

## NEAR EAST UNIVERSITY

# FACULITY OF ECONOMICS AND ADMINISTRATIVE SCIENCES

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# SUBMITTED BY: MUSTAFA CENK ÇIPLAK

## NUMBER: 20041936

LEFKOŞA





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## ACKNOWLEDGMENTS

Five years passed and the graduation day is coming. And this is the greatest and the last project that I done in Near East University. First of all I would like to thank to my advisor Asist.Prof.Dr Nadire Çavuş for her understanding and support. Secondly I would like to thank to my friends for their help whenever I need them. And at last I would like to thank to my family for their belief and support over these five years.

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## ABSTRACT

The reason that I chose making a pharmacy program for my project is a pharmacy needs all processes that a program must have and more than that. And especially in Turkey and Cyprus pharmacies are more private than other countries.

What do I mean by telling you private? Generally pharmacies are not franchise in Cyprus and Turkey. For example think about Ford , If you want to sell Ford cars you need to buy the franchise of it. And certainly Ford has its own computerized system. So you don't need to purchase any other program for the business operations of your franchise. But pharmacies in Cyprus and Turkey you need to have their own computer system for business processes.

Why do a pharmacist needs a computerized system instead of doing processes manually? There are several reasons one reason is making these processes manually is time consuming. The other reason is these processes are tiring. Think about Turkey especially pharmacies near SSK and Bağ-Kur, How many processes do a pharmacist needs to make in a day? I think you don't even want to think about it. And the most important reason is the key processes of the pharmacy is about human's life. So making mistakes may cause dangerous consequences. If the computer checks which drugs needs prescription or checks previous prescription records of the customer to prevent mistakes. The mistakes would be minimized.

The design, programming and database which I used are below:

-Delphi 7 for programming language.

-Firebird 1.5 for my database.

-Firebird Maestro and IB Expert for database design.

-Smartdraw 2009 for documentation design.

And The processes are below:

-Record and Check Prescription

-Receive and Transform Drug Order

-Update Goods Sold File

-Update Inventory File

-Produce Management Reports

## INTRODUCTION

Pharmacies today are busier than ever and need extremely efficient pharmacy software to keep their operations going smoothly .Many pharmacists still don't use a computer system for their operations(especially in Cyprus). So without a computer system pharmacists lose time , spend much more effort and can easily make mistakes about their operations.

The pharmacy processes includes all management, buying, selling and stock activities that the other systems have and additionally prescription processes which is the heart of all these operations. And it is hard for the pharmacist to make all the activities manually.

A pharmacy program's first aim must be preventing medical errors which is leading cause of injury and death.

A frequently recommended method for preventing adverse drug events is computer-aided screening of prescriptions.

My goal is to provide a software to enable pharmacies to work more efficiently, reliable and effectively.

For such a business a computer based system the program must have the utilities for

- 1. Date entry of all the suppliers
- 2. Data entry of all the products from the suppliers
- 3. Data entry of all the clients (Pharmacies)
- 4. Edit/Update their specifications
- 5. Search for any manufacturer, product or client
- 6. Orders for products to the manufacturers and replenishment process
- 7. Supply process to the clients (pharmacies)
- 8. Proper IRS (Information Reporting System) based on the data collected by the above mentioned processes
- 9. Computerized accounting system showing details of profit and loss as well as clients, manufactures and business accounts

## **EXPLANATION**

### My project includes the processes below :

- 1.Record and Check Prescription
- 2.Receive and Transform Drug Order
- 3.Update Goods Sold File
- 4. Update Inventory File
- 5.Produce Management Reports

I will explain all these processes briefly:

### **1.Record And Check Prescription:**

I think it is the key part of my project and not just my project, every pharmacist has to check prescription when a customer wants a drug that needs prescription. It's about the health even life of the customer. So drug selling is not like selling an automobile, computer or any other goods. It needs more attention than selling other goods. So mistakes must be minimum.

How can a pharmacist prevent mistakes? The answer is using a computerized system that checks which drugs need prescription, which customers fill the quantity limit of their prescriptions, or checking their prescription is expired or not.

After checking that the drug needs prescription or not, or customer has a valid prescription. The next step could be prescription answer that is customer can't buy his/her request or it can transformed to customer order. In this project I thought unchecked order must be drug request which can be transformed to customer order or not.

### 2.Receive And Transform Drug Order:

If the request transformed to customer order this is where the data will come then. And this is where drug is transformed to order, payment is taken , receipt is given and necessary data is transformed to goods sold and inventory data.

The other important thing in this part is discount rate, if you have insurance you don't pay the whole value of the drugs. (Think about SSK and Bağ-Kur, or private life insurance companies in Turkey). So customer has an insurance discount rate of course if he/she has insurance.

### 3.Update Goods Sold File:

After the goods sold to the customer. The sold drugs must be recorded for the manager to see some reports including total profit or loss, total goods sold amount and when staff or the pharmacist sell the goods , how much amount did they sell.

In Turkey or Cyprus usually pharmacist is the owner of the pharmacy that means he/she is the manager of the pharmacy as well. So we can think that pharmacist and the manager is the same person in both countries. But in the U.S.A. drugs generally sell in Drug Stores like CVS, Walgreens (They are not just sell drugs, drug store is a part of their business) which means manager is different from the pharmacist.

### IMPORTANT

When program record goods sold file its is imprortant that not to consider discount rate on the report because insurance company pays the discounted amount to the pharmacist so it will not effect the management reports.

### 4.Update Inventory File:

After selling process completed the program needs to decrease the amounts sold from inventory(stock) .In my program there is a stock limit(Reorder Point) . When stock level decreases under the limit the program warns you on the start. This helps pharmacist to prevent products be out of stock.

### 5. Produce Management Reports:

In my program there are several reports that helps manager(pharmacist) to make necessary decisions about the future of the bussiness. The reports are below:

- **1-Total Inventory Selling Values**
- 2-Total Inventory Buying Values
- 3-Total Inventory Profit
- 4-Total Goods Sold Profit
- 5-Goods Sold
- 6-Expired Drugs

The reports described in user guideline so we can continue by identifying the database.

I used firebird 1.5 which it can connected to Delphi with the interbase components.

My database includes tables below:

### **1-Prescription**

It is where prescriptions are recorded I used foreign keys intead of adding the same fields to the table. You don't need to use Customer Name and Product Name again if related tables have these fields. The customer id is the foreign key in the table connected to customers table which means before you add a prescription, you need record customer to customer table if the customer is new.

	E	Name	Туре	Primary	Not Nul
1	Þ	PRESCRIPTION_ID	INTEGER	<b>V</b>	1
2		CUSTOMER_ID	INTEGER		
3		ISBN_NO	INTEGER		
4		TIME_TOTAL	INTEGER		
5	-	RECORDED_DATE	DATE		V
6	1		INTEGER		

### 2-Customers

The fields are seen below but there is an important field in this table that is discount rate, discount rate can't be null, most of the insurance company provides discount but if customer has no institution related with him/her so you need to enter 100 to the table which means paying the whole price of the drug.

3	E Name	Туре	Primary	Not Nul
1 1	B CUSTOMER_ID	INTEGER		~
2	IDENTITY_CARD_NO	INTEGER		
3	CUSTOMER_NAME	CHAR(20)	[m]	
4	CUSTOMER_SURNAME	CHAR(20)		
5	CUSTOMER_PHONE	INTEGER		
6	CUSTOMER_ADDRESS	CHAR(100)		
7	SEX	CHAR		
8	INSTITUTION	CHAR(20)		[Trans
9	INST_NO	INTEGER		1
0	DISCOUNT_RATE	DOUBLE PRECISION		V

### **3-Products**

The most important thing in products table is needprescription value which is user defined type, the boolean type is not pre-defined in firebird 1.5

	iiiii	Name	Туре	Primary	Not Nul
1	5	B ISBN_NO	INTEGER		V
2		SUPPLIER_NO	INTEGER		
3	1	PRODUCT_NAME	CHAR(20)		
ri i		PRODUCT_B_PRICE	DOUBLE PRECISION		
5		PRODUCT_S_PRICE	DOUBLE PRECISION		
6	-	PRODUCT_DESCRIPTIO	DNCHAR(100)		
7	1	NEEDPRESCRIPTION	MYBOOLEAN	1	1

## **4-Suppliers**

This table is for traditional supplier records . It is related to products

	iiii	Name	Туре	Primary	Not Null
1	۶	B SUPPLIER_NO	INTEGER	V	
2		SUPPLIER_NAME	CHAR(20)		
3		SUPPLIER_ADDRESS	CHAR(100)		
4		SUPPLIER_PHONE	INTEGER		
5		SUPPLIER FAX	INTEGER		

table.

## 5-Stock

Expiry date will be added automatically to the table thats why I didn't use not null property to this field.

Fie	eld	S			
		Name	Туре	Primary	Not Nui
1	Þ	RECORD_NO	INTEGER		1
2		ISBN_NO	INTEGER		
3		EXPIRY_DATE	IDATE	line in the second s	
4		QUANTITY	INTEGER		

## 6-Selling

This table used for receipt records. So after the sale of the product the table automatically be erased.

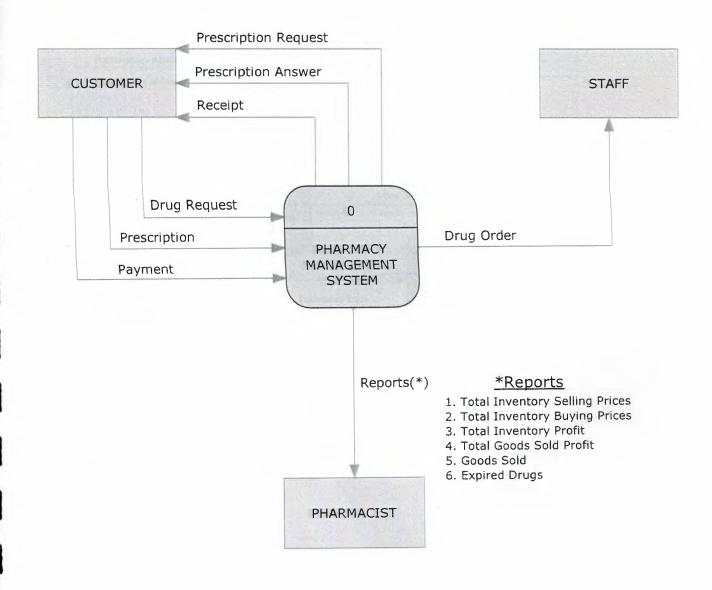
	E N	ame	Туре	Primary	Not Nul
		B ISBN_NO	INTEGER		V
2		PRODUCT_NAME	CHAR(20)		
(3)		QUANTITY	INTEGER		
4	Links	PRICE	DOUBLE PRECISION		

### 7-Goods Sold

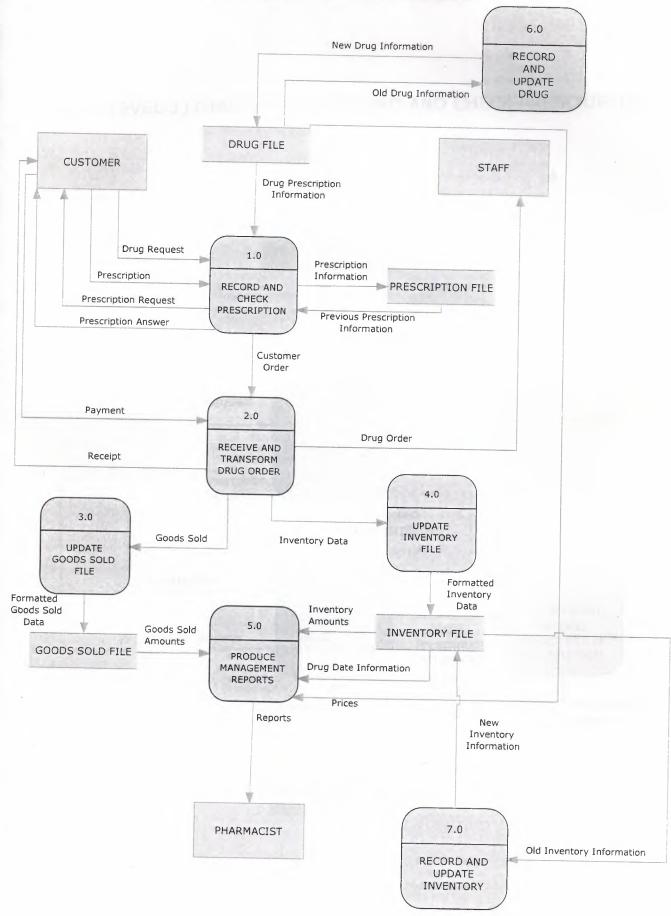
In daily processes section when you press sell after added the requested drugs for selling . The sold records will be added to this table .

	i	Name	Туре	Primary	Not Nul
1	•	ISBN_NO	INTEGER		
2		PRODUCT_NAME	CHAR(20)		
3		QUANTITY	INTEGER	<u>E</u>	
4		PRICE	DOUBLE PRECISION		-
5	-	SOLD_DATE	DATE		

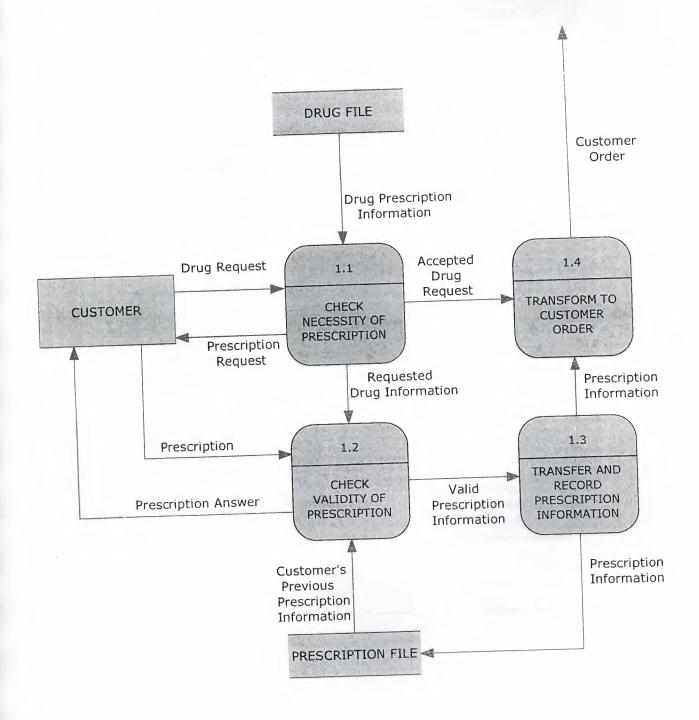
## PHARMACY MANAGEMENT SYSTEM CONTEXT DIAGRAM



## PHARMACY MANAGEMENT SYSTEM TOP-LEVEL DIAGRAM

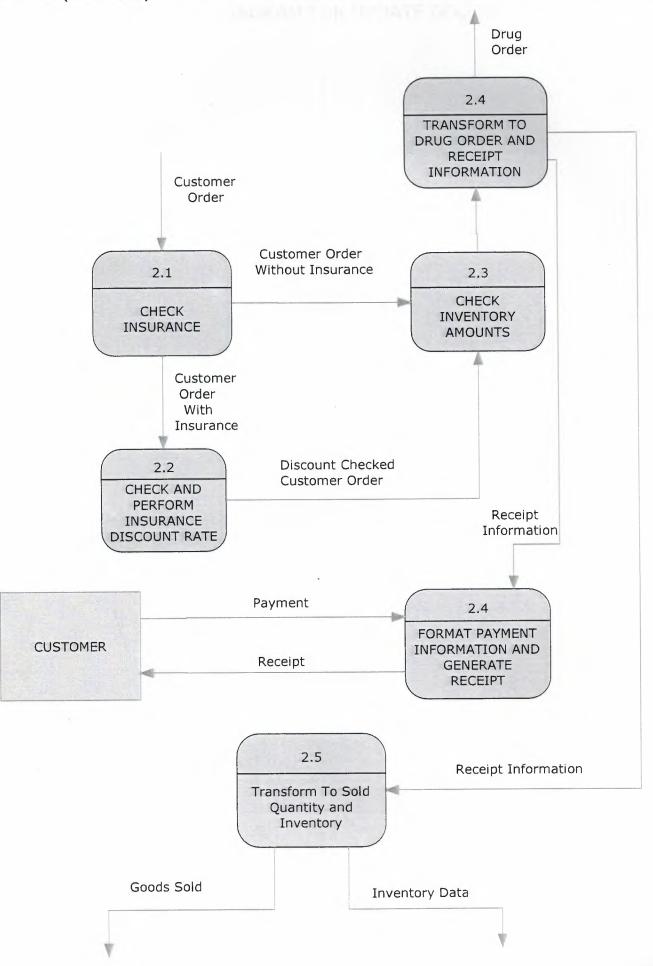


# DETAIL(LEVEL-1) DIAGRAM FOR RECORD AND CHECK PRESCRIPTION

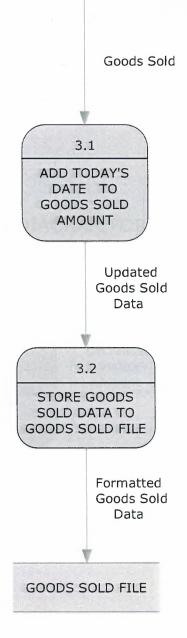


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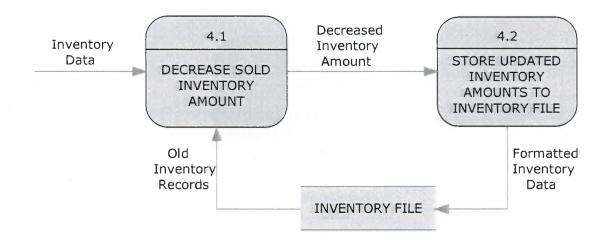
DETAIL(LEVEL-1) DIAGRAM FOR RECEIVE AND TRANSFORM DRUG ORDER



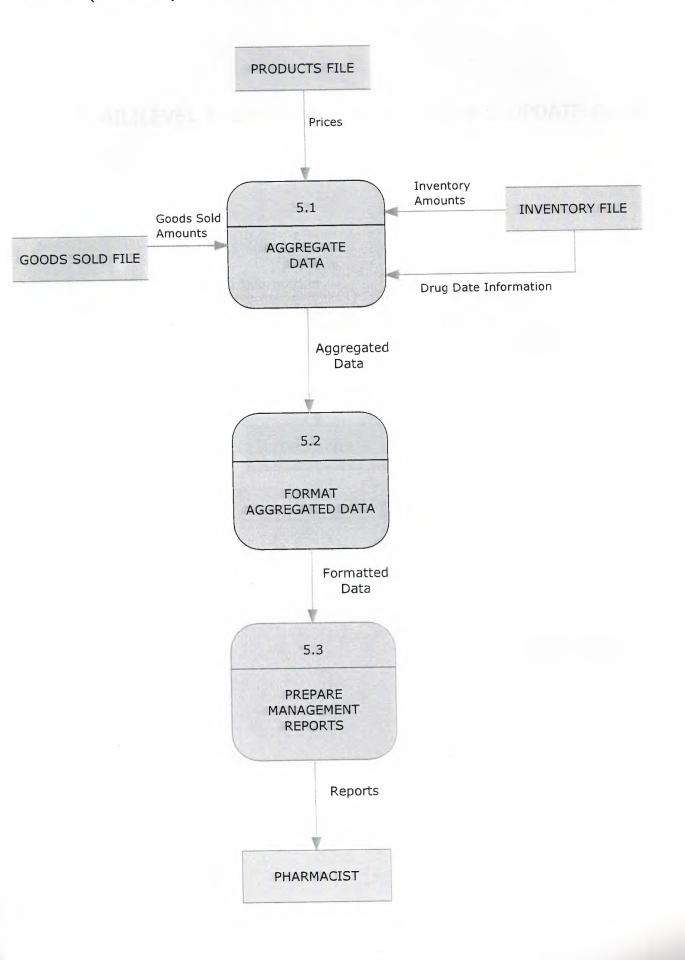
DETAIL(LEVEL-1) DIAGRAM FOR UPDATE GOODS SOLD FILE



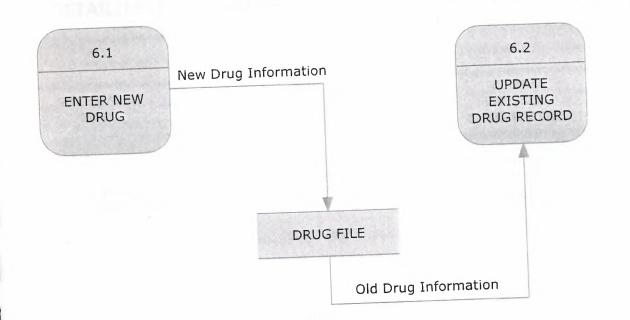
## DETAIL(LEVEL-1) DIAGRAM FOR UPDATE GOODS SOLD FILE



## DETAIL(LEVEL-1) DIAGRAM FOR PRODUCE MANAGEMENT REPORTS

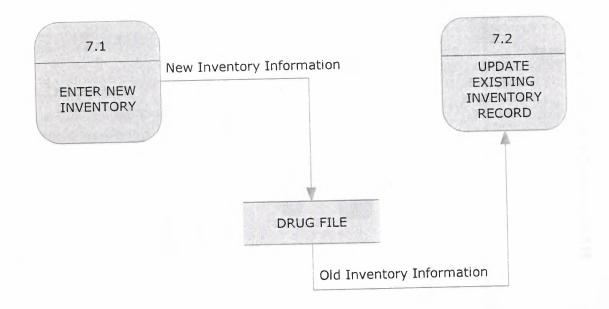


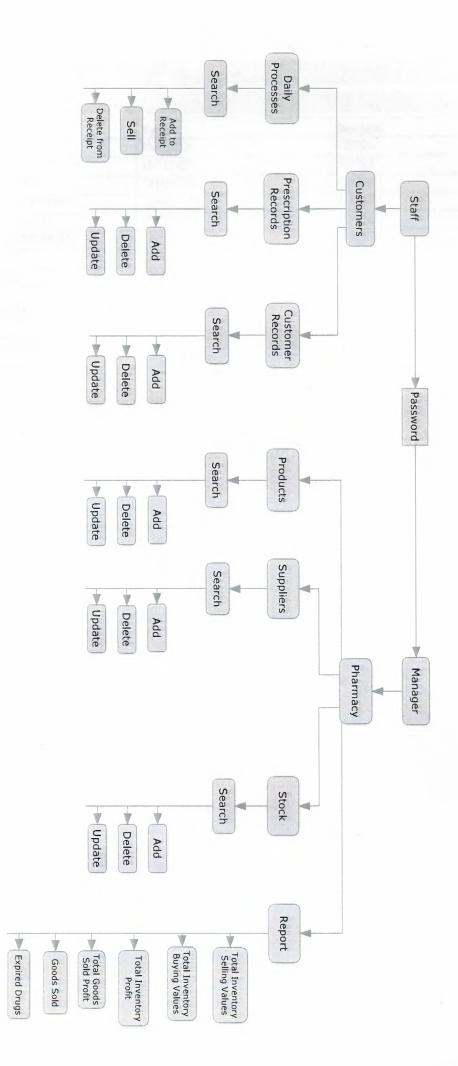
# DETAIL(LEVEL-1) DIAGRAM FOR RECORD AND UPDATE DRUG





# DETAIL(LEVEL-1) DIAGRAM FOR RECORD AND UPDATE INVENTORY





# SYSTEM BLOCK DIAGRAM

SYSDBA CUSTOMERS

Table: CUSTOMERS

## **Fields**

Name	Туре	Domain	Not Null
CUSTOMER_ID	INTEGER	RDB\$1	NOT NULL
IDENTITY CARD_NO	INTEGER	RDB\$3	
CUSTOMER_NAME	CHAR(20)	RDB\$4	
CUSTOMER_SURNAME	CHAR(20)	RDB\$5	
CUSTOMER PHONE	INTEGER	RDB\$6	
CUSTOMER_ADDRESS	CHAR(100)	RDB\$7	
SEX	CHAR(1)	RDB\$8	
INSTITUTION	CHAR(20)	RDB\$9	
INST NO	INTEGER	RDB\$10	
DISCOUNT_RATE	DOUBLE PRECISION	RDB\$77	NOT NULL

## Constraints

Constraint Name	Туре	On Field
PK CUSTOMERS	Primary Key	CUSTOMER_ID
TR_CODITIEND		

## Indices

Index Name	On Field	Unique	Active	Sorting
RDB\$PRIMARY1	CUSTOMER_ID	Yes	Yes	Ascending
RUD\$PRIMART1				

SYSDBA PRODUCTS

## Table: PRODUCTS

## Fields

Sin ma	Туре	Domain	Not Null
	INTEGER	RDB\$34	NOT NULL
ISBN_NO SUPPLIER_NO	INTEGER	RDB\$16	
PRODUCT NAME	CHAR(20)	RDB\$57	
	DOUBLE PRECISION	RDB\$74	
PRODUCT_B_PRICE	DOUBLE PRECISION	RDB\$72	
PRODUCT_S_PRICE	CHAR(100)	RDB\$20	
PRODUCT_DESCRIPTION	CHAR(5)	MYBOOLEAN	NOT NULL
NEEDPRESCRIPTION	CHAR(S)		

## Constraints

Constraint	Name	Туре	On Field	
INTEG 7	Nume	Primary Key	ISBN_NO	
FK PRODUC	TS 1	Foreign Key	SUPPLIER_NO	
FK Table:	SUPPLIERS	FK Field:	SUPPLIER_NO	
Update	NO ACTION	Delete Rule:	NO ACTION	
Rule:				

## Indices

Indices				C. time
Index Name	On Field	Unique	Active	Sorting
	SUPPLIER_NO		Yes	Ascending
RDB\$FOREIGN18		Yes	Yes	Ascending
RDB\$PRIMARY6	ISBN_NO			

Date / Time: 24	Haziran 2009	User:	SYSDBA	
	\Users\Cenk\Desktop\PROPHAR	Table:	SUPPLIERS	

Table: SUPPLIERS

Fields	lds			
Name	Туре	Domain	Not Null	
SUPPLIER NO	INTEGER	RDB\$21	NOT NULL	
SUPPLIER NAME	CHAR(20)	RDB\$22		
SUPPLIER_ADDRESS	CHAR(100)	RDB\$23		
SUPPLIER PHONE	INTEGER	RDB\$24		
SUPPLIER_FAX	INTEGER	RDB\$25		

## Constraints

Constraint Name	Туре	On Field	
PK SUPPLIERS	Primary Key	SUPPLIER_NO	

Indices	ces			
Index Name	On Field	Unique	Active	Sorting
RDB\$PRIMARY4	SUPPLIER_NO	Yes	Yes	Ascending

Date / Time:	24 Haziran 2009	User:
Database:	C:\Users\Cenk\Desktop\PROPHAR	Table:

SYSDBA GOODS SOLD

Table: GOODS SOLD

Fields			
Name	Туре	Domain	Not Null
ISBN_NO	INTEGER	RDB\$78	
PRODUCT_NAME	CHAR(20)	RDB\$79	
QUANTITY	INTEGER	RDB\$80	
PRICE	DOUBLE PRECISION	RDB\$81	
SOLD_DATE	DATE	RDB\$82	

Date / Time:	24 Haziran 2009	User:	
Database:	C:\Users\Cenk\Desktop\PROPHAR	Table:	

Table: SELLING

-----

Fields			
Name	Туре	Domain	Not Null
ISBN_NO	INTEGER	RDB\$67	NOT NULL
PRODUCT NAME	CHAR(20)	RDB\$70	
QUANTITY	INTEGER	RDB\$68	
PRICE	DOUBLE PRECISION	RDB\$71	

SYSDBA SELLING

Constraints

Туре	On Field
Primary Key	ISBN_NO
Foreign Key	ISBN_NO
FK Field:	ISBN_NO
Delete Rule:	NO ACTION
	Primary Key Foreign Key FK Field:

Indices				
Index Name	On Field	Unique	Active	Sorting
RDB\$FOREIGN38	ISBN_NO		Yes	Ascending
RDB\$PRIMARY37	ISBN_NO	Yes	Yes	Ascending

Date / Time:	24 Haziran 2009	User:	SYSDBA
Database:	C:\Users\Cenk\Desktop\PROPHAR	Table:	STOCK

Table: STOCK

**Fields** Name Type INTEGER Domain Not Null NOT NULL **RDB**\$26 RECORD\_NO INTEGER RDB\$27 ISBN\_NO RDB\$29 EXPIRY\_DATE DATE QUANTITY RDB\$30 INTEGER

## Constraints

Constraint	Name	Туре	On Field
PK_STOCK		Primary Key	RECORD_NO
FK_STOCK_	1	Foreign Key	ISBN_NO
FK Table:	PRODUCTS	FK Field:	ISBN_NO
Update	NO ACTION	<b>Delete Rule:</b>	NO ACTION
Rule:	and the second second		

## Indices

Index Name	On Field	Unique	Active	Sorting
RDB\$FOREIGN19	ISBN_NO		Yes	Ascending
RDB\$PRIMARY5	RECORD_NO	Yes	Yes	Ascending

## **USER GUIDELINES**

In this section I will describe the usage of the program. Before I started to describe main menu I need to write about a process that can be activated when you start the program.

This program has a Reorder Point Level which gives you a warning when stock level decreases to that level(Shown in figure 1.0). In this program this level is 10. So If you have one or more drugs that under this level the program warns you and ask that you want to see the drugs which are reorder point level.

Figure 1.0

AIN MENU		
	PHARMACY SYSTEM	
MAIN PHARMACY PRO	DCESSES R	ECORD AND REPORT
1.	You have stock that quantity is under limit. Do you want to s	see it? Customers
DAILY PROCESSES	Yes No Cancel	Pharmacy
and and and and and		

This process helps you prevent drugs in your pharmacy be out of stock.

The main menu is divided into two sections (as seen in figure 1.1 on the next page)

1-Main Pharmacy Processes

2-Record And Report

Figure 1.1

PHARMACY SYSTEM		
MAIN PHARMACY PROCESSES	RECORD AND REPORT	
DAILY PROCESSES	Customers	
	Pharmacy	

## 1-Main Pharmacy Processes:

It includes the daily processes section which is the main part of the program that daily customer processes will be made.

It includes DAILY PROCESSES button.

## 2-Record And Report

It has two section which are Customers and Pharmacy. In Customers section you can access customer and prescription records. Pharmacy section is the management section in which manager or owner of the pharmacy can access and change product, stock and supplier records and get necessary management reports.

It has two buttons which are CUSTOMERS and PHARMACY.

## DAILY PROCCESES:

This section is the heart of the program which daily customer processes are made.

### Figure 1.2

Î

Daily Processes		
Customers Records		
	DAILY PROCESSES	Today is 23.06.2009
PRODUCT INFORMATION	DRUG SEARCH	QUANTITY OF REQUESTED DRUG
ISBN-NO <sup>2</sup>		Enter Quantity
PRODUCT NAME aspirin	Search	Rest of the second second second
Need Prescription No		
STOCK QUANTITY 3	INVOICE ISBN_NO PRODUCT_NAME QUANTITY PRICE 2 aspirin 1 1.34	PROCESSES
PRICE 1.34		ADD
TOTAL 1.34		SELL
	Delete Last Record Delete All	

Before you start a process you need to search the drug you want to add or sell. After searching necessary drug, the output will be shown on *product information* which is on the left of the screen. In this example shown in Figure 1.2 you can see that the drug aspirin has an isbn-no of 2, stock quantity of 3 and its price is 1.34 dollars, Turkish Liras or whatever you are using in your country. Total is the total price of the drugs added invoice section.

When you want to add a drug there can be two possibilities that the program will not add the requested drug.

## Posibility 1: You Dont have enough stock

## Figure 1.3

rity Processes		Today is 23.06.2009
	DAILY PROCESSES	TooBy 16 23.00.2009
PRODUCT INFORMATION	DRUG SEARCH	QUANTITY OF REQUESTED DRUG Enter Quantity
ISBN-NO 2	PRODUCT NAME	10
PRODUCT NAME aspirin	Pharmacy X	
Need Prescription No	You dont have enough stock	PROCESSES
	ISBN_NO PR	DDA
PRICE <sup>1,34</sup>		
TOTAL		SELL

In the aspirin example(Figure 1.3) below we want to add amount of 10 which we have only 3 on stock. So the program tells us we don't have enough stock. So this will help pharmacist to realize he/she don't have enough stock and also prevents programing irregularities.

## Possibility 2: Customer has no (or valid) prescription

Processes ers Record.	and the second s	T In in 00.06 2000
	DAILY PROCESSES	Today is 23.06.2009
PRODUCT INFORMATION	DRUG SEARCH	QUANTITY OF REQUESTED DRUG Enter Quantity
		1
ISBN-NO 1	prozac	
RODUCT NAME prozec	Prescription Check 23	
eed Prescription Yes	Enter ID of the customer 7	
TOCK QUANTITY 10	OK Cancel	PROCESSES
PRICE 23.2		DDA
PRICE		
TOTAL		SELL

After you press add for adding the drug to invoice and if the Need Prescription section shows 'Yes' (which means the drug needs prescription to sell it to the customer) the program will want you to enter the customer id to check he/she has prescription or not(Shown in figure 1.4).

### Figure 1.5

ally Processes		
11C3 10C2-03	DAILY PROCESSES	Today is 23.06.2009
PRODUCT INFORMATION	DRUG SEARCH	QUANTITY OF REQUESTED DRUG
ISBN-NO 1		Enter Quantity
PRODUCT NAME prozec	Warning 22	
Need Prescription Yes	Customer has no prescription.Do you want to enter a new one?	
STOCK QUANTITY 10	Yes No Cancel	PROCESSES
PRICE 23,2		DDA
TOTAL		SELL
	Delete Last Record Delete All	

If customer has no prescription the program will warn you that customer has no prescription and asks you that you want to enter a new one or not. If you click yes the program calls the necessary section for you to enter the new prescription.

The same warning can shown except the output is telling the customer has no valid prescription , If customer has prescription but that prescription is not include the requested drug.

If the customer has a valid prescription and you have enough stock. Or the drug don't need a prescription and you have enough quantity then the drug will be added without any problems.

When you press sell after adding requested drug or drugs program gives you three choice about receipt.(Look at the figure 1.6)

1-Print: Directly get print out of the receipt.

2-Preview: Shows the receipt output on the screen.

3-File: You can save the receipt to your computer.

And in the options section you can get more than one receipt copies when you want to get the print out. These parts are the same when you want to get management reports and it will not discussed later on similar processes.

### Figure 1.6

itomer, Records		
	DAILY PROCESSES	Today is 23.06.2009
PRODUCT INFORMATION	DRUG SEARCH	QUANTITY OF REQUESTED DRUG
ISBN-NO 3	Output Options	Enter Quantity
PRODUCT NAME benical	Selected Printer Send To OneNote 2007 Report Destination	<u>n</u>
Need Prescription Yes	Preview     Cancel	
STOCK QUANTITY 4	IS Format: Rave Snapsnot File (NT )	PROCESSES
PRICE 1.5	Cotiens Cotes I plade I plade	ADD
TOTAL		
		SELL
	Delete Last Record Delete Alt	

Delete all and Delete Last Record is for deleting the last or all data added to the invoice section.

Before I finish writing about Daily Processes, you could realize that there are two section seen on the toolbar one is customer, the other is records with these sections you can open other parts of the program rapidly. But some parts of the program needs manager access to enter which are include in the records section.

When you click customer on main menu the sub menu named 'records related with customer' seen on the screen(figure 1.7). It gives you two choices:

**1-Customer Records** 

2-Prescription Records

Figure 1.7

RECOF	RDS RELATED WITH CUS	TOMERS	
	Customer Records		
	Prescription Records		

## 1-Customer Records:

As you can understand from its name this section is related for customer record processes(Seen as figure 1.8)

## Figure 1.8

	CUSTO				
CUSTOMER INFORM	ATION		CUSTOMER S	SEARCH	
Customer ID	2		Search		
Customer Name				-	
Customer Surname Gezer			T		
Identity Card No	212121			ME CUSTOMER_SURNAME	CUSTOMER P
		CINEROUSE IDUDENTI	CARD NO CUSTOMER NA	ME CUSTOMER_SURNAME	COSTOMETLE
Customer Phone	2234567	1	TY_CARD_NO CUSTOMER_NA 122321 Cenk 212121 Ali	CUSTOMER_SURNAME Ciplak Gezei	32
-	2234567	1	122321 Cenk	Çıplak	32
Customer Phone	2234567	1	122321 Cenk	Çıplak	32
Customer Phone Customer Address	2234567	1	122321 Cenk	Çıplak	32

You can search customer record, add a new record ,update existing record and see next or previous records by clicking related buttons or see records on the table seen on right bottom of the figure 1.8

## 2-Prescription Records:

Figure 1.9

PRESCRIPTION INFORM	ATION	PRESCRIPTION SEARCH		
Prescription ID	1	customer-name 🔻		
Customer ID	1	Cenk		
Isbn_No	3			
Customer Name Cenk	-	Search		
Customer Surname Çıplak	-	PROCESSES		
Time-Total	12	Add Prescription Delete Prescription Update Prescription		
Quantity	1	Add Prescription Delete Prescription Update Prescription		

Prescription processes(figure 1.9) are like the other recording processes customer prescriptions are recorded here and when need changes about prescription changes can be made from here.

## MAIN MENU PHARMACY BUTTON:

To enter this section you need to have manager access that means a staff works in pharmacy can access daily processes, customer and prescription records but he/she can't access this section without entering neccessary password. I took the screen output after clicking in pharmacy button seen in figure 2.0.

	Manager Access	23
AIN PHARMACY PRO		RD AND REPORT
DAILY PROCESSES	Please Enter Your Password	Customers
	DK	Pharmacy

If you enter the password true then the other section will come seen in figure 2.1

Figure 2.1

		The second s	
	MANAGER SEC	TION	
ECORDING PROCESSES			
Product		MANAGEMENT REPORTS	1
Suppliers	The marker	Reports	
Stock			
	Product Suppliers	Product Suppliers	Product Suppliers Reports

Manager section includes two parts RECORDING PROCESSES and MANAGEMENT REPORTS

Recording processes includes Product, Suppliers and Stock

Management Reports includes neccessary report sections.

## **PRODUCTS**:

### Figure 2.2

Products			Contraction and the	State and	And And Estat		E	
Other M nagement Re	cord Sections							
			PRODU	ICTS				
			incode	1010				
PRO	DUCT INFORMATIO	DN				PRODUCT SEARCH		
ISBN-NO	1				T	*		
		1000						
Supplier No	1							
Product Name	prozac					Search		
TIOUGERINGINE						Search		
Product Buying Price		10						
	-	23,2		ISBN_NO	SUPPLIER_	NO PRODUCT_NAME	PRODUCT_B_PRICE	1
Product Selling Price	1	23,2		Þ	1	prozac	10	
Product Description				land to be a set of the set of th	2 3	aspirin benical		111
1 Todace beschption	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				4	aferin		
Need Prescription?	Yes	•		-				.h.
								*
				i turi				
Previous	Next				Add	Delete	Update	
11641003	INCAU				~00	Delete	Opuale	

In this section like other recording processes you can search ,add,delete and update products. The menu seen on figure 2.2 .

The table grid shows the recorded product which helps user to see products in a better view.

You can see the toolbar that writing 'Other Management Record Sections' is used for rapid access to other management sections which are suppliers and stock.

## SUPPLIERS:

### Figure 2.3

	SUPPLIER	S				
			Supplier Search			
1		Lily				
-		supplie	er name	•		
			Search			
3245465						
3234546			Processes			
		Add	Delete	Update		
evt						
		3234546	3245465 3234546 Add	3245465 3234546 Add Delete	3245465 3234546 Add Delete Update	

The suppliers section keeps records about suppliers so manager can access to supplier whenever neccessary. It includes the routine search and record proccesses.

### **STOCK**:

#### Figure 2.4

nnamagentent K	anona hinosa							
			STOCK					
	STOCK INFORMATION		PROCESSES			STOCK SEARCH		
Record No	27		1		P	roduct Name	-	
			Add		b	enical		
ISBN No		3				Search		
Product Name	benical	•	Delete			Jeach		
Expiry Date	12.12.2008	inerest the street of		RECORD_NO ISBN_NO EXPIRY_DATE QUANTITY				
Expline Date	12.12.2008		Update		2	3 19.06,2009	3	
			opullo		8	1 22.06 2009	1	
Quantity		11			12	4 22.06.2009	7	
				•	27	3 12.12.2008	11	
	1							25 25 25 25 25 25 25 25 25 25 25 25 25 2
	Previous Next							

Stock section keeps records of Inventory but there is an important part that drugs recorded in this section which is Expiry Date . In figure 2.4 all recorded drugs seen expired . So do the manager needs to look at the table and check which drugs are expired? Of course not the expired drugs can seen in management reports section.

### MANAGEMENT REPORTS:

Every type of manager needs to use management reports to see the management operations is making properly. Helps manager to make decisions about some problems and supports their decision making.

#### Figure 2.5

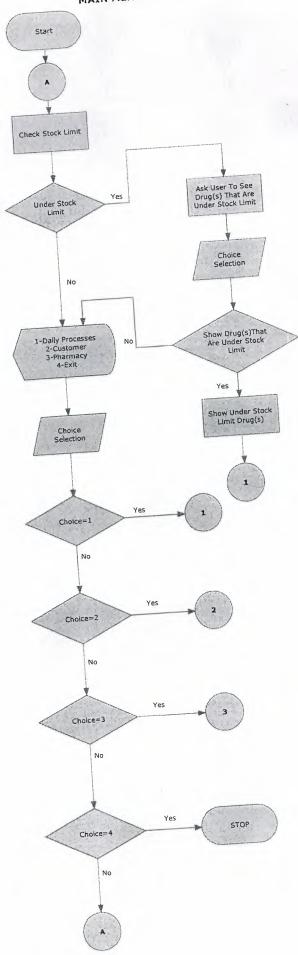
🦉 Managen	ment Reports	
	MANAGEMENT REPORTS	
	REPORTS	
	Total Inventory Buying Values	
	C Total Inventory Profit	
	C Total Goods Sold Profit	
	Goods Sold	
	C Expired Drugs	
	Show	

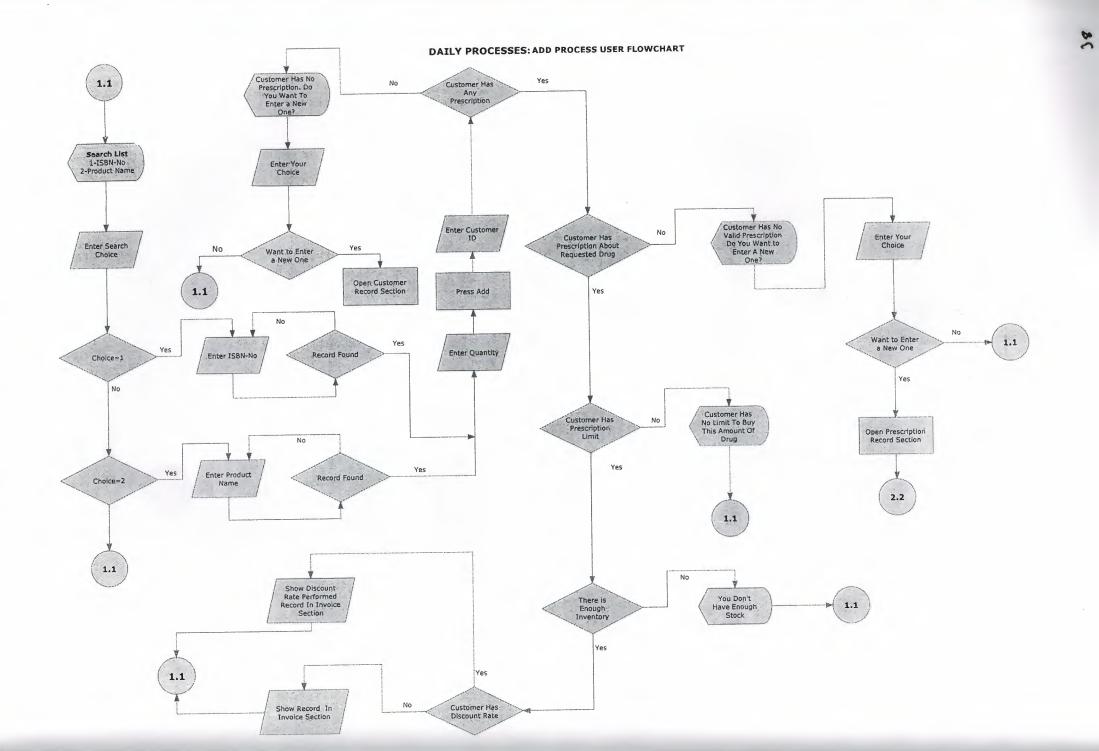
In figure 2.5 you can see different types of the management reports which are discussed below:

Total Inventory Selling Prices:

It shows the total selling prices of drugs in your inventory.

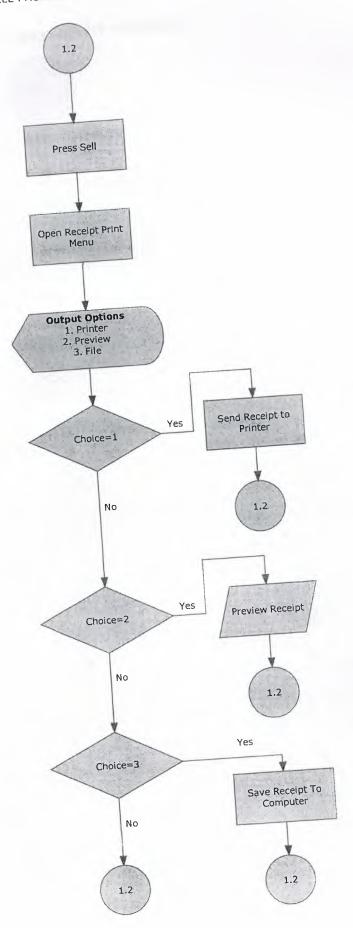
MAIN MENU FLOWCHART

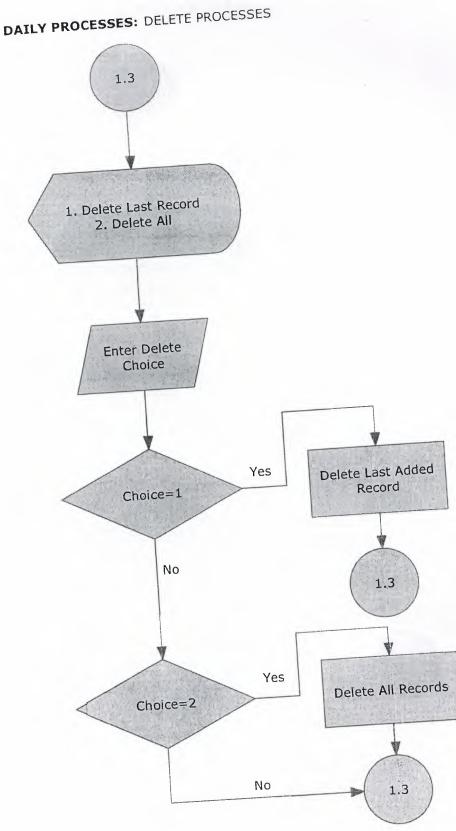




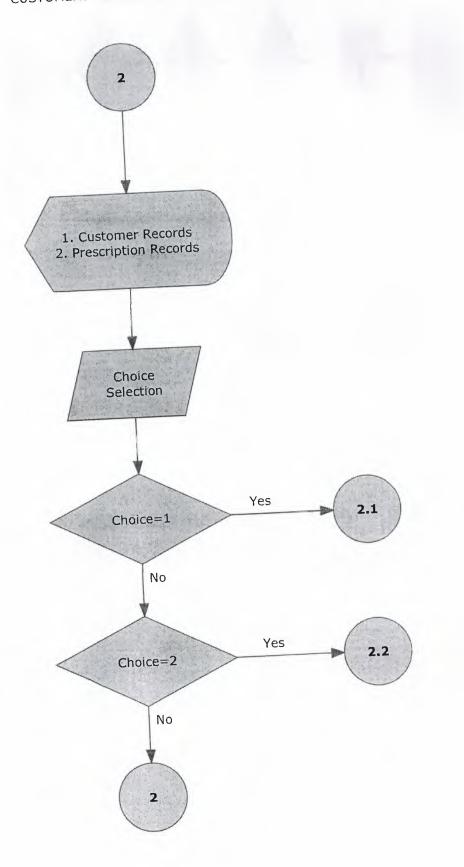
# DAILY PROCESSES

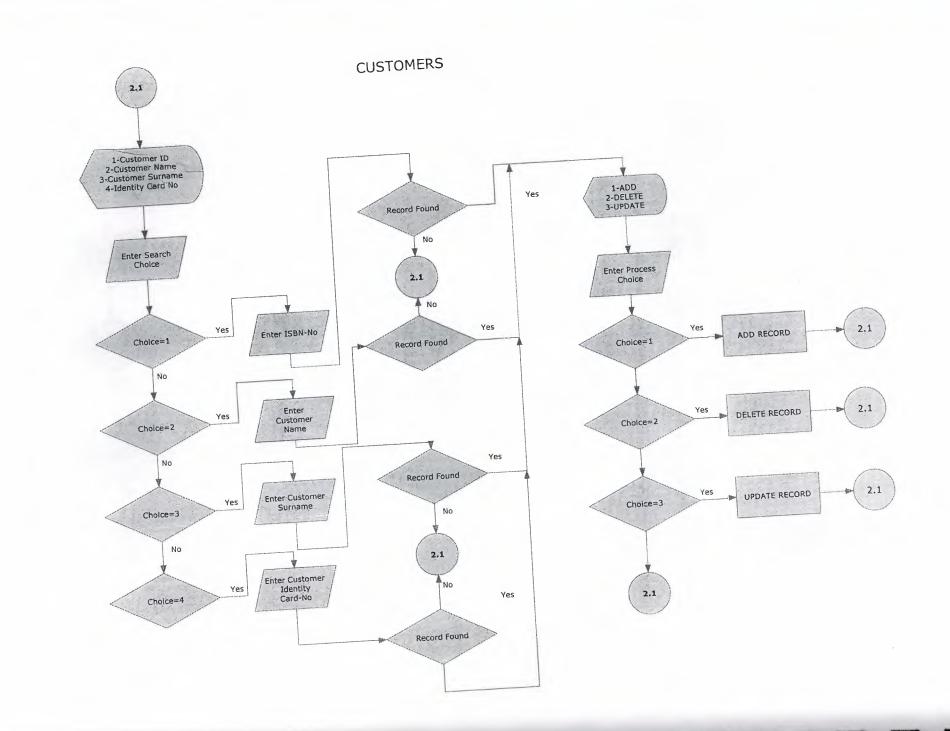
# SELL PROCESS FLOW CHART





# CUSTOMERS SELECTION PROCESS



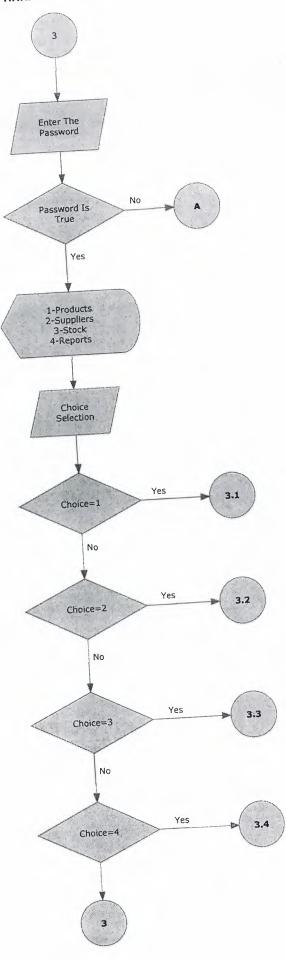


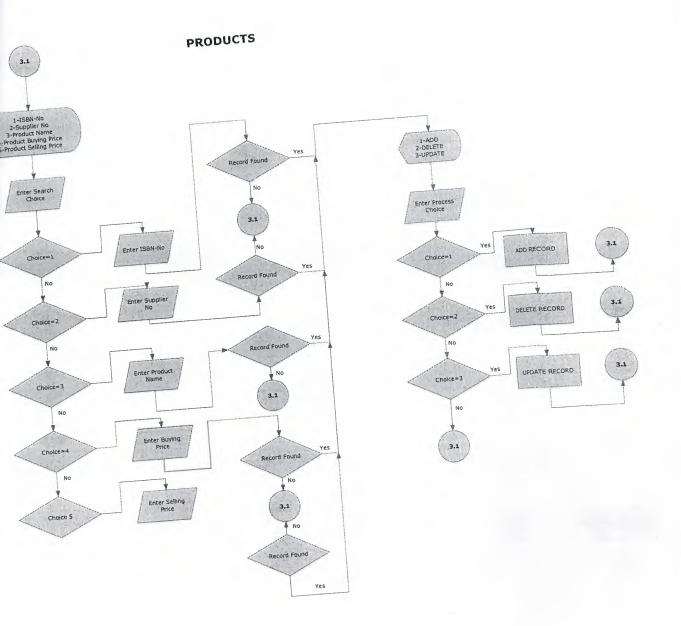
PRESCRIPTION 2.2 1-Customer Name 2-Customer Surname 1-ADD 2-DELETE 3-UPDATE Enter Your Choice Yes Enter Process Record Found Enter Product Choice Yes Name Choice=1 No No Yes 2.2 ADD RECORD Choice=1 2.2 No No Yes Enter ISBN-No Choice=2 2.2 Yes DELETE RECORD Choice=2 Record Found No No 2:2 Yes 2.2 UPDATE RECORD Choice=3 No 2.2

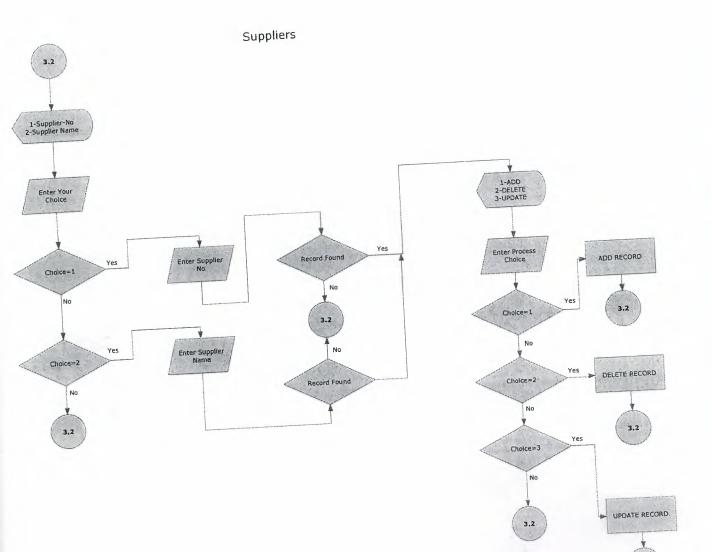
5

I.

PHARMACY SECTION



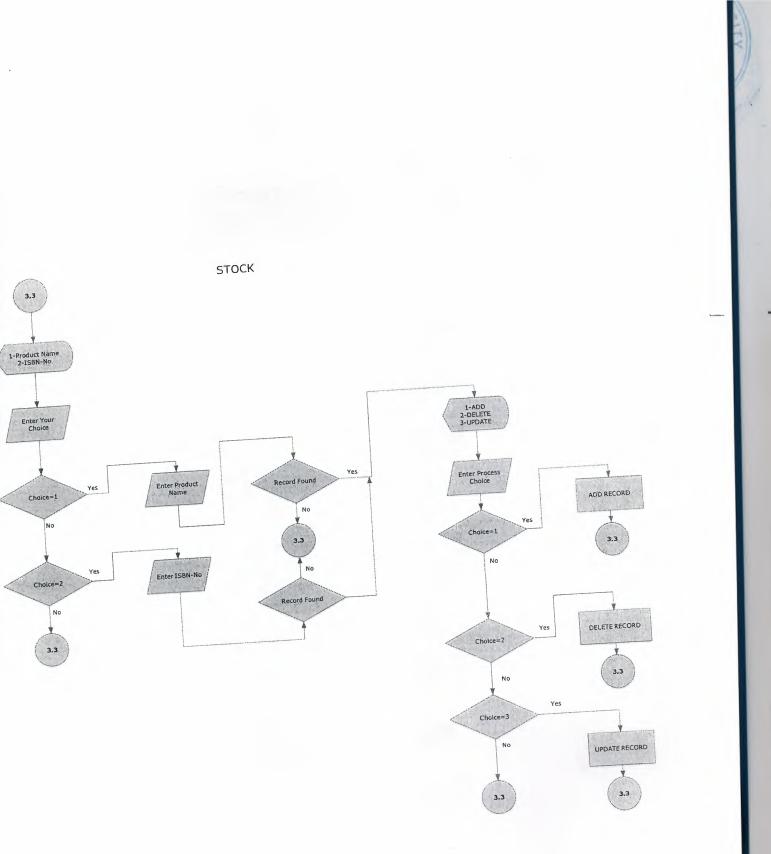


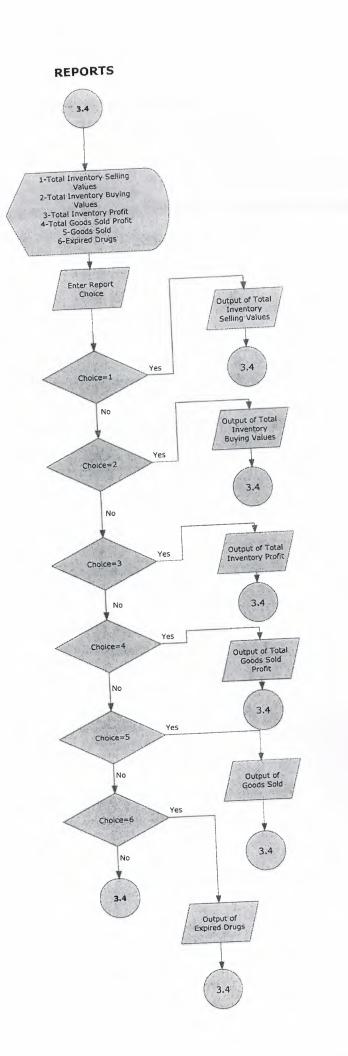


# 40

3.2

-





## Total Inventory Buying Prices

It shows total buying prices of drugs in your inventory.

### Total Inventory Profit

It shows what would be your profit if you sold all the drugs stored in your inventory.

# Total Goods Sold Profit

It shows your total profit from selling processes

### Goods Sold

This includes the data comes from selling drugs in Daily Processes

## Expired Drugs

It shows the expired drugs.

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