



NEAR EAST UNIVERSITY

FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES

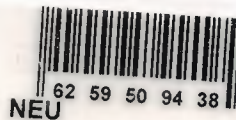
DEPARTMENT OF COMPUTER INFORMATION SYSTEMS

SUPERMARKET AUTOMATION SYSTEM

Submitted To : Department of C.I.S.

Submitted By : Ahmet Yasin Çiftçi 20020430

**Nicosia
2006**





CONTENTS

	PAGE
I. ACKNOWLEDGEMENTS	3
II. ABSTRACT	4
III. INTRODUCTION	6
IV. DESIGN OF THE SYSTEM	13
- Explanation	14
- Data Flow Diagrams	24
- Database Design	34
V. USER MANUAL	
- User Flow Charts	47
VI. REFERENCES	
APPENDIX I	
- Screen outputs	115
APPENDIX II	
- Source Code	124

ACKNOWLEDGEMENTS

I want to thank to:

My lecturer and at the same time Chairman of C.I.S., Assist. Professor Dr. Yalçın Akçalı for his personal inspirations and supports.

My friends Mustafa Erol Yetim and Hayati Sonay for their psychological support to conclude the project.

I want to thank to:

My family for providing me with financial support and for their psychological support while preparing the project.

ABSTRACT

The project is Supermarket Automation System. The system operates some processes such as registering new suppliers with their products, registering new employees, registering new products with its categories and etc.

I choose to do this project because one of my relative wants to do it, so he can do his job computerized, modern and fast. At this reason I choose to do this project also my graduation project and my first program to sell.

There three main users of the system. These are ;

Manager that he/she can reach all menus except purchasing and buying, he/she can add, delete or update promotions, he/she can add or update employees, and also he/she can reach all reports.

User that he/she can add, delete or update suppliers, he/she can add, delete or update suppliers' products, he/she can add, delete or update customers, he/she can add, delete or update suppliers, he/she can purchase new products to the company and also he/she can cancel old sales.

Cashier that he/she can sell the products.

INTRODUCTION

In the early days of retailing, all products had to be fetched by an assistant from shelves on one side of a counter while the customers stood on the other side and pointed to what they wanted. Also, many foods did not come in the individually wrapped consumer-size packages taken for granted today, so an assistant had to measure out the precise amount desired by the consumer. These practices were obviously labor-intensive and therefore quite expensive.

The concept of a self-service grocery store was developed by Clarence Saunders and his Piggly-Wiggly stores. He was the most successful of the early chains in the world, having become common in North American cities in the 1920s. The general trend in retail since then has been to stack shelves at night and let the customers get their own goods and bring them to the front of the store to pay for them. Although there is a higher risk of shoplifting, the costs of appropriate security measures will be ideally outweighed by the economies of scale and reduced labor costs.

Supermarkets proliferated in the world, along with suburban areas after World War II. At present, supermarkets are often co-located with smaller retailers in strip malls and are generally regional rather than national.

In Europe, the proliferation of out-of-town supermarkets has been blamed for the disappearance of smaller, local grocery stores and for increased dependency on the motor car (and the consequent traffic). In particular, some critics consider the practice of selling loss leaders to be anti-competitive, and are also wary of the negotiating power large retailers have with suppliers. Supermarkets are found around the world in dozens of countries.

It was formerly common for supermarkets to give trading stamps. Today, most supermarkets issue store-specific "members' cards," "club cards," or "loyalty cards" which are scanned at the register when the customer goes to check-out. Typically, several items are given special discounts if the credit card-like devices are used.

Today supermarkets face price competition from discount retailers such as Wal-Mart and Zellers (non-union labor and greater buying power) and warehouse stores such as Costco (savings in bulk quantities).

This project deals in automation of various activities related to customers, suppliers, finance and Inventory of Supermarket. Performed complete development of application capturing day-to-day transactions like handling sales transaction, customer payments, product receipts, updation of stock etc.

My Project has 7 processes. These are;

1. Customer Registration Process,
2. Selling Process,
3. Accounting Process,
4. Purchase Process,
5. Employee Process,
6. Promotions Process and
7. Reports Process.

1. Customer registration Process;

This process will include add and update customers.

- Adding Sub process;

This process will take in new attendants' personal information. Such as Home Phone, Title, etc.

- Updating Sub Process;

This process will update existing attendants' personal information. Such as Home Phone changes, Surname changes, Address changes, etc.

2. Selling Process;

This process takes customers' requests, gives them invoices and when it is necessary it cancels existing and old sales.

- Customer Invoice Sub process;

This process takes customers requests, gives them invoices such as bill, and update current stock. And when a cancellation occurs, sends paying request to Customer Payroll Process.

- Customer Payroll Sub Process;

This process takes all customers' payments, repay their money, updates Bills and Bill Details Tables.

3. Accounting Process;

This process calculates all payments, gives another processes permission to do money transactions, and does salary calculations to pay employees' salaries.

- **Cancelled Selling Accounts Sub process;**

This process updates the database if any customer brings back the billed product.

- **Salary Calculation And Payment Sub Process;**

This process does all calculations of payments.

- **Customer Payments Sub process;**

This process updates the database if any customer brings back the billed product.

- **Supplier Payments Sub process;**

This process updates the database if any Supplier sends a bills to the billed product.

- **Employee Payments Sub process;**

This process calculates and pays employees' salaries.

4. Purchase Process;

This process calculates the purchase amounts, realizes the transaction, sends to accounting process paying order to the supplier and if that supplier is not recorded, records that customers information and update it.

- **Supplier Payment Sub process;**

This process will pay supplier payments which the account process sent (because of security privacy).

- **Supplier Order Sub Process;**

This process takes the order list from manager and gives new order to supplier, if the supplier statements or commitments come, updates database.

- **Adding New Supplier Sub process;**

This process will take in new suppliers' company information. Such as Company Address, Contact Name, Contact Title, etc. And if any information update occurs , it also updates the stored database information.

7. Reports Process.

This process will generate reports for internal stakeholders such as employees, suppliers, customers, etc.

- **Financial Reports Sub process;**

5. Employee Process;

This process will include add and update employees' personal information and provides to hold their attendances.

- Adding New Employee Sub process;

This process will take in new attendants' personal information and store it in the database when the manager sends them acceptance. Also this process provides to update the employees' personal information if any change occurs.

- Employee Attendance Sub Process;

This process will hold employees' day-to-day attendance information.

6. Promotions Process;

This process will add, delete and update promotions, sets its interval and updates the products selling price.

7. Reports Process;

This process will include all internal and external stakeholders' reports, such as, employees, suppliers, customers, etc.

- Aggregate Product Reports Sub process;

This process will include all category and product reports.

- **Aggregate Bill Reports Sub Process;**

This process will include all bills and bill details reports.

- **Customer Reports Sub process;**

This process will include all customer reports.

- **Aggregate Purchase Reports Sub Process;**

This process will hold all purchase and purchase details reports.

- **Promotion Reports Sub process;**

This process will hold all promotion reports.

- **Aggregate Supplier Reports Sub Process;**

This process will hold all suppliers and their products' reports.

- **Aggregate Employee Reports Sub Process;**

This process will hold all employees' and their attendance reports.

EXPLANATION

The minimum requirements of the system are as follows:

Intel Pentium IV Processor

2.4 GHz

512 MB of RAM

80 GB Hard Disk

15" Monitor

Microsoft Windows XP

100% Mouse

DESIGN OF THE SYSTEM

The system architecture is shown in the following diagram:

System Architecture Diagram

Hardware Components

Software Components

Network Components

Security Components

System Configuration

System Maintenance

System Performance Monitoring

EXPLANATION

The minimum requirements of the system are as follows;

Intel Pentium IV Processor

2.4 GHz

512 MB of RAM

80 GB Hard Disk

15" Monitor

Microsoft NT 2000 Server Edition

USB 2.0 Support

10 / 100Mbps Fast Ethernet Adapter for PCI

The recommended requirements of the system are as follows;

Intel Pentium Centrino Processor

3.2 GHz

2048 MB of RAM

1 TB Hard Disk

17" Monitor

Microsoft NT 2003 Server Edition

USB 2.0 Support

100 / 1000 Mbps Fast Ethernet Adapter for PCI

I used Delphi programming language for writing this program and Paradox database that has also connection with Delphi.

Also to be able to run the program without any problem install-shield express is also provided together with program.

SUPERMARKET AUTOMATION SYSTEM

1. PROJECT IDENTIFICATION AND SELECTION

2. THE AIM OF THIS PROJECT

The Supermarket Automation System aims to serve customers who come to the supermarket for shopping in the best way and provides much more fast shopping.

The existing system's handicaps, easiness to use and flexibility of processes that the new system wishes to bring the users and corrections to be made on the existing system are explained in detailed under the headlines "The Existing System's Capabilities" and "The New System's Providences".

THE SYSTEM BOUNDARIES :

1. The employees who are aimed to use this system did not have enough computer education therefore they must have little computer using capabilities.
2. The customers' information cards that hold the customers' personal information are kept by employees on hand and are not processed correctly and in order.
3. The primary feature that separates each customer cards uniquely is a number called customer number and this number is incremented by one for each new customer. However in existing system last numbers may be forgotten, so the uniqueness is not sure.

RESOURCE LIMITS:

Actually there are some limitations to do the project. Furthermore the limits can be passed at most 10 %. Actual value the owners give me to do the project is \$ 5,000 \pm 10 %. As an extra payment I can take only from training. All of these expenses will be afforded by company's own budget.

2. PROJECT INITIATION AND PLANNING

Technical Feasibility:

The hardwares that are necessary for the system are as follows:

- A server to a server room,
- Computers and for each cashier's desk,
- Computers for each users' desk or room,
- A computer and a printer for system manager.

Beside this hardwares, some hardwares and some softwares for new software system that will be applied and should be afforded as well.

Operational Feasibility:

A test has been made the employees to determine their computer usage levels. According their results may be some training can be given the employees. But for server management, the company will need to hire a new employee as a system administrator or server (database) manager.

Economical Feasibility:

All the expenses will be afforded to the company's own budget as I mentioned before.

3. ANALYSIS

THE REQUIREMENT DETERMINATION:

The requirements made by manager are as follows;

- To increase the speed of operations,
- To prevent data duplication,
- To prevent the loss of data,
- To provide quick data access,
- To provide distinction between users with saving their data,
- To restrict data access to the system,
- To differ reaching all the data for every job description (with different menus)

THE EXISTING SYSTEM'S CAPABILITIES

- The supermarket works with manual system. All the market documents hold in hand.
- When a customer bought some more foods, calculation is done with help of a calculator.
- There are no promotions to old customers, every customer has seen a daily customer, and there are no distinctions.
- All transactions are cash transactions; there are only one P.O.S machines.
- They are counting their inventory on hand and they are writing on a notebook (When a customer ask about a product, they are looking that notebook) and they are looking for the shelf and than they can reply the answer of the question.

THE NEW SYSTEM'S PROVIDINGS

- The new system will give a change to do their job much faster, because they can reach the data from every computer.
- The new system will give a change to see their inventory every time, and the system will give attention to the products which are under re-order level.
- Every time (on run time of program) they can take reports and they can print it.
- The new system can provide the multiple sale processes at the same time (cash sale or credit-card sale).
- The new system will provide the customers distinction with customer points. Every collected point will give a change to take more presents.
- The new system can provide the salary calculations for employees with holding their attendances.
- The new system can provide different system entries with different job positions.

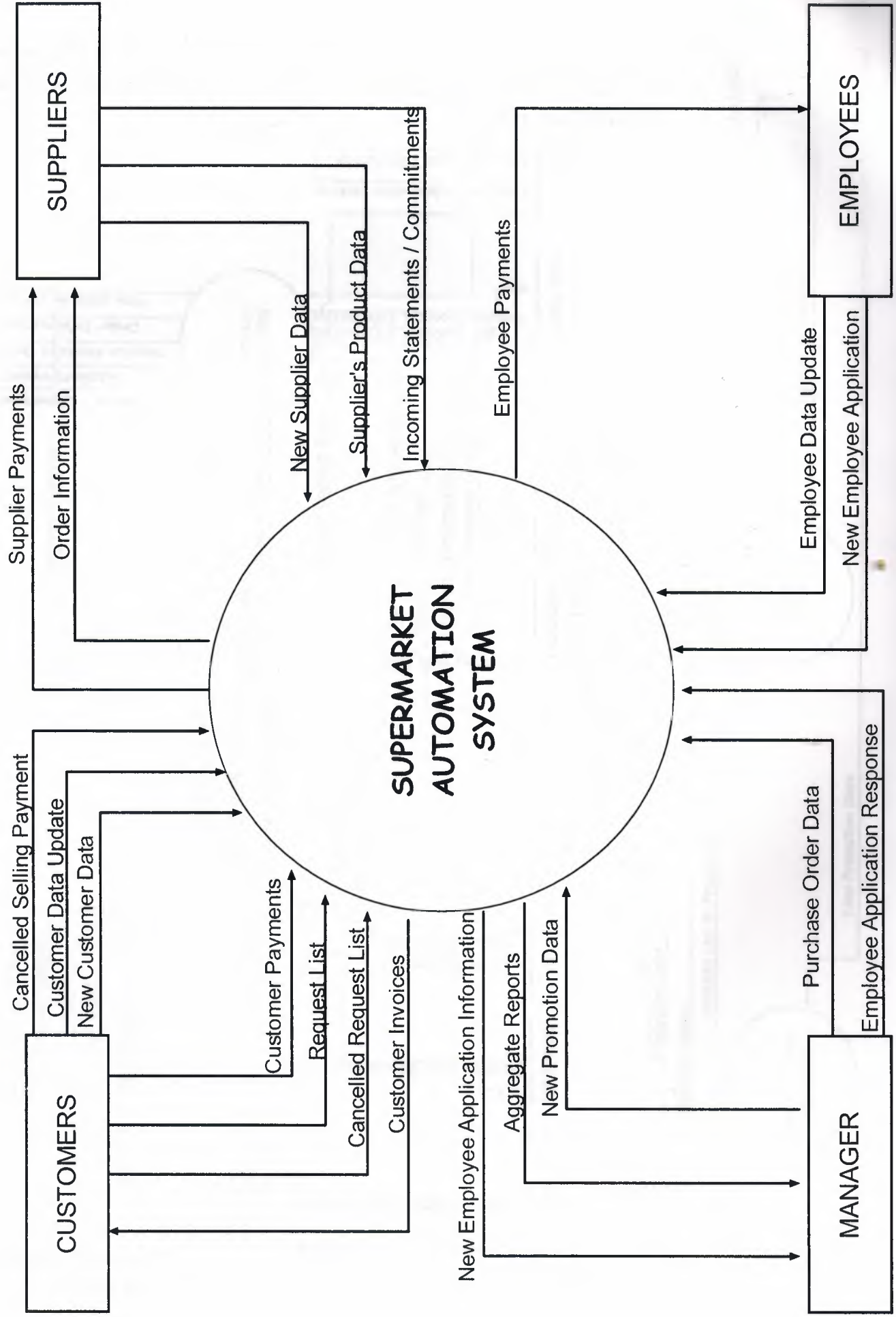
THE DATABASE

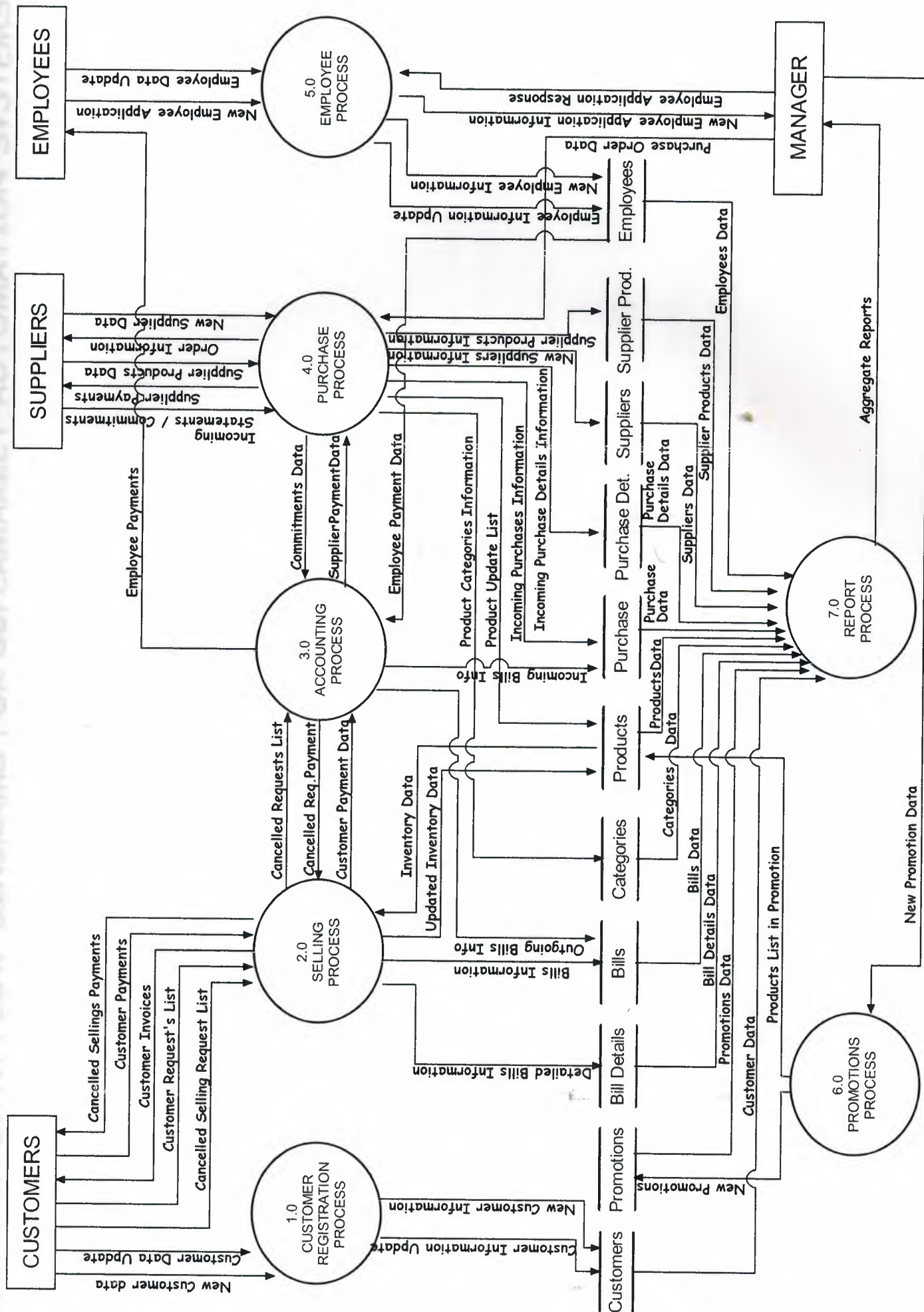
There are eleven tables in the system. These are;

- Customers,
- Employees,
- Attendances,
- Suppliers,
- Supplier Products,
- Products,
- Categories,
- Promotions,
- Purchase,
- Purchase Details,
- Bills and,
- Bill Details.

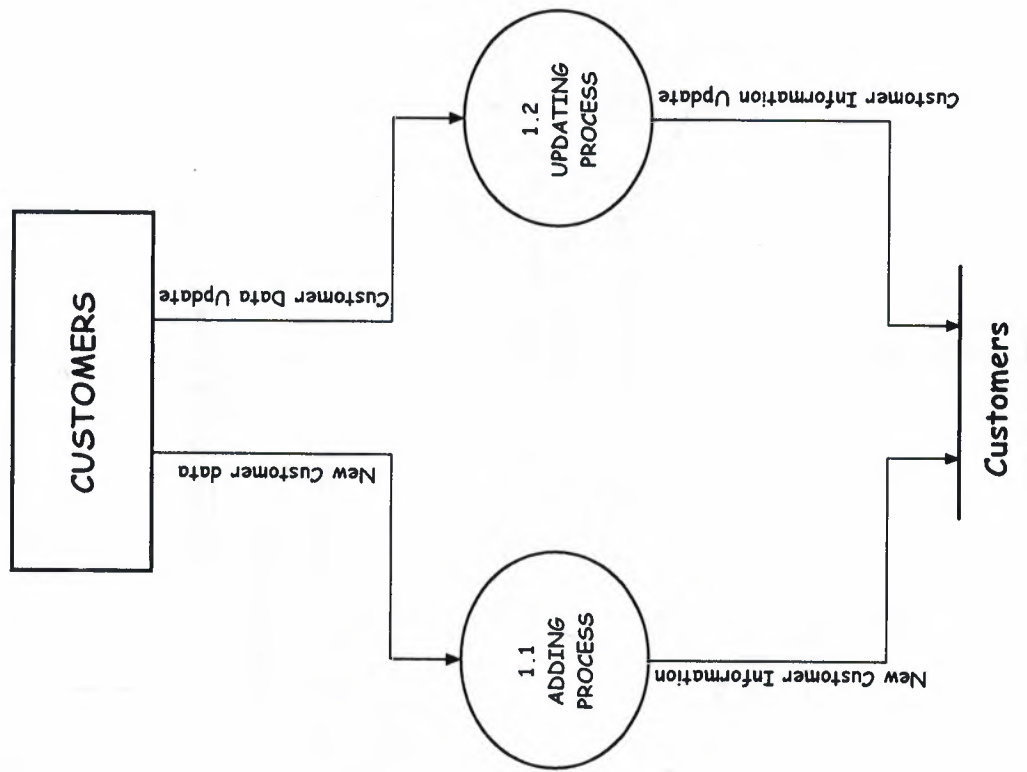
DATA FLOW DIAGRAMS

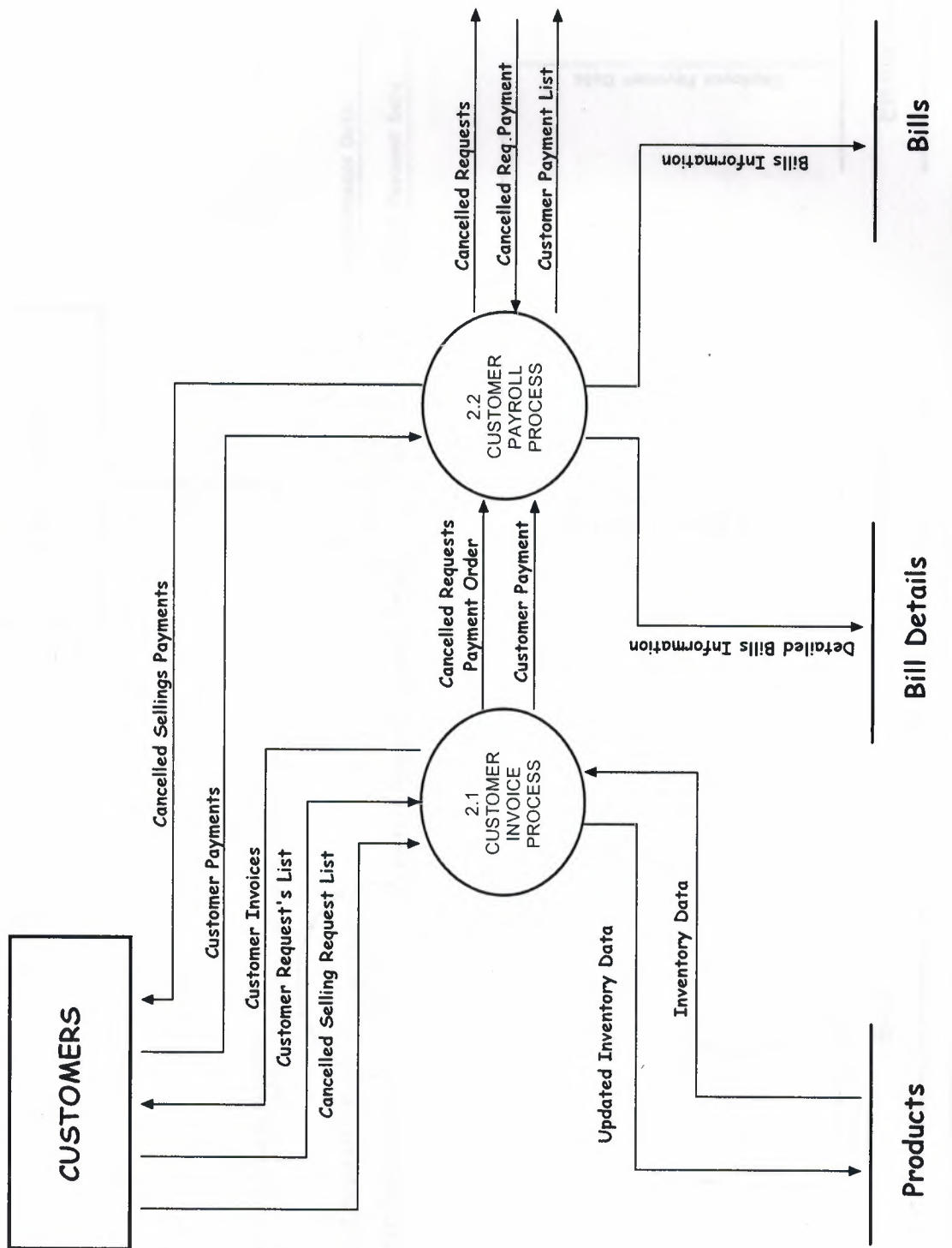
CONTEXT DATA FLOW DIAGRAM FOR SUPERMARKET AUTOMATION SYSTEM

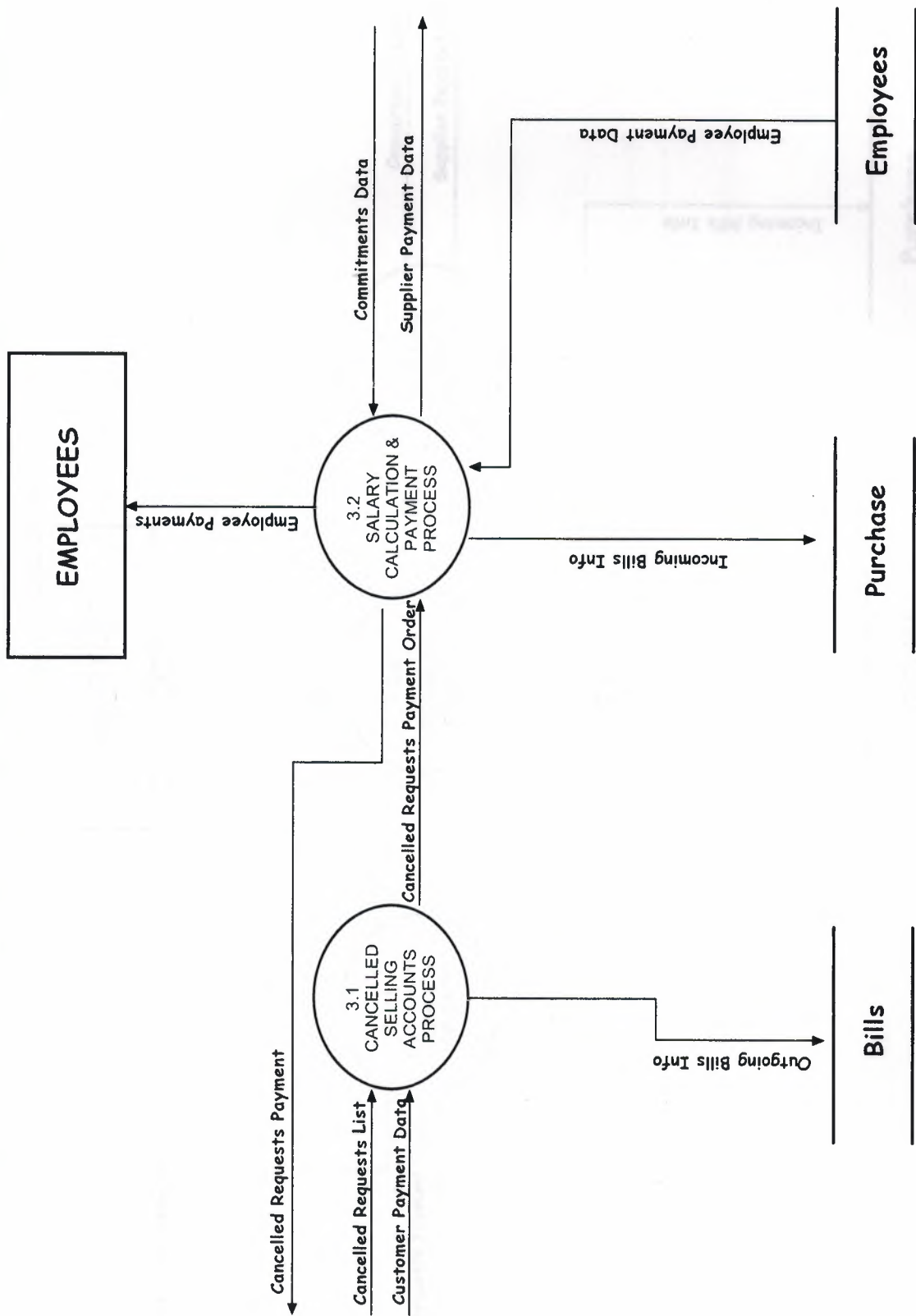


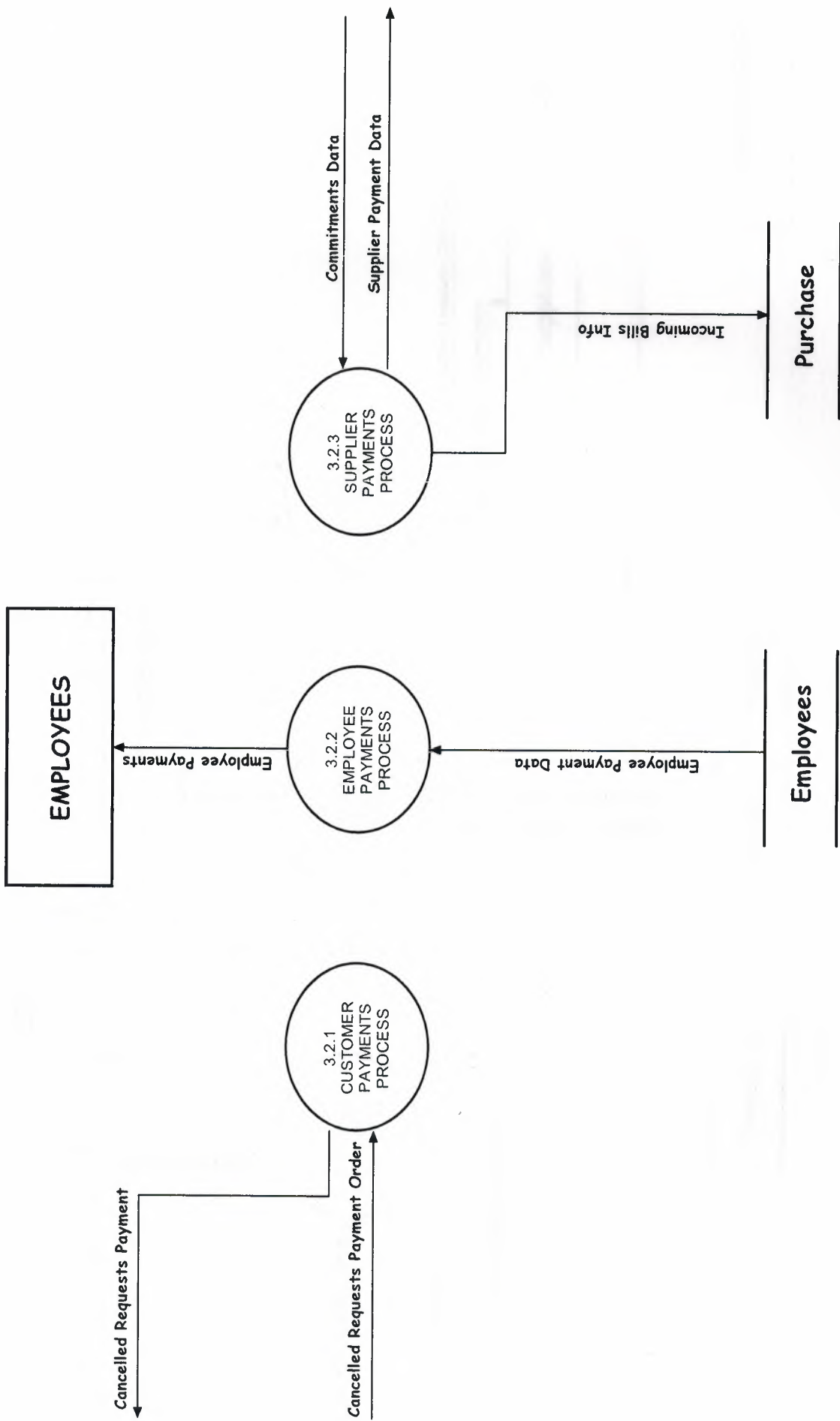


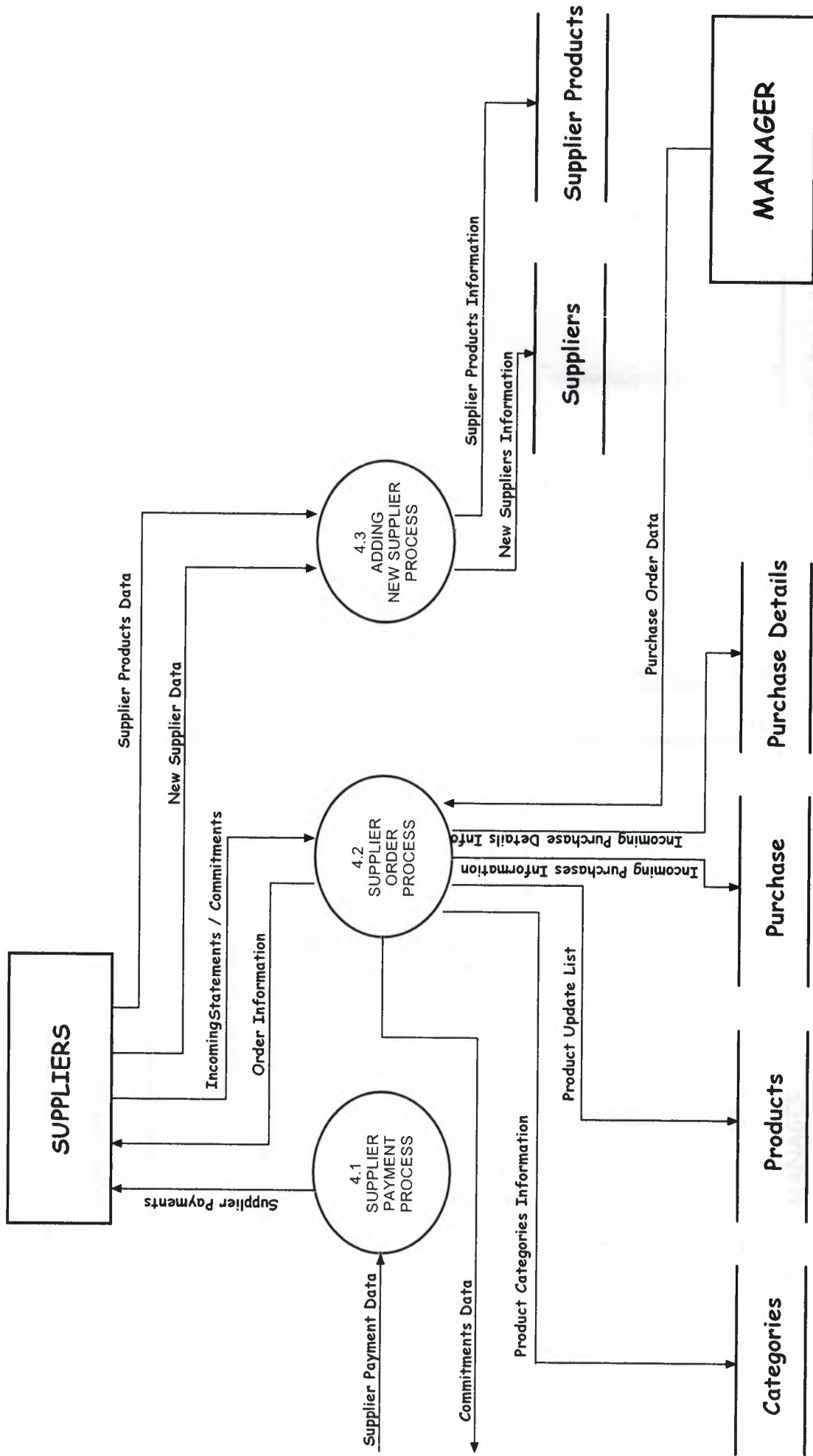
DETAILED DATA FLOW DIAGRAMS FOR SUPERMARKET AUTOMATION SYSTEMS

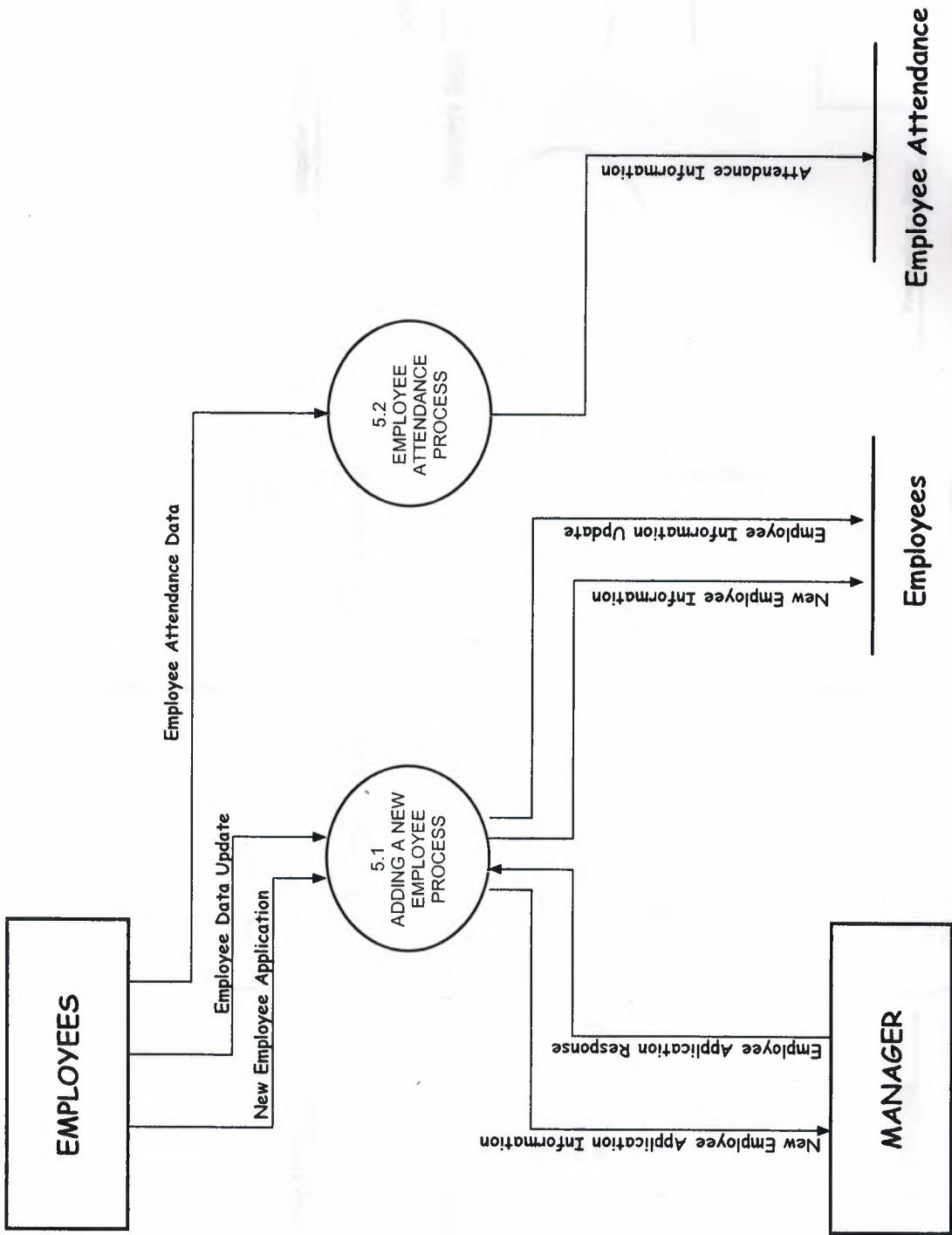


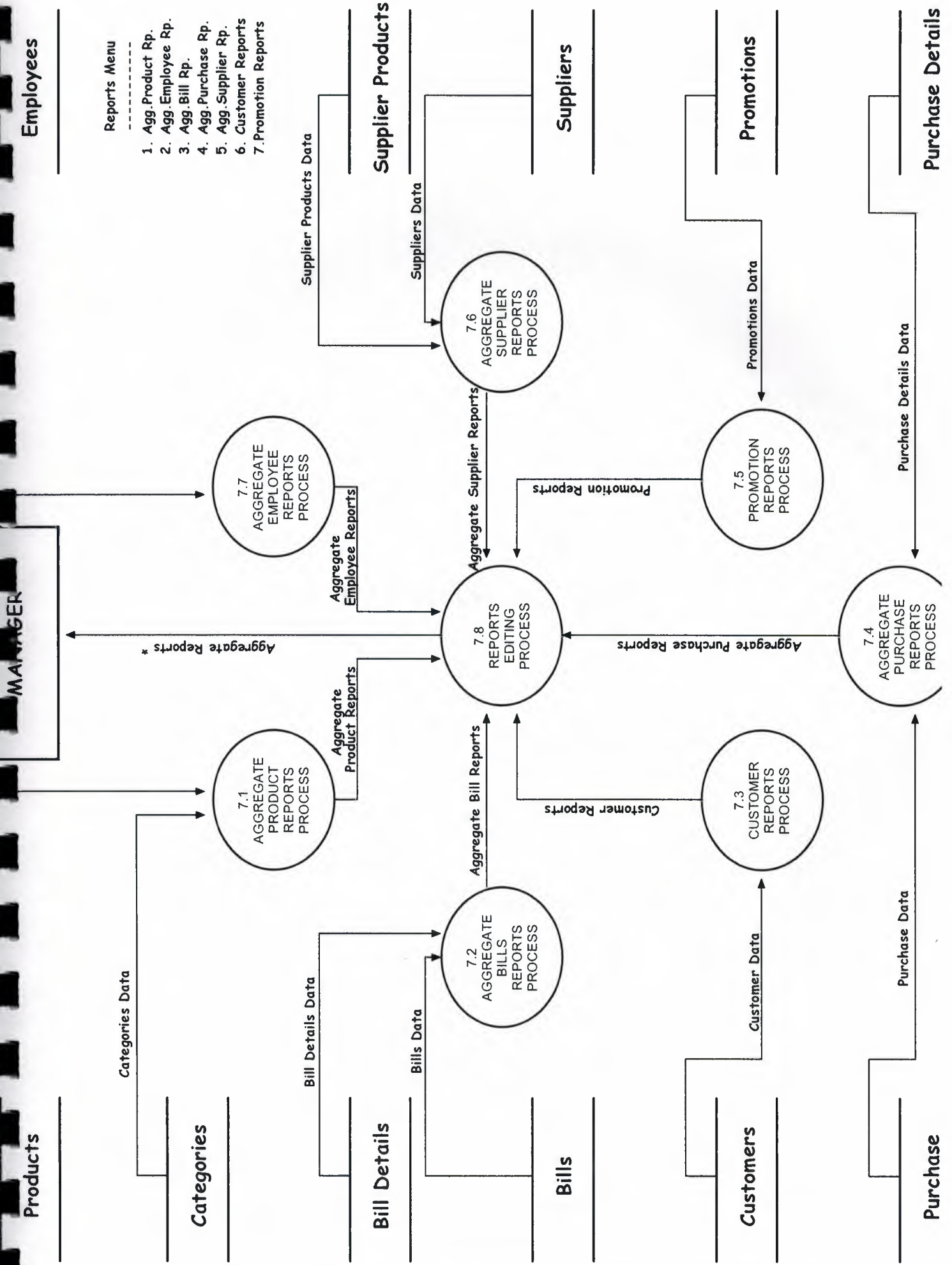






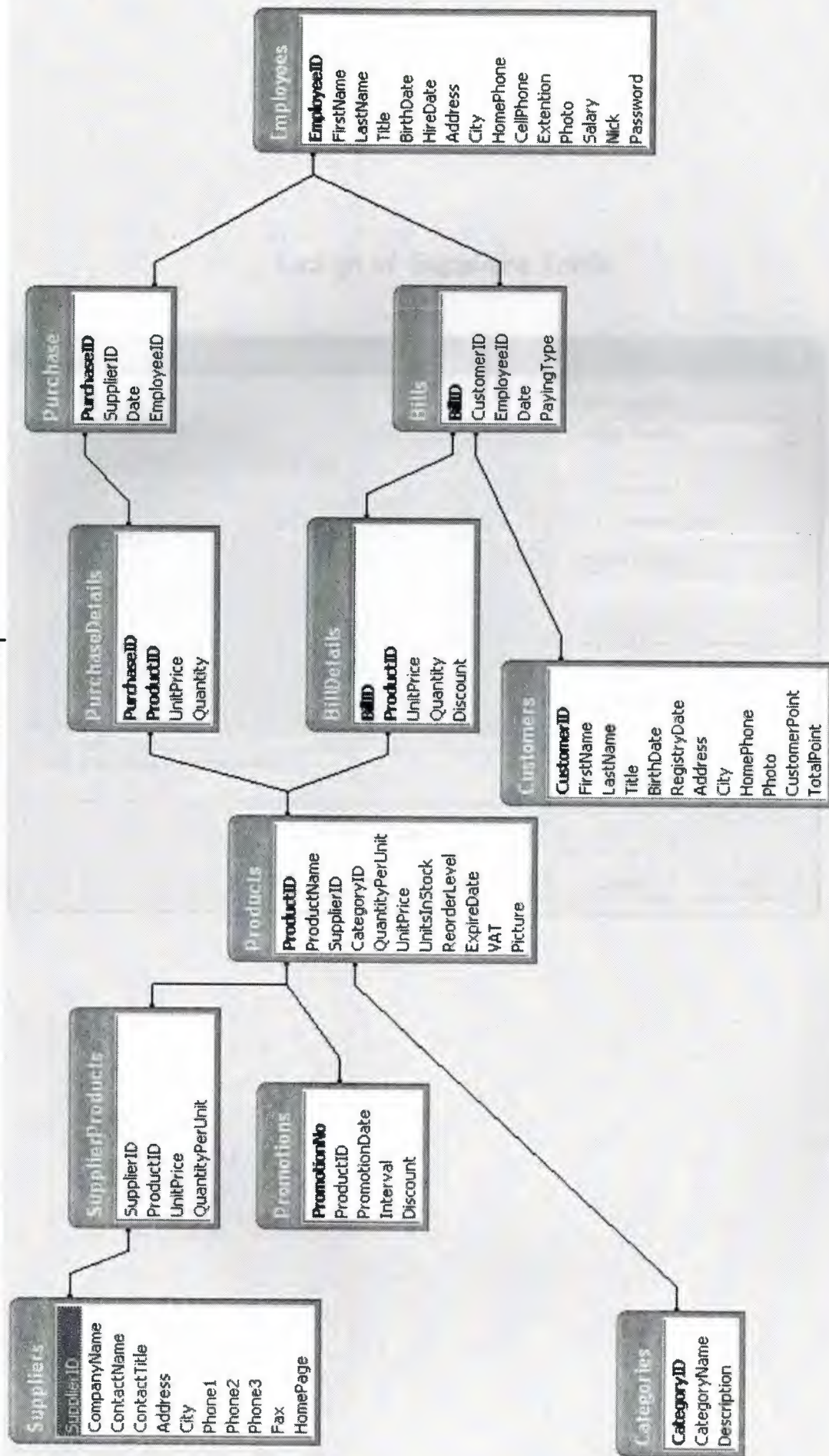






DATABASE DESIGN

Database Relationship



Design of Suppliers Table

Restructure Paradox 7 Table: Suppliers.DB

Field roster:

	Field Name	Type	Size	Key
1	SupplierID	+		
2	CompanyName	A	30	
3	ContactName	A	30	
4	ContactTitle	A	20	
5	Address	A	100	
6	City	A	10	
7	Phone1	A	24	
8	Phone2	A	24	
9	Phone3	A	24	
10	Fax	A	24	
11	HomePage	A	30	

Check to require a value in this field.

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

☒ Pack Table

Assist...

Save Save As... Cancel Help

Design of Supplier Products Table

Restructure Paradox 7 Table: SupplierProducts.DB

Field roster:

	Field Name	Type	Size	Key
1	SupplierID	N		*
2	ProductID	N		*
3	UnitPrice	\$		
4	QuantityPerUnit	A	10	

Enter a field name up to 25 characters long.

☒ Pack Table

Table properties:

Validity Checks

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Design of Purchase Table

Restructure Paradox 7 Table: Purchase.db

Field roster:

	Field Name	Type	Size	Key
1	PurchaseID	+		*
2	SupplierID	N		
3	Date	D		
4	EmployeeID	N		

Enter a field name up to 25 characters long.

☐ Pack Table

Save Save As... Cancel Help

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value: 1

3. Maximum value:

4. Default value:

5. Picture:

Assist...

Design of Purchase Details Table

Restructure Paradox 7 Table: PurchaseDetails.db

Field roster:

	Field Name	Type	Size	Key
1	PurchaseID	N		*
2	ProductID	N		*
3	UnitPrice	\$		
4	Quantity	N		

Enter a field name up to 25 characters long.

☐ Pack Table

Table properties:

Validity Checks

☒ 1. Required Field

2. Minimum value: 1.00

3. Maximum value:

4. Default value:

5. Picture:

Design of Products Table

Restructure Paradox 7 Table: Products.DB

Field roster:

	Field Name	Type	Size	Key
1	ProductID	+		*
2	ProductName	A	30	
3	SupplierID	N		
4	CategoryID	N		
5	QuantityPerUnit	A	10	
6	UnitPrice	\$		
7	UnitsInStock	N		
8	ReorderLevel	N		
9	ExpireDate	D		
10	VAT	N		
11	Picture	A	100	

Enter a field name up to 25 characters long.

☐ Pack Table

Table properties:

Validity Checks ▼

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Design of Categories Table

Restructure Paradox 7 Table: Categories.db

Field roster:

	Field Name	Type	Size	Key
1	CategoryID	+		*
2	CategoryName	A	30	
3	Description	A	100	

Enter a field name up to 25 characters long.

☐ Pack Table

Save

Save As...

Cancel

Help

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Assist...

Design of Customers Table

Restructure Paradox 7 Table: customers.DB

Field roster:

	Field Name	Type	Size	Key
1	CustomerID	+		*
2	FirstName	A	15	
3	LastName	A	15	
4	Title	A	4	
5	BirthDate	D		
6	RegistryDate	D		
7	Address	A	100	
8	City	A	10	
9	HomePhone	A	24	
10	CustomerPoint	N		
11	TotalPoint	N		

Enter a field name up to 25 characters long.

☐ Pack Table

Save Save As... Cancel Help

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Assist...

Design of Promotions Table

Restructure Paradox 7 Table: Promotions.db

Field roster:

	Field Name	Type	Size	Key
1	PromotionNo	+		*
2	ProductID	N		
3	PromotionDate	D		
4	Interval	N		
5	Discount	N		

Enter a field name up to 25 characters long.

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

☐ Pack Table

Assist...

Save Save As... Cancel Help

Design of Employees Table

Restructure Paradox 7 Table: Employees.DB

Field roster:

	Field Name	Type	Size	Key
1	EmployeeID	+		*
2	FirstName	A	15	
3	LastName	A	15	
4	Title	A	20	
5	BirthDate	D		
6	HireDate	D		
7	Address	A	100	
8	City	A	10	
9	HomePhone	A	24	
10	CellPhone	A	24	
11	Extension	A	4	

Enter a field name up to 25 characters long.

☐ Pack Table

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Assist...

Save Save As... Cancel Help

Design of Bills Table

Restructure Paradox 7 Table: Bills.DB

Field roster:

	Field Name	Type	Size	Key
1	BILLID	+		*
2	CustomerID	N		
3	EmployeeID	N		
4	BillDate	D		
5	PayingType	L		

Enter a field name up to 25 characters long.

☐ Pack Table

Table properties:

Validity Checks
Define...

☒ 1. Required Field

2. Minimum value:

3. Maximum value:

4. Default value:

5. Picture:

Assist...

Save Save As... Cancel Help

Design of Bill Details Table

Restructure Paradox 7 Table: BillDetails.db

Field roster:

	Field Name	Type	Size	Key
1	BillID	N		*
2	ProductID	N		*
3	UnitPrice	\$		
4	Quantity	N		
5	Discount	N		

Enter a field name up to 25 characters long.

☐ Pack Table

Save Save As... Cancel Help

Table properties:

Validity Checks

Define...

☒ 1. Required Field

2. Minimum value:

1.00

3. Maximum value:

4. Default value:

5. Picture:

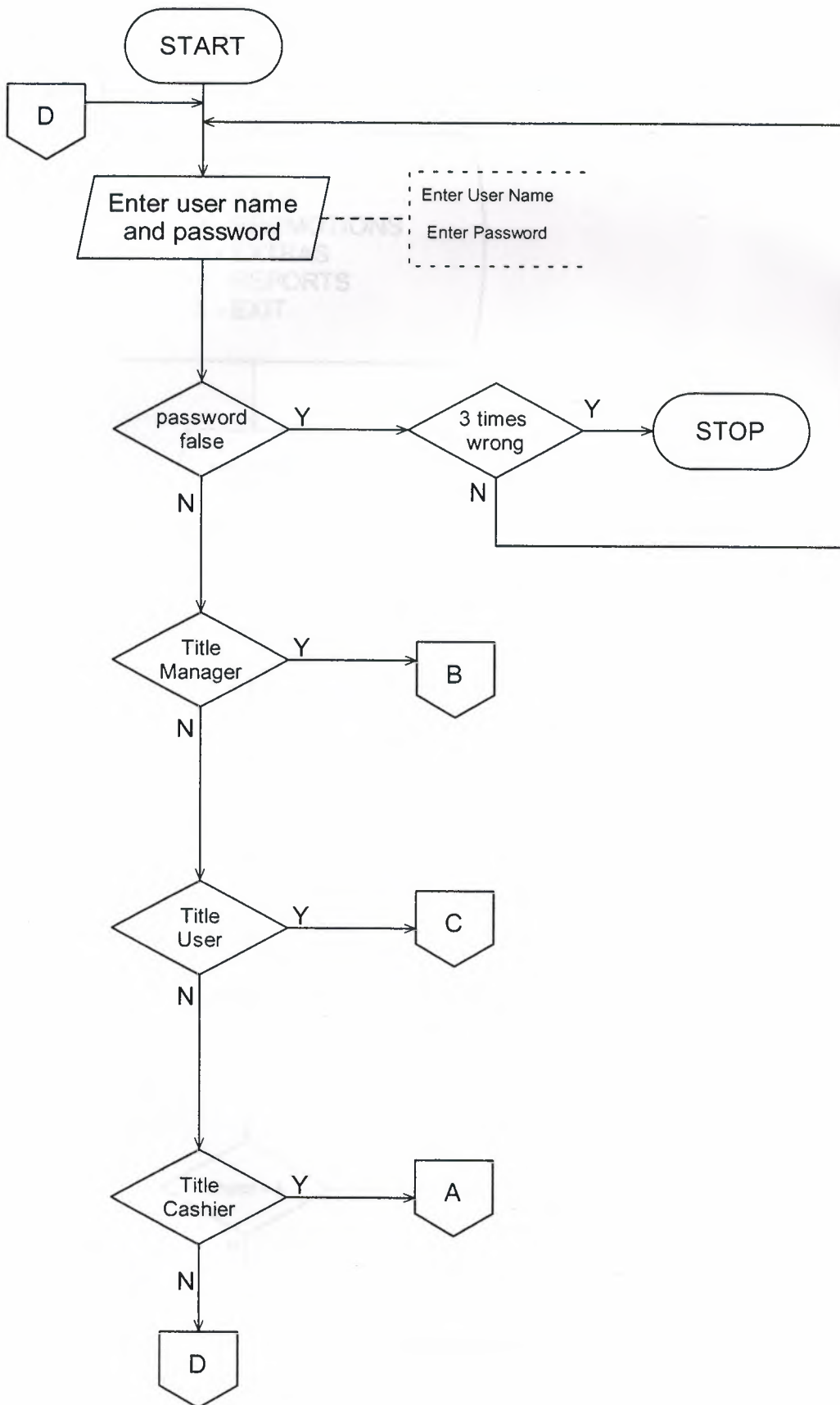
Assist...

10

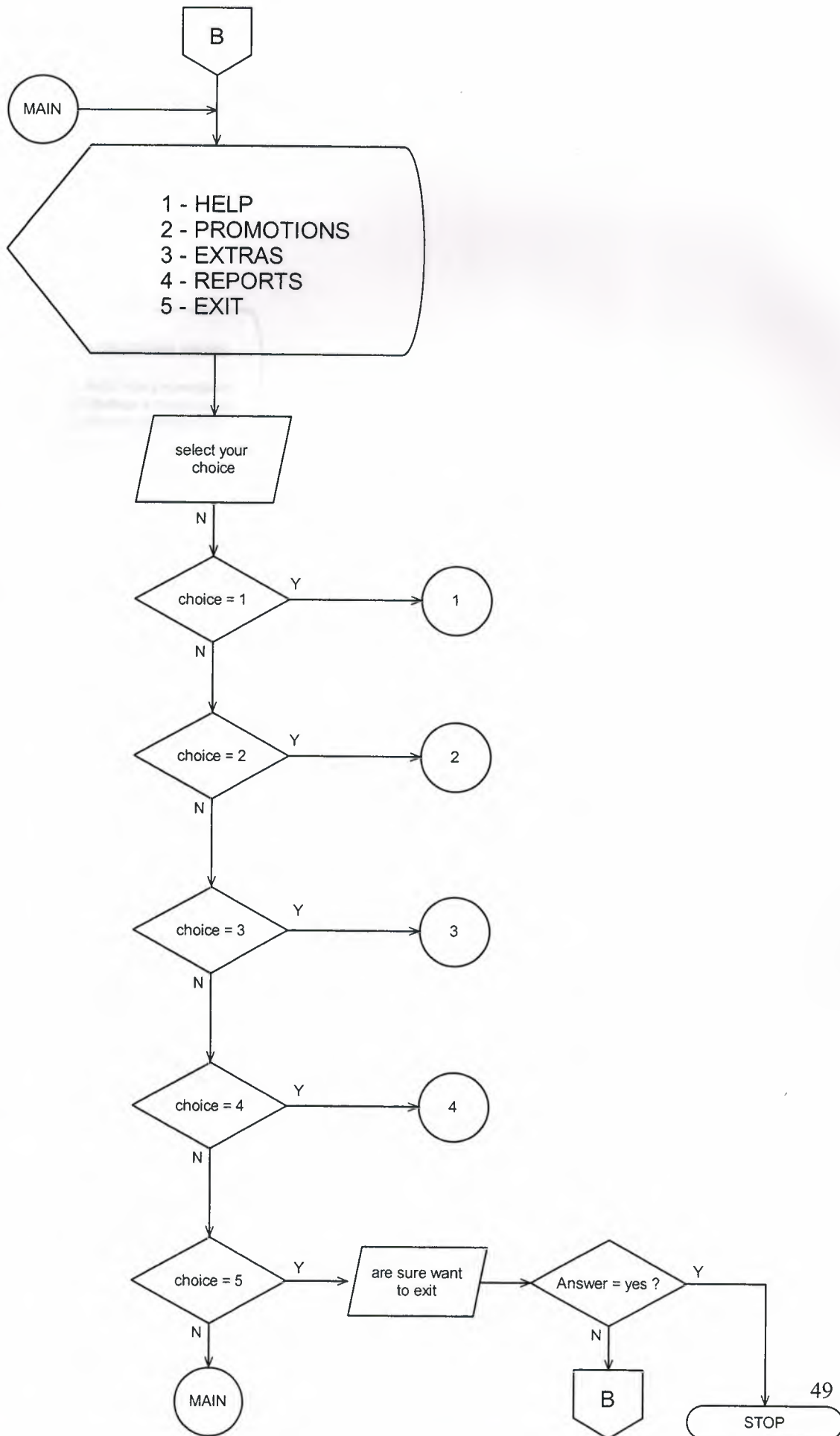


USER FLOW CHARTS

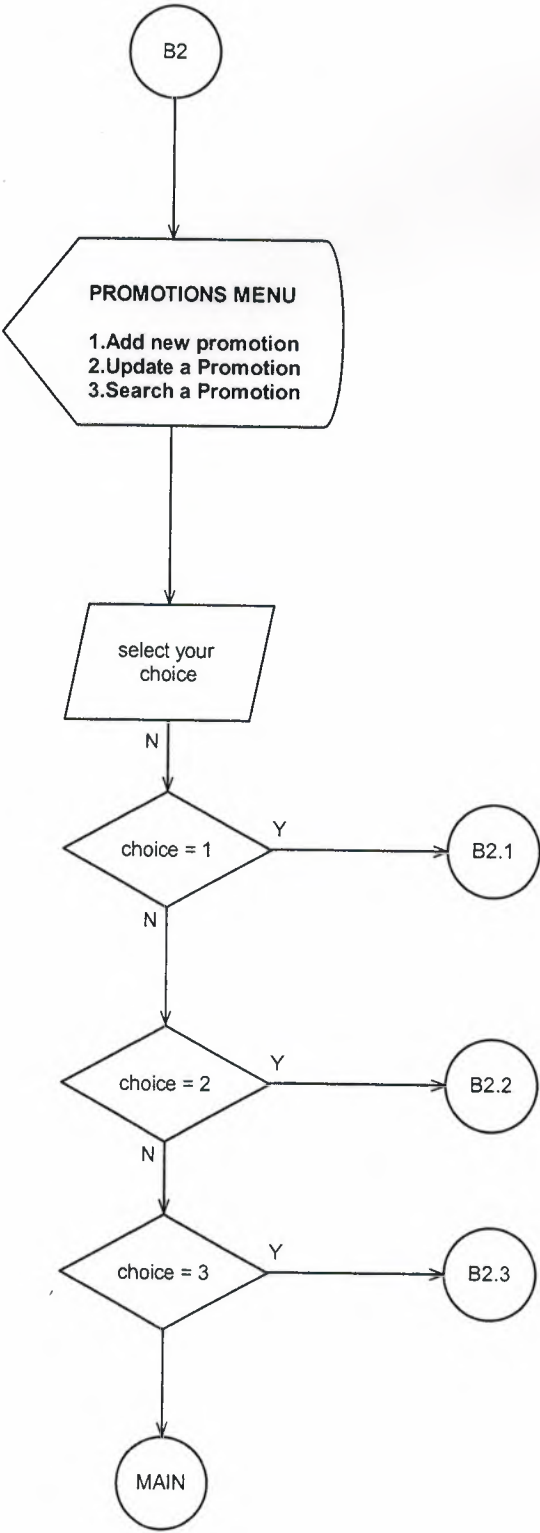
PASSWORD ENTRY



MAIN MENU

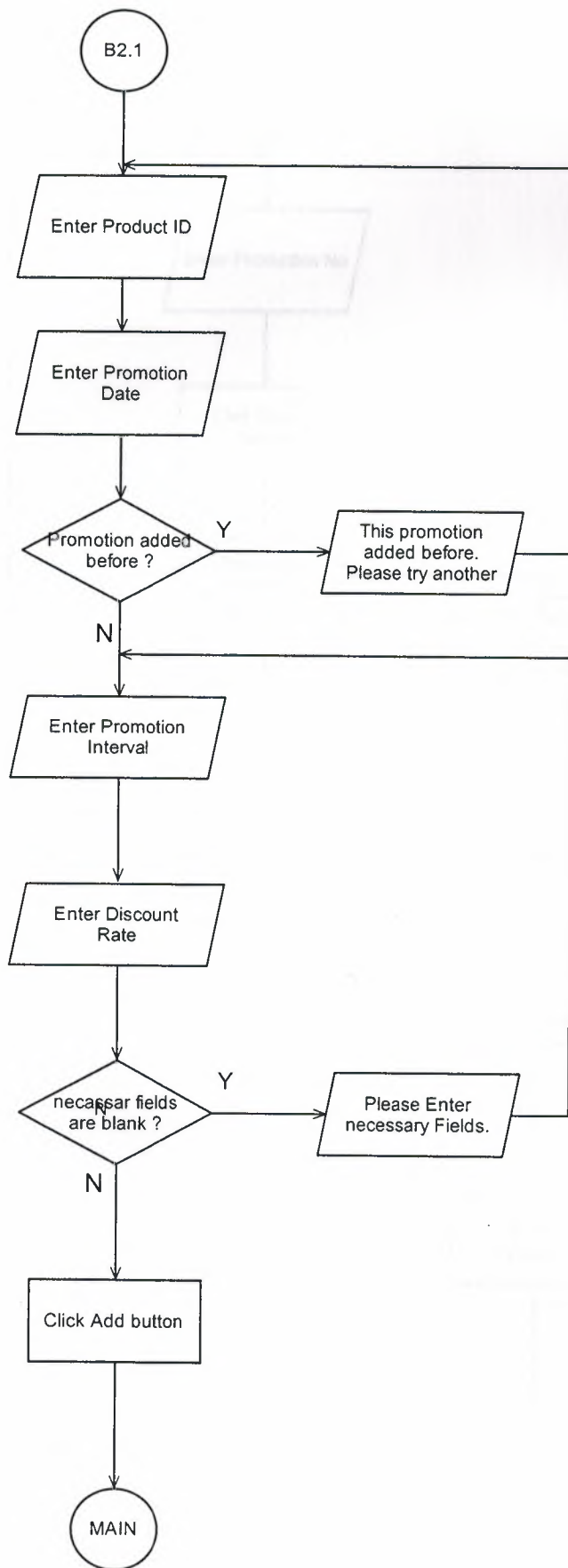


PROMOTIONS MENU

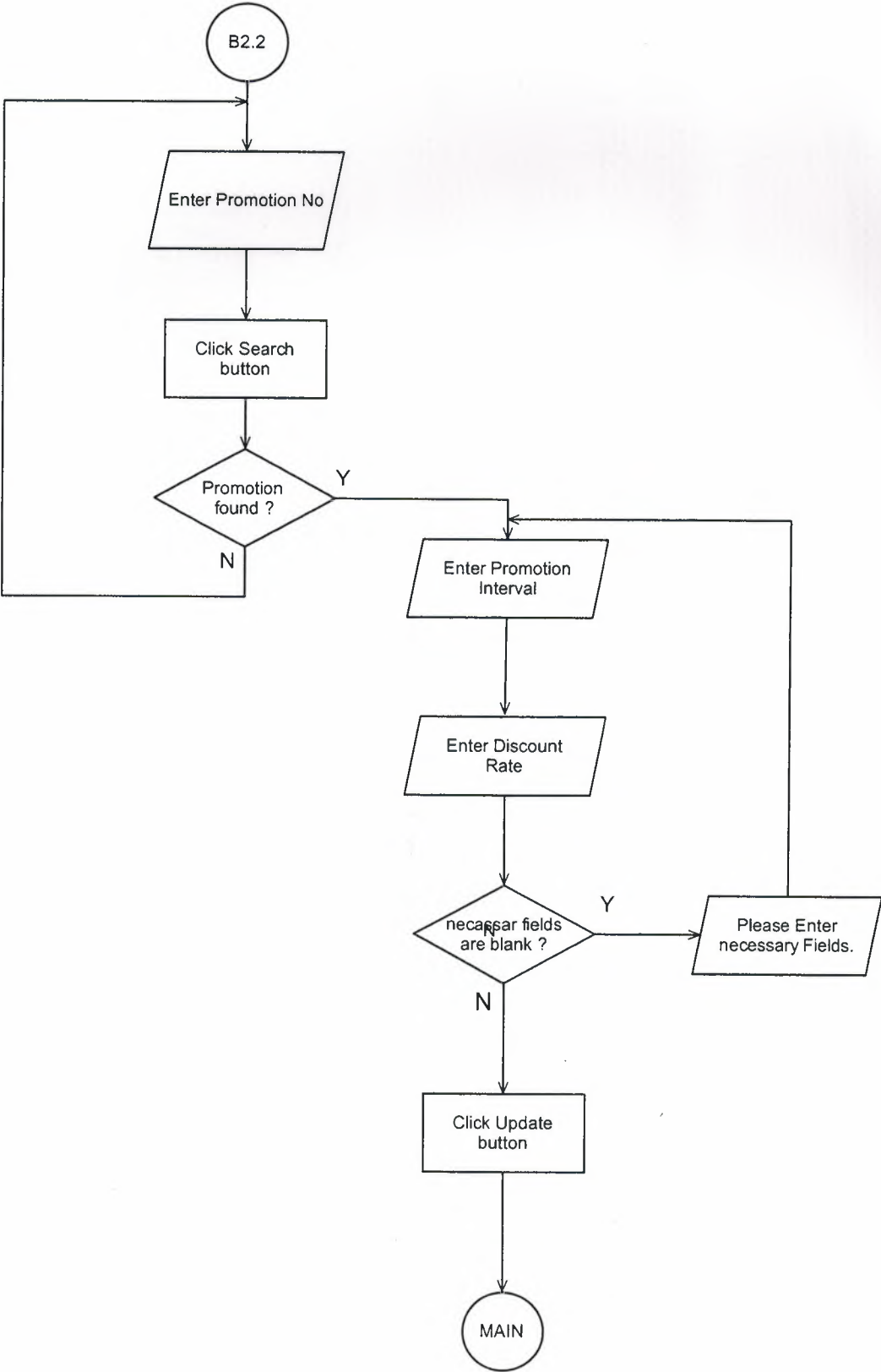




Add new Promotion



Update a Promotion

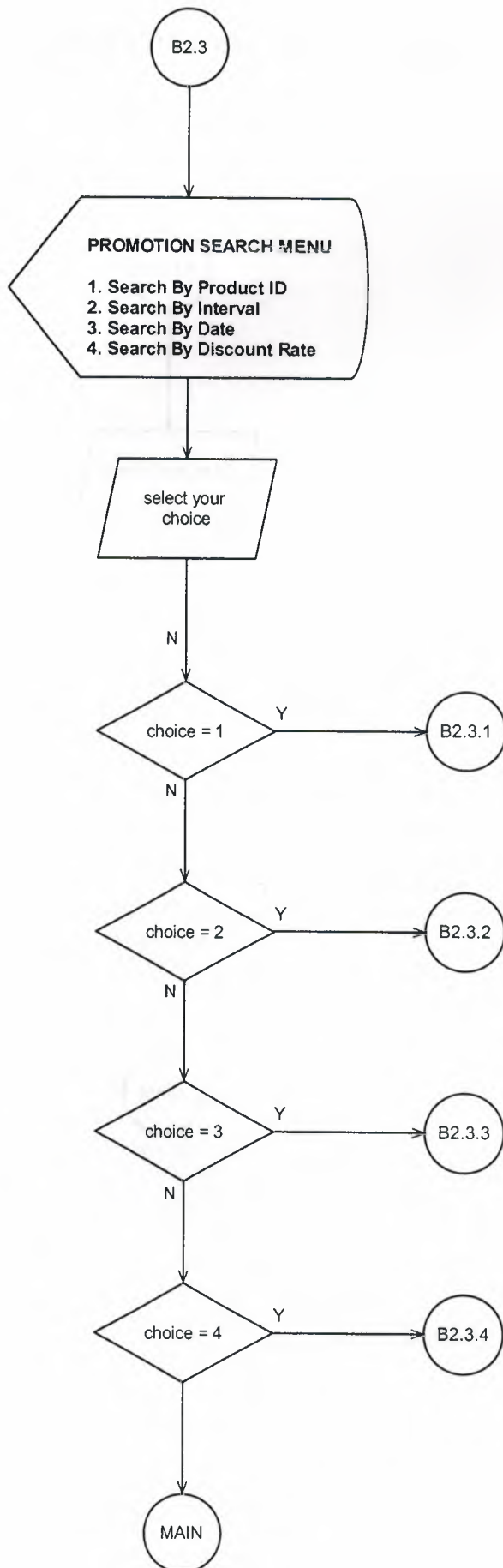


Search for documents

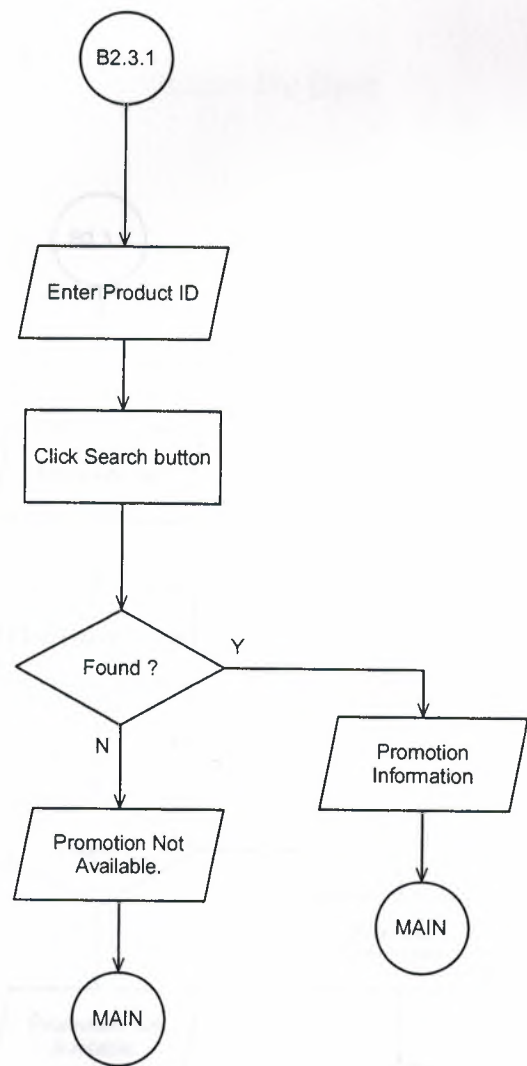
- 1. Search by Keyword
- 2. Search by Author
- 3. Search by Date
- 4. Search by Document Type



Promotion Search Menu

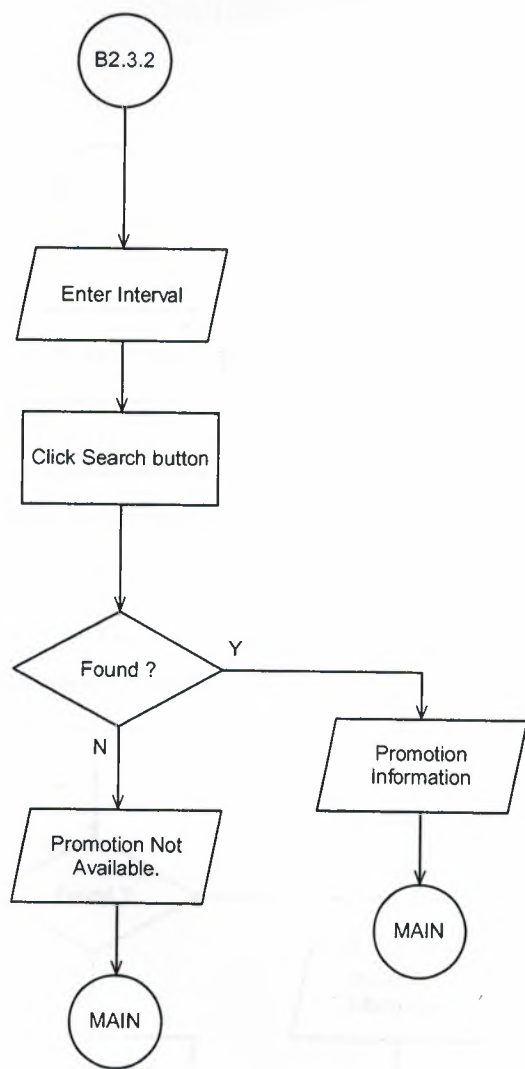


Search a Promotion By Product ID

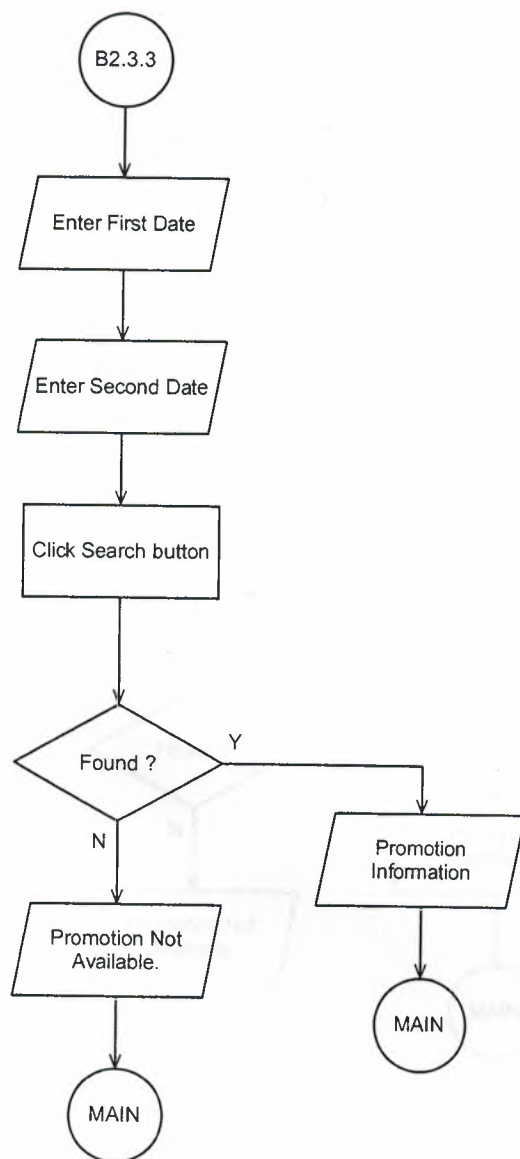


Search a Promotion By Interval

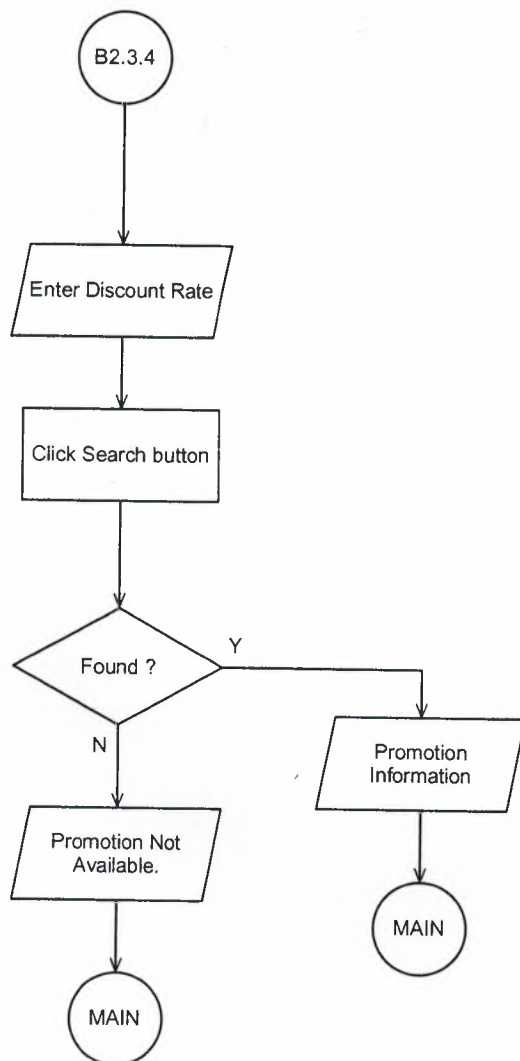
Search a Promotion By Date



Search a Promotion By Date

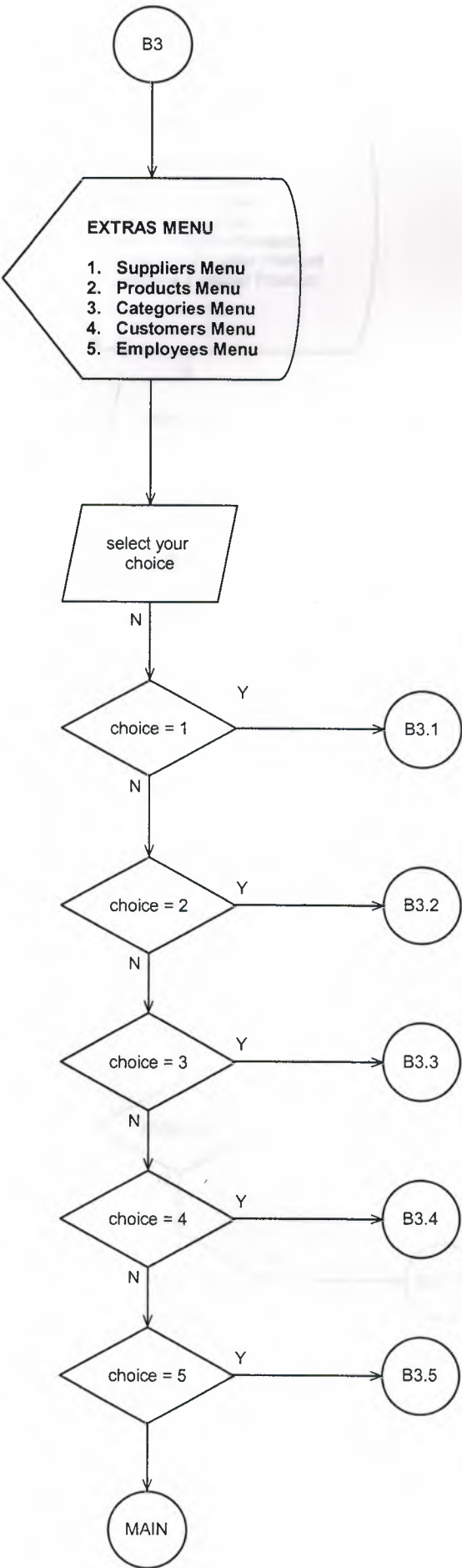


Search a Promotion By Discount Rate

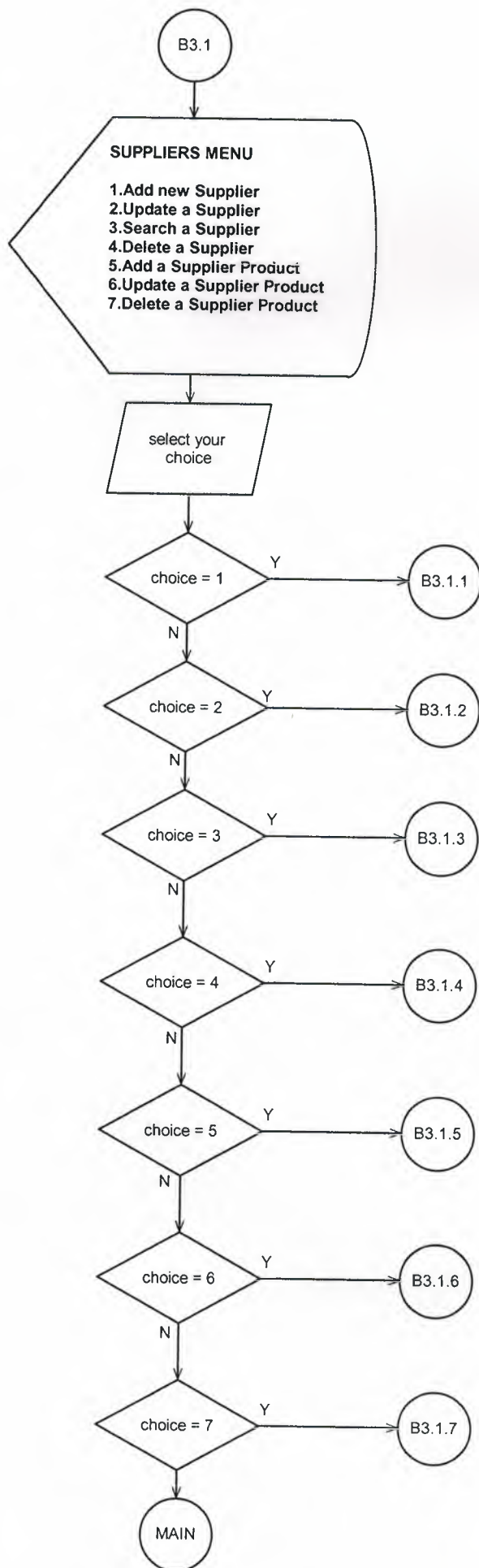




EXTRAS MENU

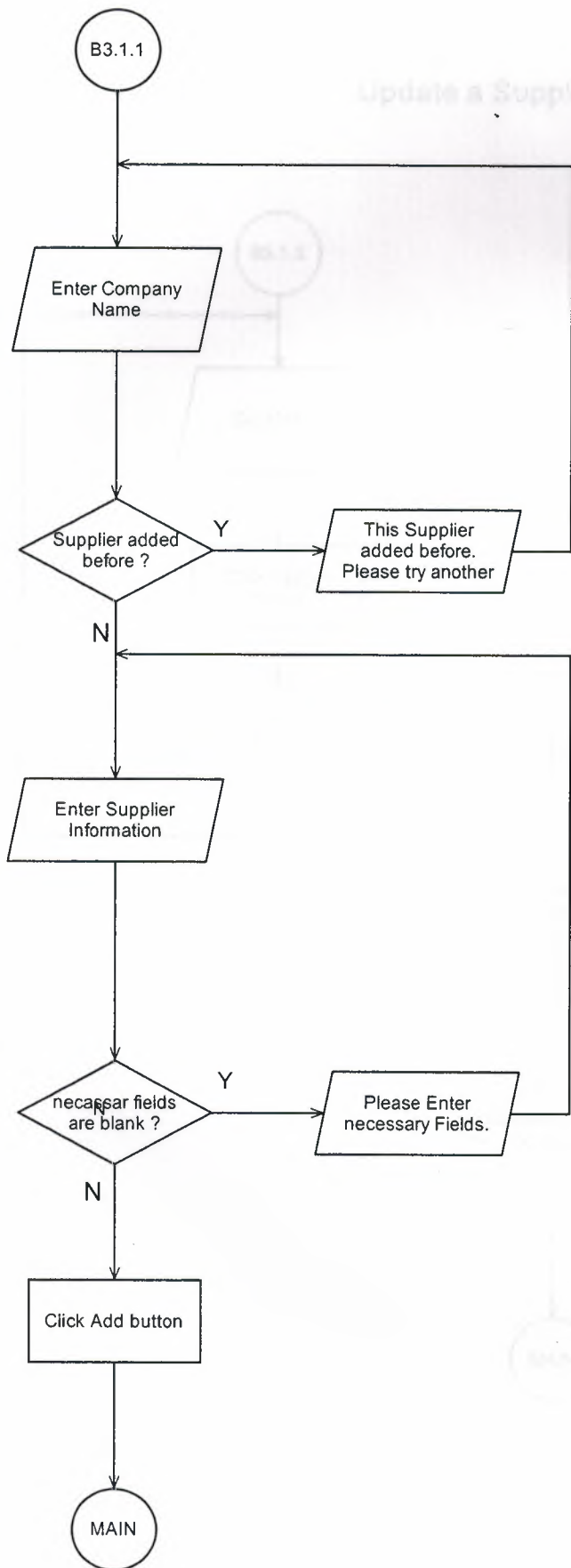


SUPPLIERS MENU

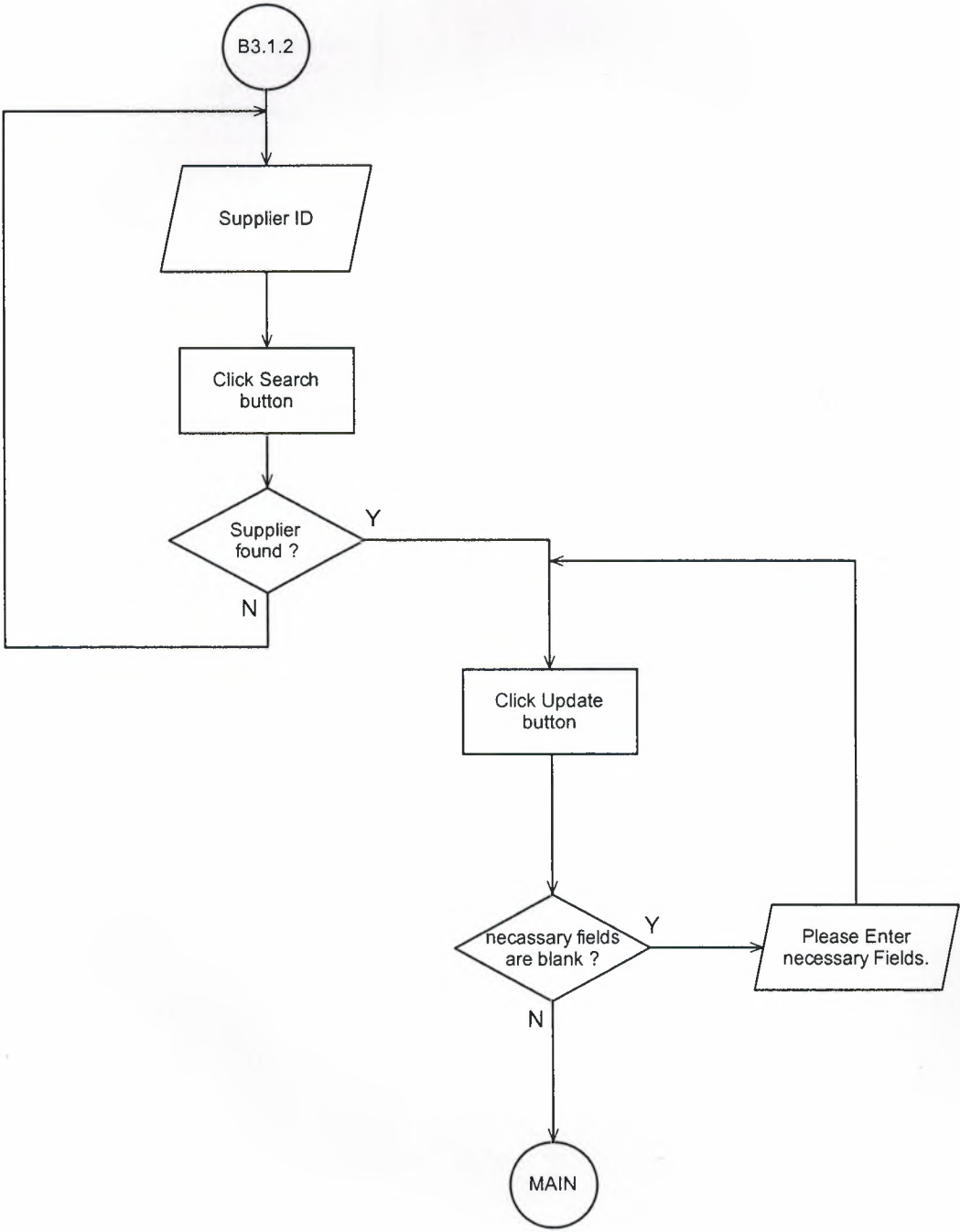




Add new Supplier



Update a Supplier



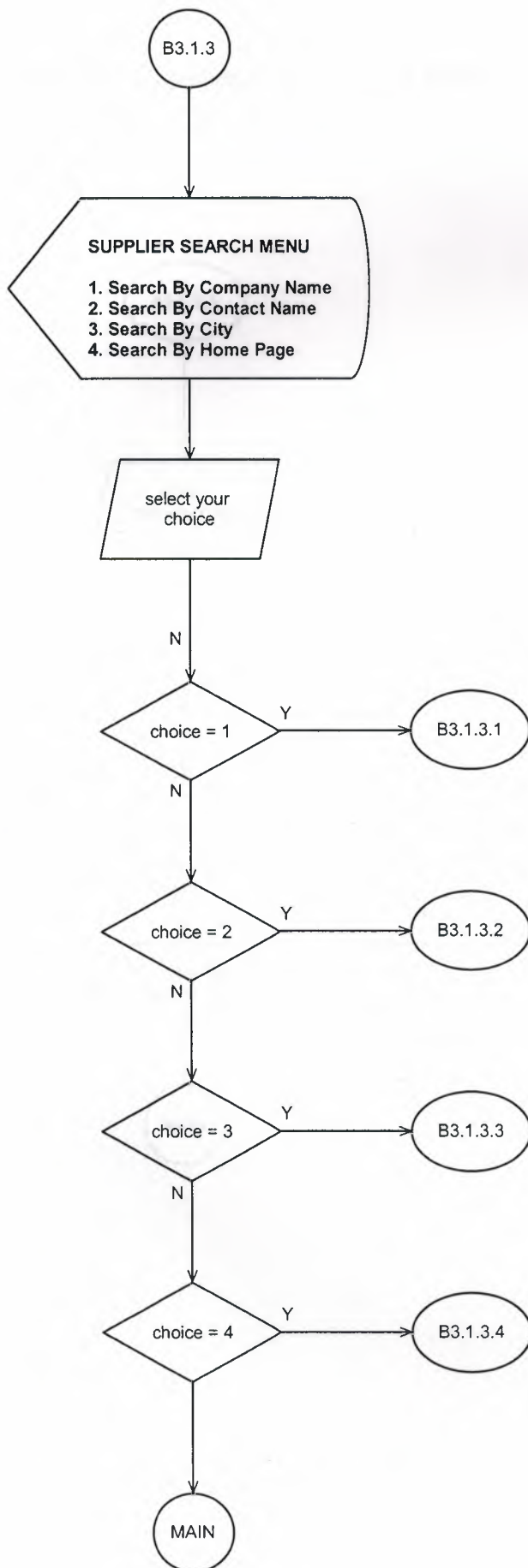
SEARCH BY NAME MENU

- 1. Search By Composite Name
- 2. Search By Contact Name
- 3. Search By City
- 4. Search By Home Page

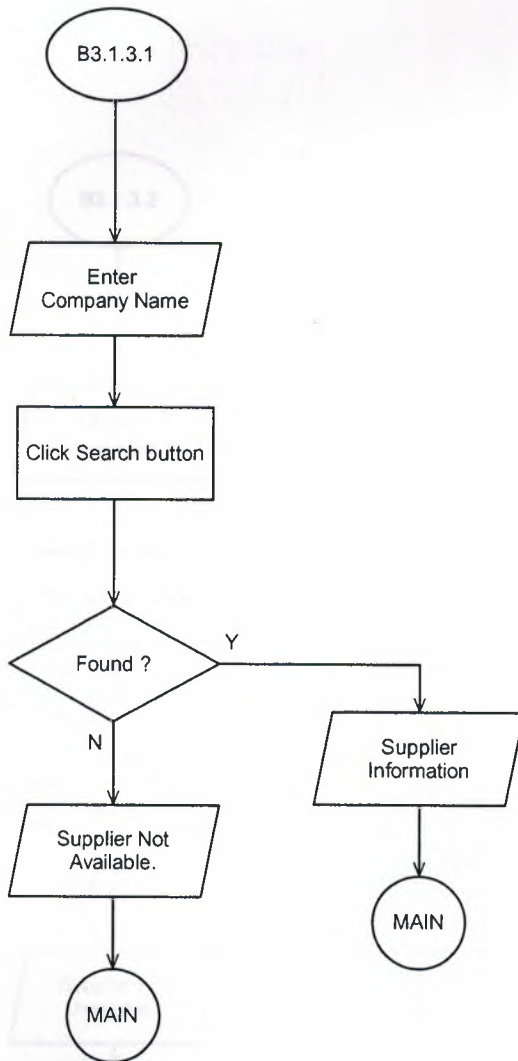
SEARCH BY NAME



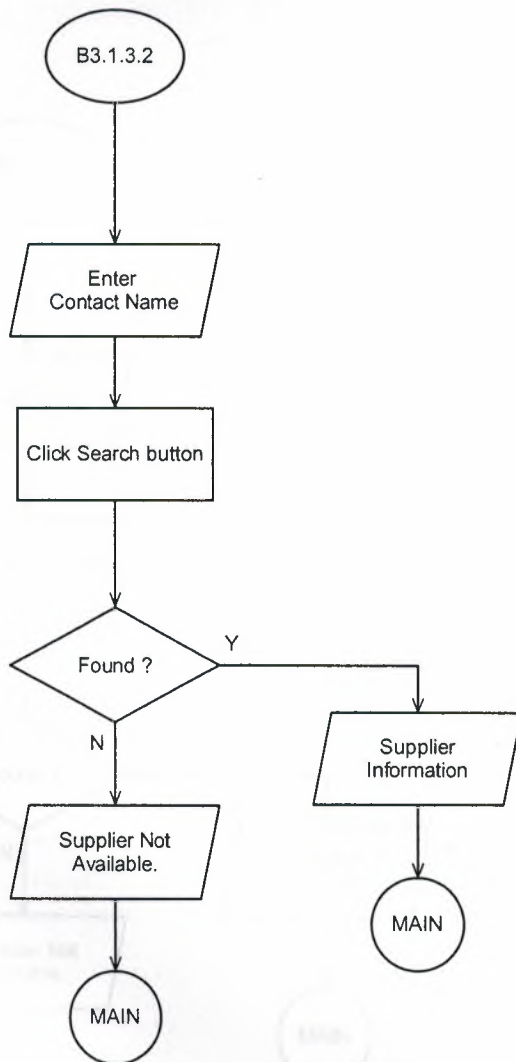
Supplier Search Menu



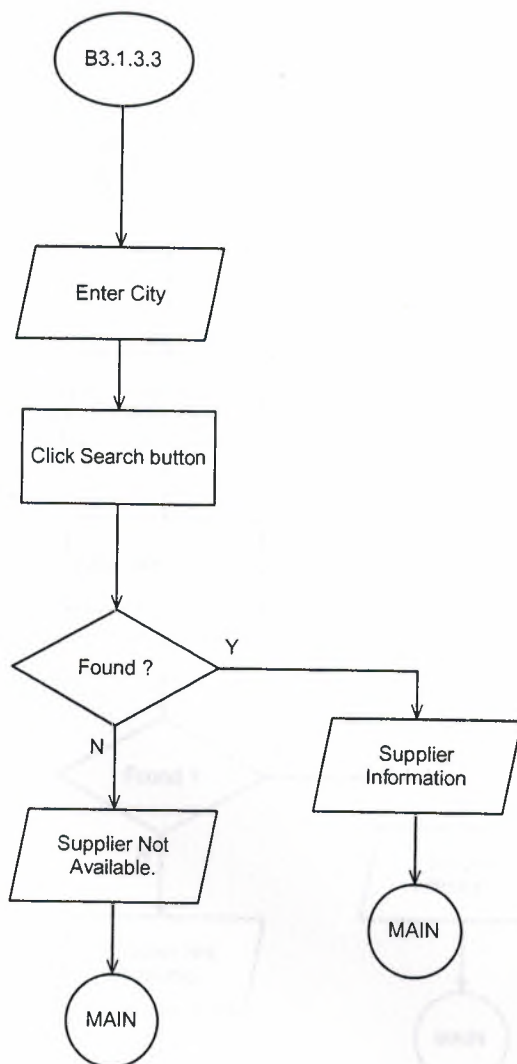
Search a Supplier By Company Name



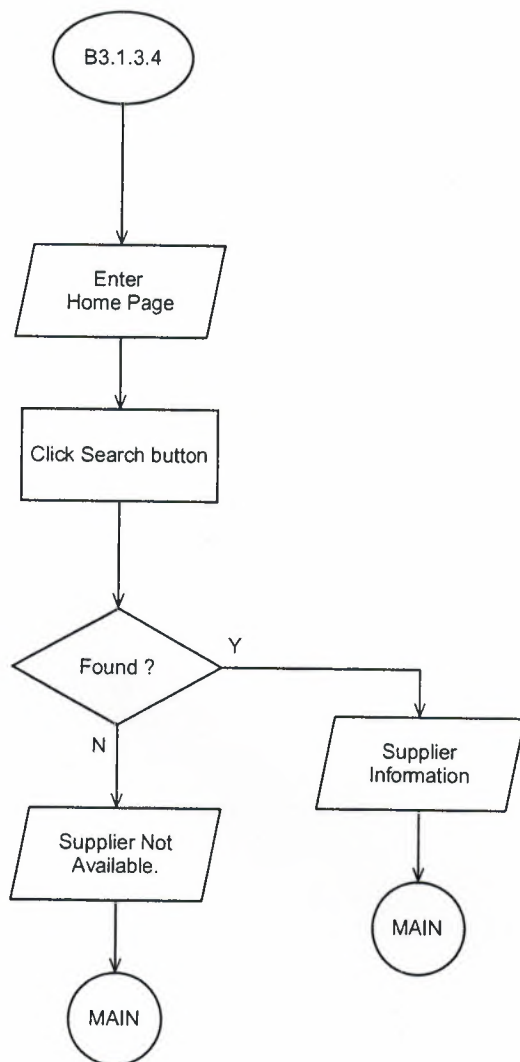
Search a Supplier By Contact Name



Search a Supplier By City

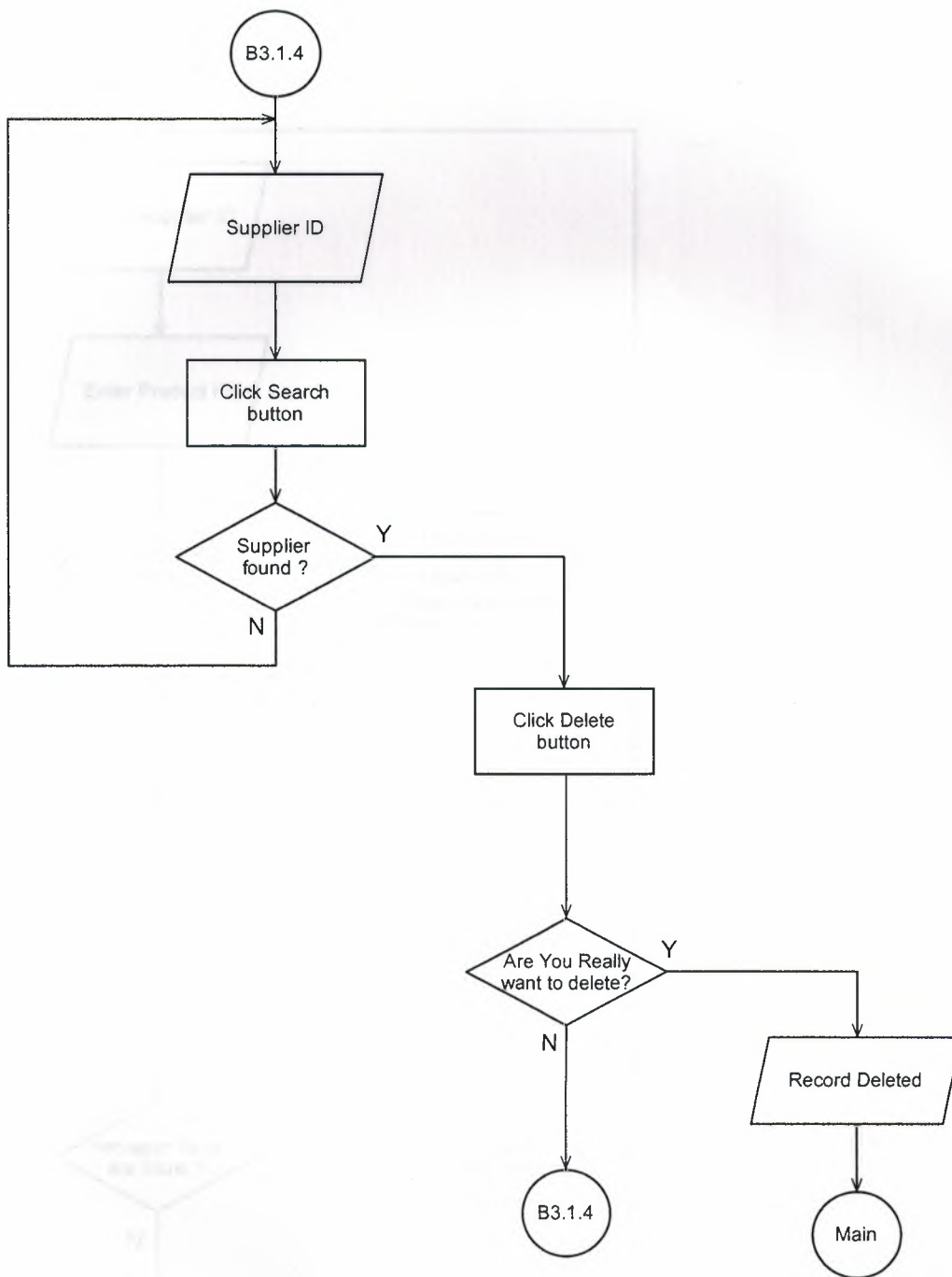


Search a Supplier By Home Page

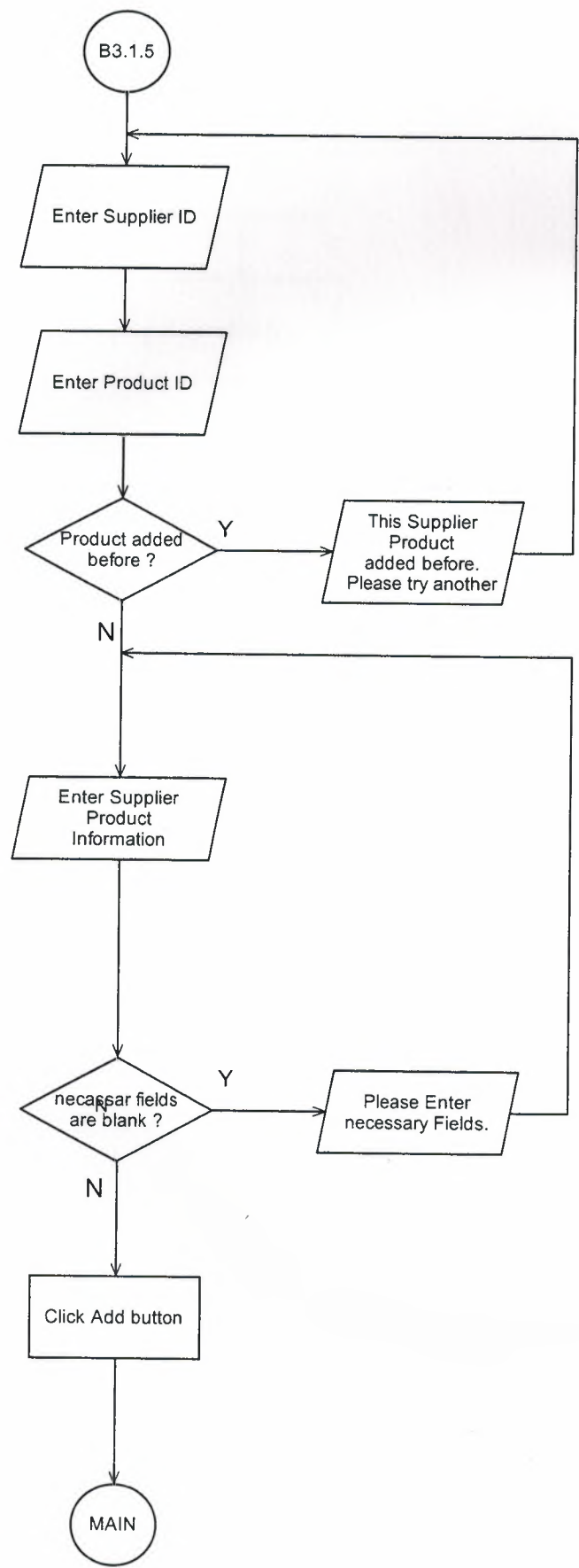




Delete a Supplier

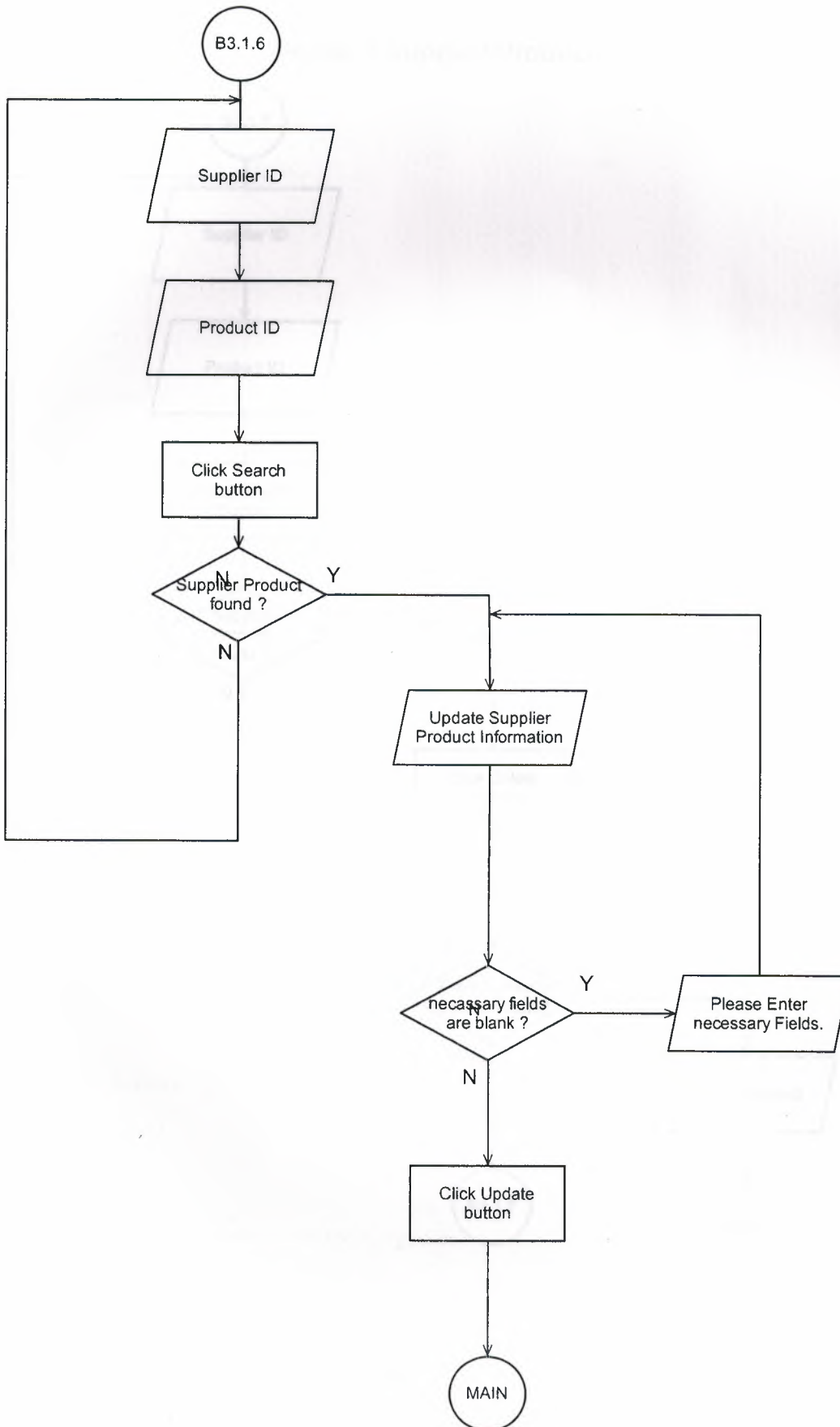


Add a Supplier Product

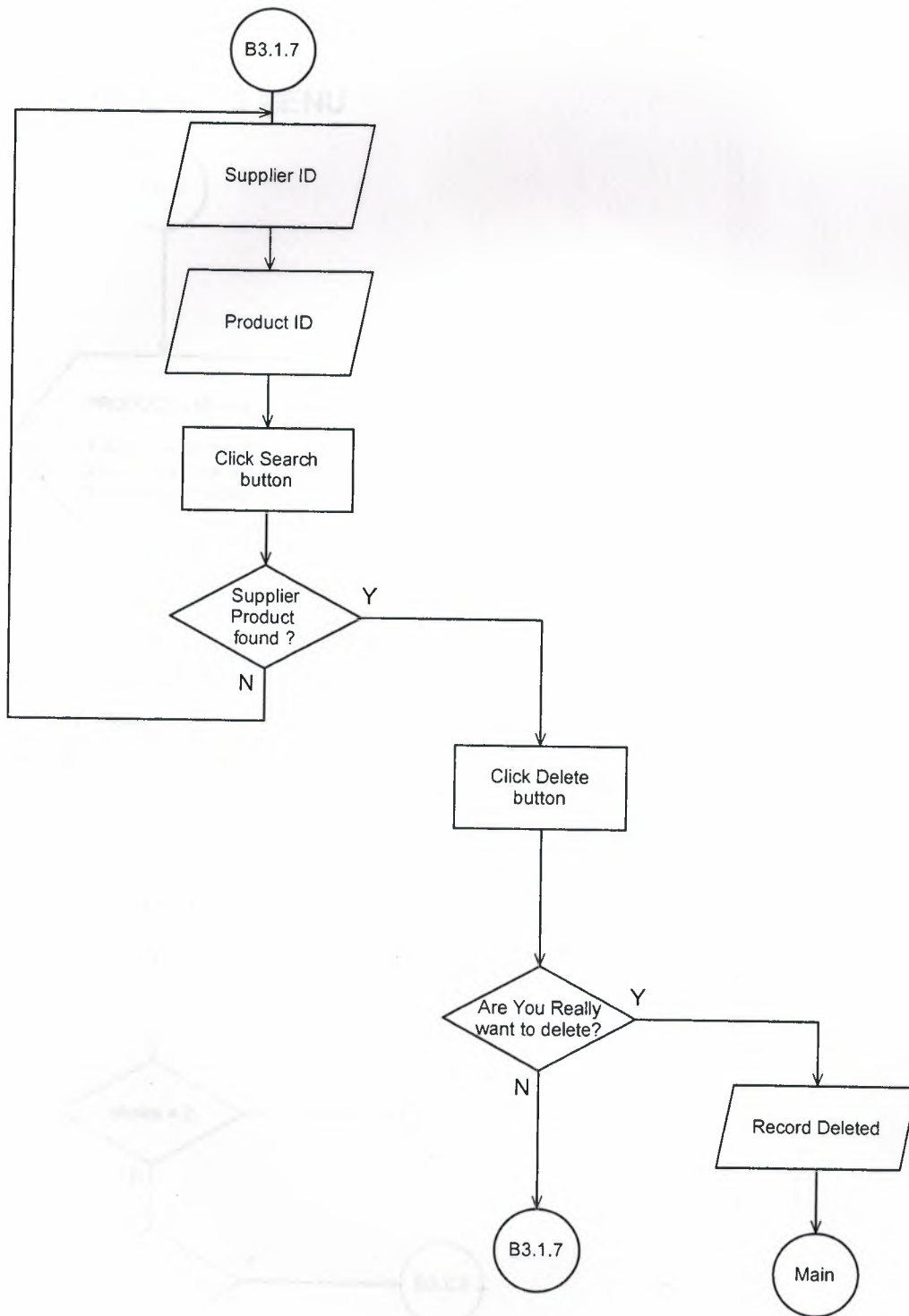




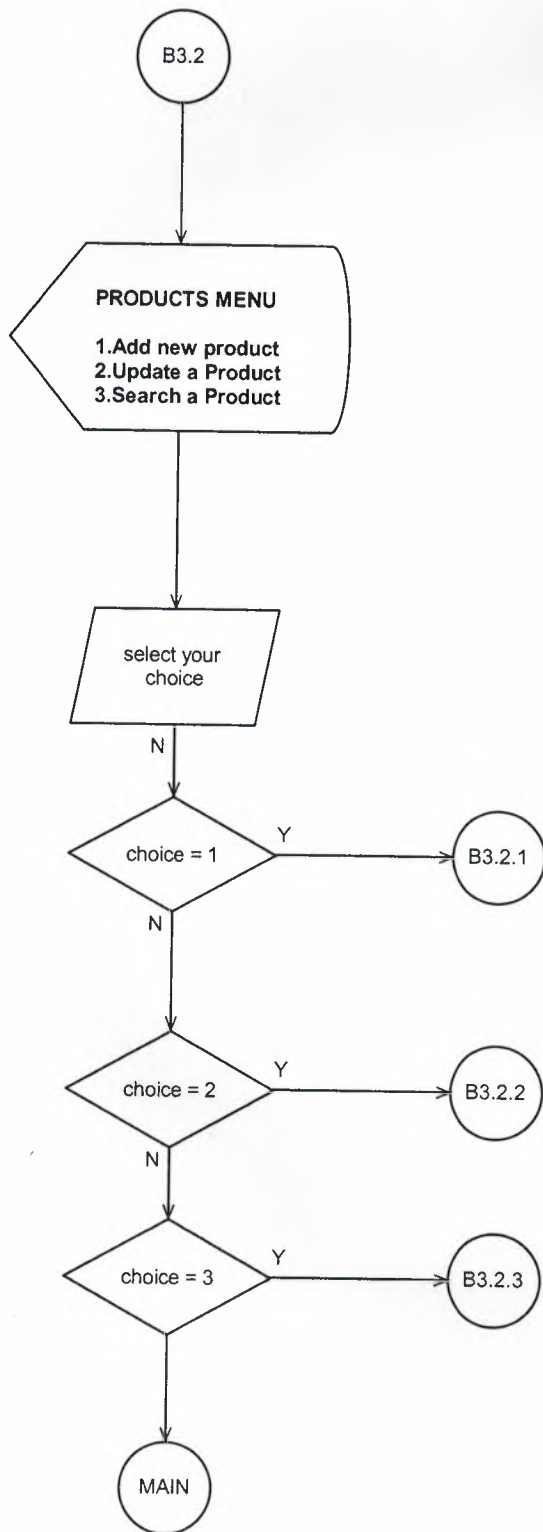
Update a Supplier Product



Delete a Supplier Product



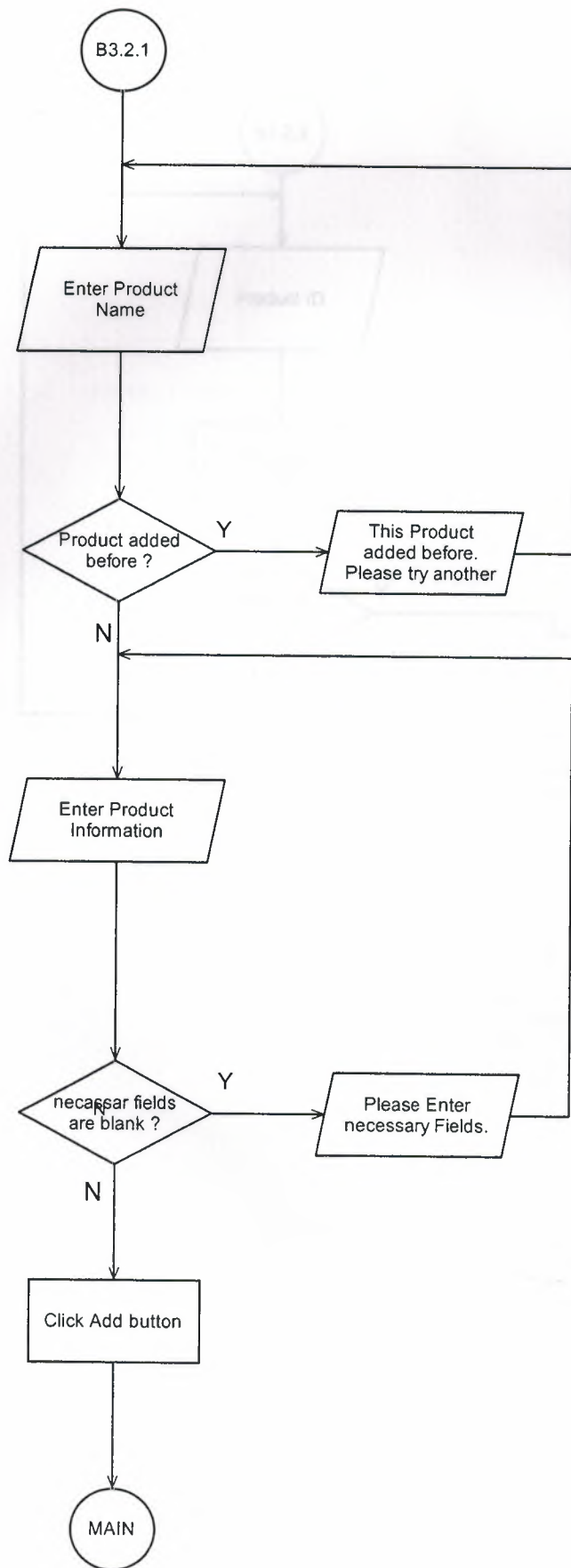
PRODUCTS MENU



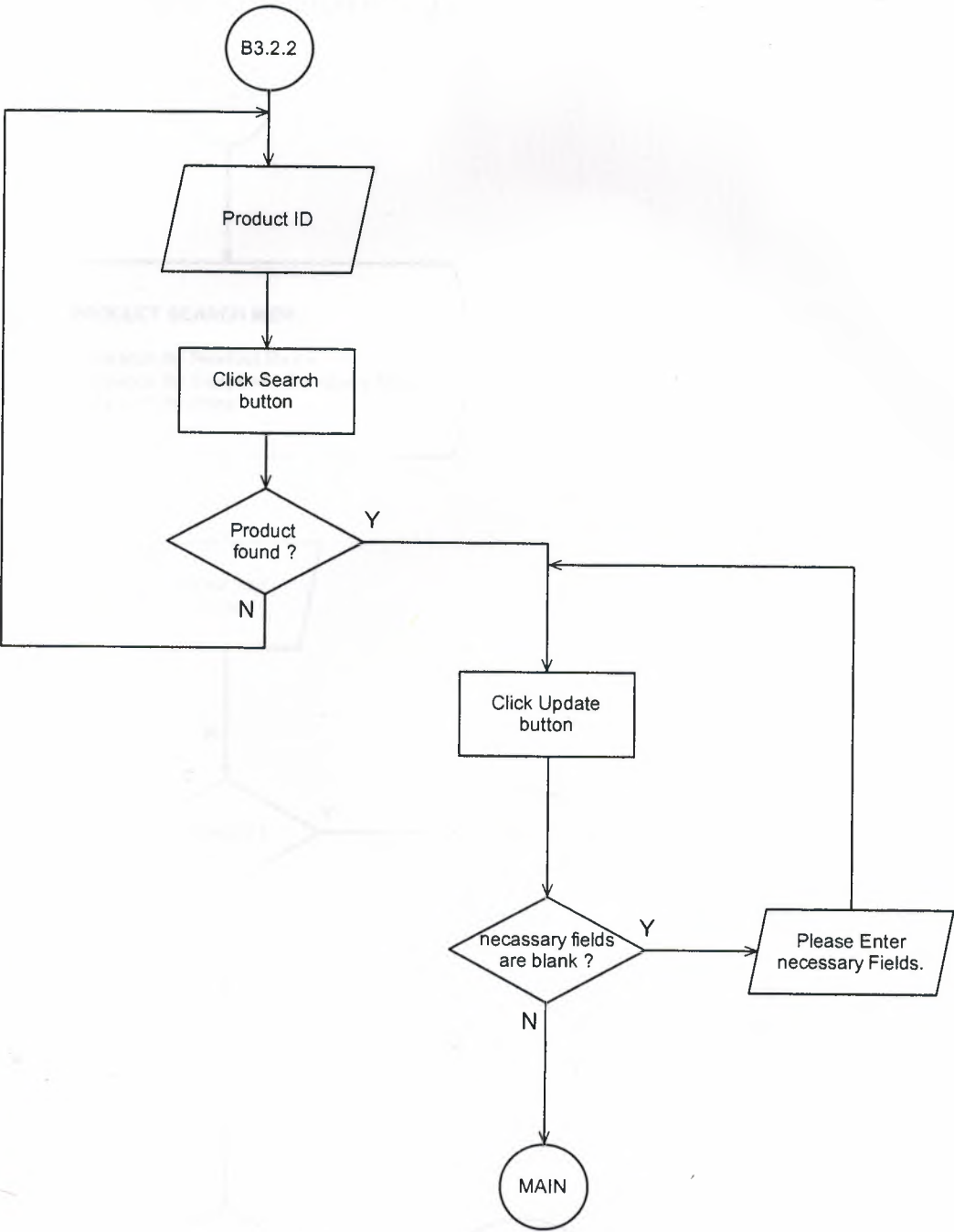
Flow



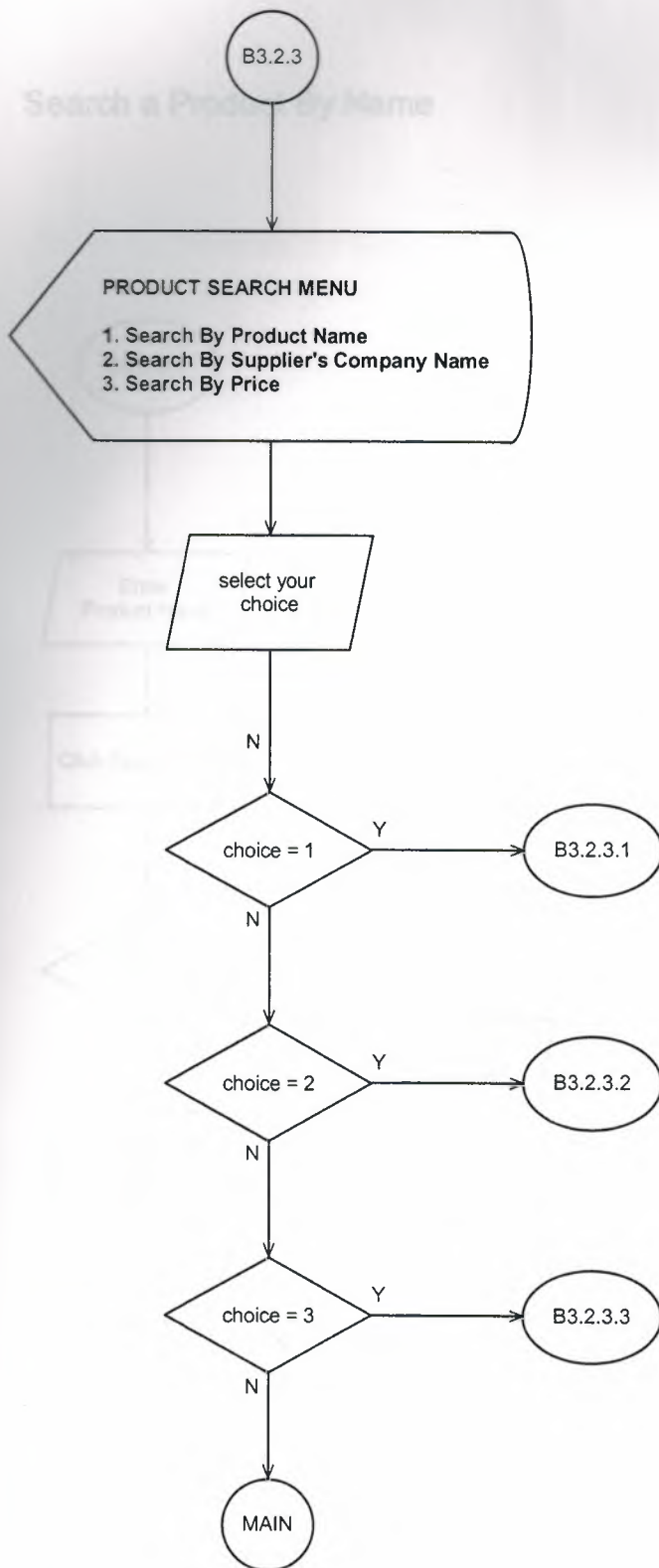
Add new Product



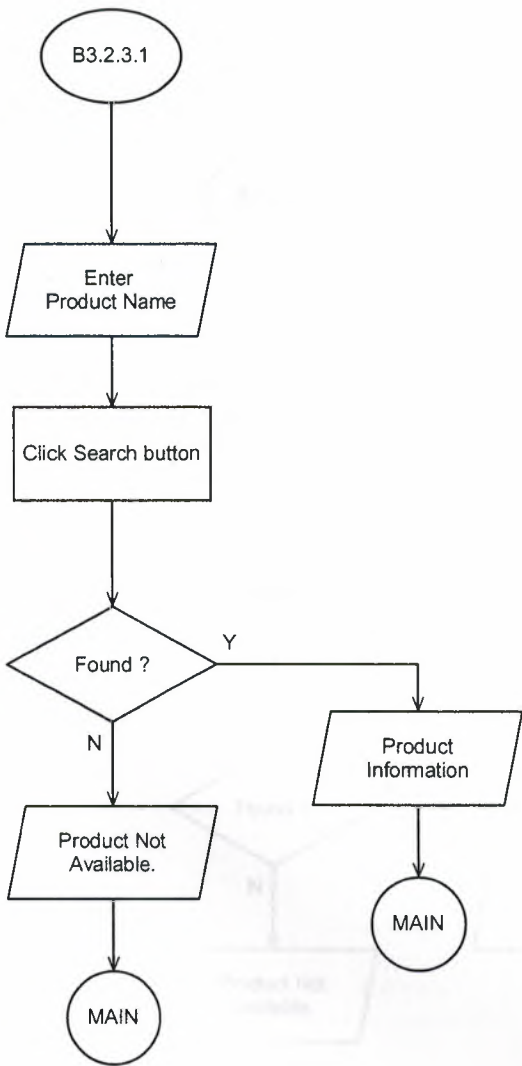
Update a Product



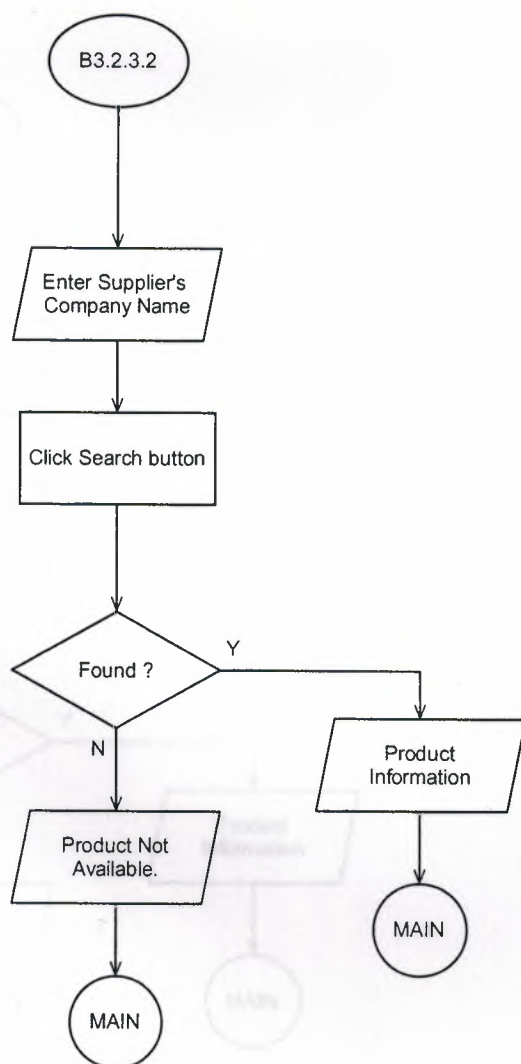
Product Search Menu



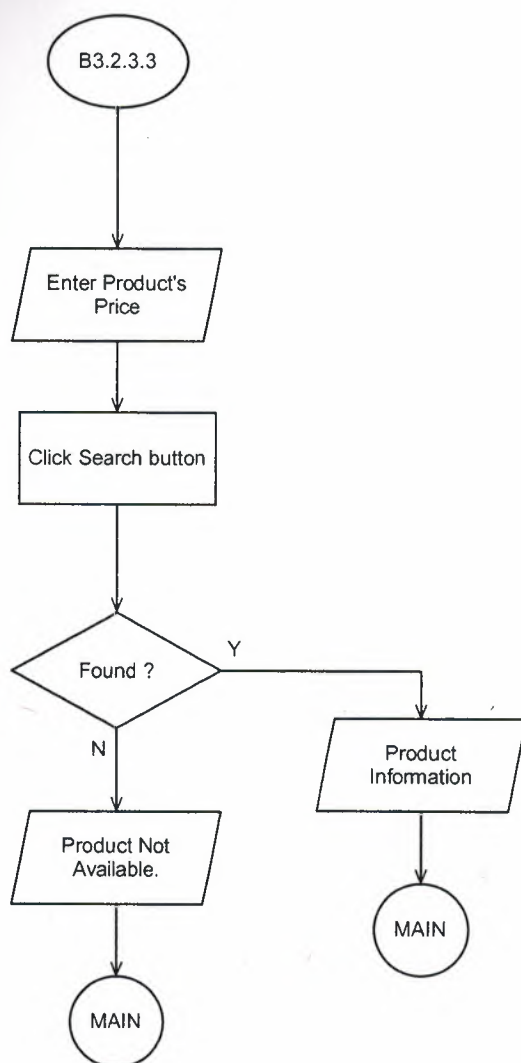
Search a Product By Name



Search a Product By Supplier's Company Name



Search a Product By Price

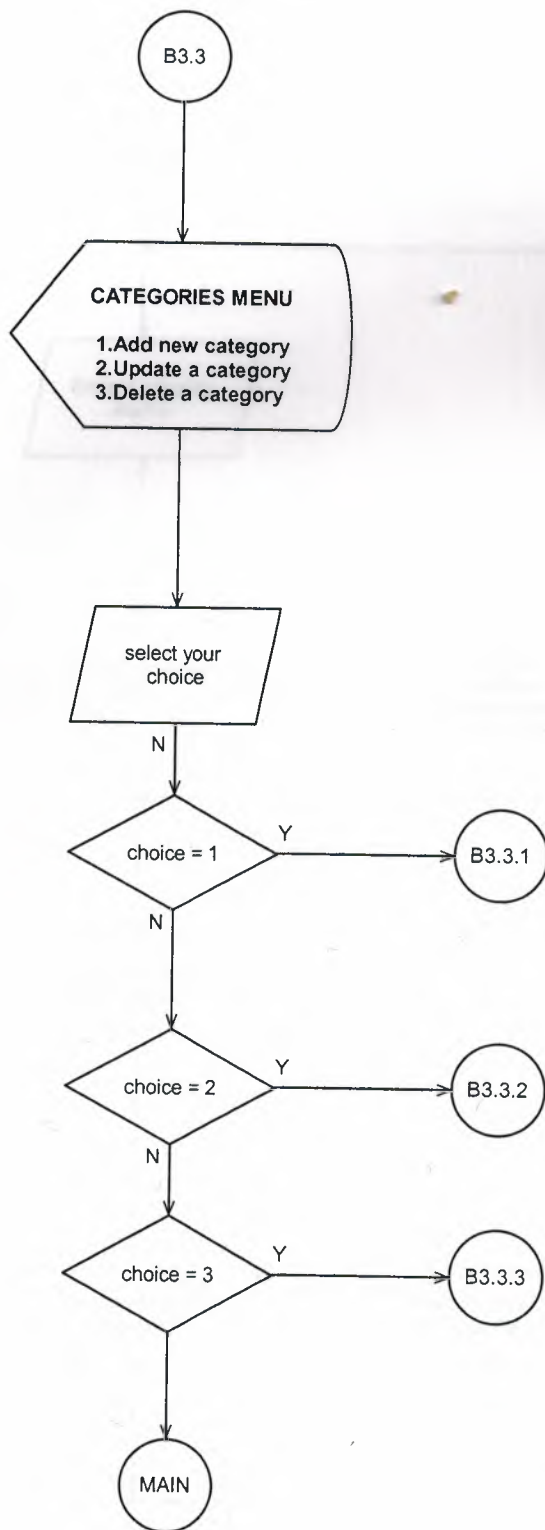


MANAGEMENT MENU

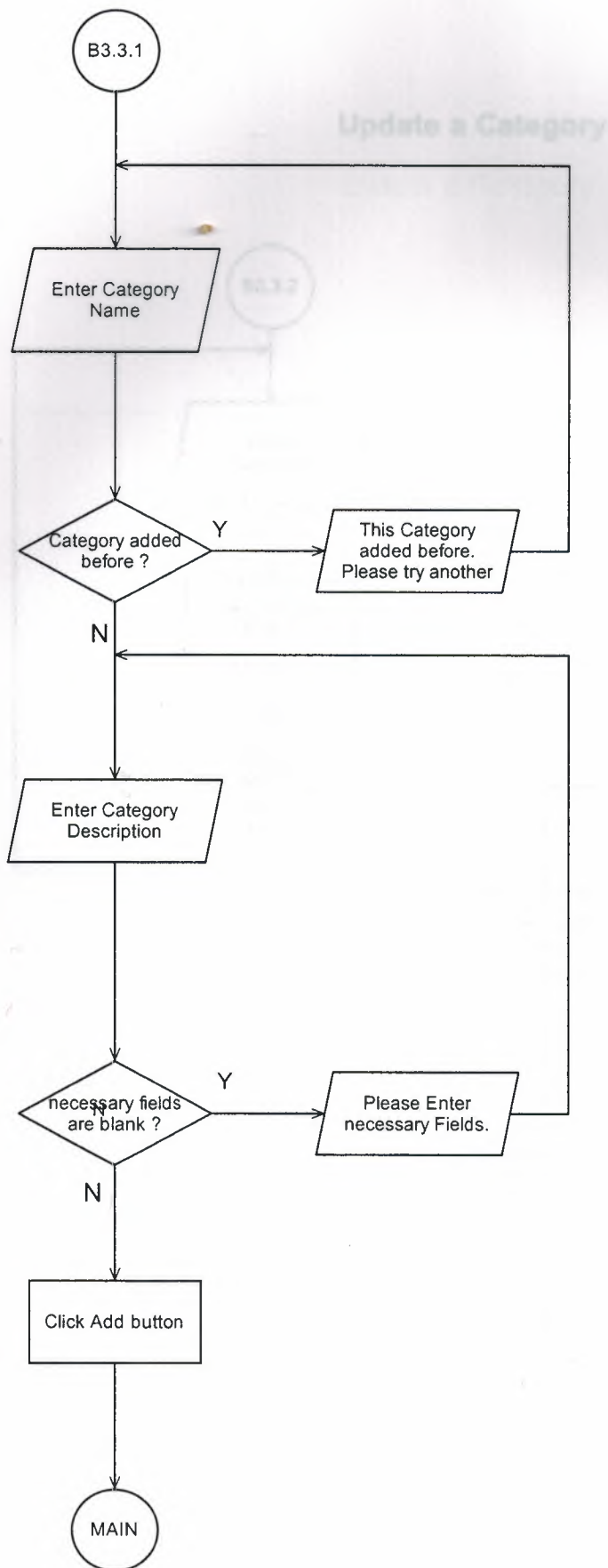
1. Add new category
2. Update a category
3. Delete a category



CATEGORIES MENU

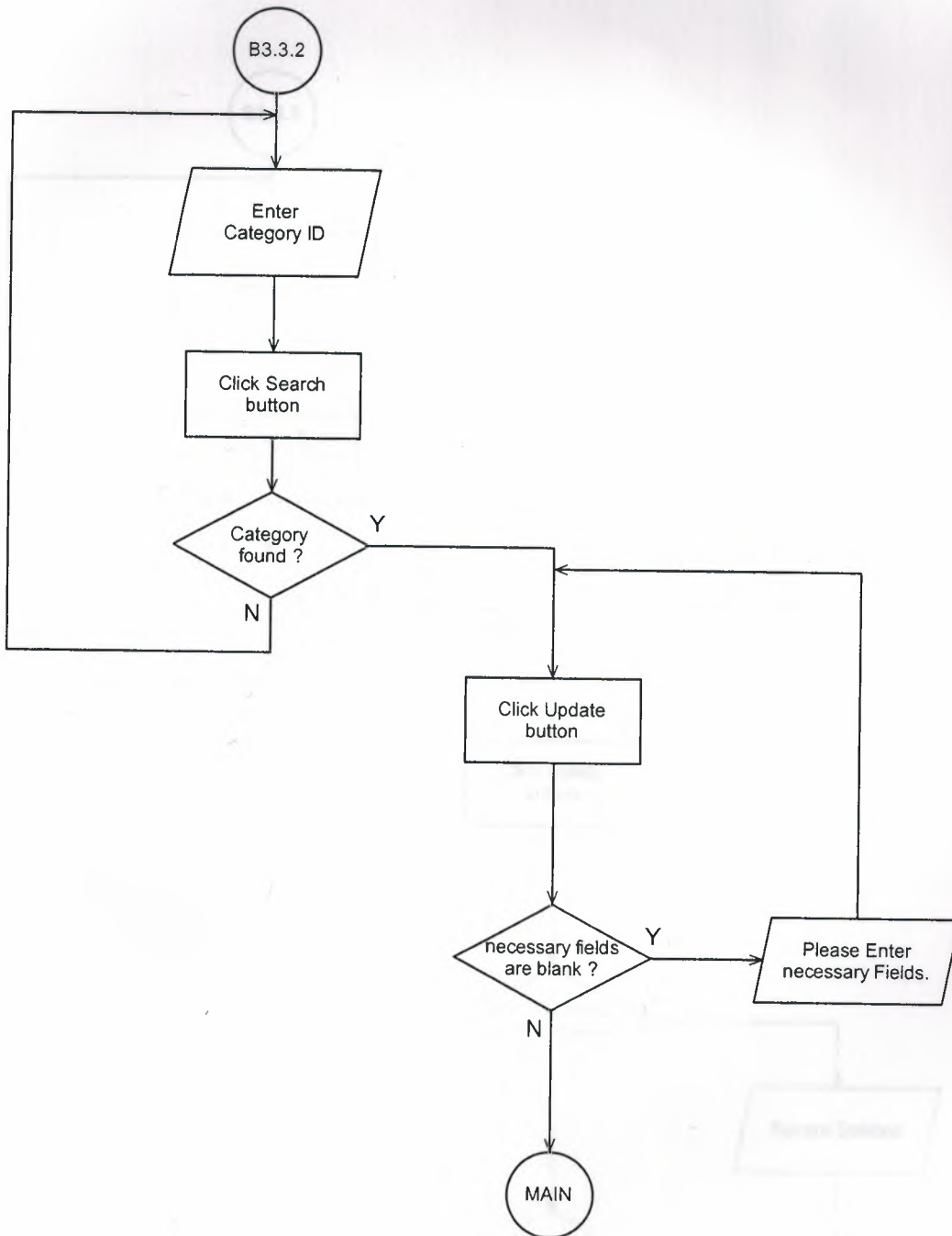


Add new Category

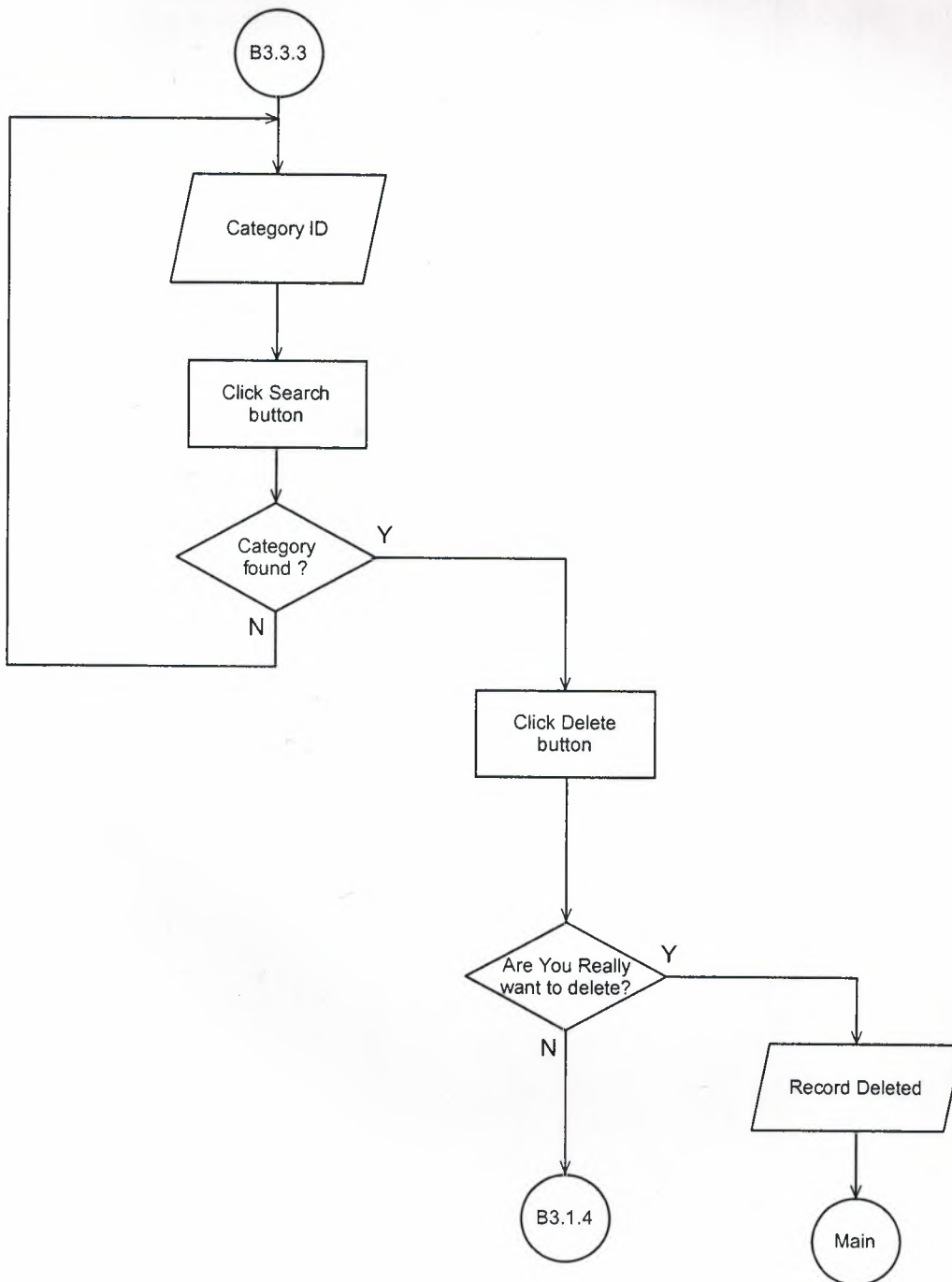


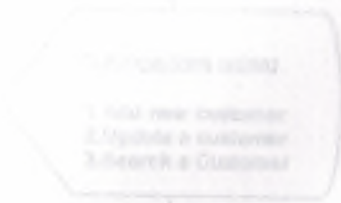
Update a Category

Delete a Category

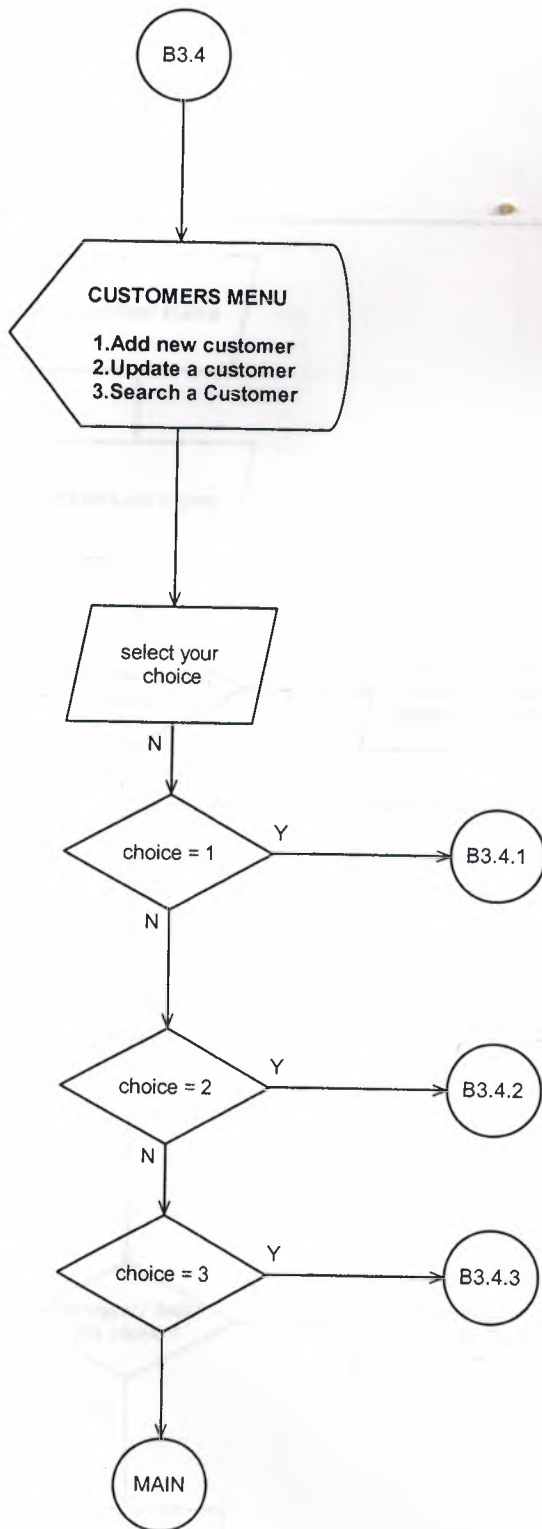


Delete a Category

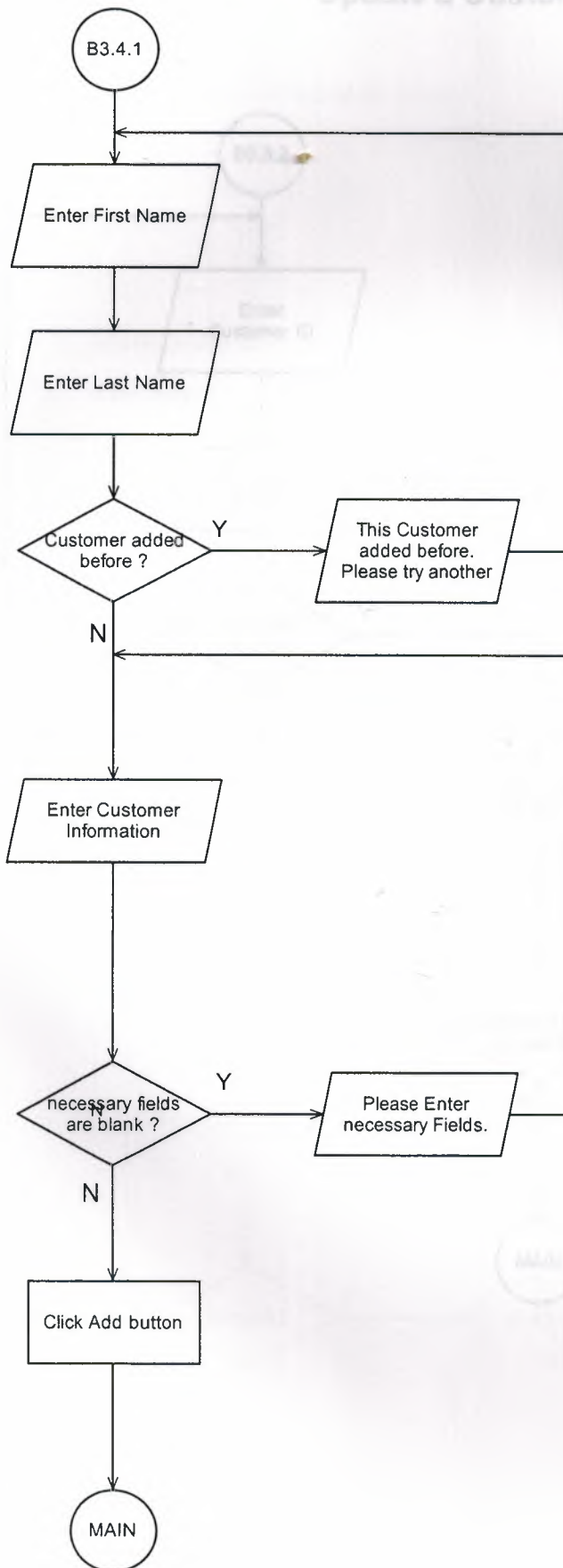




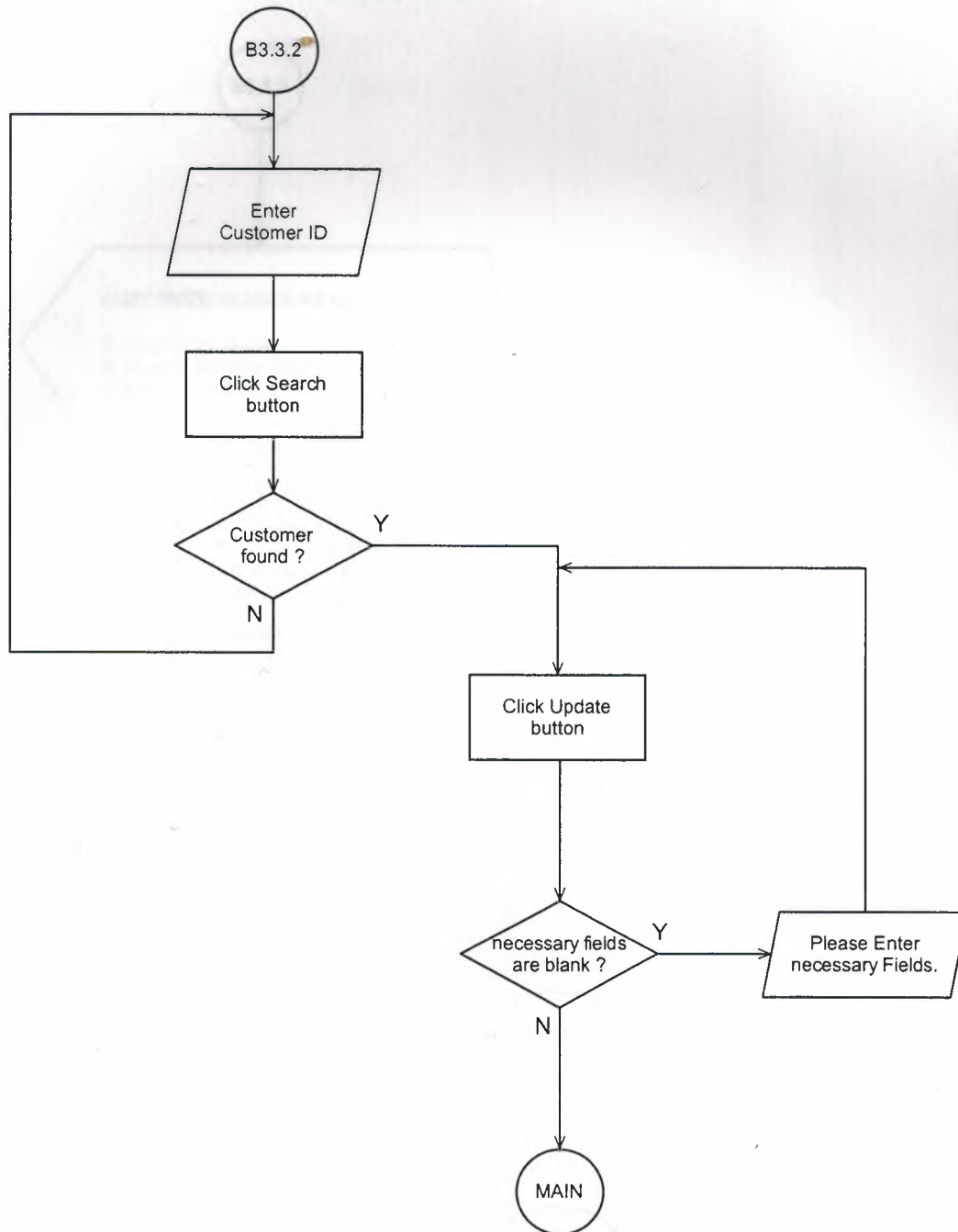
CUSTOMERS MENU



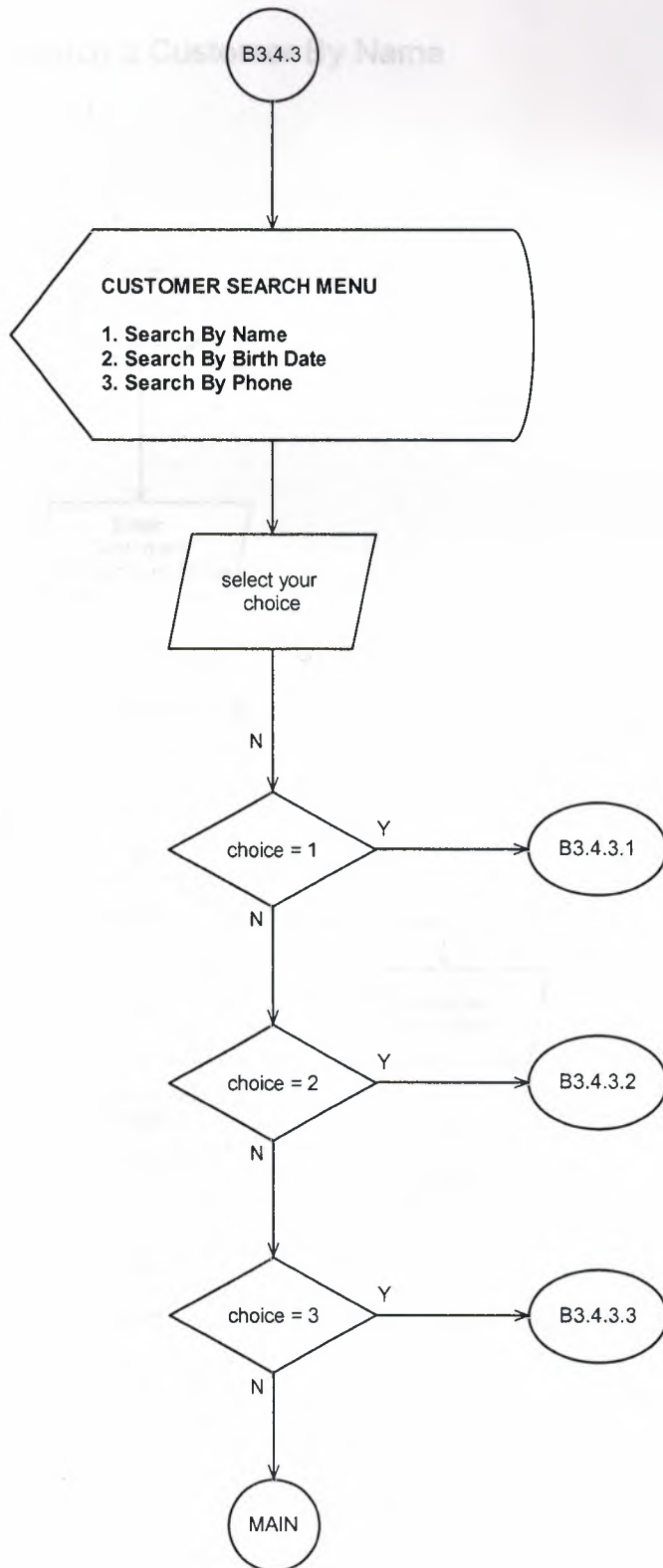
Add a Customer



Update a Customer

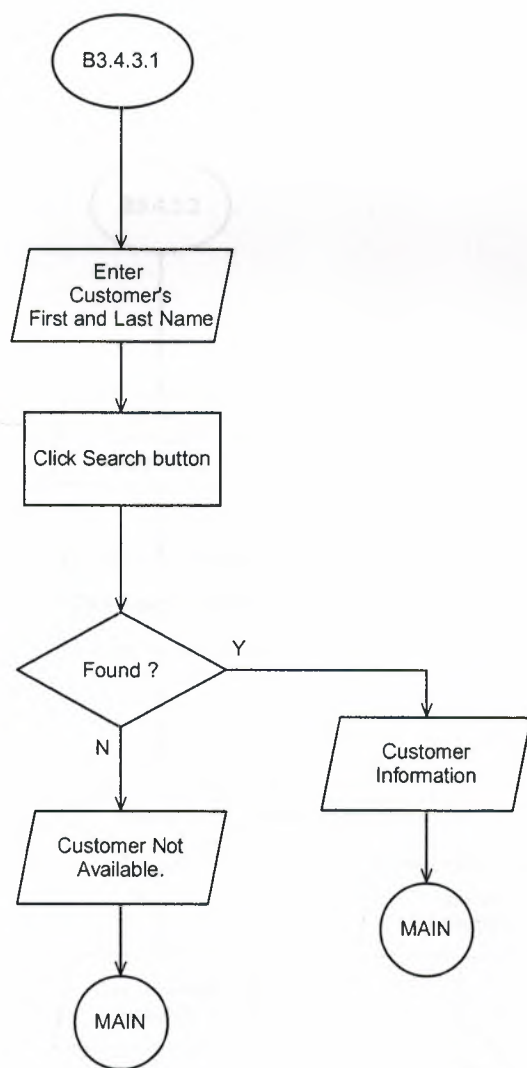


Customer Search Menu

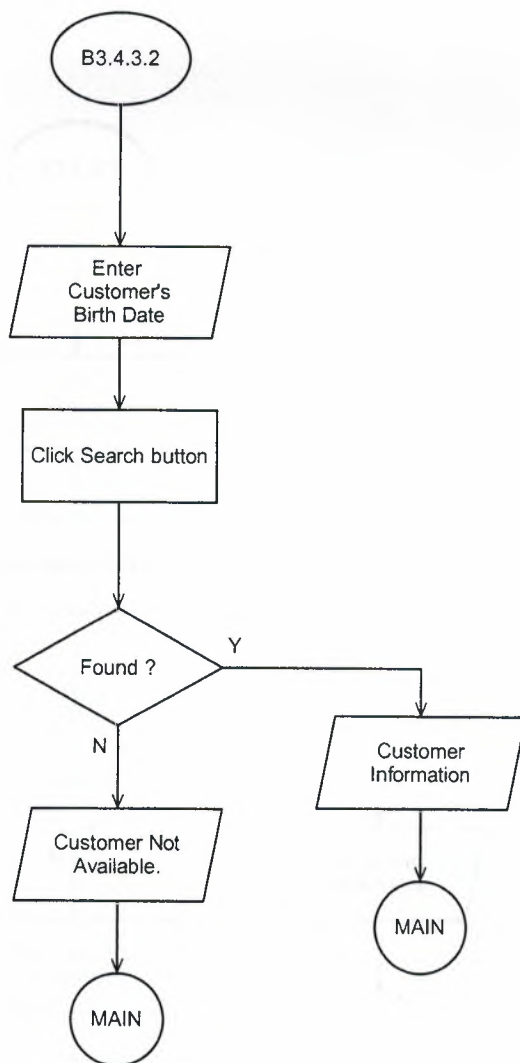


Search a Customer By Name

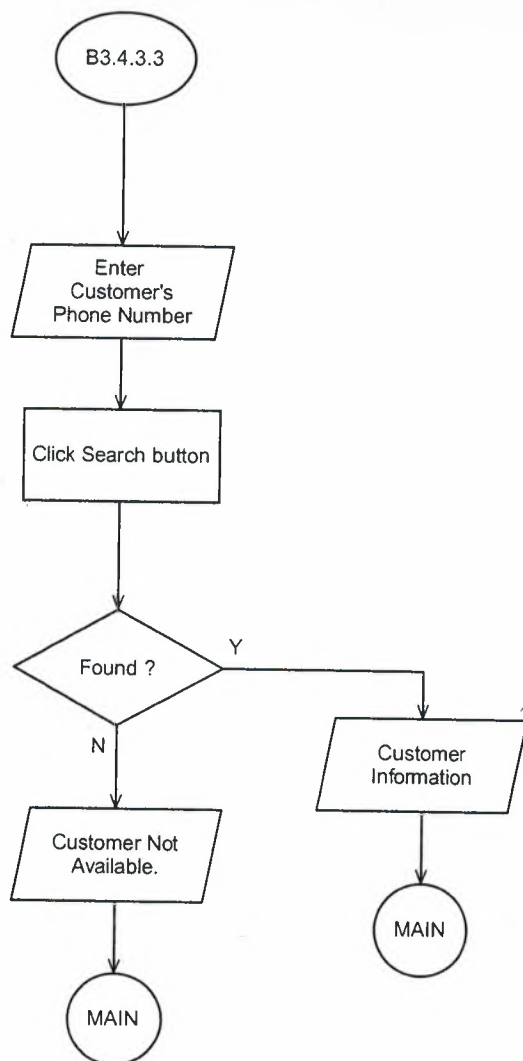
Search a Customer By Birth Date



Search a Customer By Birth Date



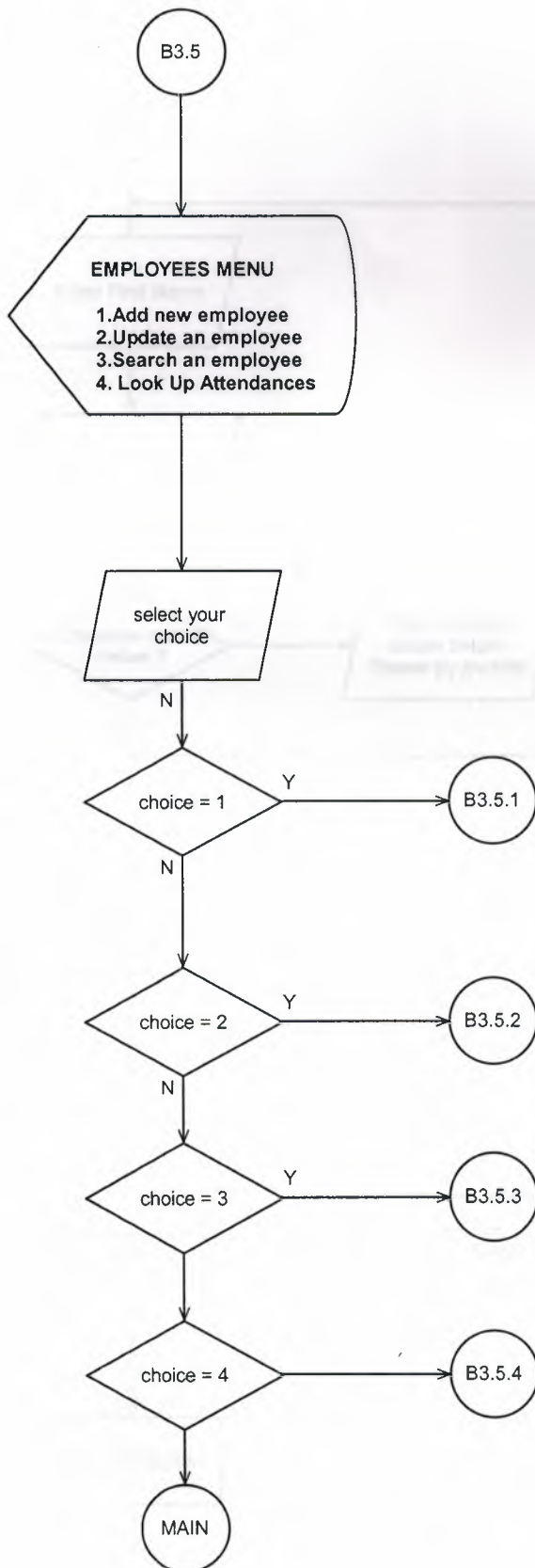
Search a Customer By Phone



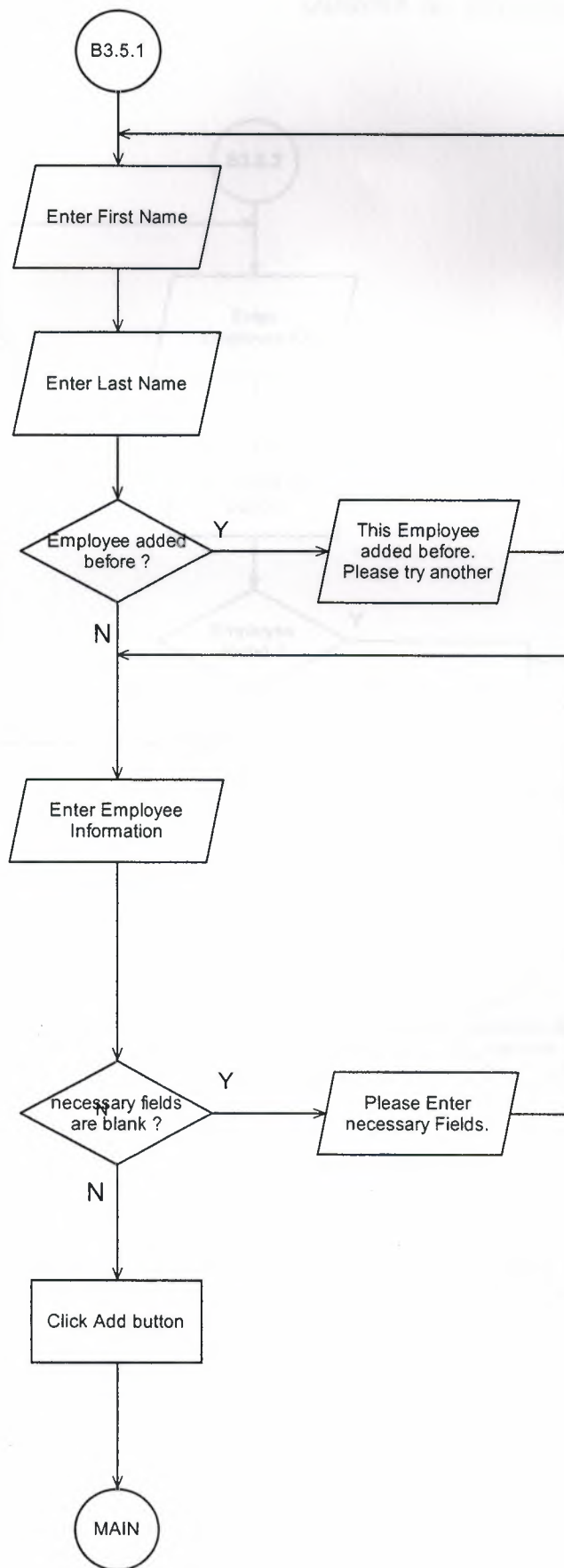
EMPLOYEES AND



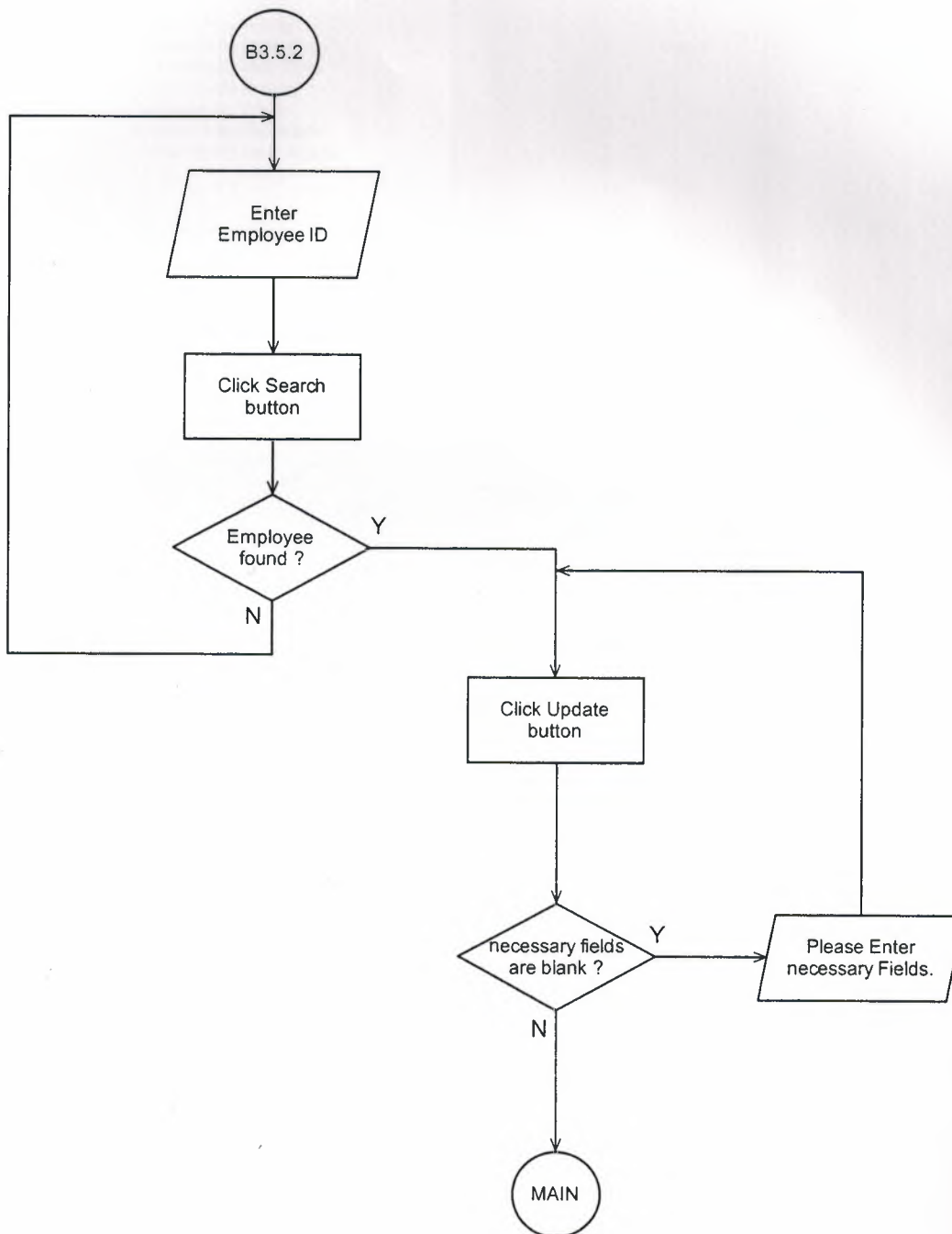
EMPLOYEES MENU



Add an Employee



Update an Employee



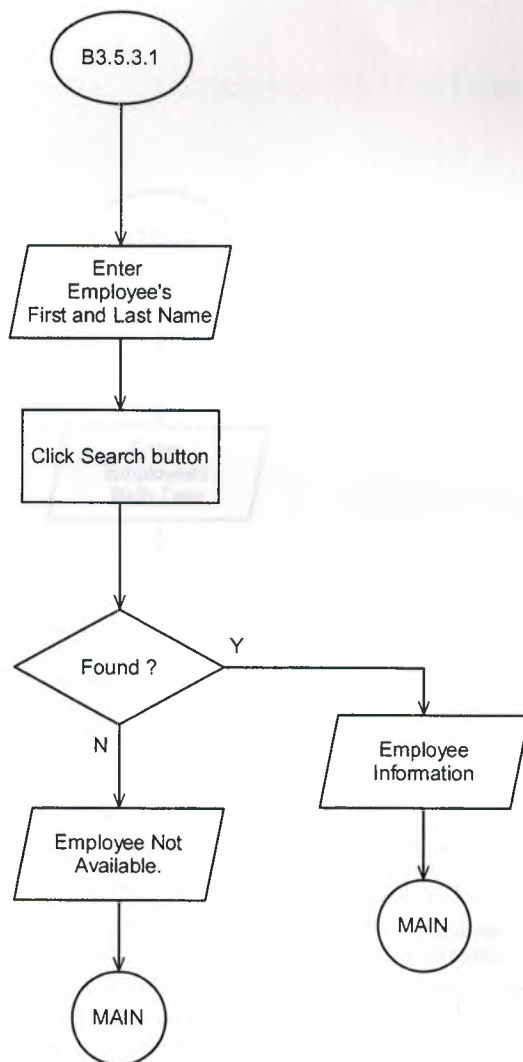
Search an employee Menu



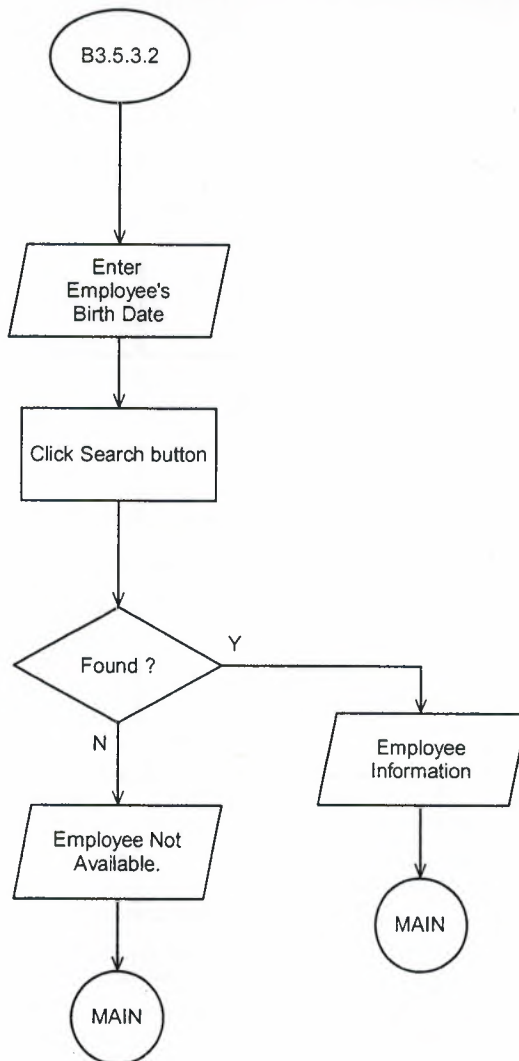
Search an employee Menu



Search an Employee By Name

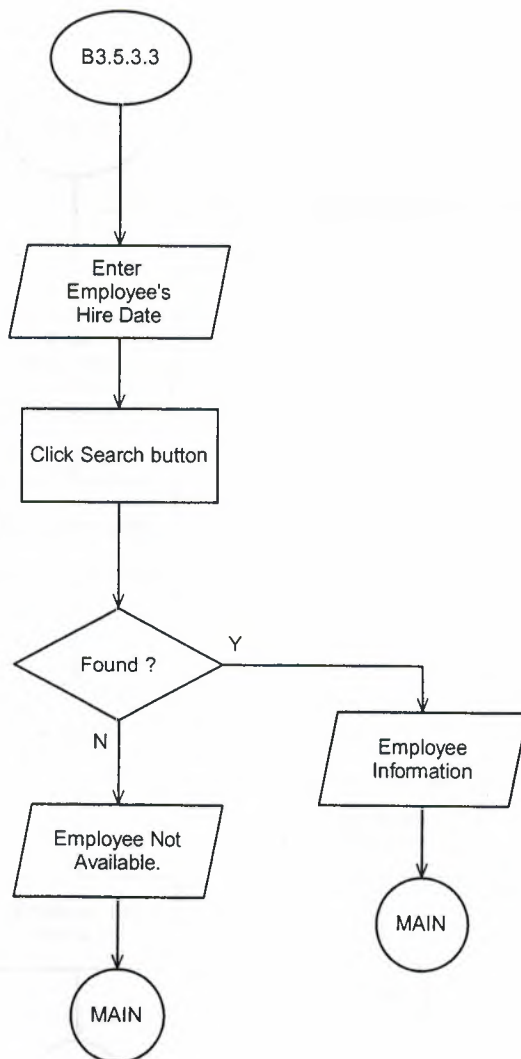


Search an Employee By Birth Date

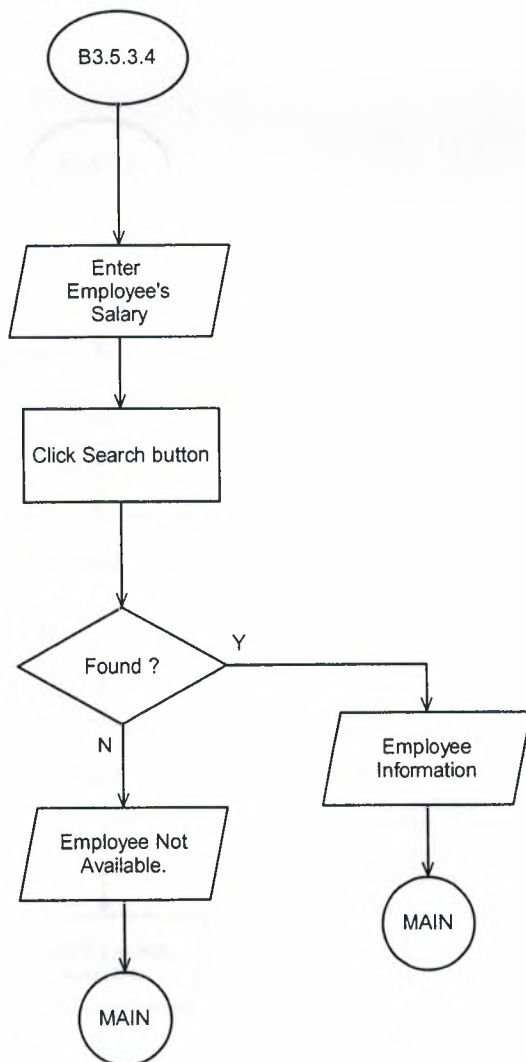


Search an Employee By Hire Date

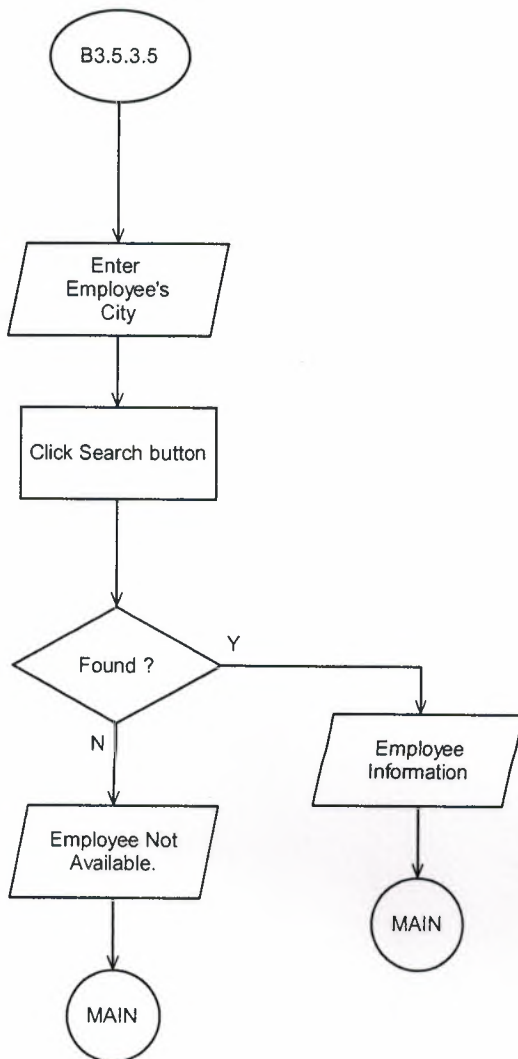
Search an Employee By Salary



Search an Employee By Salary

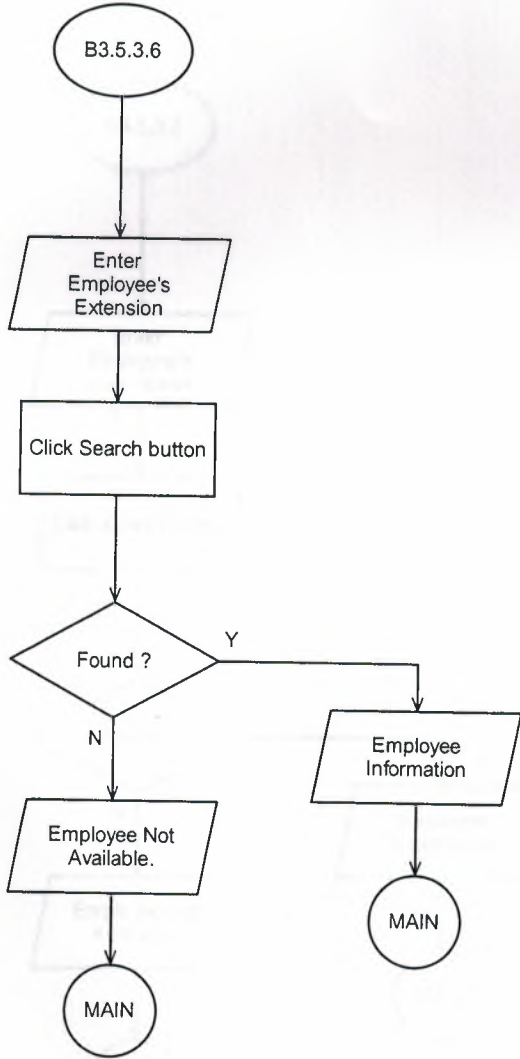


Search an Employee By City

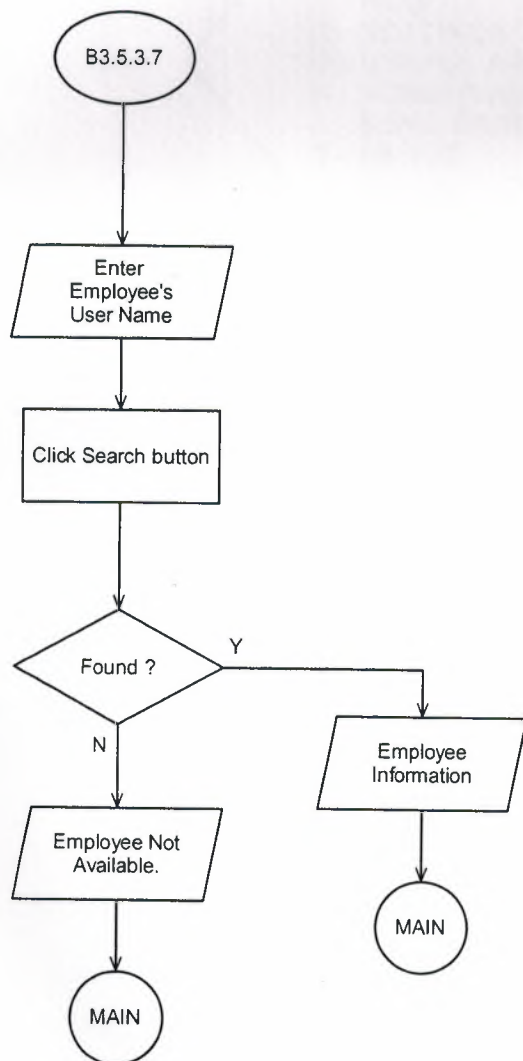




Search an Employee By Extension

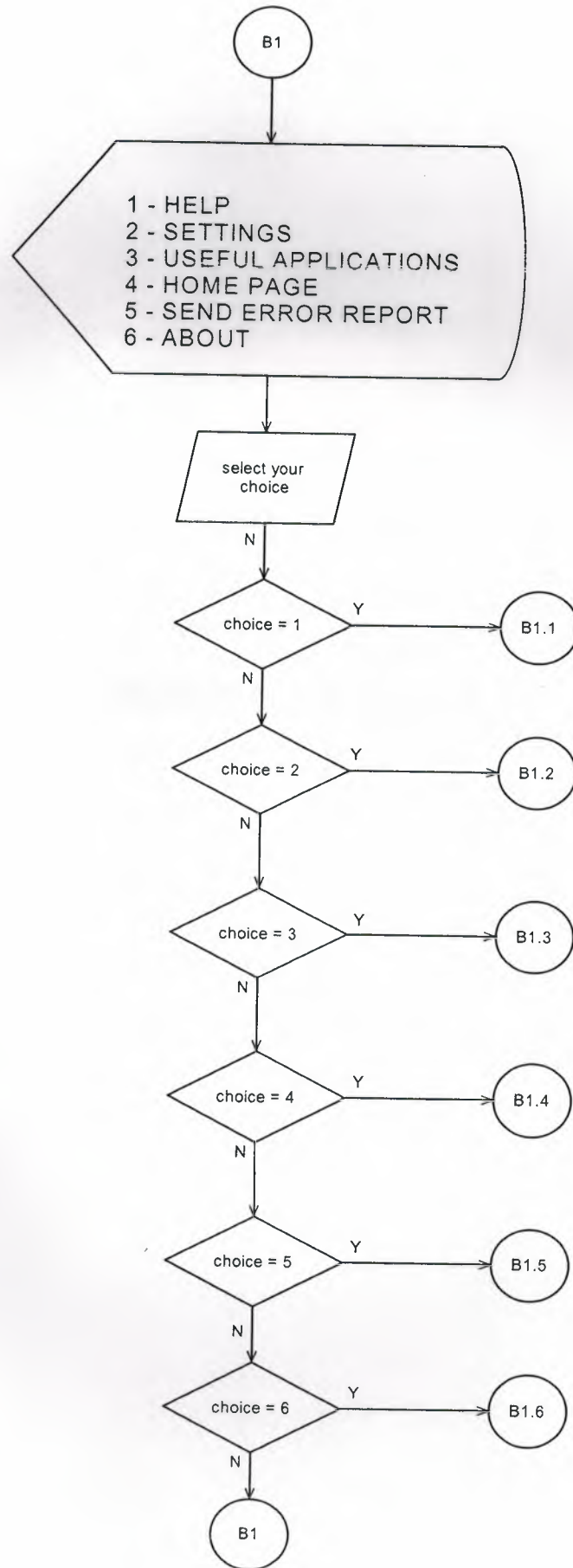


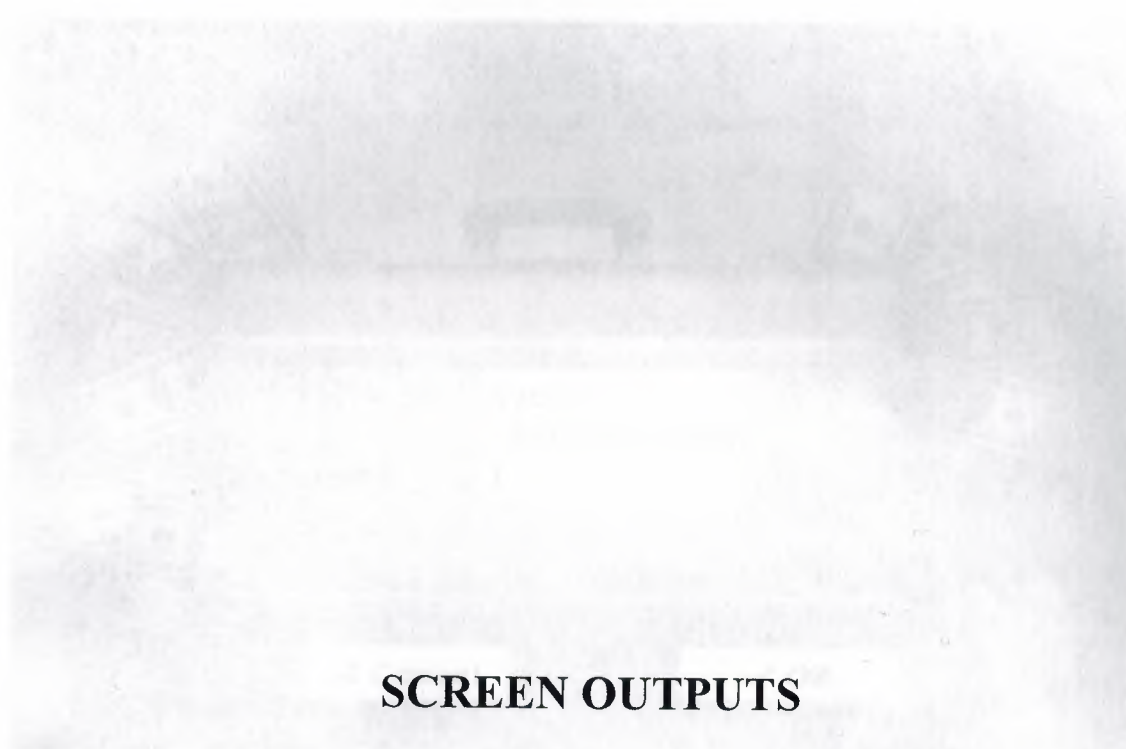
Search an Employee By User Name





HELP MENU

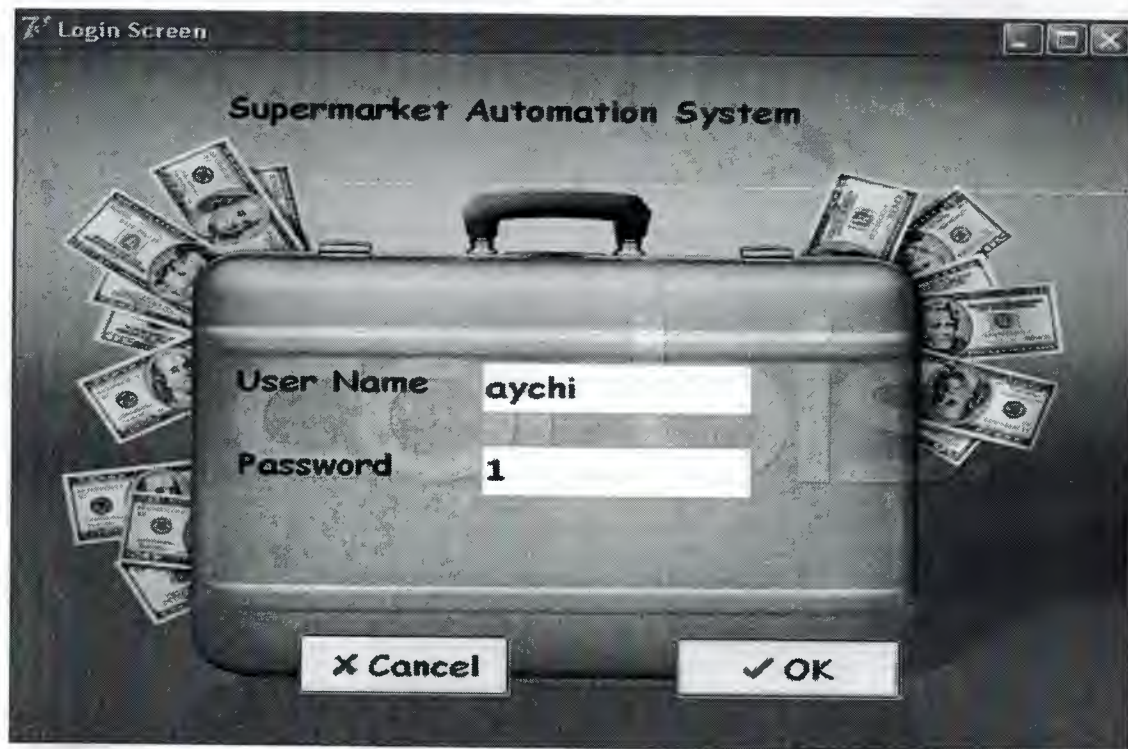




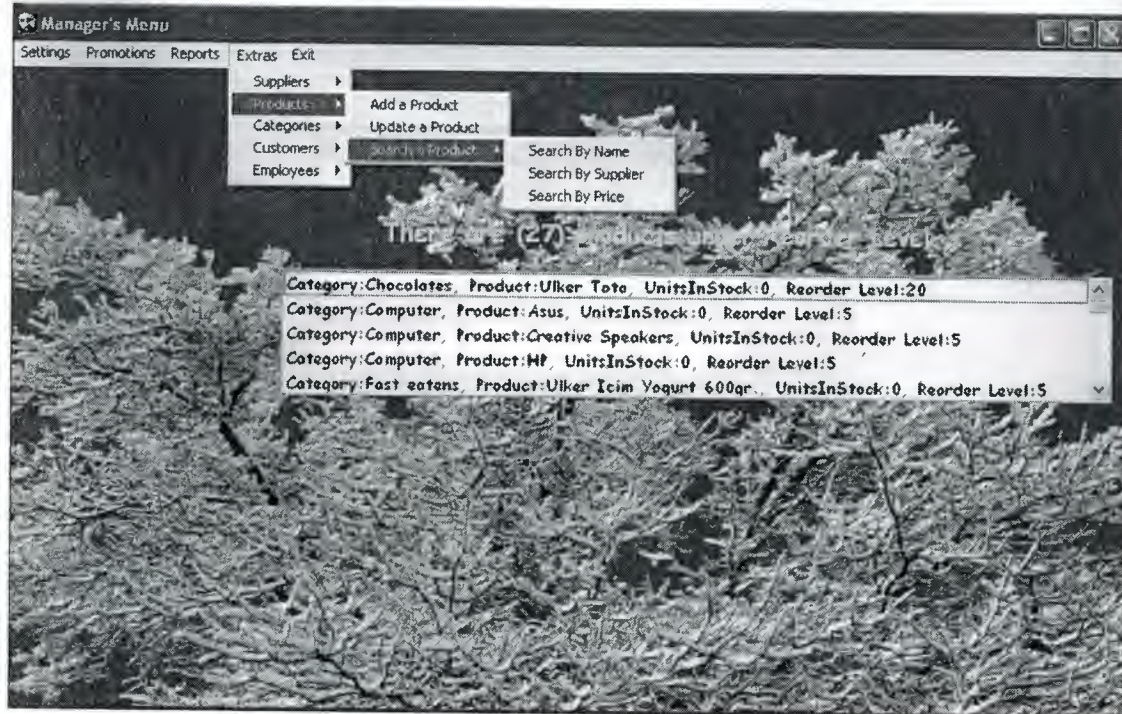
SCREEN OUTPUTS



Manager Login Screen







Manager Main Menu







Supplier Screen

Supplier Screen

Add New Supplier	Search A Supplier	Update A Supplier
* SupplierID	<input type="text"/>	 Search
* Company Name	<input type="text"/>	
Contact Name	<input type="text"/>	 Ignore  Add
Contact Title	<input type="text"/>	
Address	<input type="text"/>	
City	<input type="text"/>	
Phone1	<input type="text"/>	
Phone2	<input type="text"/>	
Phone3	<input type="text"/>	
Fax No	<input type="text"/>	 Main Menu
Home Page	<input type="text"/>	

Supplier Products Screen

Supplier Products Screen

Add New Product	Delete A Product	Update A Product
* SupplierID	<input type="text"/>	 Search
* Product ID	<input type="text"/>	
Unit Price	<input type="text"/>	 Ignore  Add
Quantity Per Unit	<input type="text"/>	
		 Main Menu

Products Screen

Products Screen

Add New Product Search A Product Update A Product

* Product ID

* Product Name

* Supplier ID

Quantity Per Unit

Unit Price

Reorder Level

* Category Name

Description

Categories Screen

Category Screen

Add New Category Delete A Category Update A Category

Category ID


Category Name

Description

Customers Screen

Customers Screen

Add New Customer Search A Customer Update A Customer

* Customer ID  Search Photo

* First Name

* Last Name

Title

Birth Date

Registry Date



Address


City

Home Phone

Customer Point

Total Point


 Ignore  Add

 Main Menu

Employees Screen

Employees Screen

Add New Employee Search An Employee Update An Employee

* Employee ID  Search * Salary

* First Name * User Name

* Last Name * Password

Title

Birth Date

* Hire Date



Address


City

Home Phone

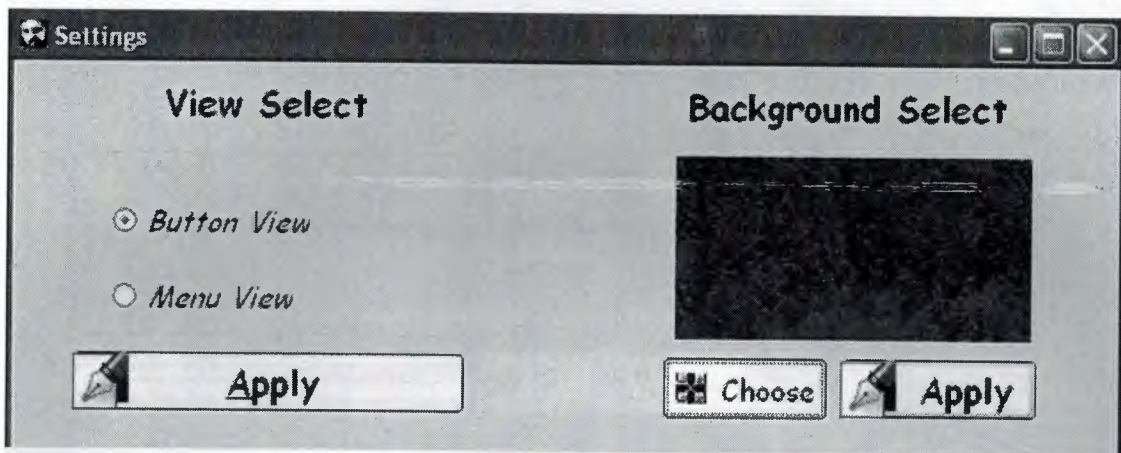
Cell Phone

Extension

 Ignore  Add

 Main Menu

Settings Screen



User Login Screen



The login screen features a dark background with a central image of a metal suitcase. Several US dollar bills are fanned out around the suitcase. The title bar reads 'Login Screen'. The main title is 'Supermarket Automation System'. Below the suitcase, there are two input fields: 'User Name' with the text 'ali' and 'Password' with the text '1'. At the bottom, there are two buttons: 'X Cancel' and '✓ OK'.

7 Login Screen

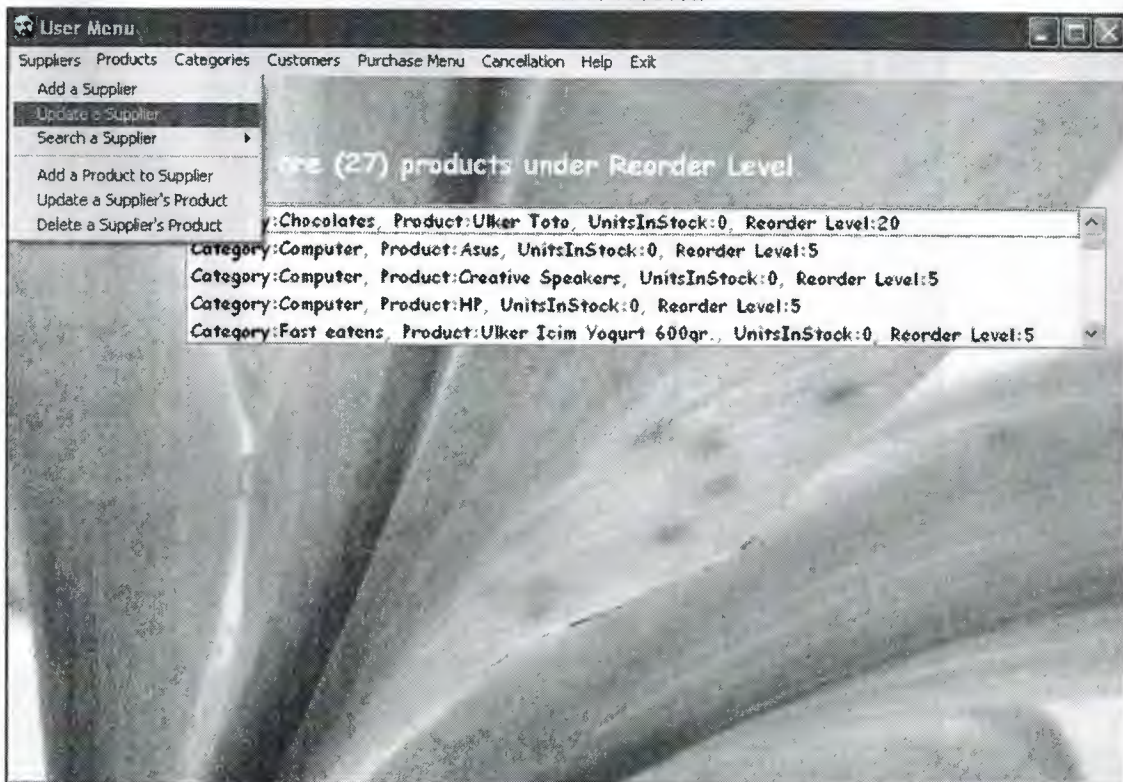
Supermarket Automation System

User Name ali

Password 1

X Cancel ✓ OK

User Main Menu



The main menu has a title bar 'User Menu' and a menu bar with 'Suppliers', 'Products', 'Categories', 'Customers', 'Purchase Menu', 'Cancellation', 'Help', and 'Exit'. A dropdown menu is open under 'Suppliers', showing options: 'Add a Supplier', 'Update a Supplier', 'Search a Supplier', 'Add a Product to Supplier', 'Update a Supplier's Product', and 'Delete a Supplier's Product'. The main area displays '(27) products under Reorder Level'. A list of products is shown with columns for Category, Product, UnitsInStock, and Reorder Level.

User Menu

Suppliers Products Categories Customers Purchase Menu Cancellation Help Exit

Add a Supplier

Update a Supplier

Search a Supplier

Add a Product to Supplier

Update a Supplier's Product

Delete a Supplier's Product

(27) products under Reorder Level

Category	Product	UnitsInStock	Reorder Level
Chocolates	Ulker Toto	0	20
Computer	Asus	0	5
Computer	Creative Speakers	0	5
Computer	HP	0	5
Fast eatens	Ulker Icim Yoqurt 600gr.	0	5

Purchase Menu

Purchase Screen

* Product ID ? Learn

* Supplier ID ? Learn

* Unit Price

* Quantity

* Buying Date

Product Information

Product Name

Category Name

Supplier Information

Contact Name Phone

City Home Page

✓ OK ⏏ Exit

Cancellations Screen

Cancellation Menu

Bill ID : ✓ Search

Product Name	Quantity	Price	Total
<div>X Delete Product(s)</div>			

Cashier Login Screen

7 Login Screen

Supermarket Automation System

User Name

Password


Cashier (Sale) Menu

Sale

Cashier Name : Burce Kemer 04.10.2006 06:50:49

Customer Name

Customer Information

City Photo 

Total Point

Payment Type

☒ Cash ☐ Credit Card

Account Cut

Grand Total : 82,5

Pay off:

Pay back:

* Product Name	* Unit Price	* Quantity
<input type="text" value=""/>	<input type="text" value=""/>	<input type="text" value=""/>
Etı Cicibebe	6,25	1
Etı Yulaflı Kremalı	1,25	2
Grapes	6,25	2
Cherry	6,25	2
Ulker Camlica 330	1,25	3
Ulker Alpella 300g	2,25	10
Ulker Cola Turka 3	1,25	2
Ulker Ketchup	6,25	2
Water Melen	3,75	2