة المرور

Table 6.2 Change password test cases

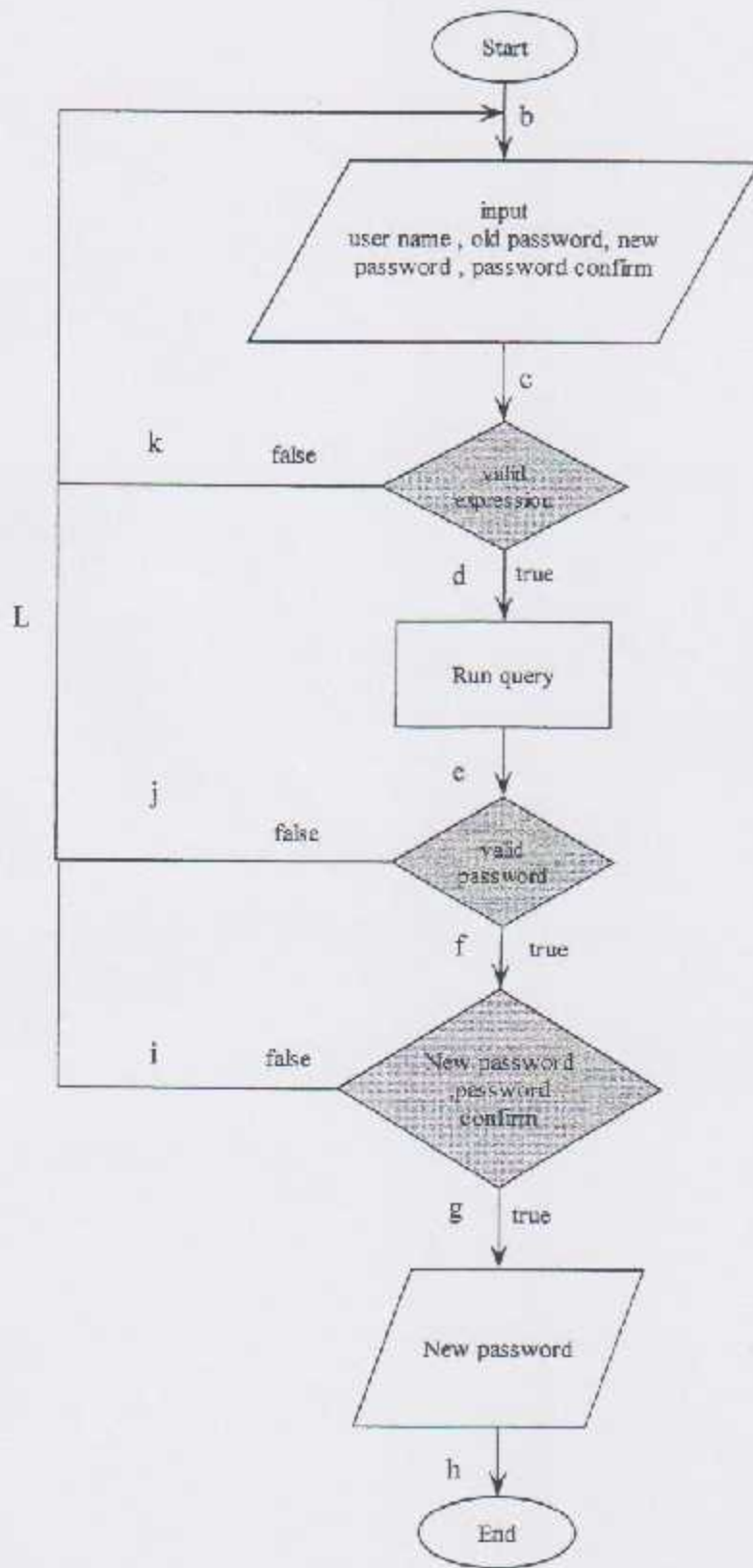


Figure 6.2 change password flowchart

3. The testing for "customer payment" module

Testing method: thread testing

Conformance to specifications testing result showed that the module performs as expected.

Test cases	Test data			Expected output	Actual output
	اسم الزبون	تاريخ الاستلام	المبلغ المقبوض		
b-c-d-e-f	بلال	25/1/2005	99	Add المبلغ المقبوض	Add المبلغ المقبوض
b-c-g	بلال	25/1/2005	تسعة وتسعون	Invalid format	Invalid format

Table 6.3 customer payment test cases

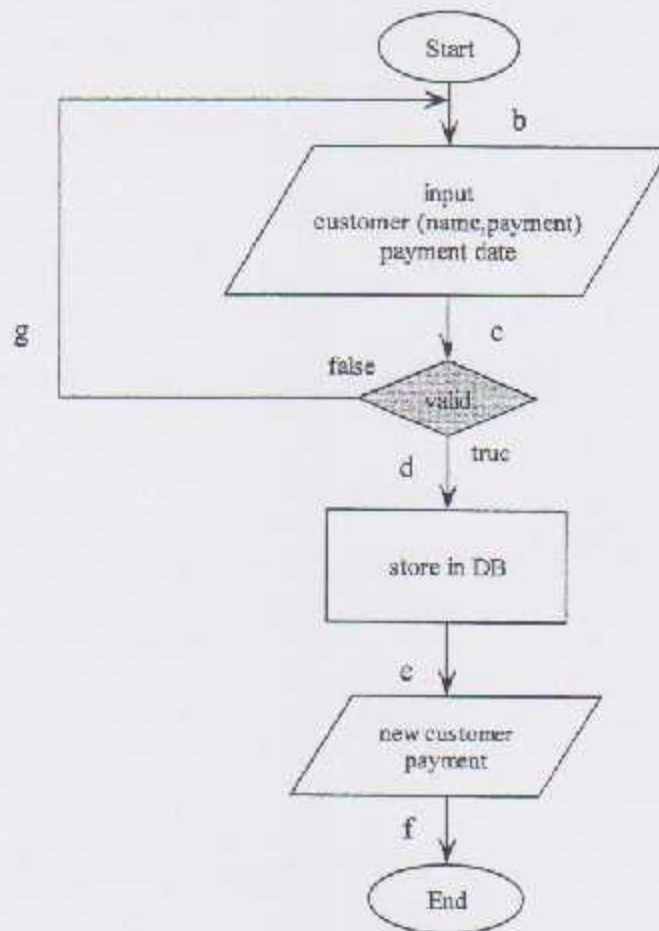


Figure 6.3 customer payment flowchart

4. The testing for "add new category" module

Testing method: thread testing

Conformance to specifications testing result showed that the module performs as expected.

Test cases	Test data		Expected output	Actual output
	اسم التصنيف	اسم الصنف		
b-c-d-e-f	شوكلاتة	كندر	Add اسم الصنف	Add اسم الصنف
b-c-g	شوكلاتة	كندر53	Invalid format	Invalid format

Table 6.4 add new category test cases

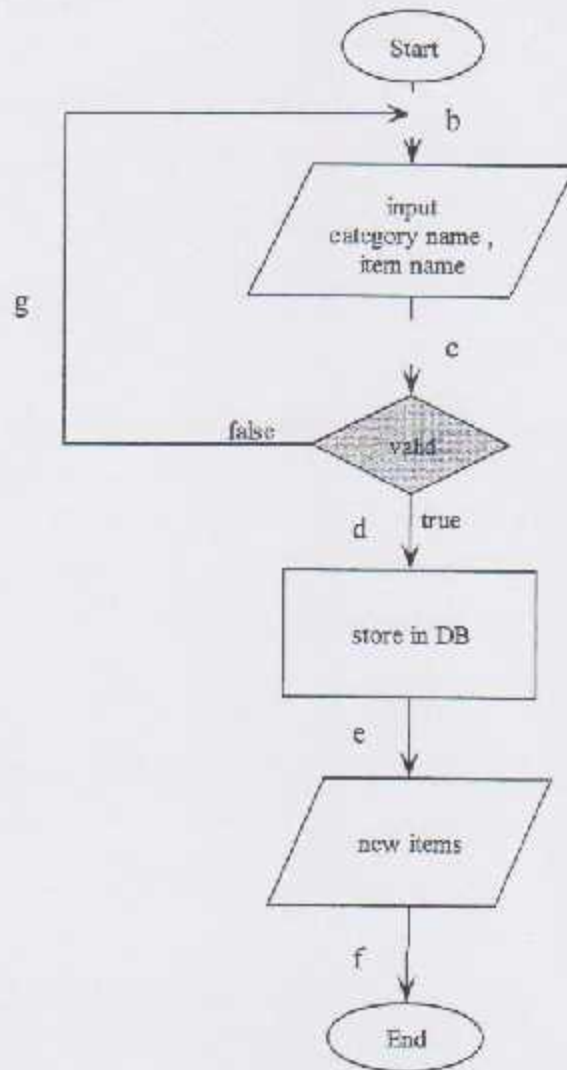


Figure 6.4 add new item flowchart

6.2.2 System integration test

The integration of all modules was tested to ensure that the whole system performs as expected.

6.2.3. System Testing

The system was tested against its specifications.

Some sample and its associated result in database:

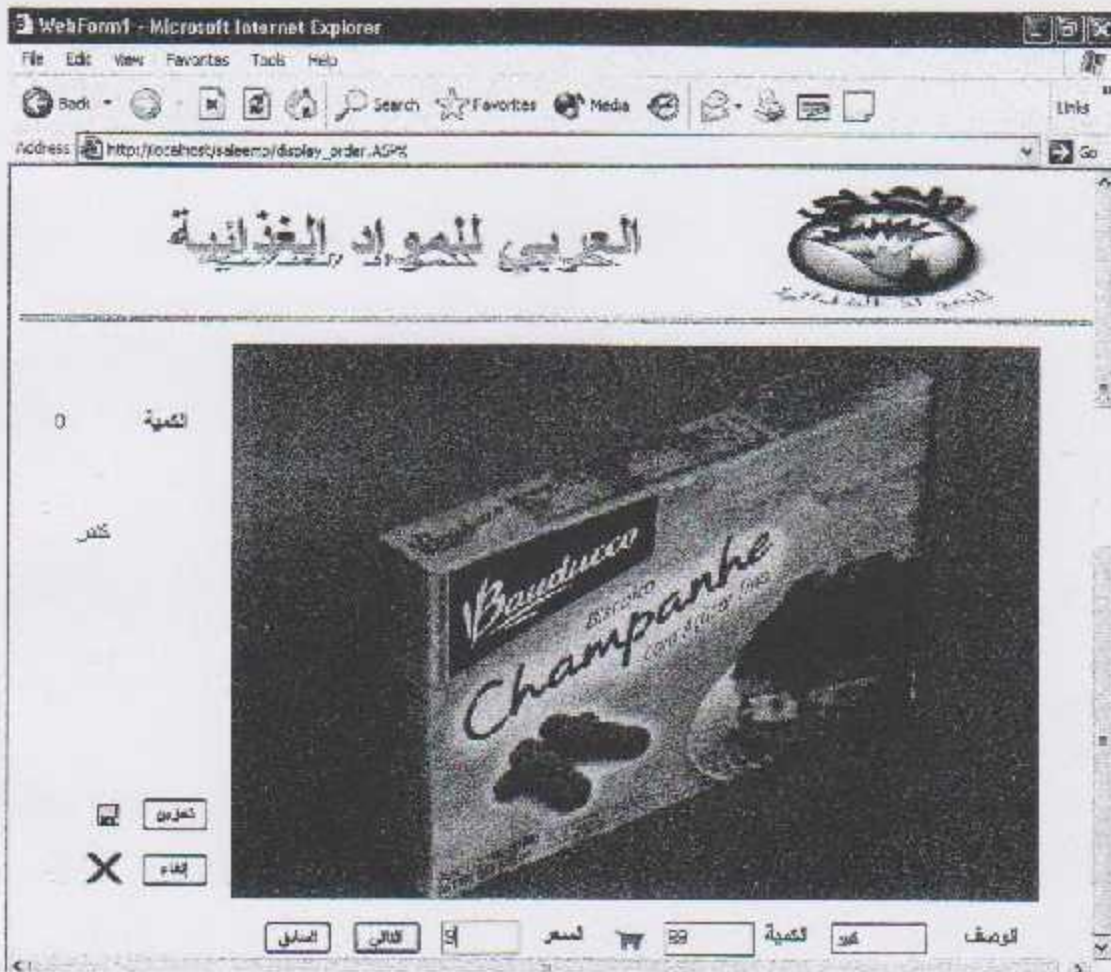


Figure 6.5: display items testing

SQL Server Enterprise Manager - [Data in Table 'order1' in 'saleemproject' on '(LOCAL)']

File Window Help

رقم الطلبية	رقم البند	الوقت
51	64	29/01,2005 09:09
52	64	30/01,2005 06:33
53	64	30/01,2005 06:15

SQL Server Enterprise Manager - [Data in Table 'orders' in 'saleemproject' on '(LOCAL)']

File Window Help

id	رقم الطلبية	رقم البند	الوصف	الكمية	سعر الوحدة	المجموع
44	51	81	مغبر	77	7	539
45	51	83	مغبر	66	9	594
47	83	81	كوب	99	9	891

Figure 6.6: display items Test Result



Figure 6.7 Add New Quantity

The screenshot shows a SQL Server Enterprise Manager window displaying the data in the 'item_details' table. The table has the following columns: 'رقم الاصل' (Original ID), 'رقم التصنيف' (Category ID), 'الكمية' (Quantity), 'السعر الأول' (First Price), 'السعر الثاني' (Second Price), 'السعر الثالث' (Third Price), 'السعر الرابع' (Fourth Price), 'سعر الشراء' (Purchase Price), and 'تاريخ الانتهاء' (Expiration Date). The data is as follows:

رقم الاصل	رقم التصنيف	الكمية	السعر الأول	السعر الثاني	السعر الثالث	السعر الرابع	سعر الشراء	تاريخ الانتهاء
38	81	45	99	4	5	4	3	2
39	83	50	33	8	6	5	3	2
40	82	51	89	8	5	5	3	2
41	83	50	99	9	8	6	5	3

An arrow points to the row with item ID 41.

Figure 6.8: Add New Quantity Test Result

6.2.4 Acceptance Testing:

Acceptance Testing is used to ensure that the system design is consistency with the system requirements.

Requirement	Done
Administrator login	√
Change password	√
Add new category	√
Display item	√
Inventory entry	√
Customer profile maintenance	√
Supplier profile maintenance	√
Take customer order	√
Generate order	√
Customer payment	√
Supplier payment	√
Generate supplier report	√
Generate customer report	√
Inventory report	√

Test Result: the test is passed successfully.

6.3 Summary and Recommendation

Testing plan are covered in this chapter by cover the unit code testing that used thread testing method also covered system testing to ensure that the whole system performs as expected. in addition Acceptance Testing is used to ensure that the system design is consistence with the system requirements.

Chapter Seven

Maintenance

- 7.1 Introduction**
- 7.2 Establishment of Production Environment**
- 7.3 Migration and Deployment Plan**
- 7.4 Maintenance Plan**
- 7.5 Summary and Recommendations**

Chapter Seven

Maintenance

7.1 Introduction

Software maintenance is the general process of changing a system after it has been delivered. The changes may be simple to correct coding errors, more extensive changes to correct design errors or significant enhancement to correct specification errors or accommodate new requirement.

This chapter will cover the following:

- Establishment of Production Environment
- Migration and Deployment Plan
- Maintenance Plan
- Summary and Recommendations

7.2 Establishment of Production Environment

The steps that helps the administrator to configure and operate the system:

1. Microsoft Windows server family or XP
2. internet Information Service (IIS).
3. DOT NET Framework.
4. SQL Server 2000.

7.3 Migration and Deployment Plan

To deploy an ASP.NET Web application "saleemp" to a production directory or server, there are three major steps required:

1. build the Web application.

The first step is to build, or compile, the web application "saleemp". This compilation creates a dynamic-link library(DDL) file in the \bin directory that contains all of the code for the web application. One application Name.dll file is created for saleemp (saleemp.dll) this file contains the code from all of the resource and code-behind files.

2. Remove all of the unnecessary files from the "saleemp".

the second step in deploying the Web application "saleemp" is to select only the necessary files from the directory that contains "saleemp" . not copying the unnecessary files such as (code-behinde pages ".vb, .cs", resource ".resx" files, ...) increase the security of the production environment .

3. copy the files to the production environment.

After compiled the web application " saleemp" and remove all of the unnecessary files, we copy or FTP all of the remaining Web application files in the development directory to the production directory.

7.4 Maintenance plan

the requirements of the program may be changed or additional requirements may appear, when this occur the administrator must call the programmer and tell him what he want.

When the administrator change or add any new requirement he should to determine what he exactly need by filling the form. (show appendix A)

The programmer will read the form and complete what user want , after completion, the programmer must fill a maintenance log with the maintaining information (show appendix A)

after changing the requirement the documentation must be updated , and testing plan must be done.

The programmer must display the new functionality to the user to ensure that this is he want.

Error handling:

If an error occurred during implementation of the program the administrator call the programmer and tell him about the error that occurred on the web page.

The programmer must correct the error , and make rest planning on the system to ensure that the system work correctly.

Finally, the corrected pages must be deployed and publish it to the web server.

The administrator can call the programmer using a special form as in fig 7.1, which contains the error information and description, and then the programmer must record each step in another form as in fig 7.2 .

Software Change Request	Requirement # _____	Date: _____
Type:		
<input type="checkbox"/> New Requirement	<input type="checkbox"/> System Problem	<input type="checkbox"/> Suggestion for Improvement
<input type="checkbox"/> Requirement Change	<input type="checkbox"/> User Interface Problem	<input type="checkbox"/> other: _____
<input type="checkbox"/> Design Change	<input type="checkbox"/> Documentation Correction	
 Description: 		
Please attach supporting documentation for the requested change. (Screen/report printouts, document pages affected, etc.)		

Table 7.1 Software Change Request Form

Maintenance Log – Detail Status Information

Page #: _____ Log Date: ____/____/____

Request #:	System Name:

Table 7.3 Maintenance Log – Detail Status Information

7.5 Summary and recommendation

The Establishment of Production Environment and deploying an ASP.NET Web application to a production directory or server are covered in this chapter .Also any change of requirements can be handled by filling form that allows to decide what the user need.

Appindex

Page #:

Log Date: / /

Maintenance Log

System Name:										
Request #	Request #	Date Submitted	Approval			Status				
			Change Approved	Change Not Approved	Hold (Future Enhancement)	Technical Evaluation Phase	Change In-Progress	Cancelled	Target Date	Date Complete

Table 6-2 maintenance log.

INSTRUCTIONS FOR COMPLETING THE MAINTENANCE LOG

This change control log form is included as a suggested format for recording and maintaining software change request data, including changes to documentation. A Detailed Status Information form is available to record supplementary details. The log and software change requests should be maintained in the Systems Project Notebook.

<u>FIELD</u>	<u>DEFINITION</u>
Page #:	Enter the appropriate page number of the log sheet.
Log Date:	Enter the date control log was started.
System Name:	Enter the name and acronym of the system to be managed.
Request #:	Enter the unique sequential number assigned to each request on the request form (i.e., software change request form, etc.)
Reqmnt #:	Enter the unique number of the requirement to be changed (if known) on the request form.
Date Submitted:	Enter the date the request was submitted to the maintenance team.
Approval:	This area is for recording request approval information obtained from the request form.
Change Approved:	Enter the date the request was approved.
Change Not Approved:	Enter the date the request was disapproved.
Hold (Future Enhancement):	Enter the date the request was placed on "Hold."
Status:	This area is for recording basic information about the status of a request.
Technical Evaluation Phase:	Enter the date the technical evaluation of the request commenced.
Change In-Progress:	Enter the date work began on the request. Usually, the areas "Technical Evaluation Phase" (if applicable) and "Change Approved" should be entered prior to posting the "Change In-Progress" date. Work on most requests should not be initiated without a technical evaluation and formal approval in the request form.
Cancelled:	Enter the date the request was canceled.
Target Date:	Enter the <u>estimated</u> date that the request will be completed and ready for release/implementation.
Date Complete:	Enter the <u>actual</u> date the request was implemented.

E-Warehouse

User manual



Arabi Trading company

Chocolate makes a DIFFERENCE



Arabi trading is a business company located in hebron, city in palestine. it was established in 1997 as grocery store, and started to develop itself to be a big wholesaler for chocolate, canned food, and other food.



Arabi Trading Company (ATC)

Hebron

Palestine

Owned by: Eng. Saloom Sharara

E-mail: arabiatrading@yahoo.com

Tel.: 00972-2238916, 059-329910



copyright © 2004

- * Advertisement page that allow to any user of internet to see it .
- * If the administrator want to enter to his system he press on next that he must to enter the user name and password.



كلمة المرور

اسم المستخدم

كلمة المرور



تغيير كلمة المرور



إلغاء



إرسال

جميع الحقوق محفوظة © ٢٠٠٢

The administrator login



تغيير كلمة المرور

اسم المستخدم

كلمة المرور الحالية

كلمة المرور الجديدة

تأكيد كلمة المرور



إلغاء



إرسال

If the administrator want to change password

Security guidelines:

- Keep administrator username and password as secure as possible.
- The administrator can change password any time.
- The username and password must at least six character to increase security.

The system provides the administrator a full control over the website.

- Add new category and new item with its image
- Add new quantity of items
- Display report to the inventory
- Display items to the customer
- Registering order
- Generate bill to the customer
- Add a new customer and supplier, or delete a customer
- Search about any customer or supplier
- Enter the payment of the customer and supplier

References

- [1] <http://www.ecommercetimes.com/>
- [2] <http://www.ucs.mun.ca/~dgoudie/B8205/why.htm>
- [3] <http://www.ecommerce-guide.com/>
- [4] <http://www.online-commerce.com/>
- [5] <http://www.internetnews.com/ec-news/>
- [6] <http://onlinebusiness.about.com/>
- [7] <http://www.apache-ssl.org/>

Books:

- Addison Wesley, software engineering, sixth edition
- Joe martin, Brett Tomson. Teach Your Self ASP.NET in 24 hours, sames publishing, USA, 2002.
- MSDN, developing Microsoft ASP.NET web application using visual studio.NET