

**FACULTY OF ECONOMICS &
ADMINISTRATIVE SCIENCES**

**DEPARTMENT OF
COMPUTER INFORMATION SYSTEMS**

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CIS 400
GRADUATION PROJECT**

**COMPUTER SALE
SYSTEMS**

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COMPUTER INFORMATION SYSTEMS

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I. ACKNOWLEDGEMENT

I want to thank to:

First of all I want to thanks to my advisor Assist. Prof. Dr. Nadire Çavuş and then my instructors Assist. Prof. Dr. Yalçın AKÇALI and Mr. Tansel DEVİN for their support in completion of my project.

My student friends Erhan AKAR, Cemil TOPAL and Kemal BAYRAKTAR for their technical and psychological contributors and suport to conclude the project.

Also thanks to:

My family for providing me while preparing the project for their psychological support in all parts of life by providing me comfort and the necessary conditions to develop myself and educate in high level.

II. ABSTRACT

Generally computer sale shop have a very big problem. This problem can be explained as "too much time spend in record of the transactions". Most commonly feature of this project is easy transaction processing. I achieved this purpose by providing minimum keyboard usage. Another thing I have to focus ; I plan to sell this software to the other companies in the same sector. After the acceptance of this project the full version will be sent again and will be marketed to all the computer sale shops.

First of all, this program contains seven main forms. There are main menu, customer table, product table, supplier table, selling table, stock table and Selling process table. I explain these tables: Main menu, cotains buttons which have destinations are on written table and all table have go back to here button. Customer table, contains all customers information which he sold this means if customers come again you can find all information about customer and can see all sellings which he done. Products table, so you understand from its name, şt contains all products information. For example type-name-properties-no-guarantee etc. Here is shopwindow.Suppliers table, you can see all information about manufacturer company and if you have any problem about Product you can go or meet easily with Suppliers. Selling table, view all sellings from now to begins. Which customer - which Product - which supplier you can see easily from there. Stock table show all products which the company has. Selling process table, this table is very contents from the others Because it contains all sellings information. For example which customer and informations - which product and informations and how much all prices and it shows us redocial unit in the companies stock.

III. INTRODUCTION

The field of Information Technology is an exciting and ever-changing field. If you are a life-long learner and want new challenges everyday, it's always a good idea to think of the program you want to create in terms of its solution. In order to do this, you must have a pretty solid understanding of the programming language that you'll be working in and what you can do with it. Then you should sort out what exactly you're trying to accomplish. What do you want your program to do?

What problem is it solving? Next, divide the program into its various components. Then decide how those components will fit together to execute the program. Once all these have sorted out, you can write each part of the program and put them together. This is the correct way to program.

Target: Our target to do this project is to facilitate a computer based information system to ease the finding and to avoid the deformation of the documents.

'COMPUTER SALE' **INFORMATION SYSTEMS**

1. Customer process
2. Products Process
3. Selling Process
4. Supplier Process
5. Stock Process
6. Report Process

III.I. Processes:

1. Customer Processes

Register customer subprocess

Update customer subprocess

2. Products Process

Register product subprocess

Update product subprocess

3. Selling Process

Product sale subprocess

Cancel Sale subprocess

4. Supplier Process

Register & Update Supplier subprocess

5. Stock Process

Stock query subprocess

Update stocks subprocess

6. Reports Process

Customer reports subprocess

Sale reports subprocess

Product reports subprocess

Income reports subprocess

Payments report subprocess

IV.DESIGN OF THE SYSTEM

IV.1 EXPLANATION :

The minimum requirements of the system are as follows;

- ✓ Intel Pentium IV processor 2.420
- ✓ 533 Mhz
- ✓ 512 MB DDR RAM
- ✓ 80 GB HDD
- ✓ 14'' Monitor
- ✓ Microsoft Windows XP
- ✓ CD-ROM 52xmax
- ✓ 256 MB Graphic Card
- ✓ Modem

The recommended requirements of the system are as follows;

- ✓ Intel Pentium IV processor 3.0
- ✓ 800 Mhz
- ✓ 1 GB DDR RAM

- ✓ 120 GB HDD
- ✓ 256 MB Graphic Card
- ✓ 17" Monitor
- ✓ Microsoft Windows XP Professional
- ✓ CD-ROM 52xmax
- ✓ Modem

In this project I used the Borland's Delphi as programming language technology. I used MS Access as database that has connection with Delphi programming. Because Access's performance is very good when used on a single computer.

IV.I.I. PROJECT IDENTIFICATION AND SELECTION

PROJECT NAME:

“ COMPUTER SALE INFORMATION SYSTEM ”

THE AIM OF THE PROJECT :

The aim of the system is to record the daily processes easier and faster.

The system I have proposed will center on making the daily tasks of the managers and the individual employees completely automated. This will entail using modern hardware, software or external devices in order to give to service the advantage and complete customer satisfaction.

IV.I.II. PROJECT INITIATION AND PLANNING

- 1) System can work on a single PC.
- 2) System will not connect to internet so can not update itself
- 3) System can not communicate with the suppliers because of being an offline system.
- 4) Microsoft Access doesn't support multiple users at the same time. So the users of this system can not use the same tables.

RESOURCE LIMITS

- 1) System has to be able to scan bar codes for stock and purchase processes. A bar code scanner is required but I don't have.
- 2) The project will have a special interface using flash extensions. Program will start with a login screen and only the authorized user may have the right to use program.

IV.I.III. ANALYSIS

INFORMATION SYSTEMS TECHNICAL FEASIBILITY REPORT

Customer registration, filling and products matter, are saving under protection by assisting of essential either appliance or equipments at computer medium in secure and systematical way.

Necessary Hardwares :

- 1 computer for the manager (necessary)
- 1 computer for the repairer. (suggested)
- At least 1 printer (laser printer with coloured cartridge)

INFORMATION SYSTEMS OPERATIONAL FEASIBILITY REPORTS

To drive a Program: Delphi – Access DB

The manager and the other employees who will use the system must have at least low level computer using skill for being educated about the system.



Program Cost Analyses:

	Explanation	Cost
Scanner & fax & printer	OLYMPIA OMEGA 2140 A3 DIGITAL Fotocopy Machine	1.099,00 €
Programs	Borland Delphi 7	150,00 €
	Sql Server Firebird 2.5	100,00 €
Programmers	2 programmers	2000,00 €
Computers	HP Pavilion Elite d5000t ATX series	1277, 58 €
Total		4248, 58 €

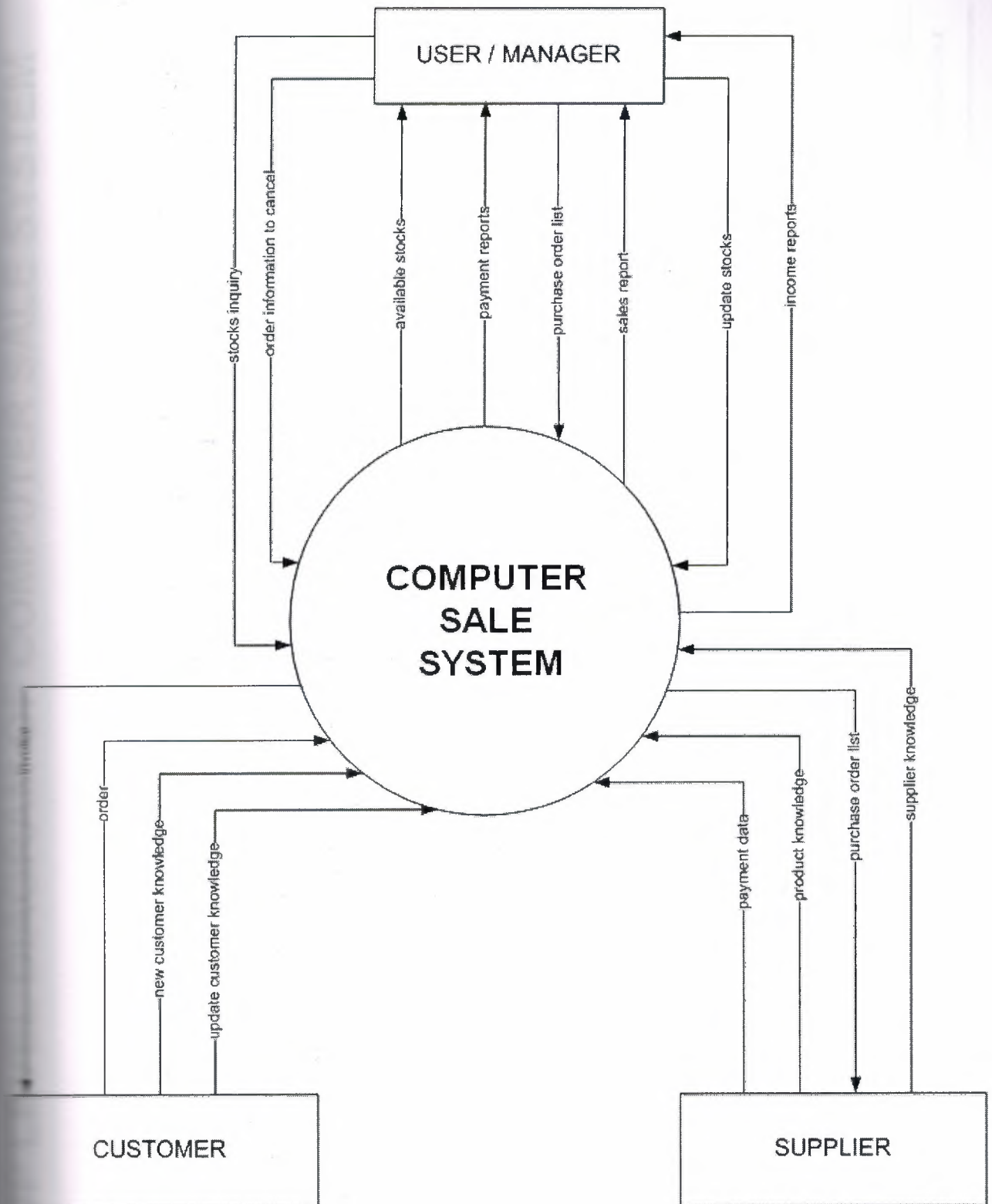
Alternative Program Cost Analyses:

	Explanation	Cost
Scanner & fax & printer	OLYMPIA OMEGA 2140 A3 DIGITAL Fotocopy Machine	1.099,00 €
Programs	Borland Delphi 7	150,00 €
	Oracle	900,00 €
Programmers	3 programmers	3000,00 €
Computers	HP Pavilion Elite d5000t ATX series	1277, 58 €
Total		6048, 58 €

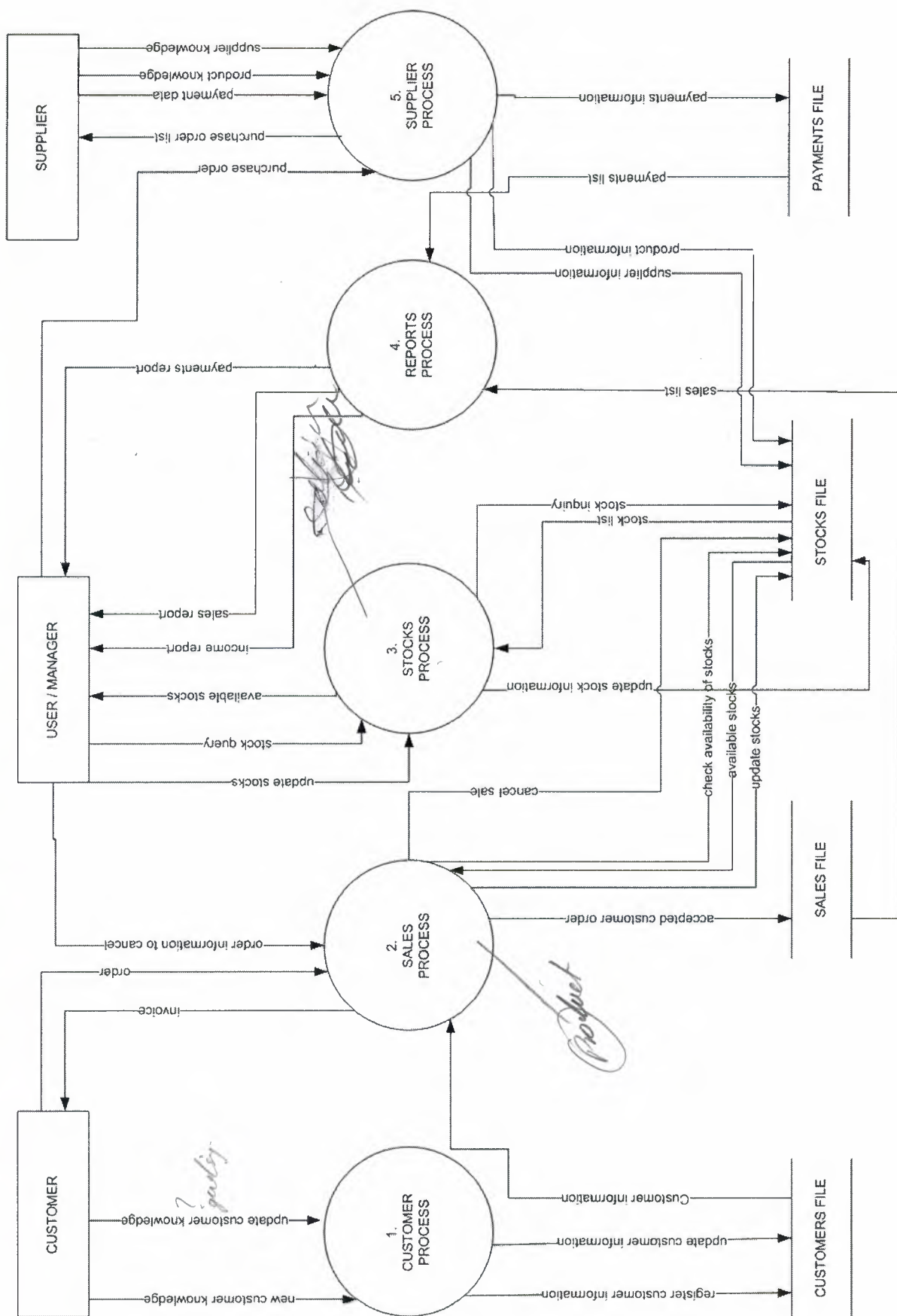
NEW SYSTEM'S PROVIDENCES

- New system will help to the user easy and quick search of the information about all the data.
- A worker can easily record repair informations.
- All the transactions by the customers will be stored in the database.
- Stocks and the sale reports will be prepared with one click

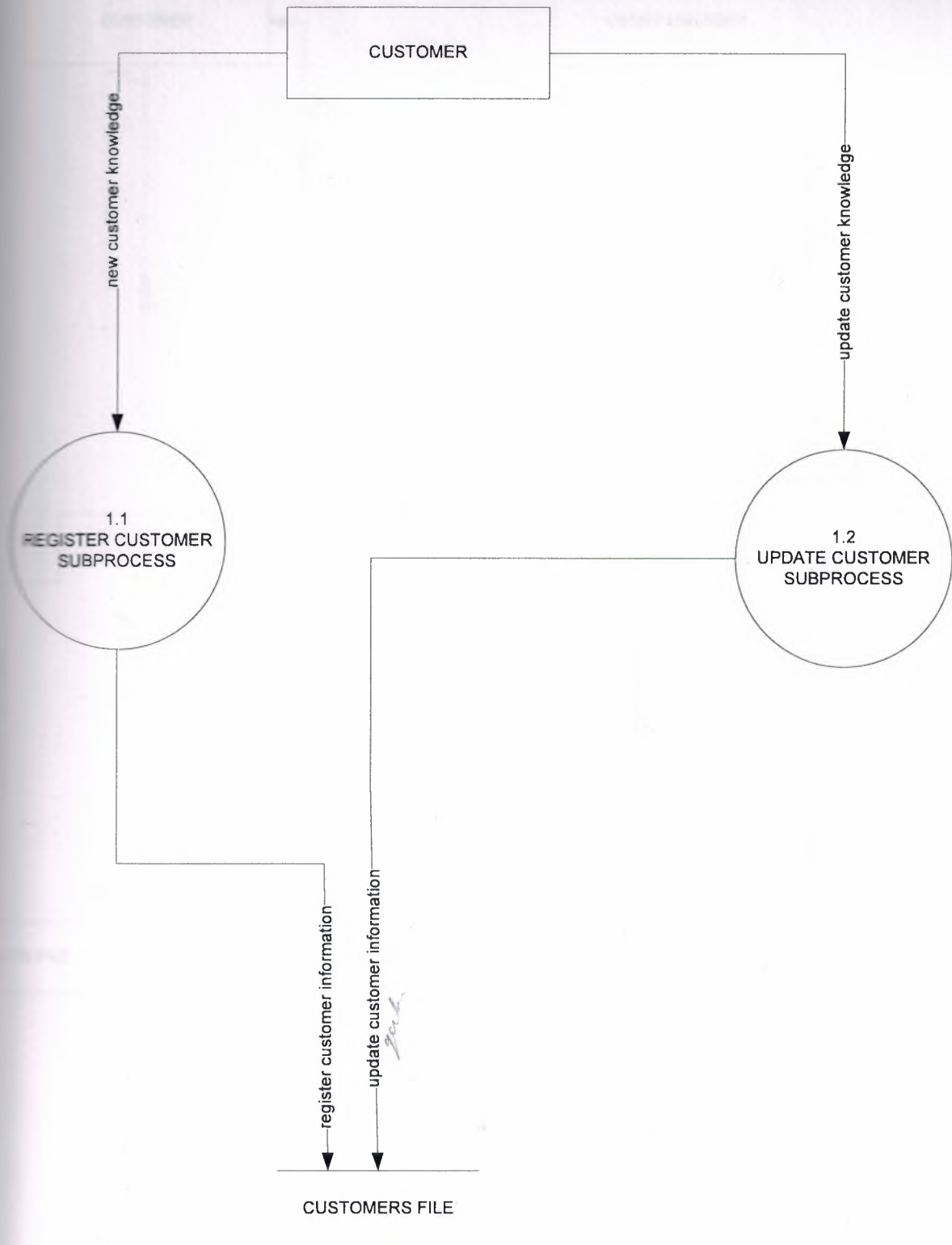
CONTEXT DIAGRAM OF COMPUTER SALE SYSTEM



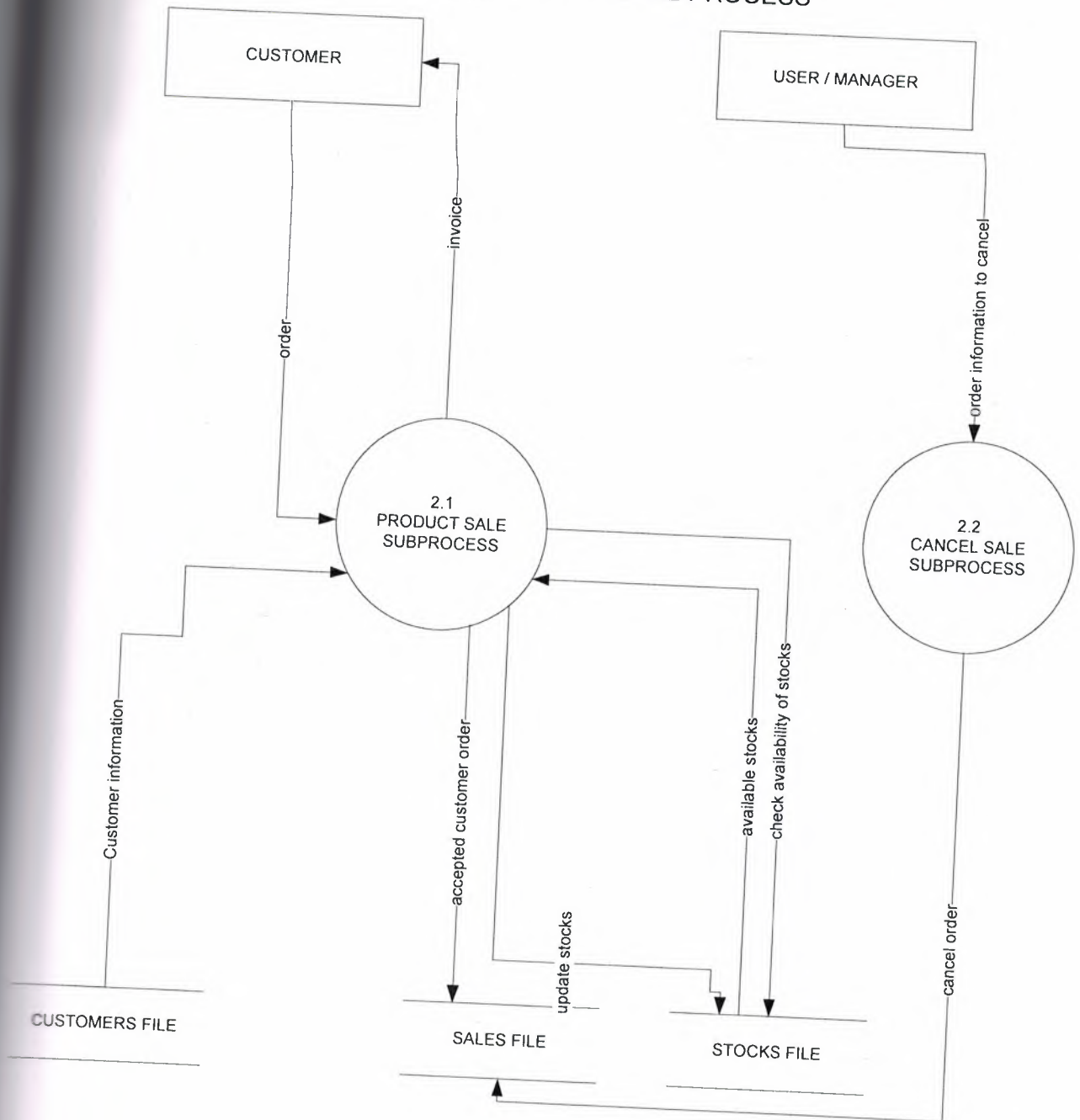
TOP LEVEL DIAGRAM OF COMPUTER SALE SYSTEM



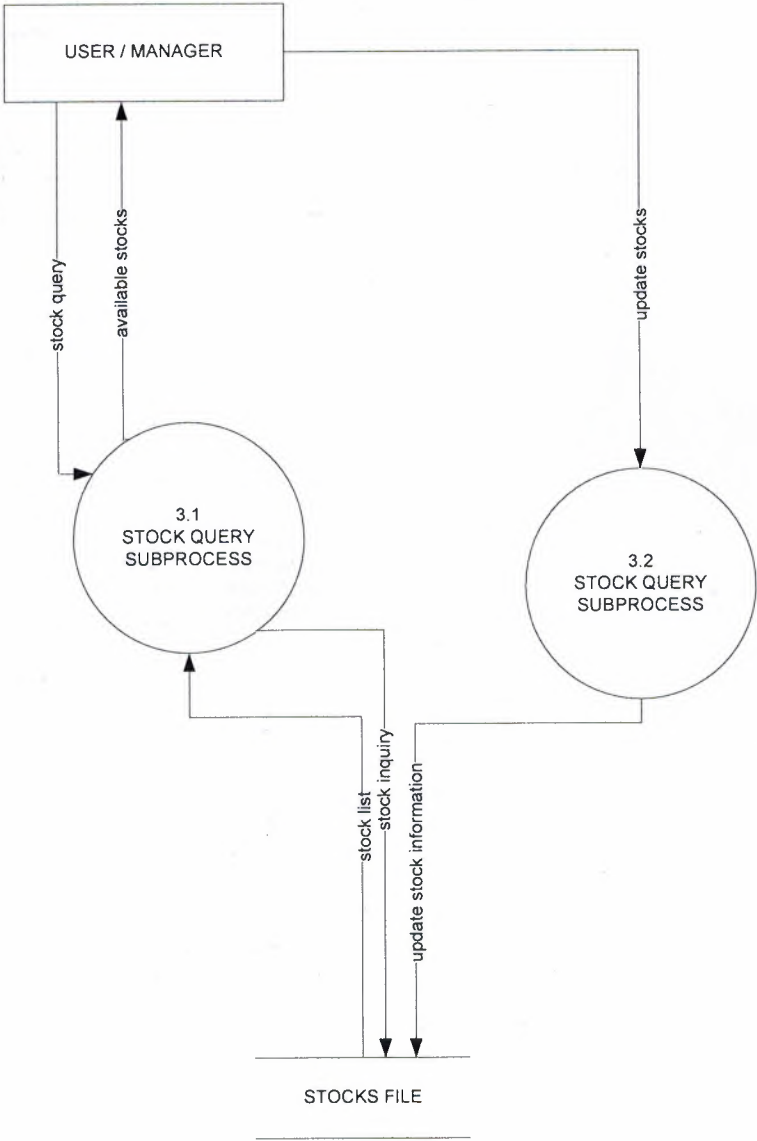
DETAILED DFD FOR CUSTOMER PROCESS



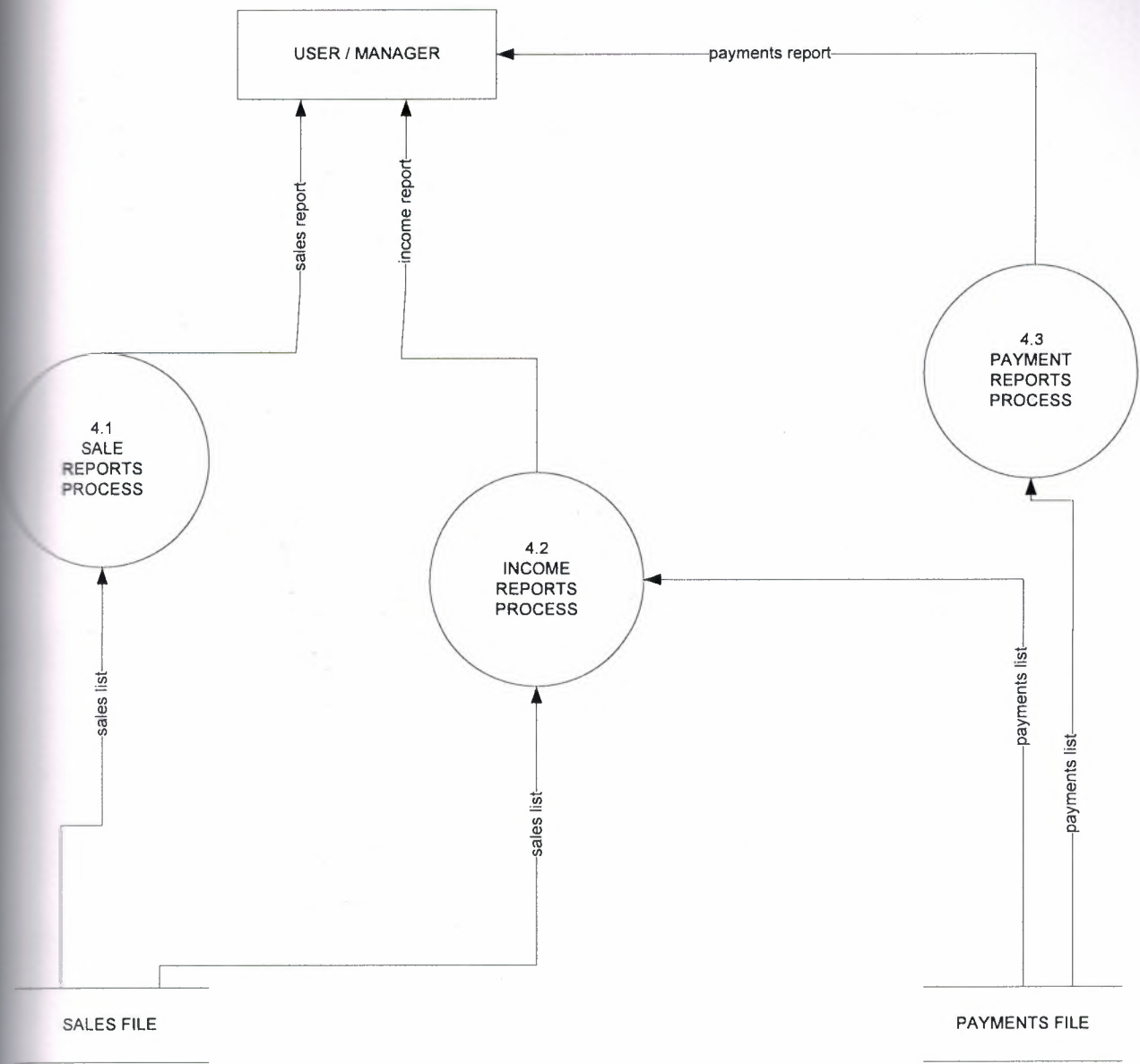
DETAILED DFD FOR SALE PROCESS



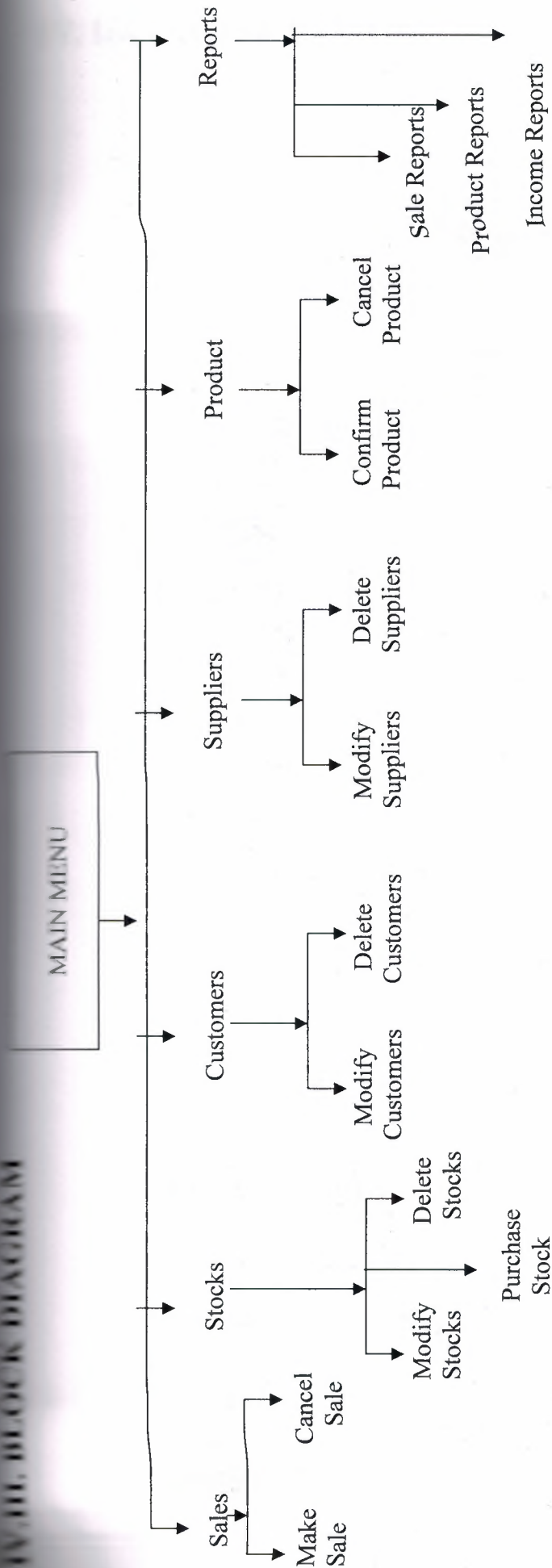
DETAILED DFD FOR STOCK PROCESS



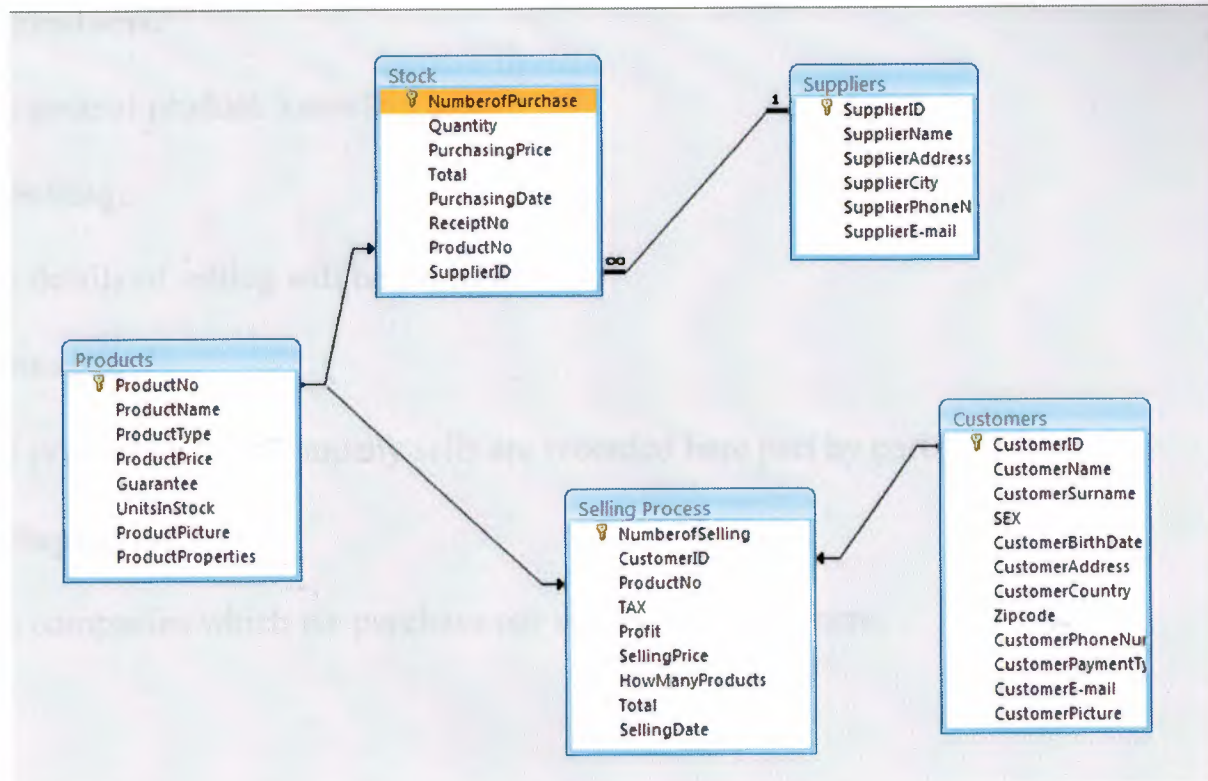
DETAILED DFD FOR REPORTS PROCESS








IV. III. BLOCK DIAGRAM



IV. DATABASE DESIGN



DATABASE TABLES

-  Customers
-  Products
-  Selling Process
-  Stock
-  **Suppliers**

1. Customers :

All the customer knowledge will be stored here.

2. Products:

The general product knowledge.

3. Selling:

The details of selling will be saved here .

4. Stocks:

The products which company sells are recorded here part by part.

5. Suppliers:

The companies which we purchase our stocks are stored here.

Customer Table

Field Name	Data Type	Description
CustomerID	Text	
CustomerName	Text	
CustomerSurname	Text	
CustomerBirthDate	Date/Time	
CustomerAddress	Text	
CustomerCountry	Text	
Zipcode	Text	
CustomerPhoneNumber	Text	
CustomerPaymentType	Text	
CustomerE-mail	Hyperlink	
CustomerPicture	OLE Object	

Products Table

Field Name	Data Type	Description
ProductNo	Text	
ProductName	Text	
ProductType	Text	
ProductPrice	Currency	
Guarantee	Number	
UnitsInStock	Number	
ProductPicture	OLE Object	
ProductPreorties	Text	

Selling Process Table

Field Name	Data Type	Description
NumberOfSelling	Text	
CustomerID	Number	
ProductNo	Number	
Total	Text	
Profit	Text	
SellingPrice	Text	
HowManyProducts	Text	
Total	Text	
SellingDate	Date/Time	

Stock Table

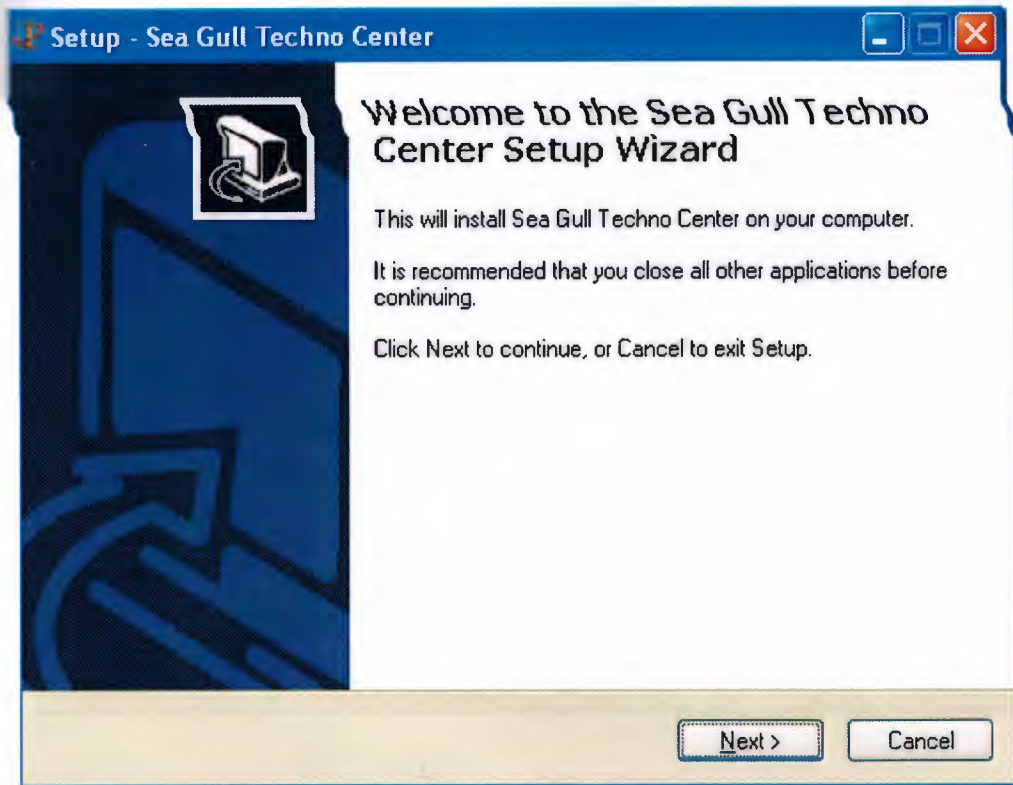
Field Name	Data Type	Description
NumberOfPurchase	AutoNumber	
Quantity	Number	
PurchasingPrice	Number	
Total	Number	
PurchasingDate	Date/Time	
ReceiptNo	Text	
ProductNo	Number	
SupplierID	Number	

Suppliers Table

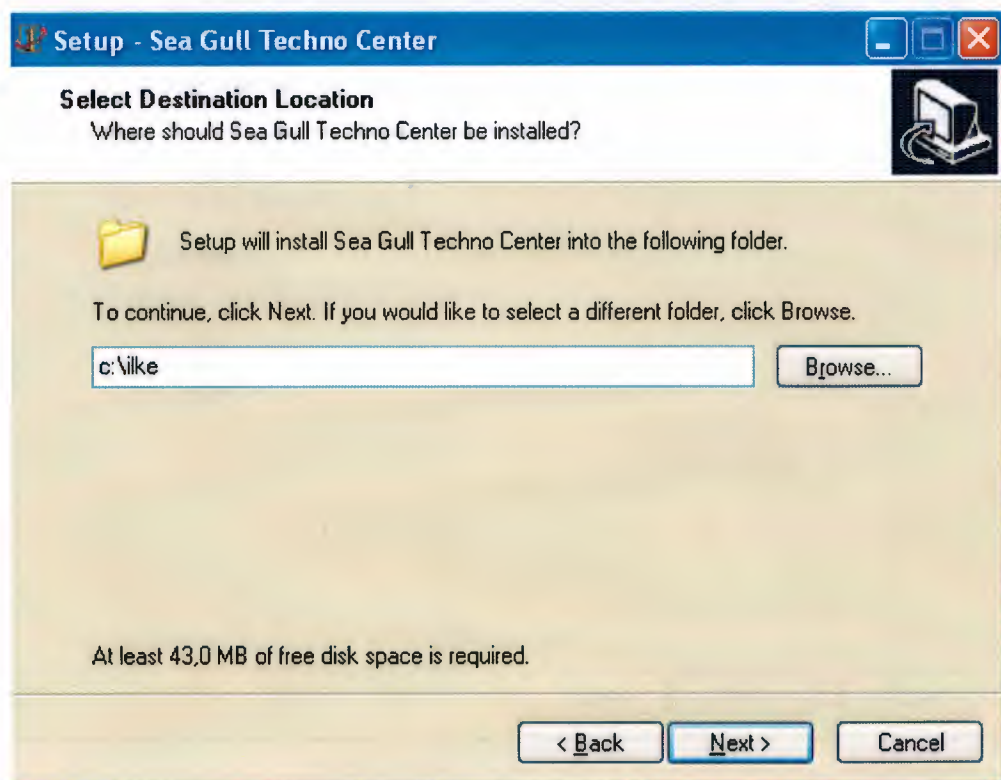
Field Name	Data Type	Description
SupplierID	Number	
SupplierName	Text	
SupplierAddress	Text	
SupplierCity	Text	
SupplierPhoneNumber	Text	
SupplierE-mail	Hyperlink	

USER GUIDELINE

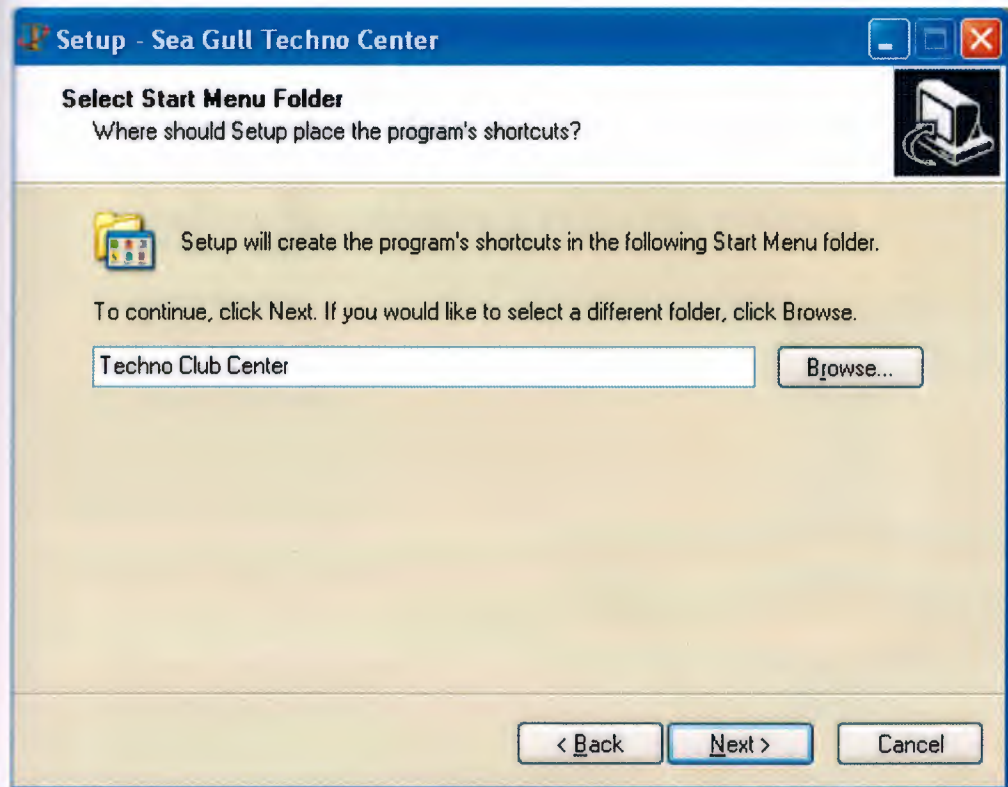
Step1



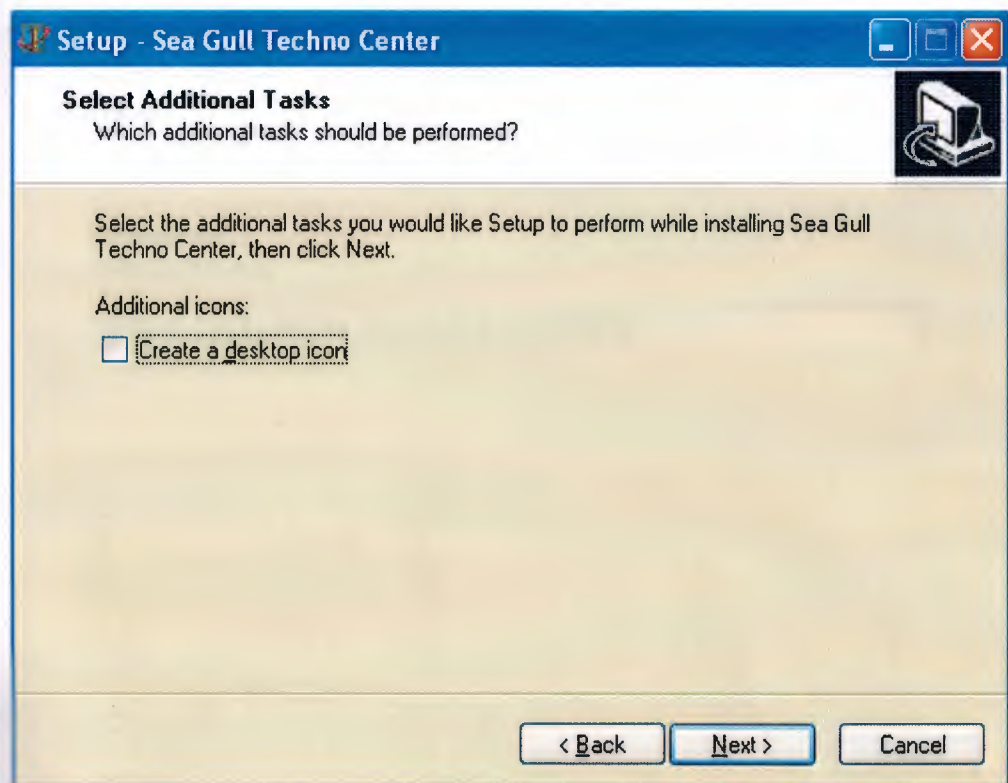
Step 2



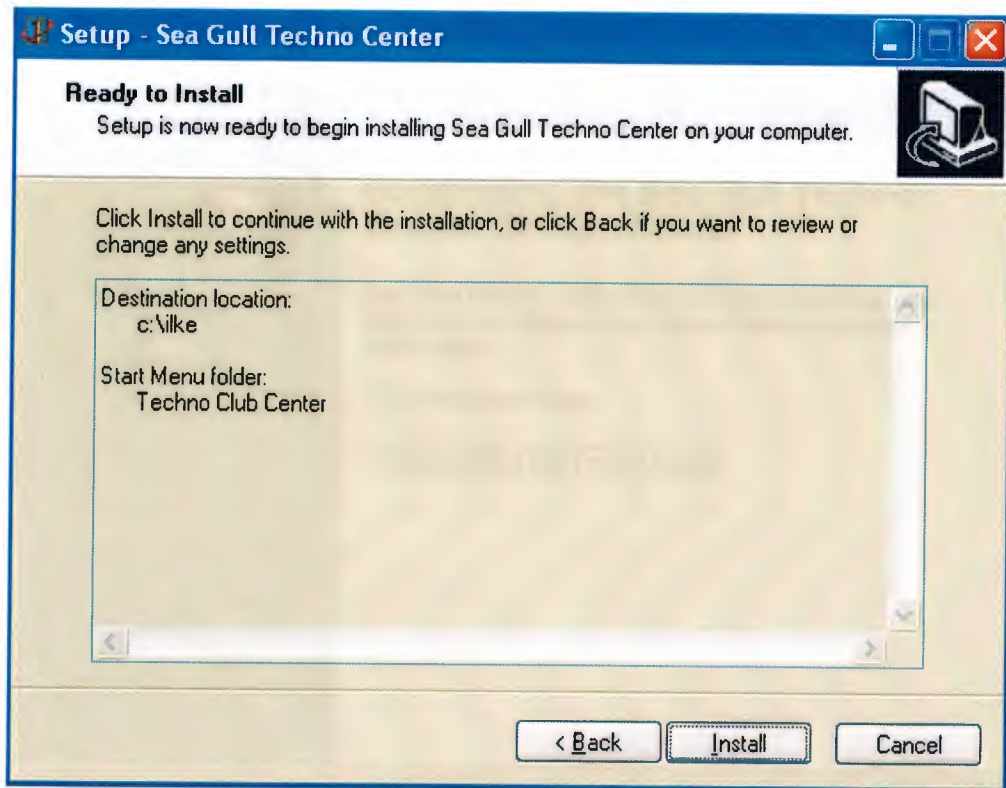
Step 3



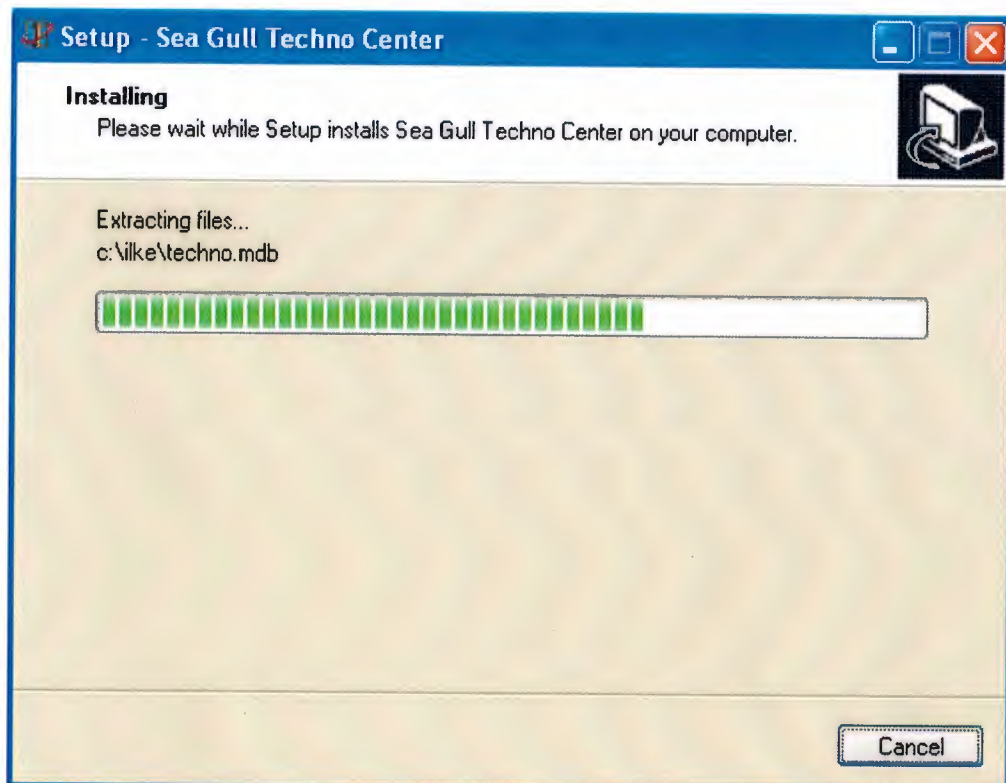
Step 4



Step 5



Step6

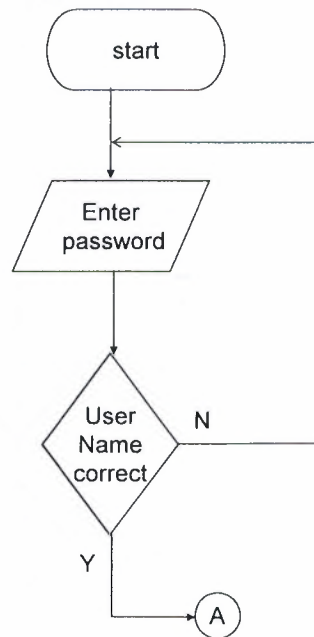


Step 7

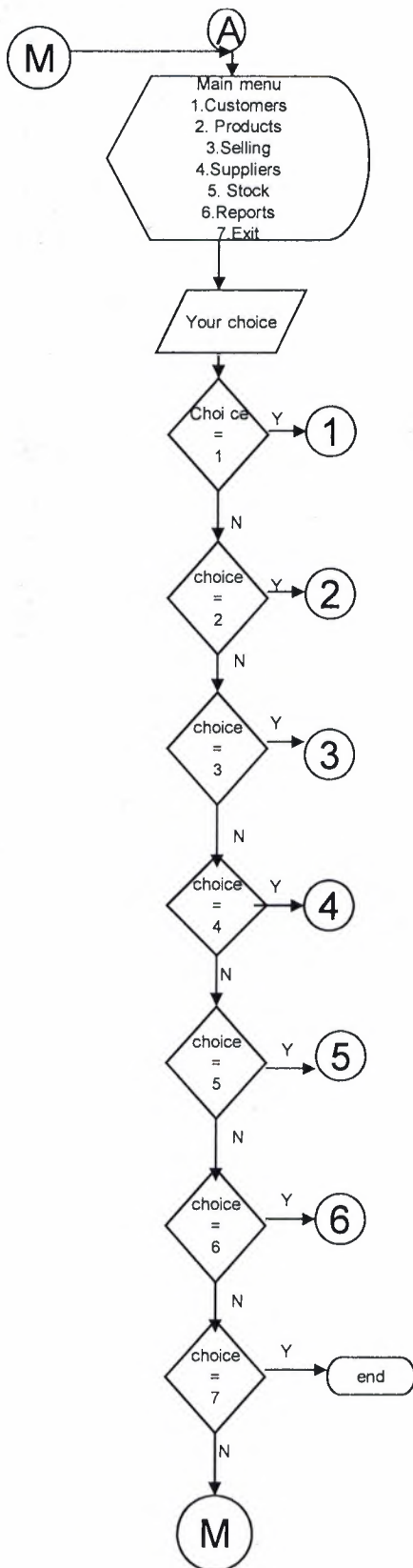


V.II USER FLOWCHARTS

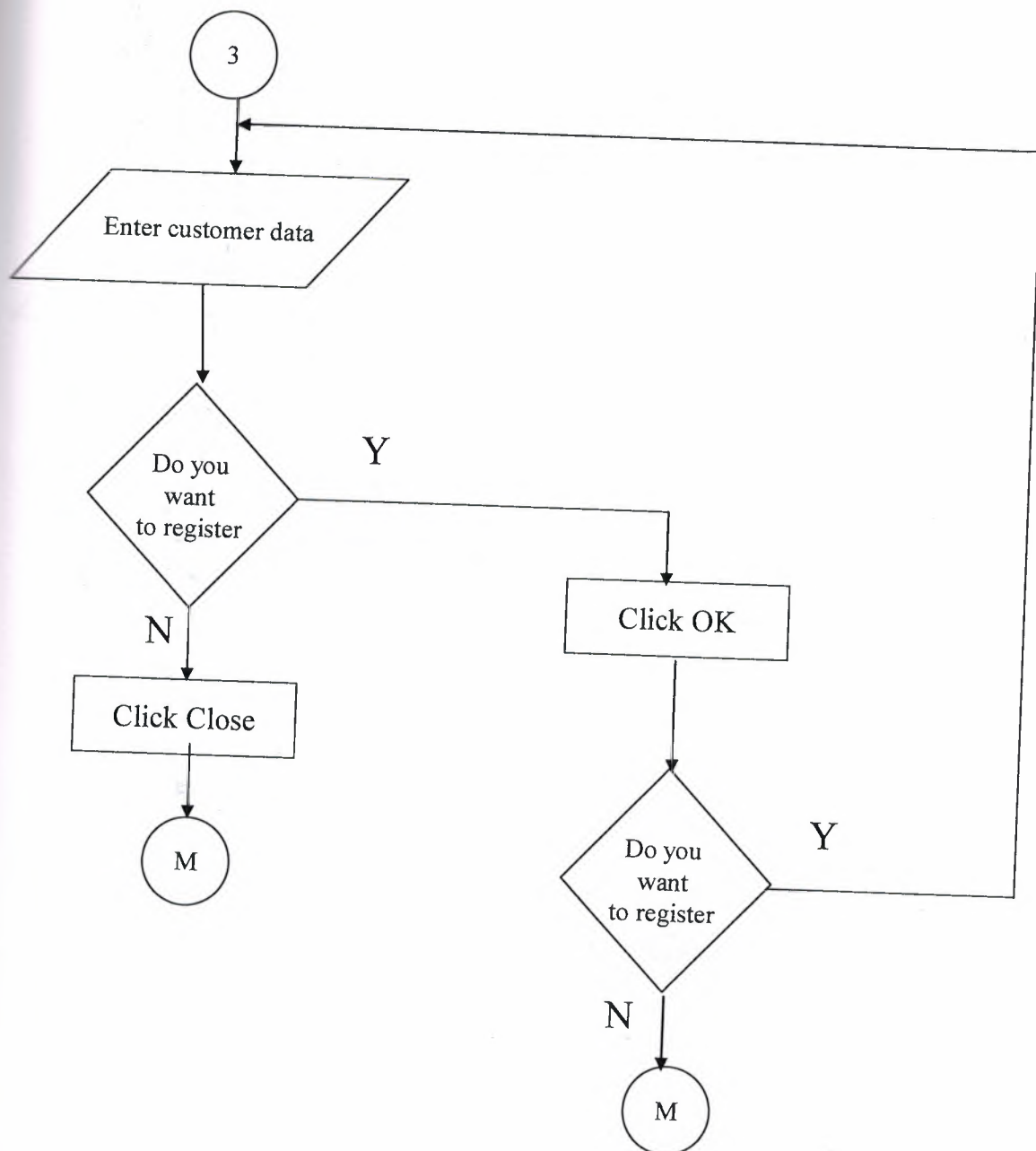
PASSWORD ENTRY



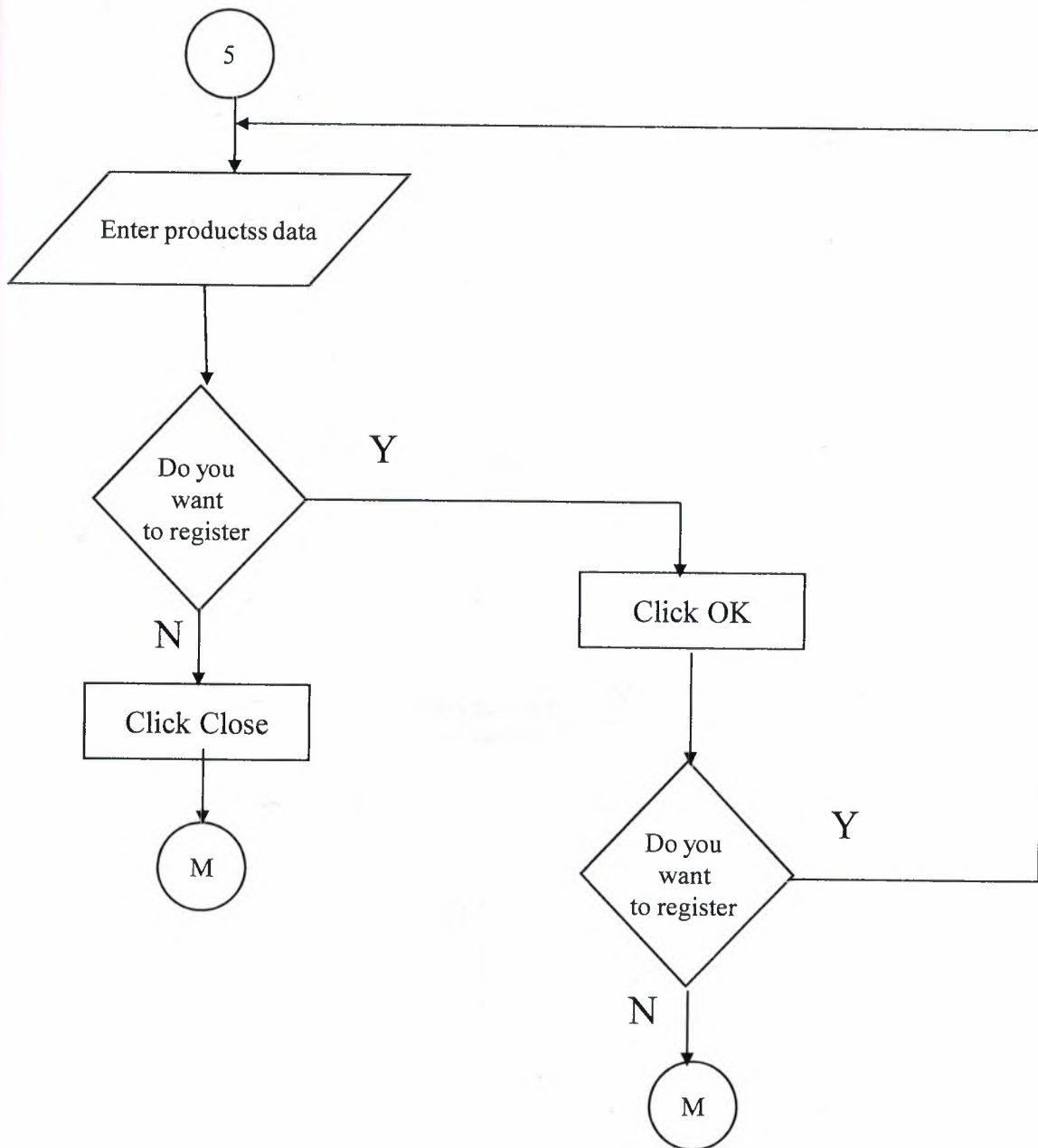
MAIN MENU



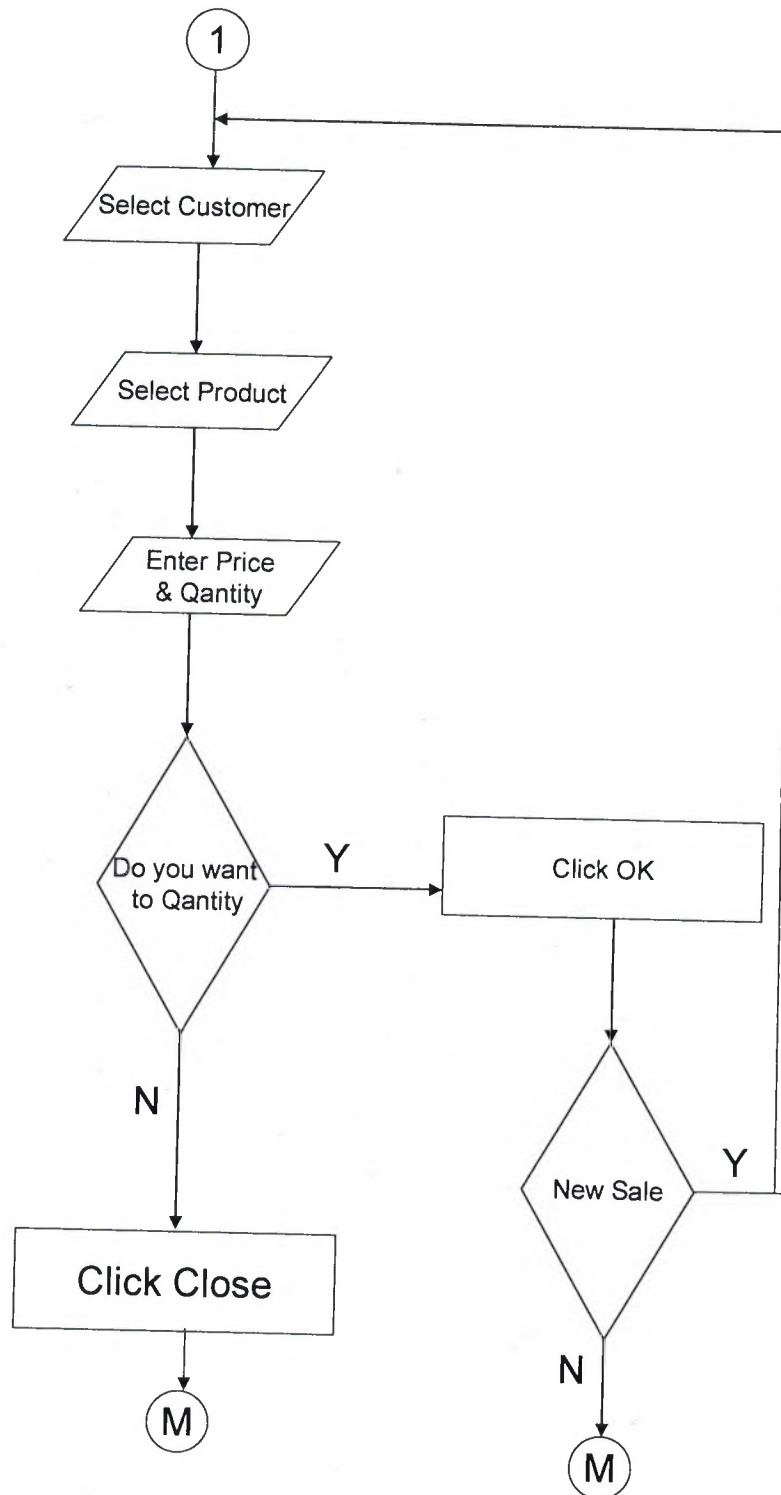
CUSTOMERS



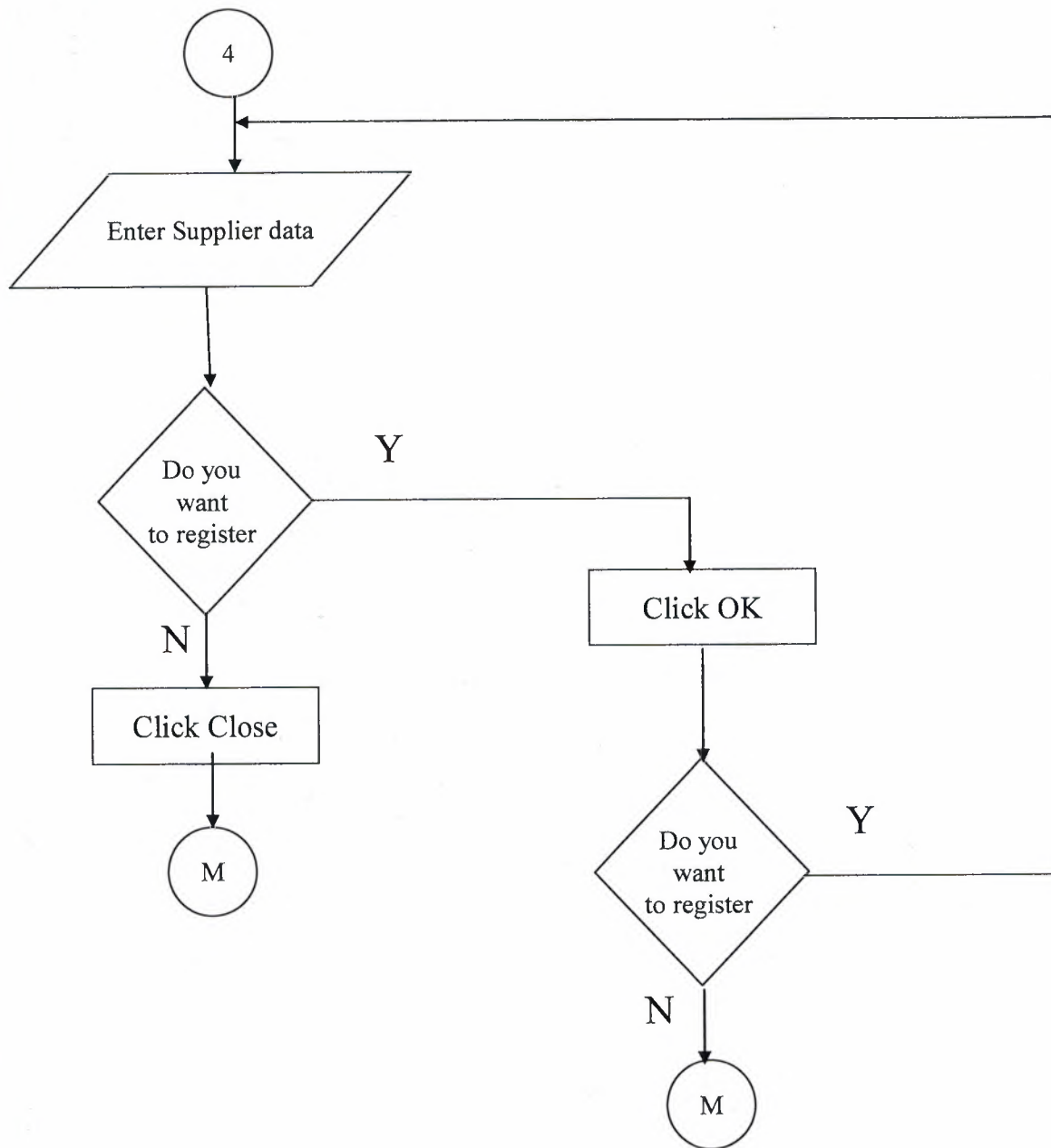
PRODUCTS



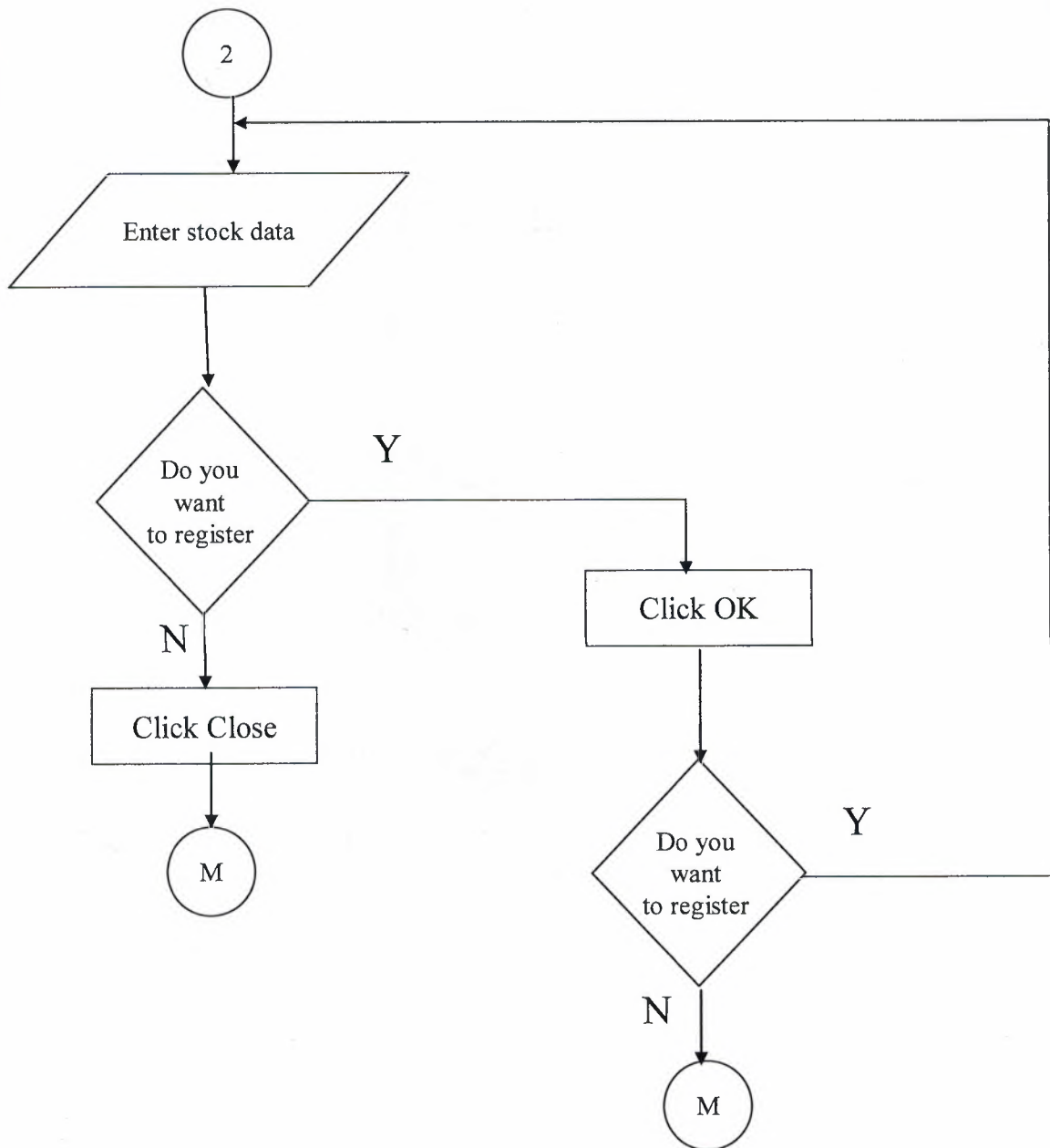
SELLING



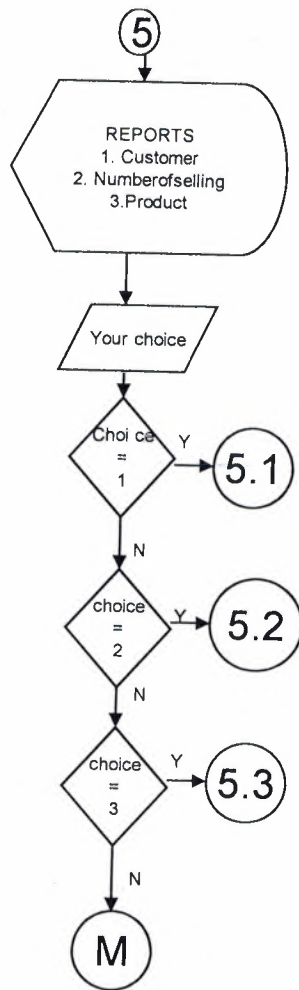
SUPPLIERS



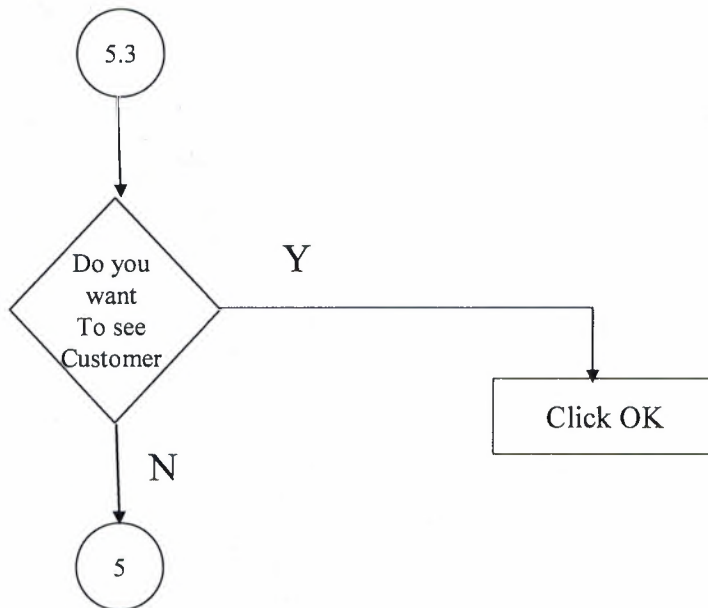
STOCKS



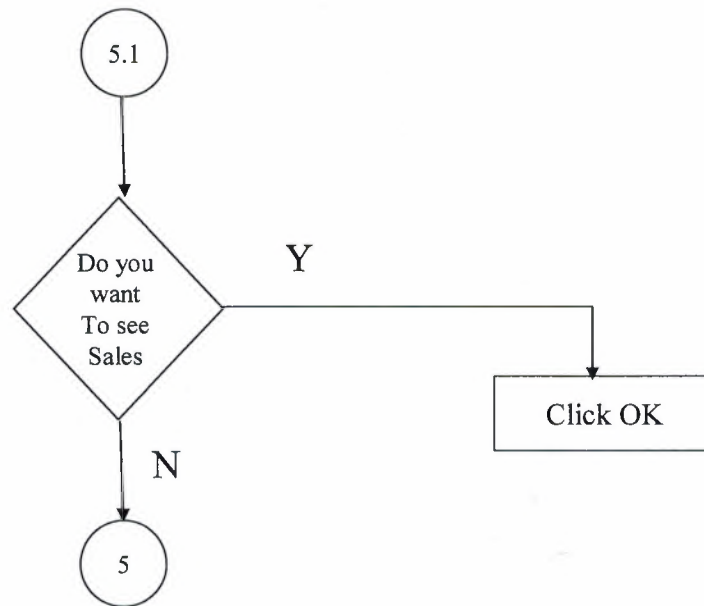
REPORTS



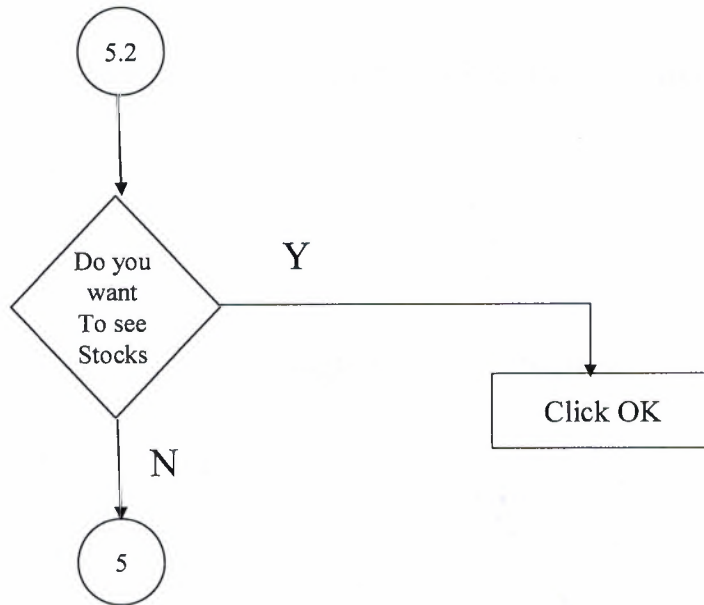
CUSTOMER REPORTS



NUMBER OF SELLING REPORTS



PRODUCT REPORTS



VI. REFERENCES

BOOKS:

YANIK M. (2007). “Delphi ile Programlama”, Beta Basım Yayım Dağıtım A.Ş.
ANKARA, TÜRKİYE

YANIK M. (2000). “Access 2000”, Seçkin Yayım Dağıtım,
ANKARA, TÜRKİYE

WEB SITES:

www.formtr.com

<http://www.frmtr.com/archive/index.php/f-362.html>

www.programlama.com

<http://www.programlama.com/sys/c2html/viewCategory.php?DocCategory=6&DocType=2>

V.I.I. APPENDIX I

(Screen output)



“Figure 1” Password Screen
Access the system



“Figure 2” Main Page
Choice the process from the menu buttons.

Products

29.06.2009

PRODUCTS

PRODUCT NO
1

PRODUCT NAME
cttth

PRODUCT TYPE
VGA

PRODUCT PRICE (\$)
110

UNITS IN STOCK
5

GUARANTEE (MONTH)
1

Browse Item Picture

PRODUCT PROPERTIES
device

MAIN MENU

ProductNo	Product Name	ProductType	ProductPreporties
1	cttth	VGA	device

“Figure 4” Products information.

Selling

SELLING

NUMBER OF SELLING
4

CUSTOMER ID
2

PRODUCT NO
2

HOW MANY PRODUCTS
5

SELLING PRICE (\$)
200

SELLING DATE
11. 07. 2008

TOTAL (\$)
1000

MAIN MENU

NumberofSelling	CustomerID	ProductNo	TAX	Profit	SellingPrice	HowManyProducts	Total	SellingDate
4	2	2			200	5	1000	11. 07. 2008

“Figure 5” Selling information.

Suppliers

SUPPLIERS

SUPPLIER ID
[Empty]

SUPPLIER NAME
[Empty]

SUPPLIER ADDRESS
[Empty]

PHONE NUMBER
[Empty]

CITY
[Empty]

E-MAIL
[Empty]

MAIN MENU

SupplierID	SupplierName	SupplierAddress	SupplierCity	SupplierPhoneNumber

“Figure 6” Suppliers information.

Report Process

REPORT PROCESS

21.05.2007

New Customer

4

New Product

CUSTOMER ID

2

PRODUCT PRICE (\$)

110

PRODUCT NO

SURNAME

akar

NAME

erhan

TAX (\$)

PRODUCT NAME

ettih

BIRTH DATE

02.02.1973

PHONE NUMBER

22222222

PROFIT (\$)

PRODUCT TYPE

VGA

COUNTRY

TRNC

ZIPCODE

0090

SELLING PRICE (\$)

200

PRODUCT PROPERTIES

device

ADDRESS

hamitkey

PAYMENT TYPE

Cash

HOW MANY PRODUCTS

5

GUARANTEE (MONTH)

1

E-MAIL

ehsd@jvxx.com

TOTAL

1000

SELLING DATE

11.07.2008

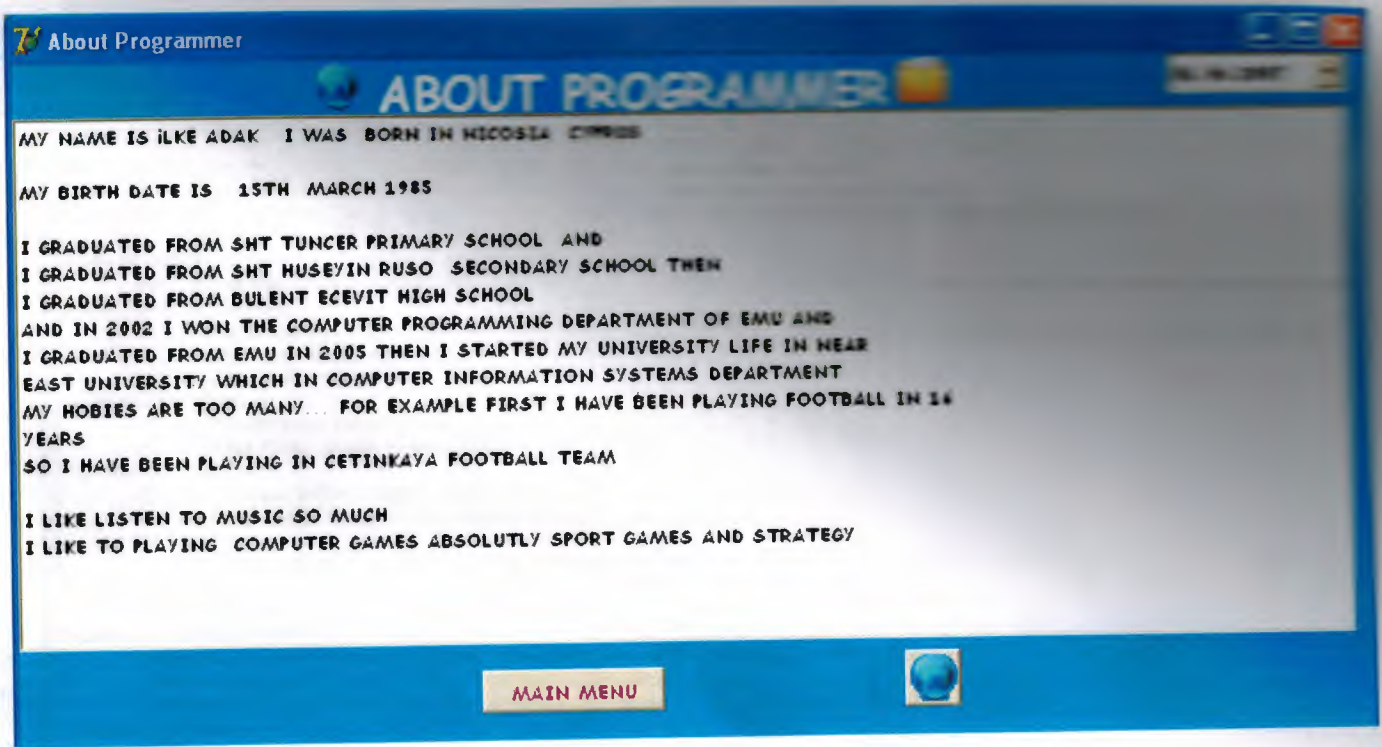
UNITS IN STOCK

5

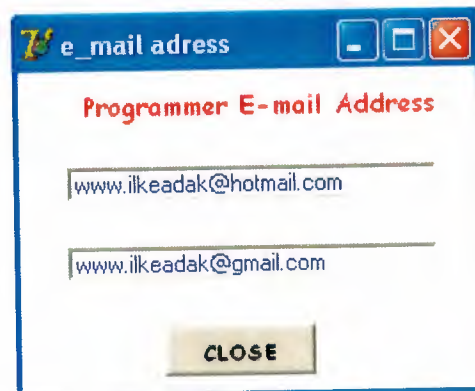
MAIN MENU

NumberofSelling	CustomerID	ProductNo	TAX	Profit	SellingPrice	HowManyProducts	Total	SellingDate
4	2	2			200	5	1000	11.07.2008

“Figure 8” Report process information.



“Figure 9” About Programmer.



“Figure 10” Mail address of programmer.

HELP MENU

THIS PROGRAM IS USED TO HELP THE MANAGER OF THE TECHNICAL CENTER TO APPLY LABEL THE PRODUCTS AND CONTROL THE STOCKS WHO DID SHOPPING FROM THERE THIS PROJECT IS AN I.T.S -400 GRADUATION PROJECT
 FIRST THIS PROGRAM CONTAINS SEVEN MAIN FORMS THERE ARE MAIN MENU - CUSTOMERS TABLE -
 PRODUCTS TABLE - SUPPLIERS TABLE - SELLING TABLE - STOCK TABLE - SELLING PROCESS TABLE - COMPANIES STOCK

1-)MAIN MENU-->

MAIN MENU CONTAINS BUTTONS WHICH HAVE DESTINATIONS ARE ON WRITTEN THERE AND ALL THE INFORMATION ABOUT THE PROGRAM

2-)CUSTOMERS TABLE-->

THIS TABLE CONTAINS ALL CUSTOMERS INFORMATION WHICH HE SOLD THIS MEANS OF CUSTOMERS INFORMATION AND CAN SEE ALL SELLINGS WHICH HE DONE

3-)PRODUCTS TABLE-->

SO YOU UNDERSTAND FROM ITS NAME IT CONTAINS ALL PRODUCTS INFORMATION FOR EXAMPLE TYPE- NAME- PROPERTIES-NO-GUARANTEE ETC HERE IS SHOPWINDOW

4-)SUPPLIERS TABLE-->

YOU CAN SEE ALL INFORMATION ABOUT MANUFACTURER COMPANY AND IF YOU HAVE ANY PROBLEM ABOUT PRODUCT YOU CAN GO OR MEET EASILY SUPPLIERS

5-)SELLING TABLE-->

VIEW ALL SELLINGS FROM NOW TO BEGINS WHICH CUSTOMER - WHICH PRODUCT - WHICH SUPPLIER YOU CAN SEE EASILY FROM THERE

6-)STOCK TABLE-->

SHOW ALL PRODUCTS WHICH THE COMPANY HAS

7-)SELLING PROCESS TABLE-->

THIS TABLE IS VERY CONTENTS FROM THE OTHERS BECAUSE IT CONTAINS ALL SELLINGS INFORMATION FOR EXAMPLE WHICH CUSTOMER AND INFORMATIONS - WHICH PRODUCT AND INFORMATIONS AND HOW MUCH ALL PRICES (PURCHASING PRICE-TAX-AMOUNT-PROFIT-SELING PRICE-TOTAL) ANDIT SHOW US RECIDUAL UNIT IN THE COMPANIES STOCK

THE PROGRAM HAS TWO SUBSIDARY FORM

FIRST ONE IS ABOUT PROGRAMMER THIS SHOWS US ALL INFORMATION ABOUT PROGRAMMER
 SECOND ONE IS ABOUT PROGRAM WHAT IS INCLUDE

THIS PROGRAM PRDUCED FOR 02-JULY-2009

----- THANKS FOR-----

-- DEAR MY TEACHER WHO TEACHES ME AND GROWS ME UP -->DR. NADIRE ÇAVUS
 THANKS FOR ALL THINK ABOUT LECTURE AND MY LIFE ...

-- THANKS FOR EVERYTHINGS AND I WISH ALL SUCCESS WOULD BE YOUR BEHIND. !

“Figure 11” Help Menu of the program.