NEAR EAST UNIVERSITY

FACULTY OF ENGINEERING

DEPARTMENT OF COMPUTER ENGINEERING

SERVICE MANAGEMENT DATABASE APPLICATION

GRADUATION PROJECT
COM – 400

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Nicosia - 2003

ACKNOWLEDGEMENTS

First of all I would like to thank Assist. Prof. Dr. ERDAL ONURHAN for his endless and untiring support and help and his persistence, in the course of the preparation of this project.

Under his guidance, I overcame many difficulties that I faced during the various stages of the preparation of this project.

I would like to thank all of my friends and family who helped me to finish my project, especially MUHAMMAD AWAIS and my cousin, CANAN BAKIR, who also shared her university life with me for five years.

Finally, I would like to thank my family, especially my uncle, FAHRETTIN BAKIR and also my mother. Their love and guidance saw me through hard times. Their never-ending belief in me and their encouragement have been crucial and a very strong pillar that held me together. They have made countless sacrifices for my betterment. I can't repay them, but I do hope that their endless efforts will bear fruit and that I may lead them, myself and all who surround me to a better future.

ABSTRACT

The repaid increase of computer's influence in our daily life,and automated tasks,not a while ago were much time and effort consuming,yet this desire to get more out of computers has created a new demand and competition for better and new Technologies.Database development is one of the most areas that's developing and demanded by ever local and international firm and institution aroun the world.

The aim of this project is to develop a service's database for general purpose mechanist and server,this project is done to help creating a system that will keep records about different equipments and their stocks and customer record for the service and to make the services including the product informations record.

Microsoft Access is used to solve the problem,the basic structure and functions of Access is also discussed in this project.

TABLE OF CONTENTS

INTRODUCTION

Many excellent data basa systems are avoilable to Customers all over the globe.Wither developped by MS Access or other data base tools.But this data base talking about the service management and its contradicting ones.

However,I have experienced that some services or even technicians are not fully aware of how serious this could be especialy in the case of old people and infants.

So I took this project to make it easy service management or one who is interested in knowing about the white goods he/she is taking and what's it contradict and some other information about the quality and their equipments.

I also wanted to design a system that's easy and straightforward,that any one interested in using it won't have to go to the process of trail and error,and this system at the same time should provide what any complex powerful system can do.In the first chapter there is a brief history of data bases and their need in any application containing big ammount of records and MS Access can promisse in the field of computer science as a database system provider.

The secon chapter provides the structure of service management tables,their application,their design and their relationship.

In third,fourth and fifth chapter,the design of the Forms,Query and reports are explained in detail,the menü forms with its properties,all topped with detail detailed explanation about the codes used by forms,search forms and reports and queries.

CHAPTER ONE

DATABASE AND ACCESS

1.1.Why is the computer necessary in our life

Computer software has become a driving force; it's a powerful force that set Decision-making and serves as a basis for modern investigation and problem solving.Computers have become a key factor that gives products and services that modern look ,its embedded in systems of all kinds;medical,industrial,military,entertainment,even office-based products.

A Computer system in a service management record can promise better speed and efficiency with almost no change of effors.

1.2.How to develop a database application

The steps involved in database application development any relational data base application there are always the same basic steps to follow.Microsoft Access is a relational data base management system because all data is stored in an Access data base in the form of simple tables.Another name for a table is relation.

The steps of Access database design like this

- Database design
- Tables design
- Forms design
- Query design
- Report design
- Macro design
- Modüles design

1.3.Relational database

DBMS has established themselves as one of the primary means for data storage for information based systems ranging from large business applications to simple pc based programs.However a relational database management system (RDBMS) is the system used to work with data management operations more than 15 years,and still improving,providing more sophisticated storage,retriaval systems.Relational database management systems provides organisations with ability to handle huge ammount of data and changing it into meaningful information.

1.4.The facilities of access

Microsoft Access is relational DBMS(Database Management System) with all the features necessary to develop and use a data base application.The facilities it offers can be found on most modern relational DBMSs and all versions of Access.

- Tables are where all the data is stored.They are usually linked by relationships.
- Queries are the way you extract data from the database
- Forms are the method used for input and display of database data.
- Reports are used to display nicely formatted data on paper.
- Macros are sets of simple commands that execute sequences of database operations.
- Modules are used to stare general-purpose VB database program code.
-

1.5.Visual basic and Access

Microsoft Acess is the DBMS(Database Management System) VB and Access in developing data base applications is that for non-trivial database applications,VB offers more flexibility to the developper then the VB comes with Access.Access database using VB program code and setting properties.

First method of linking VB forms to Access databases called the data control.The data control is a simple VB control that you drag on to a VB form to link it to your choosen database.The data can be displayed and updated using tiedtext boxes,list boxes,combo boxes,and grids.

1.5.1.DAO(Data Access objects)

The DAO approach to database programming often requires more code ,but like SQL compared to the Qury Design View,offers greater control to the database programmer over what's going on his/her application.

Data Access Objects are things like databases,recordsets,table and query definitions, and fields,Rather than tying a recor set to a data control when we use DAO we shall allow our programs to create and manipulate recordsets.

1.5.2.ADO(Active X Data Objects)

The ADO programming is in principle very similar to DAO programming but cointains some new commands.ADO is Microsoft's new approach to database programming which aims to give the programmer a more consistent way of connecting to a broad range of different types of data source.

CHAPTER TWO

STRUCTURE OF SERVICE MANAGEMET TABLES AND THEIR APPLICATIONS

2.1.Information

What i have here is service management database with all the information necessary about it,and another table which will have the contradicting part of a service management,six tables must be linked in a way so that when a user ask to see the contradicting service.

2.2.The solution

MS Access is begin used as the development tool,and the application is going to be a single user application,which means its going to be instolled on one machine,this application however may be used by more than one user on many computers sharing the same tables by using simple advancements.

2.3.Creating tables

For a new database,after having specified the database name and path as above,you will be confronted with the following window.

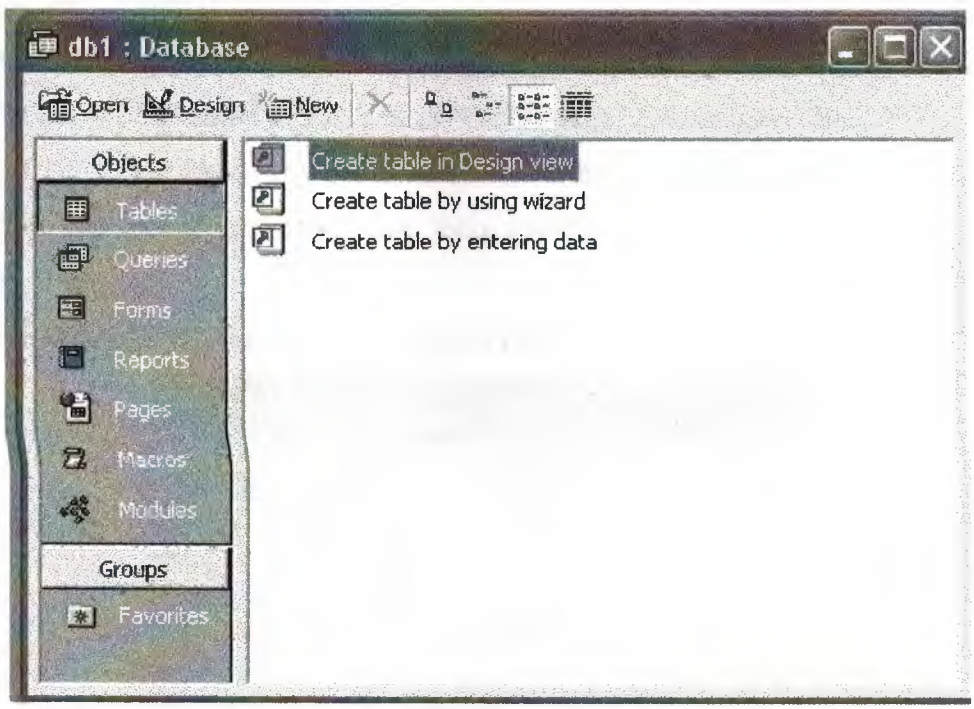


Figure2.3.1. The window of database

This window shows that there are notables in database yet.Click new button.

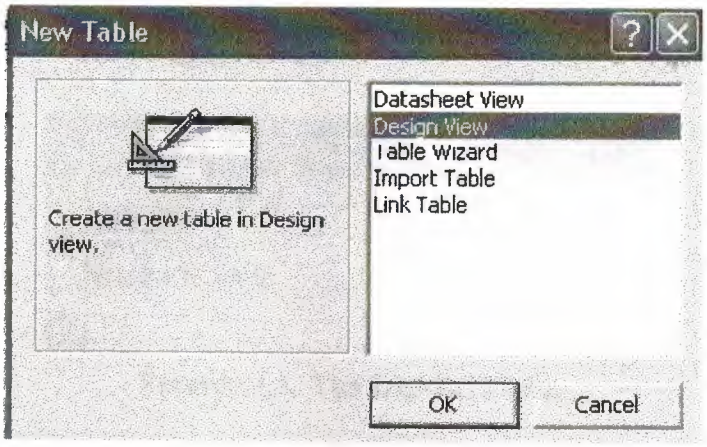


Figure2.3.2. The window is type of table design

sellect the Design View by clicking on the listbox and then the OK button.Design View gives us more control over the design of our database than either the Table Wizard or the Datasheet view.Import Table is used to bring in data from an existing database and Link Table is database to an external table.

2.4.Tables Design

In my project's table designing with primary key. Guide Lines for making a database project.

The database consists of eleven tables;

CUSTOMERTBL,DEFECTTBL,EQUIPMENTTBL,PRODUCTINFORMATIONTBL, TBL1,SERVICEINFORMATIONTBL,STOCKTBL,TECHNICIANTBL,. TCH1,TCH2,TCH3 Please pay attention on the naming conventions of objects, you are required to use appropriate names using these conventions for your objects.

the CUSTOMERTBL have got six fields one is its unique ROWID

CUSTOMERTBL : Table

Field Name	Data Type
ROWID	Text
CNAME-SURNAME	Text
ADDRESS	Text
TEL	Text
CALLED DATE	Date/Time
APPOINTMENT DATE	Date/Time

Figure2.4.1 The CUSTOMERTBL

The DEFECTTBL contains three fields Primerykey on the defectcode.DEFECTCODE is the unique.

DEFECTTBL : Table

Field Name	Data Type
MODELNO	Text
DEFECTCODE	Text
EQUIPMENT NAME	Text

Figure2.4.2. The DEFECTTBL

The EQUIPMENTTBL contains four fields.DEFECTCODE linking with DEFECTTBL.

EQUIPMENTTBL : Table

Field Name	Data Type
MODELNO	Text
DEFECTCODE	Text
STOCKNO	Text
EQUIPMENTNAME	Text

Figure2.4.3. The EQUIPMENTTBL

The PRODUCTINFORMATIONTBL have seven fields one is its unique SERINO.

PRODUCTINFORMATIONTBL : Table

Field Name	Data Type
MODELNO	Text
SERINO	Text
PRODUCTDATE	Date/Time
STANDARD	Text
VOLTAGE	Text
TOTALPOWER	Text
TOTALCURRENT	Text

Figure2.4.4. The PRODUCTINFORMATIONTBL

The Table1 have two fields we will use pictures in the main menü and oppening screen.therefore,OLE object is neccessary.

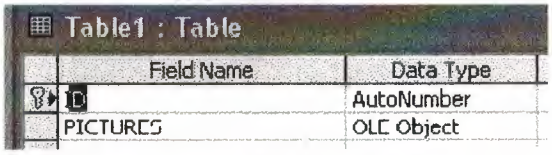


Figure2.4.5. The Table1

The SERVICEINFORMATIONTBL contains nine fields one is its unique ROWID.It is related with CUSTOMERTBL

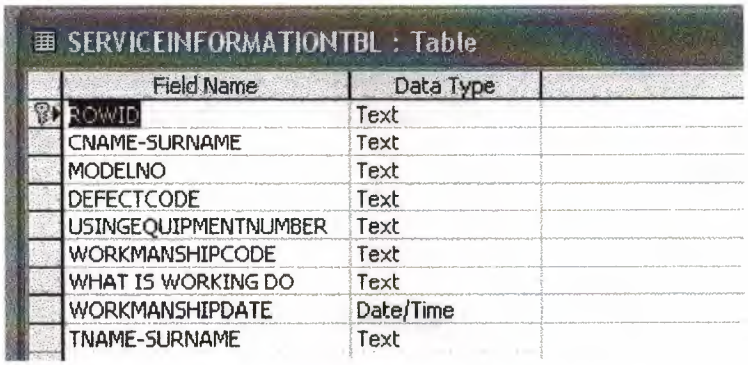


Figure2.4.6. The SERVICEINFORMATIONTBL

The STOCKTBL contains seven fields one is its unique STOCKNO linking with EQUIPMENTTBL.

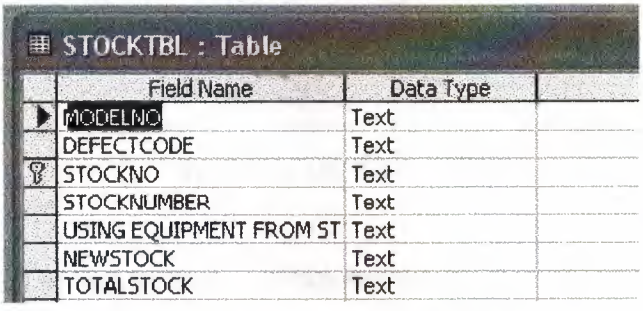


Figure2.4.7. The STOCKTBL

The TECHNICIANTBL have two fields one is its unique WORKMANSHIPCODE.

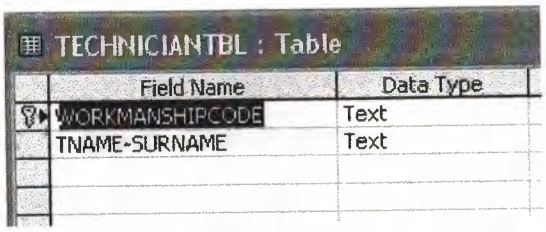


Figure2.4.8. The TECHNICIANTBL

The TCH1 table is to belong to one technician Which is giving information about the appointment date.

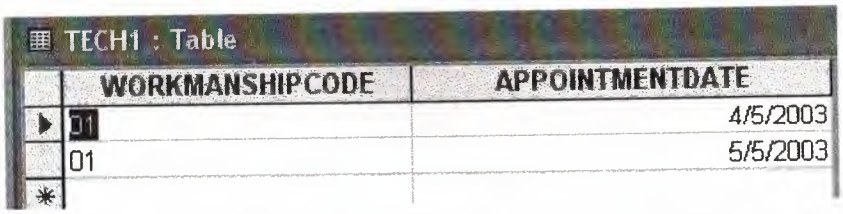


Figure2.4.9. The TCH1

The TCH2 table is to belong to one technician Which is giving information about the appointment date.

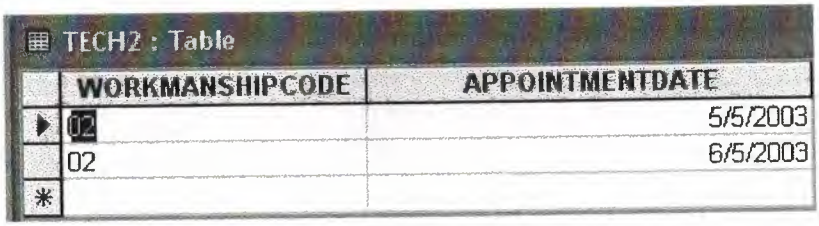


Figure2.4.10. The TCH2

The TCH3 table is to belong to one technician Which is giving information about the appointment date.

Figure2.4.11. The TCH3

All fields have been created,a primary key must be chosen for the table.This is a field that uniquelly identifies each record in table.You have to select a primary key such that no two records in the table could ever have the same value of this primary key.Occasionally,you will have a choice.

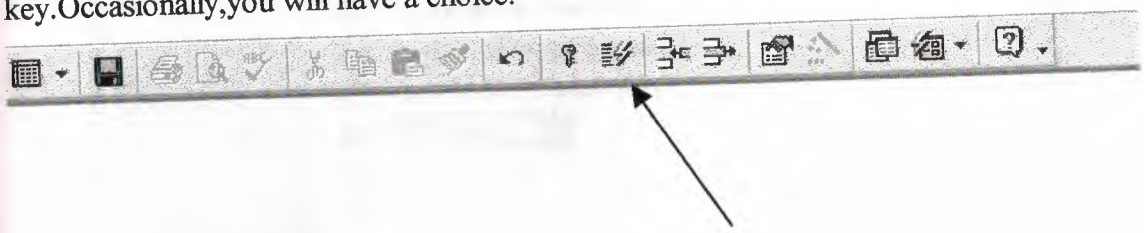


Figure2.4.12a. The Primerykey

OR

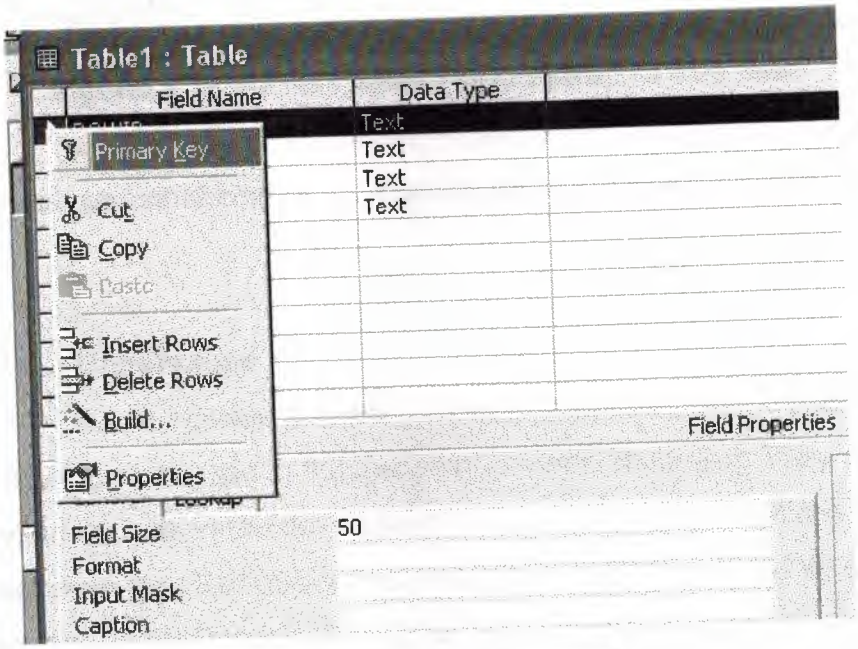


Figure2.4.12b. The Primerykey

After save your table .click Ok button.

Figure2.4.13. How the table save

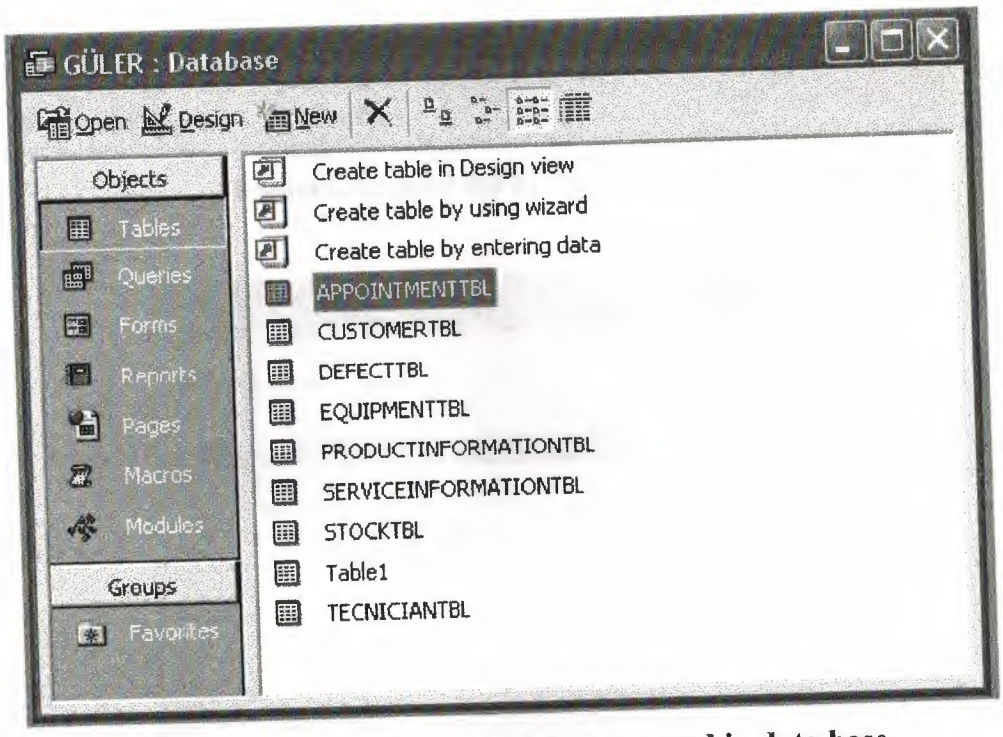


Figure2.4.14.the nine tables i have created in data base

Now let us see what kind of relationship can be formed between these tables

2.5.Creating relationships

The relationships you create between Access database tables correspond to the relationships discussed in the sections on entity modelling.They shows the links between records in tables.Forexaple,we shall create a relationship in a moment between the CUSTOMERTBL and SERVICEINFORMATIONTBL.It will the primary key ROWID in the CUSTOMERTBL to the corresponding ROWID in the SERVICEINFORMATIONTBL.

Creating relationships in Access not onl helps out programmers who design their queries using the query grid; it also helps to maintain database integretiy by disallowing.

To create relationships between the tables,you first have to open the relationships window in Access.

You do this by clicking the relationships button as shown below.

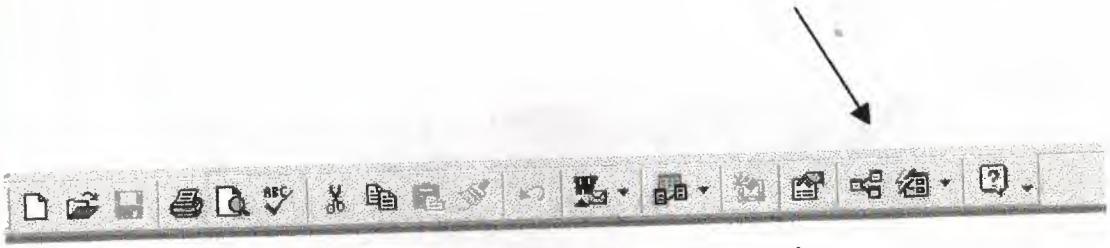


Figure2.5.1. tool list of the relationship

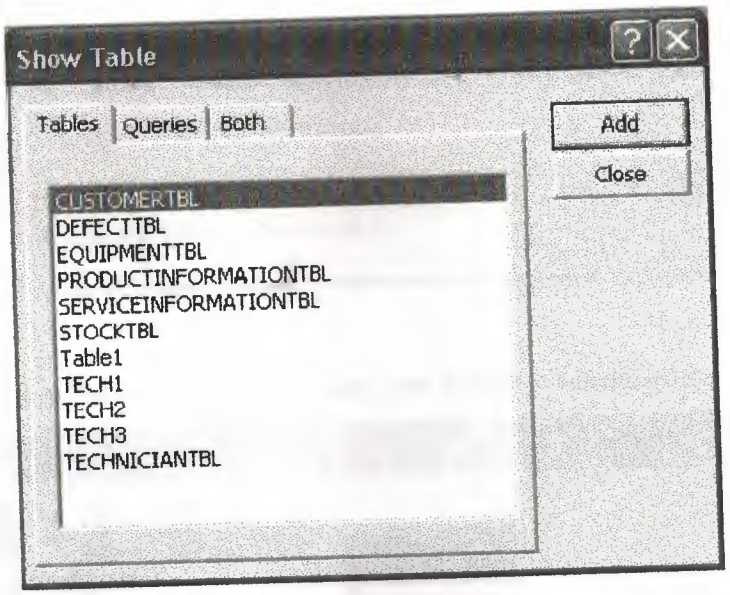


Figure2.5.2. when the relationship window open choose the tabless add to relationships

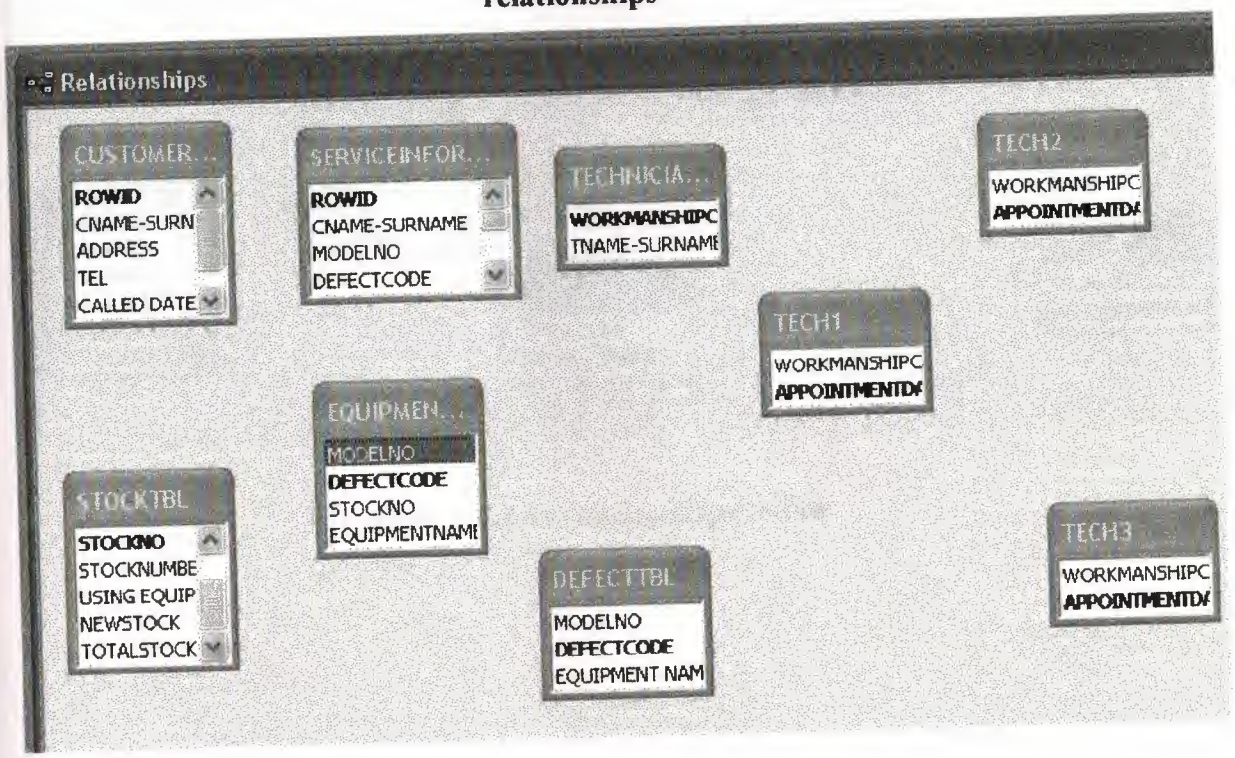


Figure2.5.3. The relationship window with the nine tables added but no relationships yet.

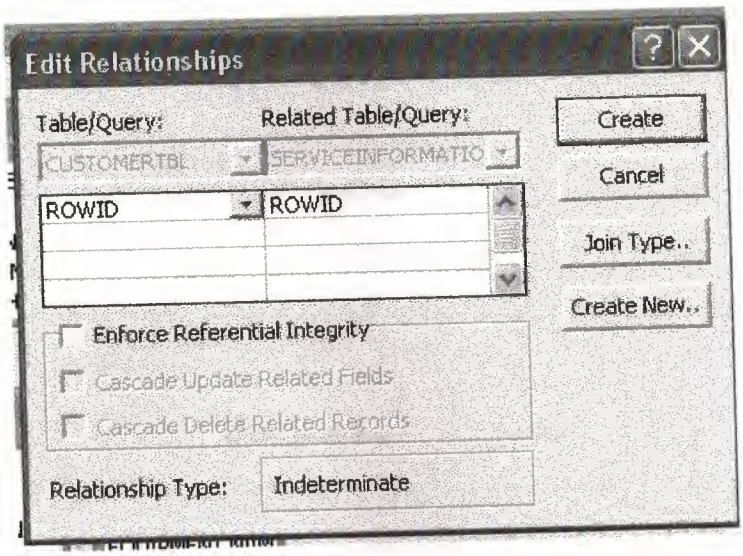


Figure2.5.4. This windows opens up when you create a relationship.

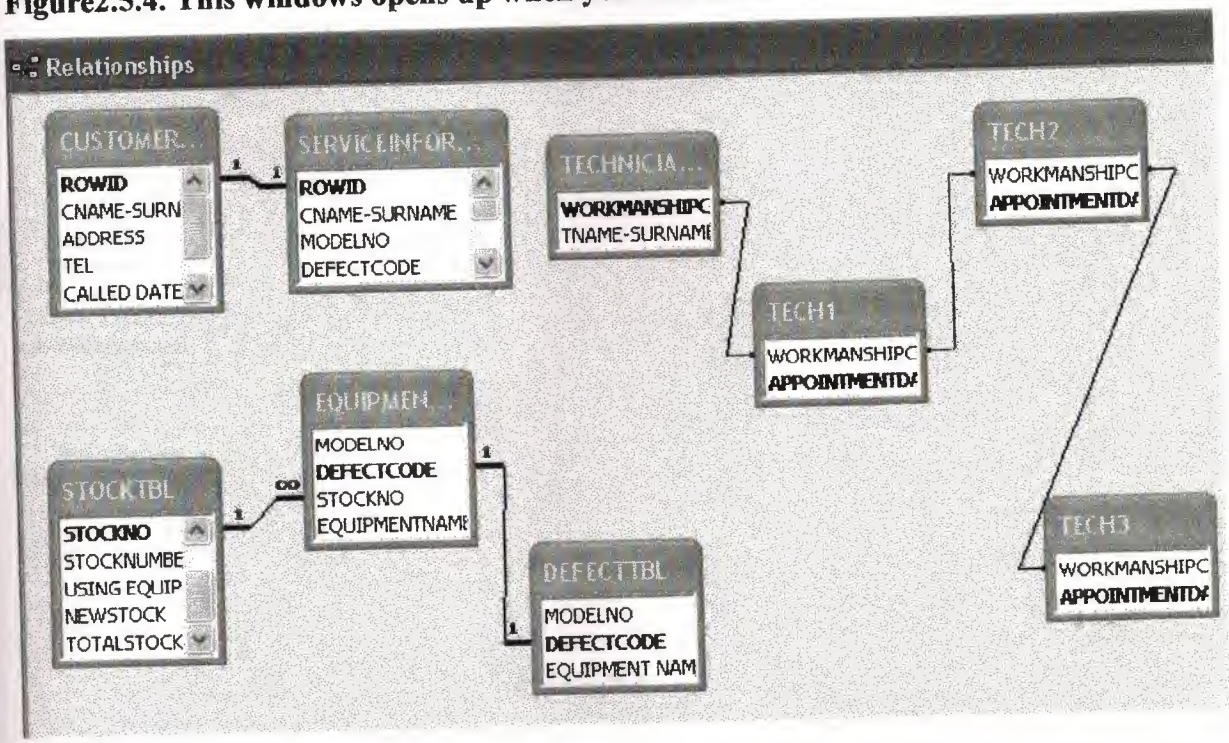


Figure2.5.5.The relationshipwindow

2.6.Flowcharts of the processes

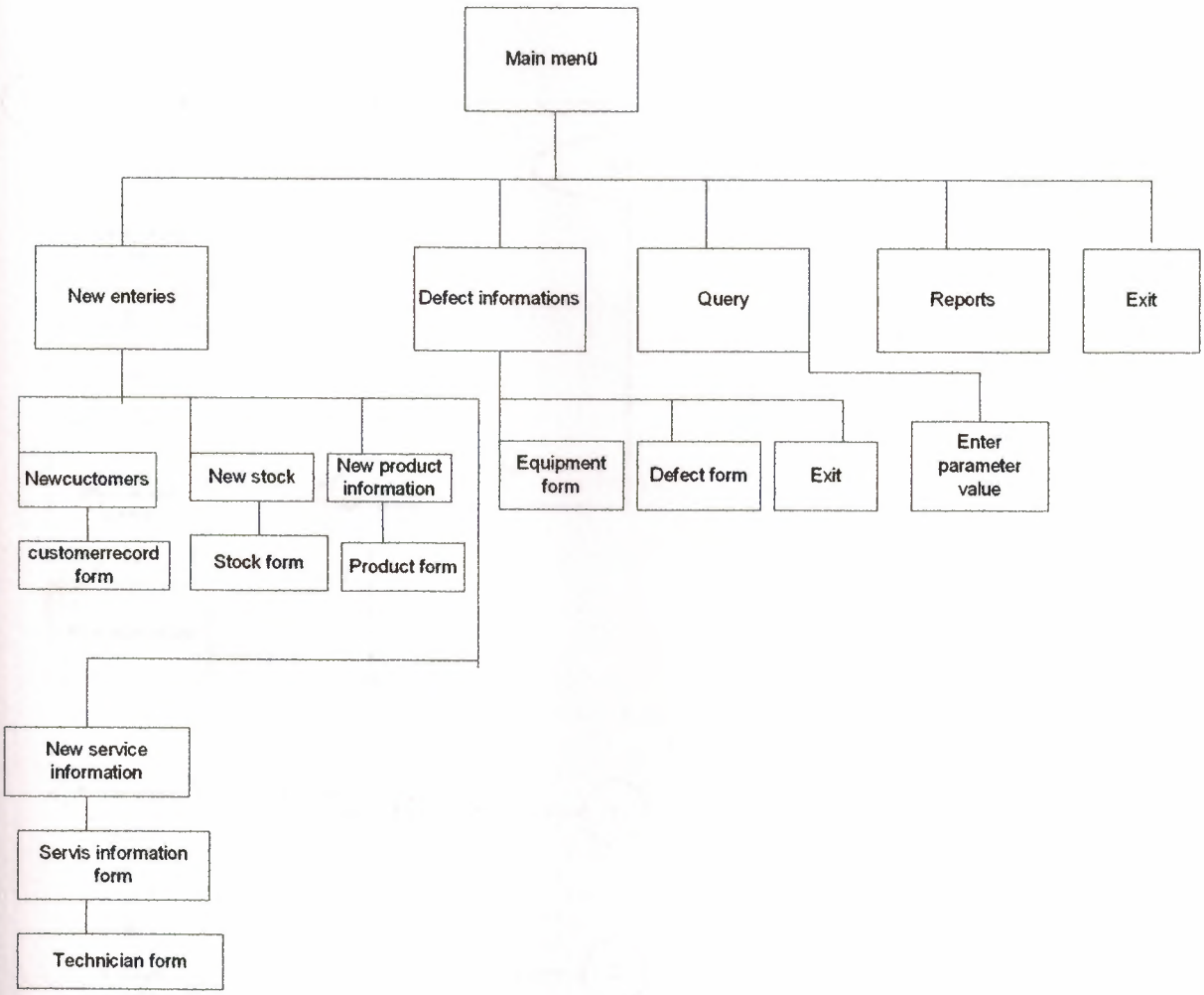


Figure.2.6.1

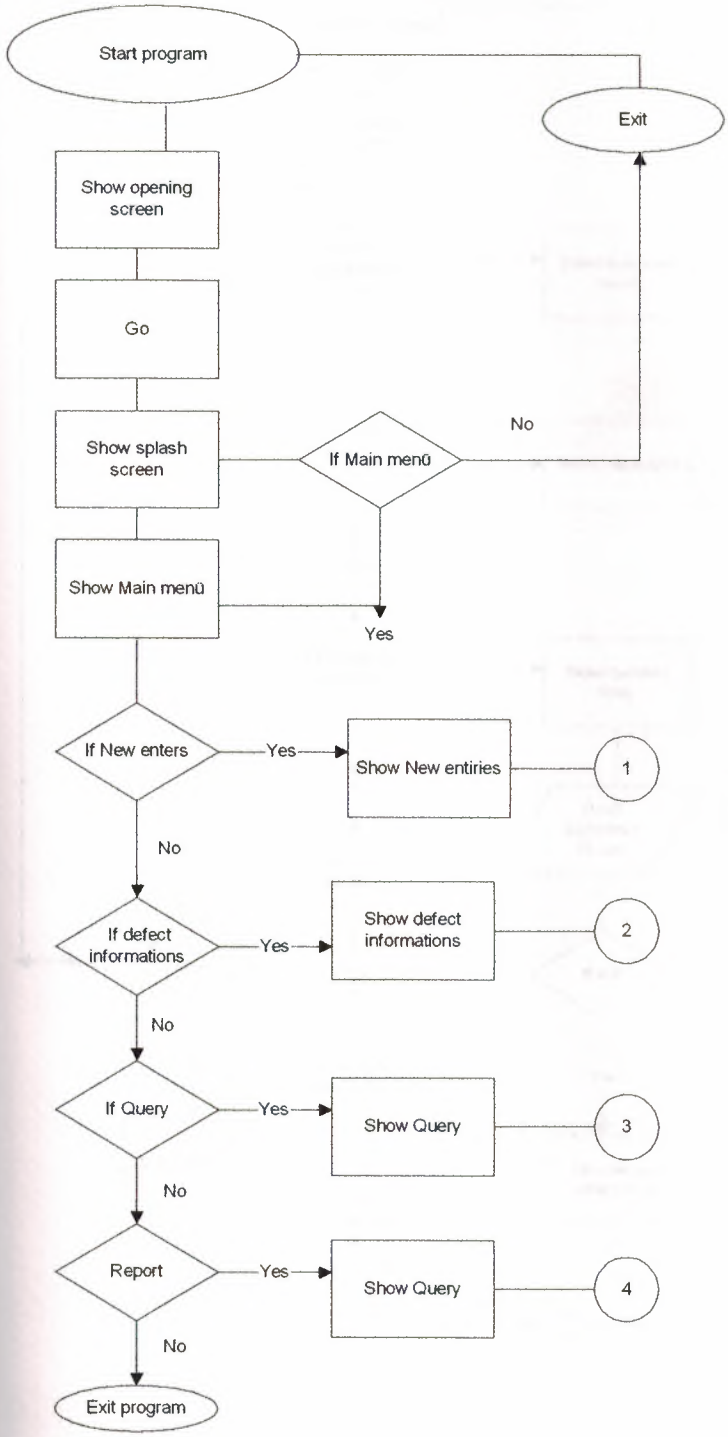

Start program
Exit
Show opening screen
Go
Show splash screen
If Main menü
No
Show Main menü
Yes
If New enters
Yes
Show New entiries
1
No
If defect informations
Yes
Show defect informations
2
No
If Query
Yes
Show Query
3
No
Report
Yes
Show Query
4
No
Exit program

Figure.2.6.2

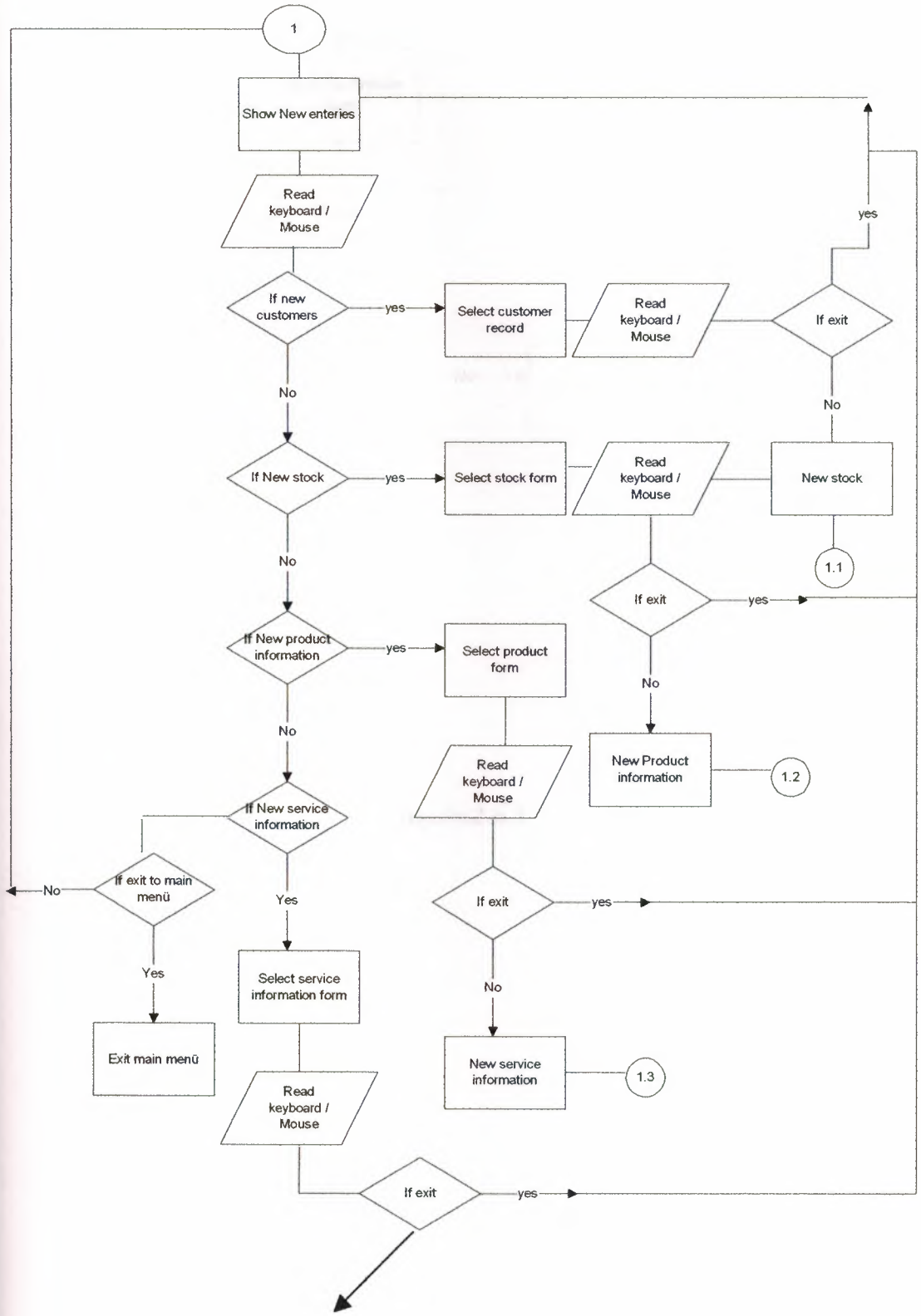

1
Show New enteries
Read keyboard / Mouse
If new customers
yes
Select customer record
Read keyboard / Mouse
If exit
yes
No
No
If New stock
yes
Select stock form
Read keyboard / Mouse
New stock
1.1
No
If exit
yes
If New product information
yes
Select product form
No
No
Read keyboard / Mouse
New Product information
1.2
If New service information
If exit to main menü
No
Yes
If exit
yes
Yes
Select service information form
No
Exit main menü
New service information
1.3
Read keyboard / Mouse
If exit
yes

Figure.2.6.3

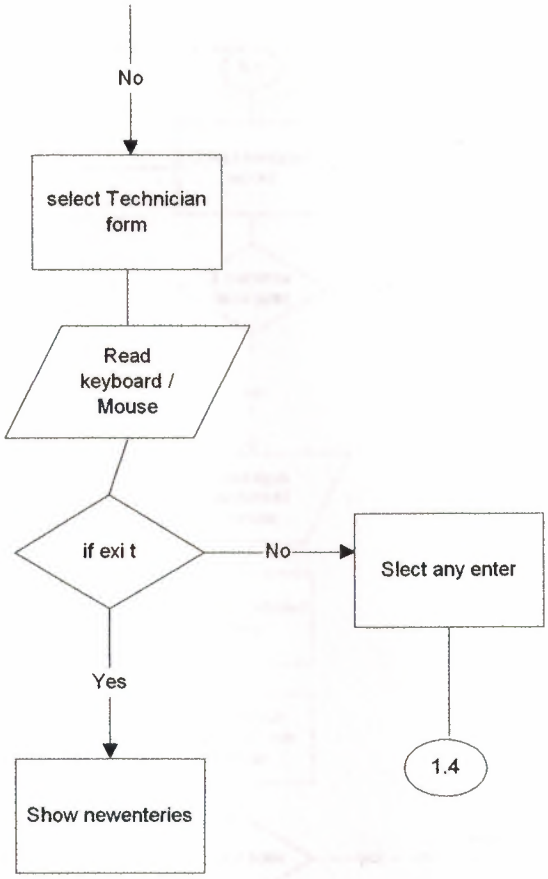

No
select Technician form
Read keyboard / Mouse
if exi t
No
Slect any enter
Yes
1.4
Show newenteries

figure.2.6.3

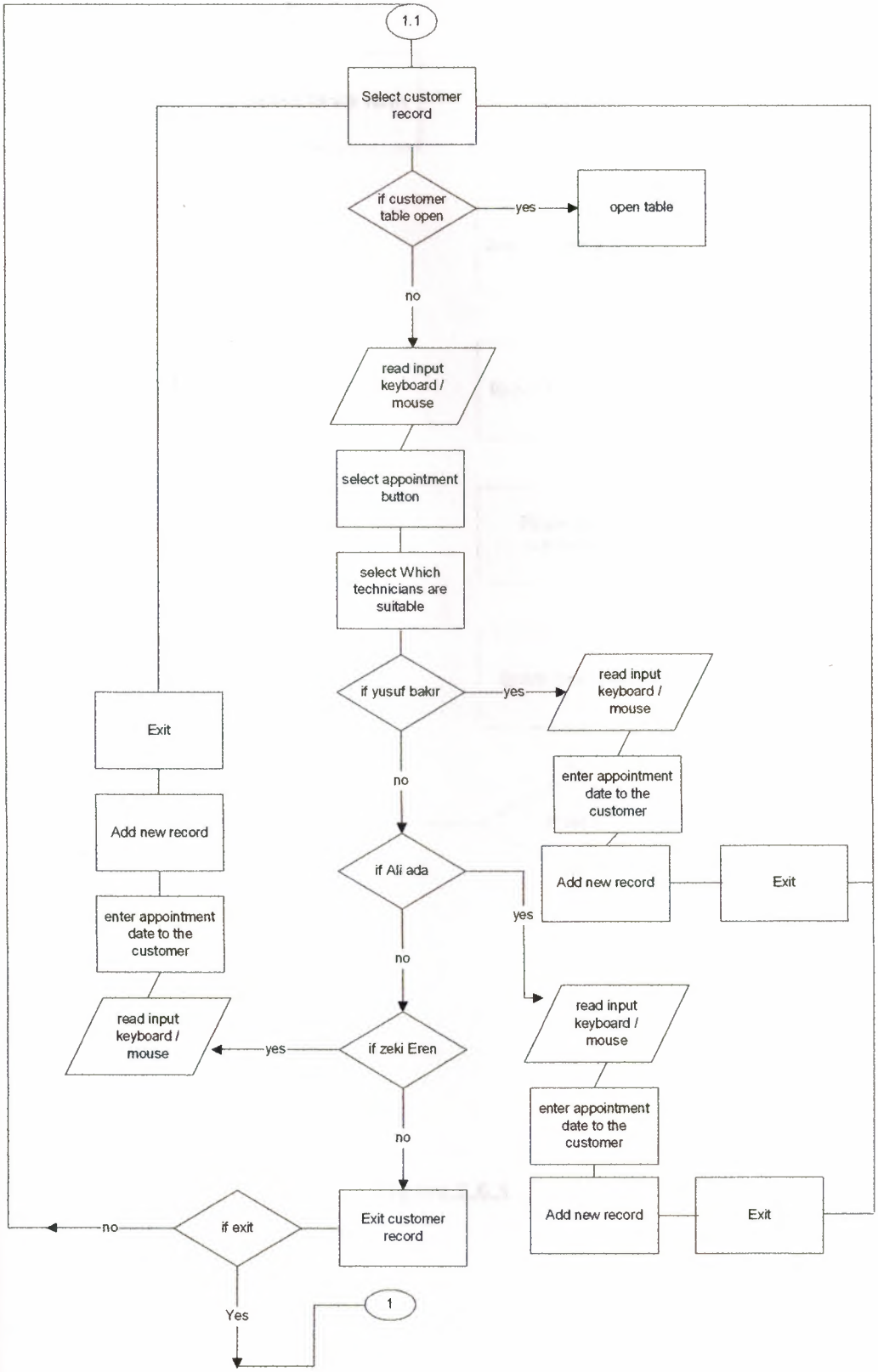

1.1
Select customer record
if customer table open
yes
open table
no
read input keyboard / mouse
select appointment button
select Which technicians are suitable
if yusuf bakır
yes
read input keyboard / mouse
enter appointment date to the customer
Add new record
Exit
no
Add new record
if Ali ada
Exit
yes
enter appointment date to the customer
no
read input keyboard / mouse
read input keyboard / mouse
yes
if zeki Eren
enter appointment date to the customer
no
Add new record
Exit
no
if exit
Exit customer record
Yes
1

Figure.2.6.4

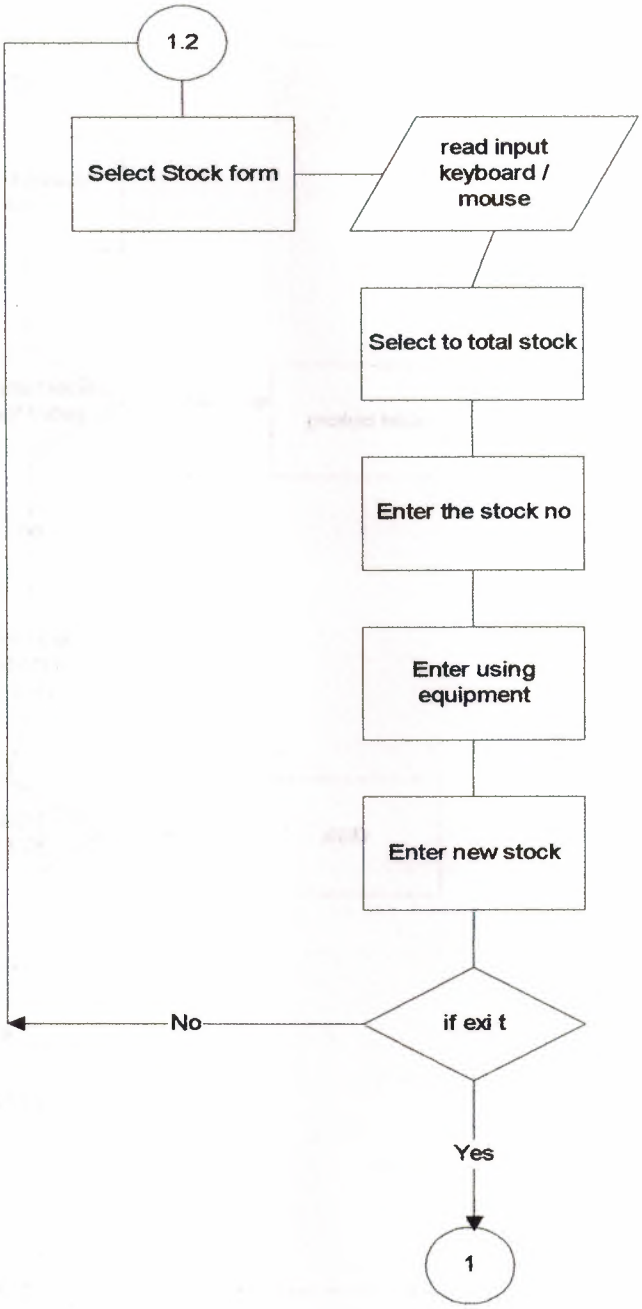

1.2
Select Stock form
read input keyboard / mouse
Select to total stock
Enter the stock no
Enter using equipment
Enter new stock
if exi t
No
Yes
1

Figure.2.6.5

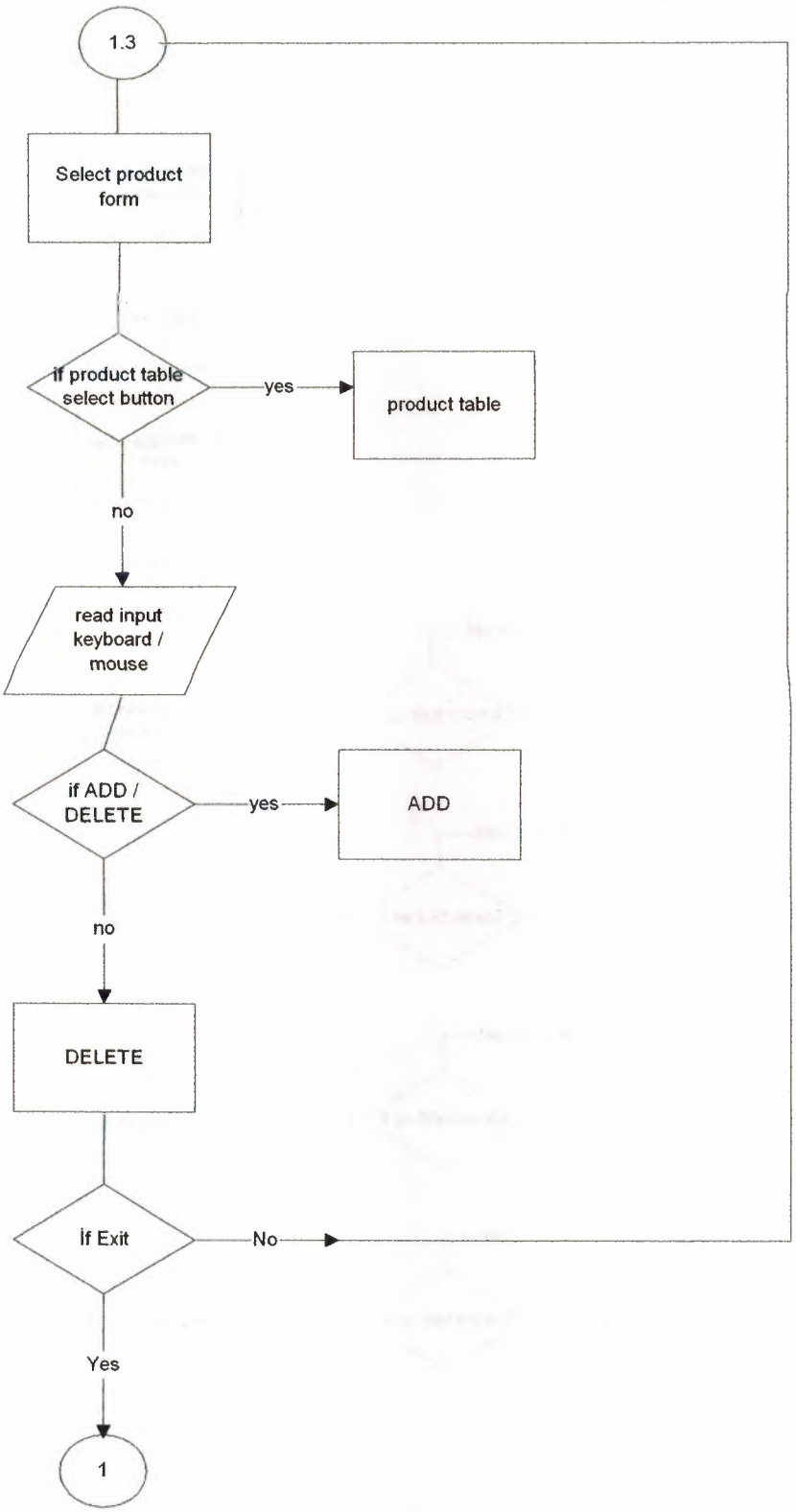

1.3
Select product form
if product table select button
yes
product table
no
read input keyboard / mouse
if ADD / DELETE
yes
ADD
no
DELETE
İf Exit
No
Yes
1

Figure.2.6.6

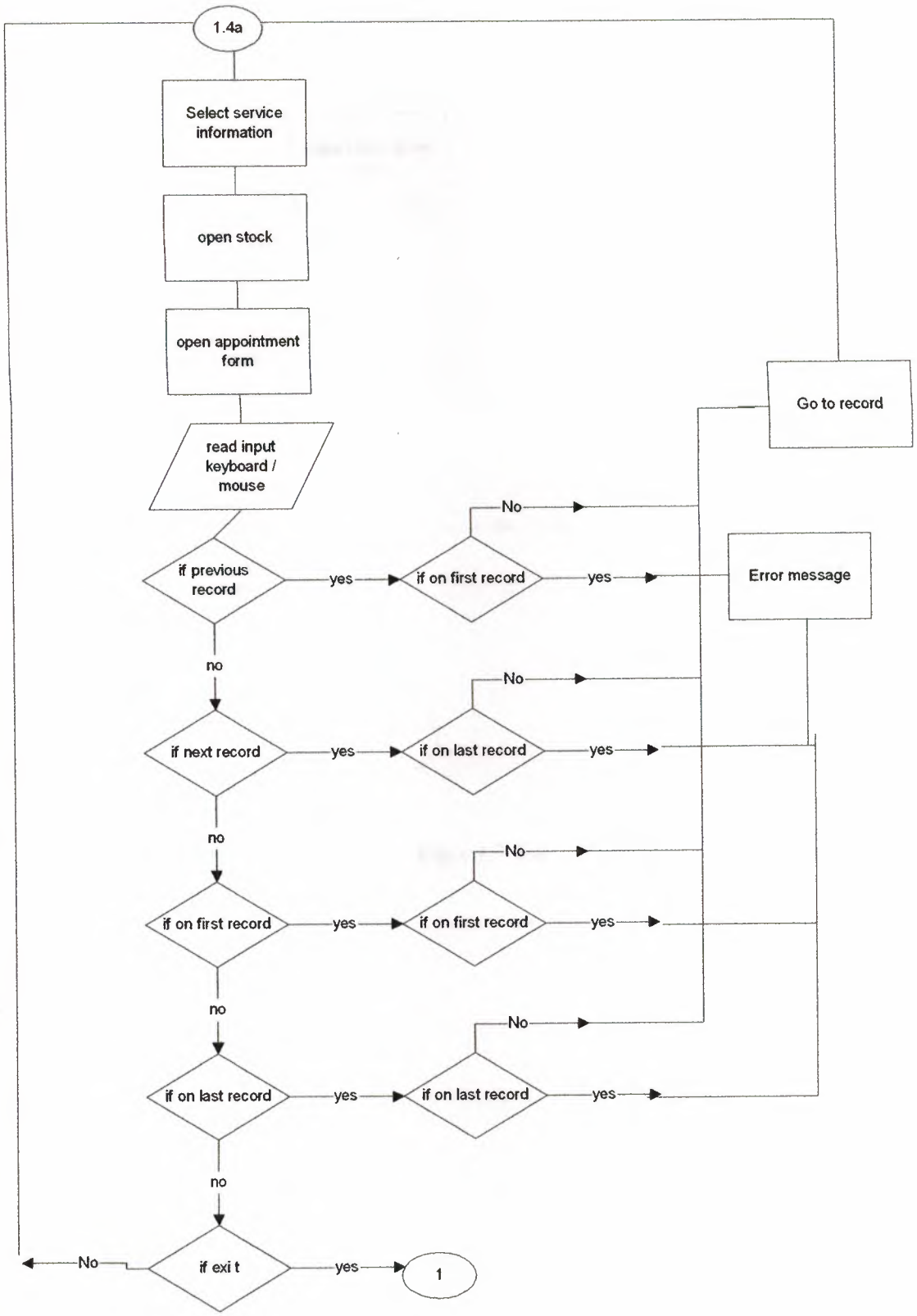

1.4a
Select service information
open stock
open appointment form
read input keyboard / mouse
Go to record
if previous record
yes
if on first record
yes
No
Error message
no
if next record
yes
if on last record
yes
No
no
if on first record
yes
if on first record
yes
No
no
if on last record
yes
if on last record
yes
No
no
if exi t
yes
1
No

Figure.2.6.7

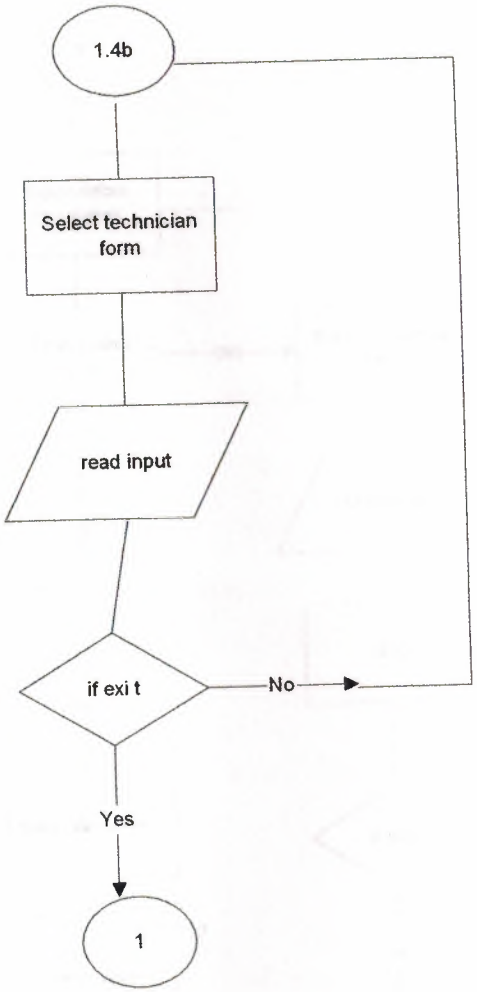


Figure.2.6.8

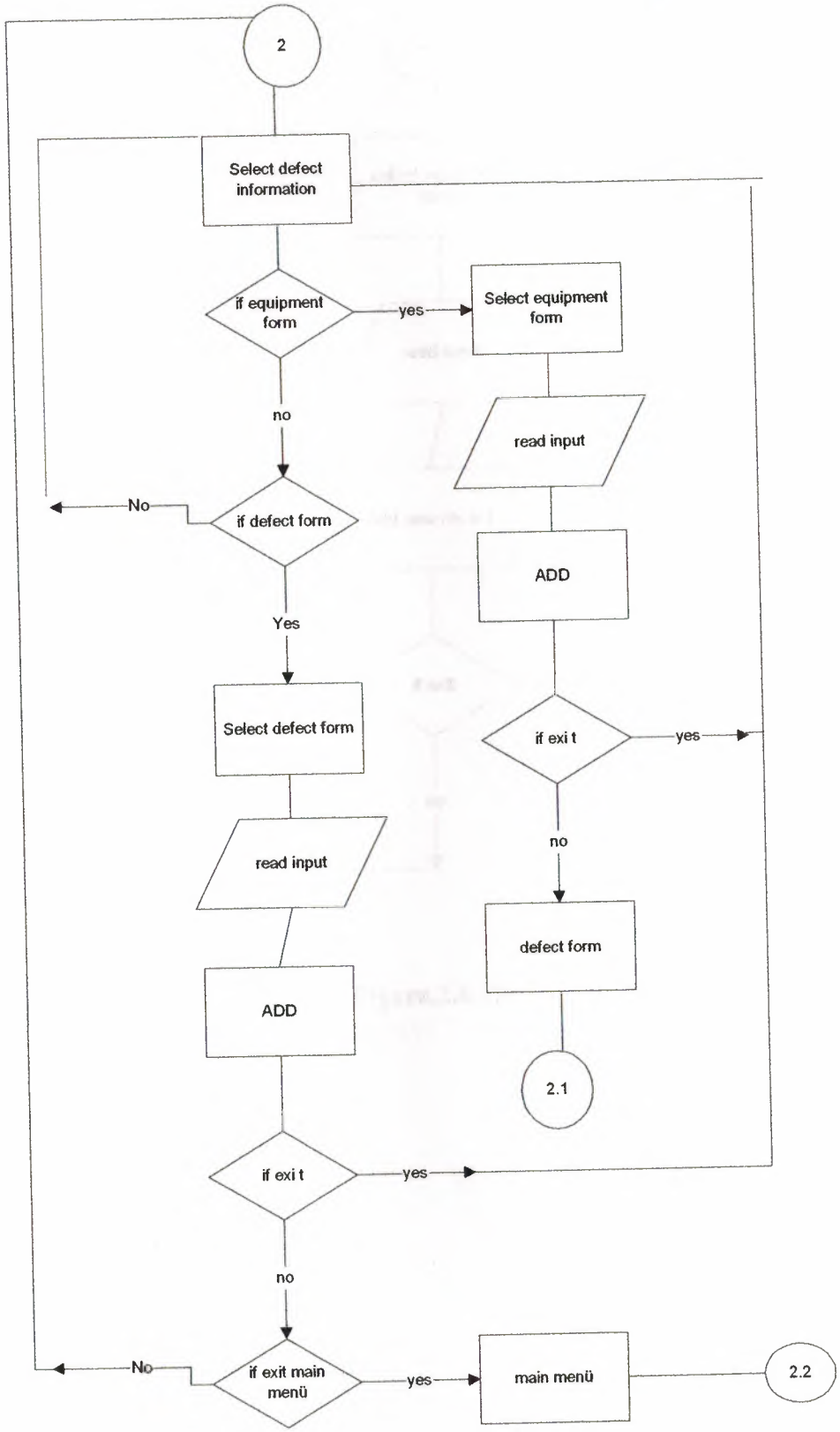

2
Select defect information
if equipment form
yes
Select equipment form
no
read input
No
if defect form
ADD
Yes
Select defect form
if exi t
yes
read input
no
defect form
ADD
2.1
if exi t
yes
no
No
if exit main menü
yes
main menü
2.2

Figure.2.6.9

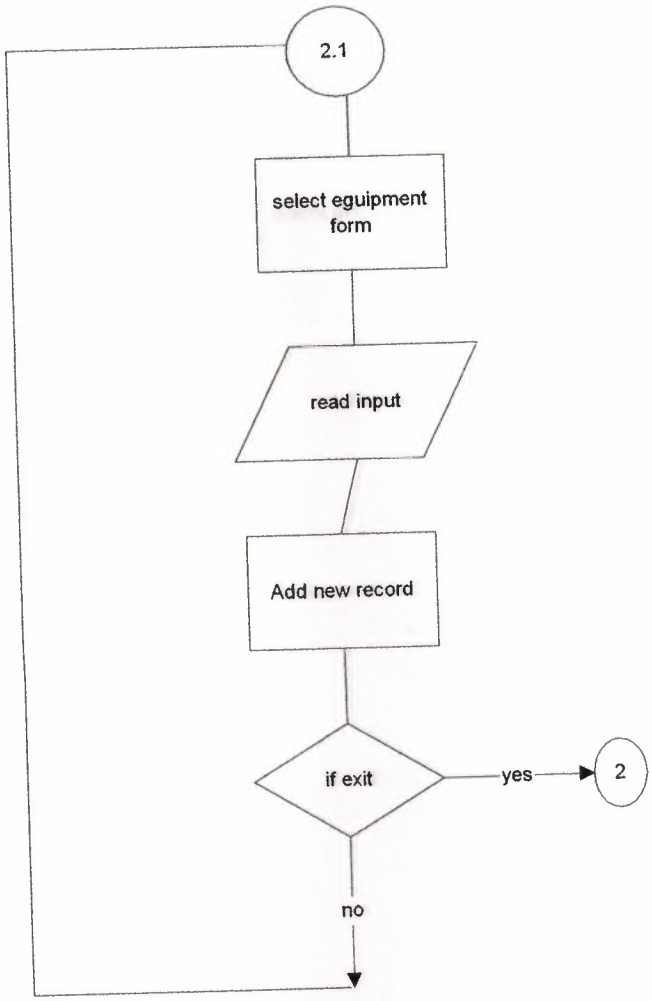

2.1
select eguipment form
read input
Add new record
if exit
yes
2
no

Figure.2.6.10

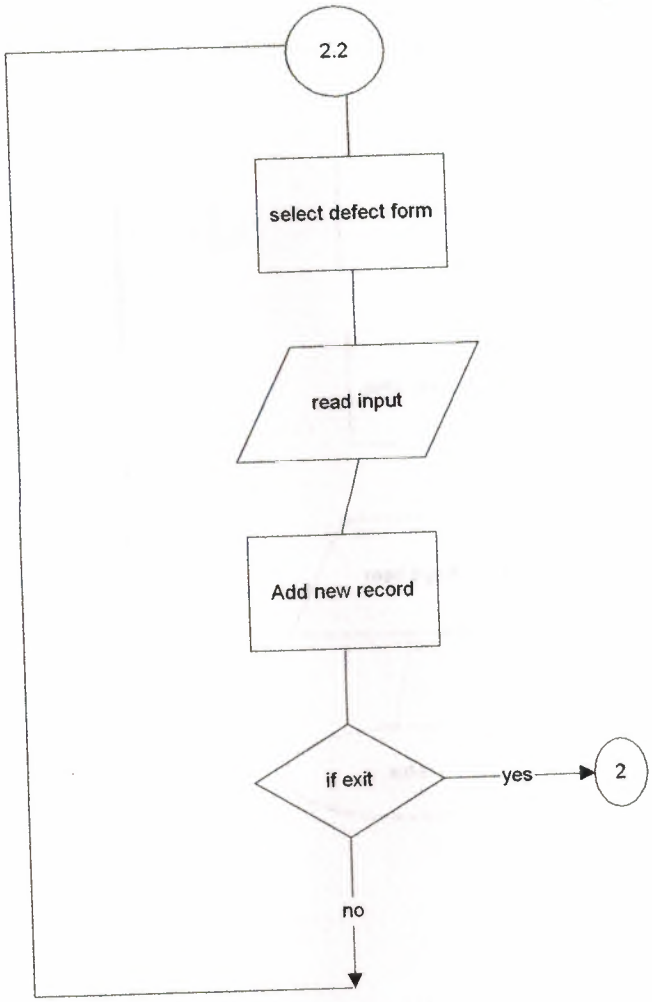

2.2
select defect form
read input
Add new record
if exit
yes
2
no

Figure.2.6.11

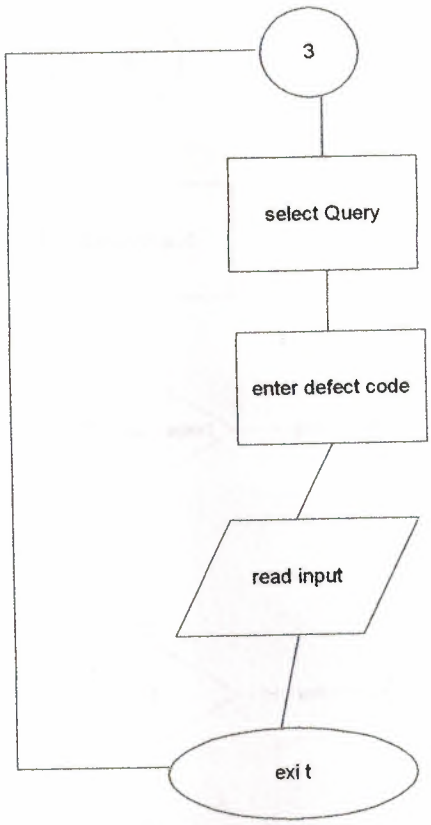


Figure.2.6.12

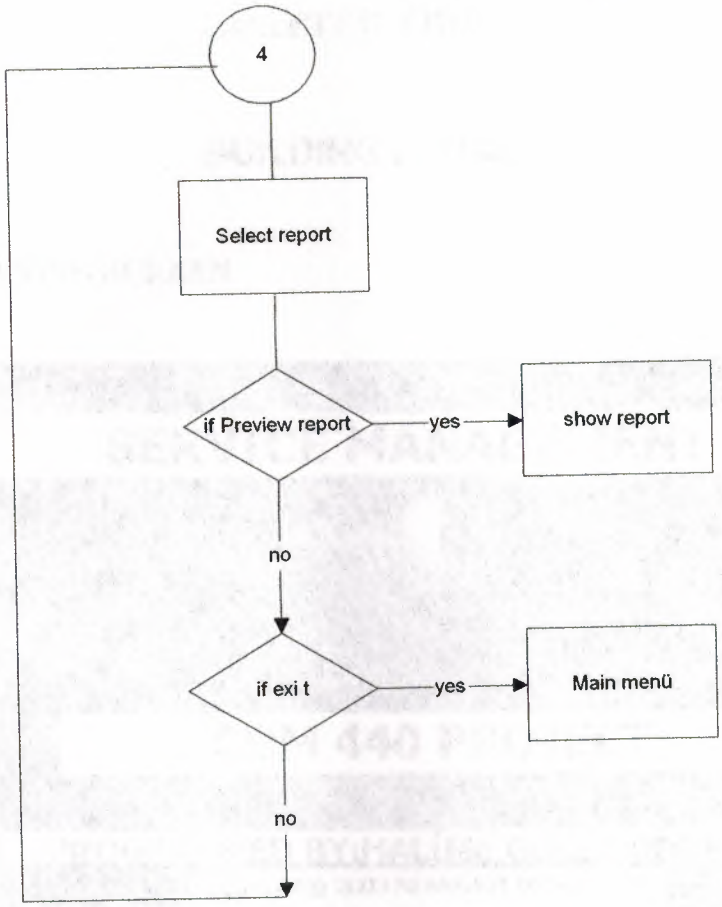

4
Select report
if Preview report
yes
show report
no
if exi t
yes
Main menü
no

Figure.2.6.13

CHAPTER THREE

BUILDING FORMS

3.1.THE OPENNING SCREEN

Figure 3.1.The opening screen main design

The opening screen is going to appear when the application is loaded which is going to give

some information about the program,it's name and name of it's programmer

First let us see some properties for our OPENINGSCREEN form.

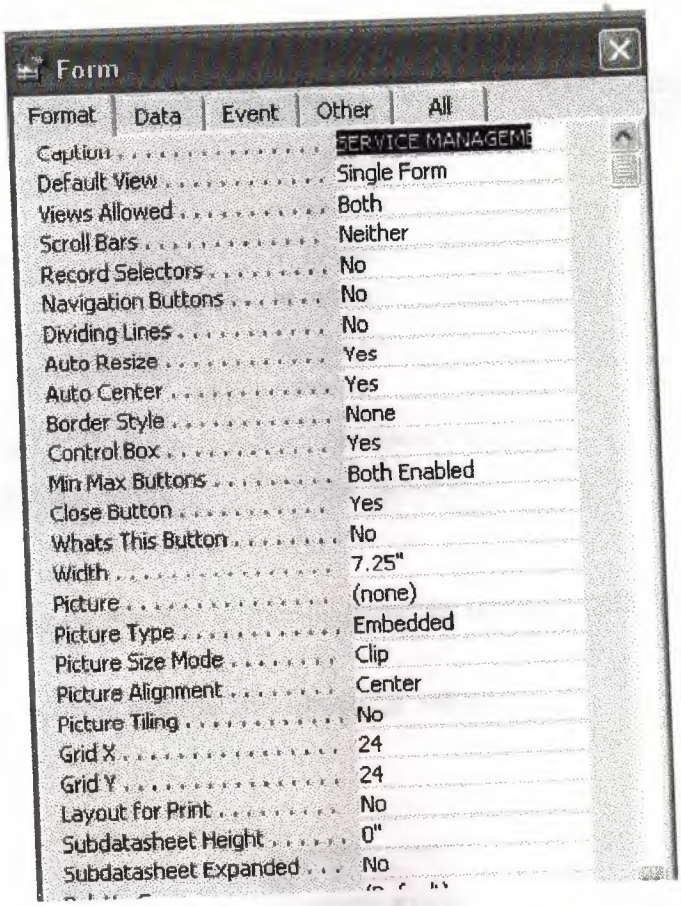


Figure 3.1.a.The opening screen form properties

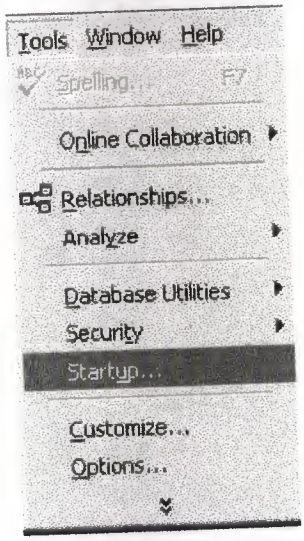


Figure 3.1.b.when the program run to wotk the opening screen ways

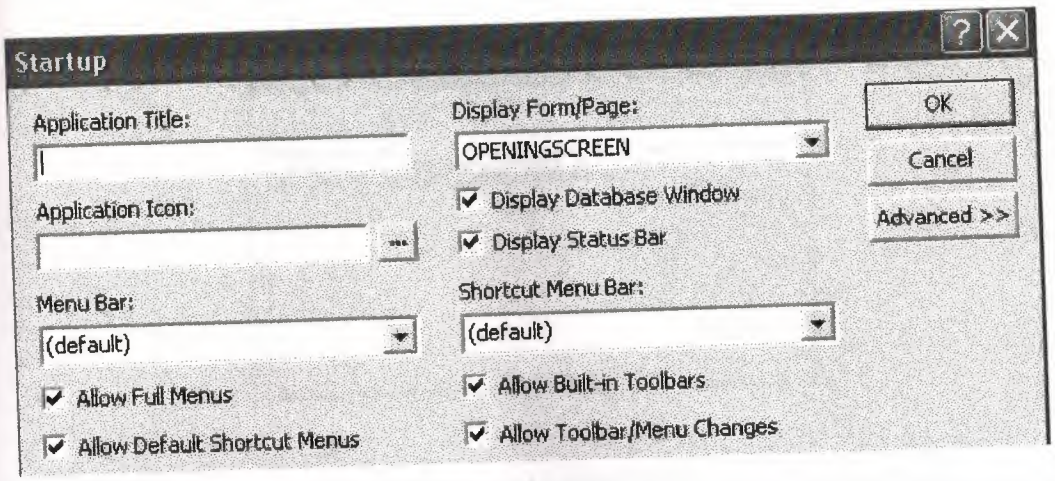


Figure 3.1.c.choose the name of oppening screen which form can be

let us see some coding behind the opening screen

Figure 3.1.c.Rightclick the GO button in the OPENINGSCREEN

Figure 3.1.d.chosee builtevent to builder

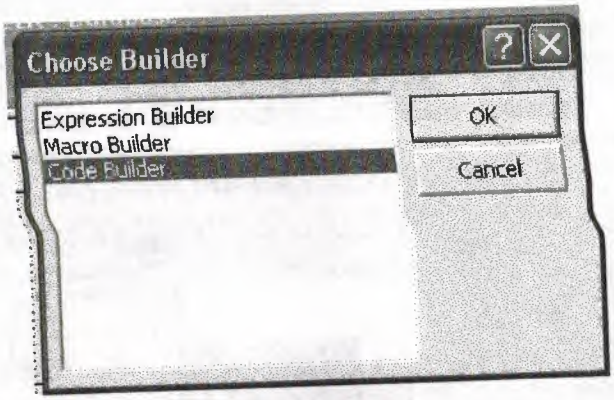


Figure 3.1.e.choose the codebuilder to write the some code

```
Private Sub Command7_Click()
DoCmd.OpenForm "SPLASHSCREEN"
DoCmd.Close acForm, "OPENINGSCREEN"
End Sub
```

3.2.THE SPLASH SCREEN

The splash screen will show the service elements of the service management.And
some coding behind the splah screen

Figure 3.2.a.buttons's codes

```
Private Sub Command17_Click()
DoCmd.OpenForm "MAINMENU"
End Sub
Private Sub Command18_Click()
DoCmd.Close acForm, "SPLASHSCREEN"
End Sub
```

Figure 3.2.b.The splash screen main design

3.3.The Main Menü

The main menü is going to navigate to other menus,it contains three buttons(options),the user can go to any of the sub menuslike view menu or the user can quit the database application,the program is going to ask the user wither to back up the data or not.

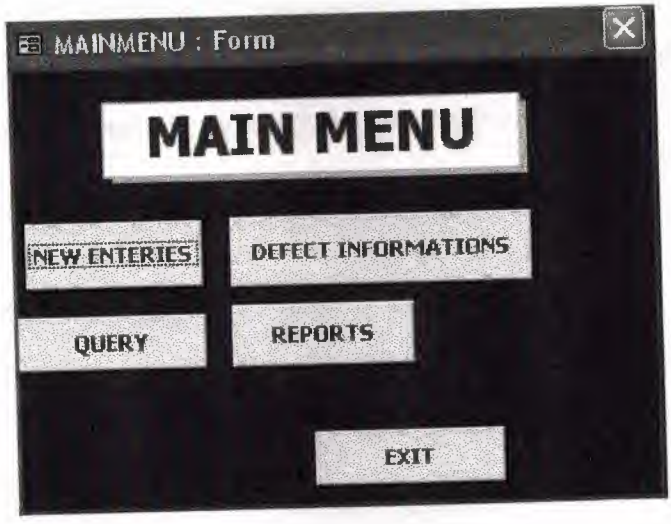


Figure3.3.the main menü

When the click NEW ENTERIES button in the main menü,NEWENTERS form going to open.

Figure3.3.1.NEWENTERIES

coding behind the new enters

```
Private Sub Command2_Click()
DoCmd.OpenForm "NEWENTERIES"
End Sub
```

3.3.1.NEW ENTERIES FORM

It have four components.

NEW CUSTOMER component have two button.Their name are CUSTOMER RECORD FORM, APPOINTMENT FORM.We use them when we will do new customer record and giving the appointment date.

NEW STOCK component has one button which name is STOCK going to use new stock record

NEW PRODUCT INFORMATION component has one button which name is PRODUCT FORM going to use new product record.

NEW SERVICE INFORMATION component have two button.Their name are SERVICE INFORMATION FORM, TECNICIAN FORM.We use them when we will do new customer service record and enter the new technician..

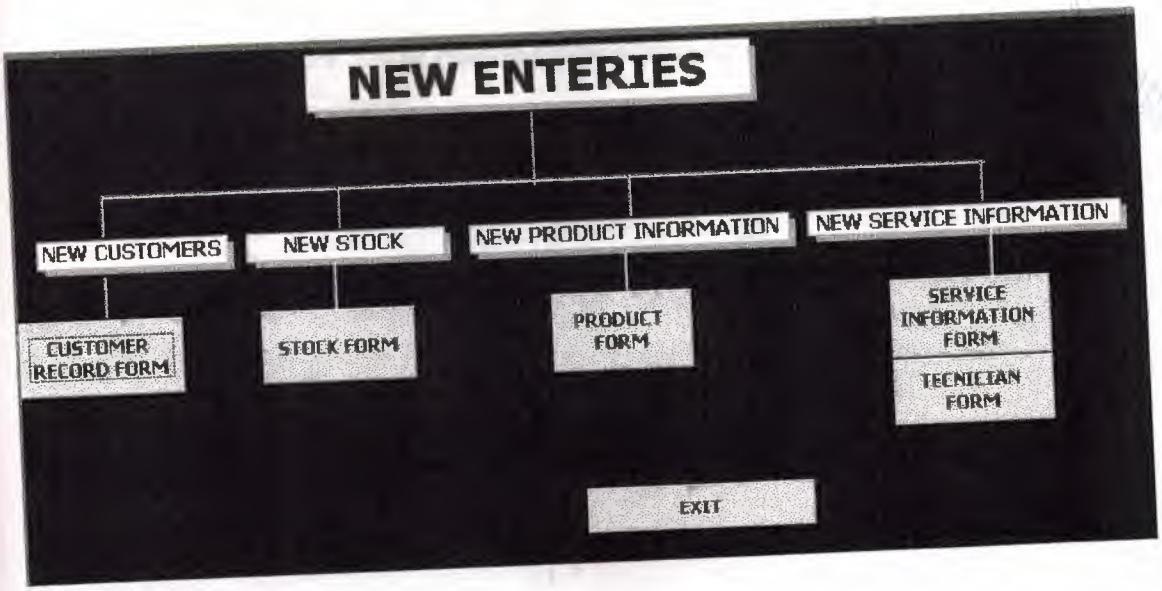


Figure3.3.1 NEW ENTERIES

coding behind the customer record form

Figure3.3.1a.customer record button

```
Private Sub Command5_Click()
DoCmd.OpenForm "CUSTOMERAPPOINTMENTRECORD"
End Sub
```

When the click CUSTOMER RECORD FORM button in the NEW ENTERS form going to open CUSTOMER INFORMATION FORM

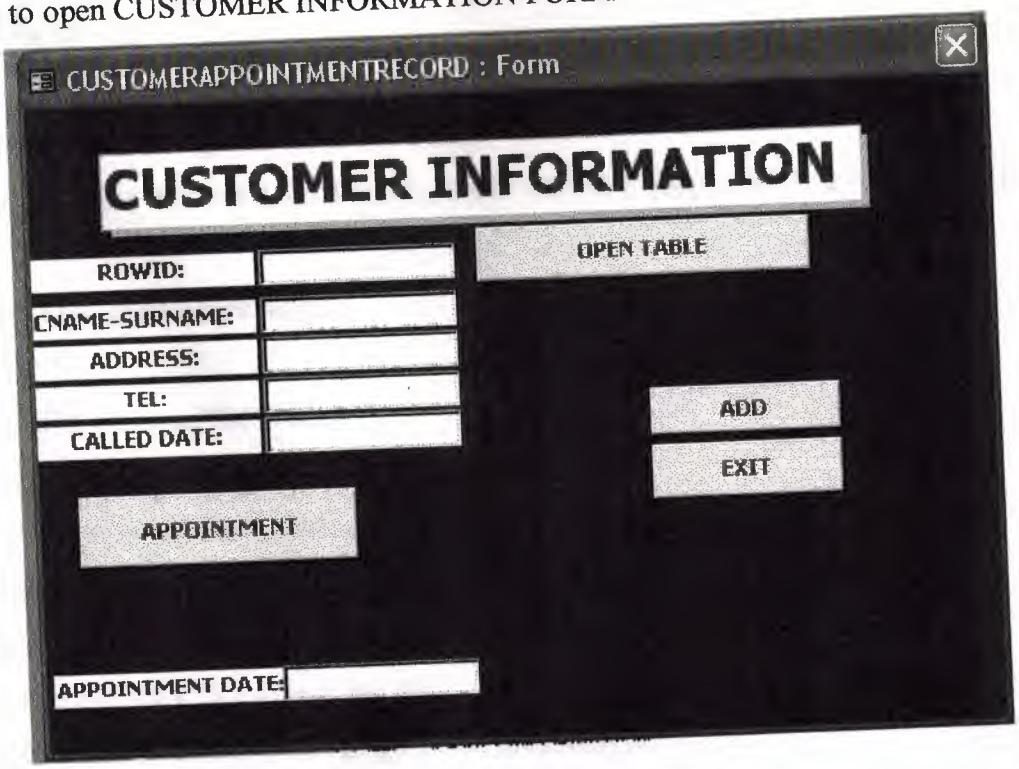


Figure 3.3.1a.customerappointment record form

some coding behind the CUSTOMERAPPOINTMENTRECORD form

Figure3.3.1a.in the form's button

To see the CUSTOMER RECORD.When click this button will open the CUSTOMERTBL

it's codes;

```
Private Sub Command10_Click()
DoCmd.OpenTable "CUSTOMERTBL"
End Sub
```

Figure3.3.1a.in the form's button

behind the code of ADD button when click

```
Private Sub Command7_Click()
Dim db As DAO.Database
Dim rs As DAO.Recordset
Dim s As String

Set db = CurrentDb()
s = "SELECT * FROM CUSTOMERTBL WHERE ROWID='" & Me.ROWID &
"'"
Set rs = db.OpenRecordset(s)

  If rs.EOF And rs.BOF Then
    rs.AddNew
    rs.Fields("ROWID").Value = Me.ROWID
    rs.Fields("CNAME-SURNAME").Value = Me.CNAME_SURNAME
    rs.Fields("ADDRESS").Value = Me.ADDRESS
    rs.Fields("TEL").Value = Me.TEL
    rs.Fields("CALLED DATE") = Me.CALLED_DATE
```

```
    rs.Fields("APPOINTMENT DATE") = Me.APPOINTMENT_DATE
    rs.Update

  Else
    MsgBox " This record is already present "

    Me.ROWID = ""

    End If
End Sub
```

Figure3.3.1a.in the form's button

behind ıt's code

```
Private Sub Command8_Click()
DoCmd.Close acForm, "CUSTOMERAPPOINTMENTRECORD"
End Sub
```

And now;Some informations neccessary about the APOINTMENT to the CUSTOMER RECORD.

When the click APPOINTMENT buton will open the APPOINTMENT FORM

Figure3.3.1b.in the form's button

behind it's code

```
Private Sub Command9_Click()
DoCmd.OpenForm "APPOINTMENT"
End Sub
```

to give the appointnent date to the customer go back the APPOINTMENT form and enter the all information about the appointment and save them.After go back the CUSTOMERAPPOINTMENTRECORD form enter the appointment date and record the that customer.

figure 3.3.2a.appointment form

APPOINTMENT form has three buttons.Their function are each button show the Technician name.When click them,you will see their workmanshipcode and their appoint date.

behind ıt's code

Figure3.3.2a.in the form's button

Private Sub Command0_Click()

DoCmd.OpenTable "TECH1"

End Sub

When you click this button going to open TECH1 table

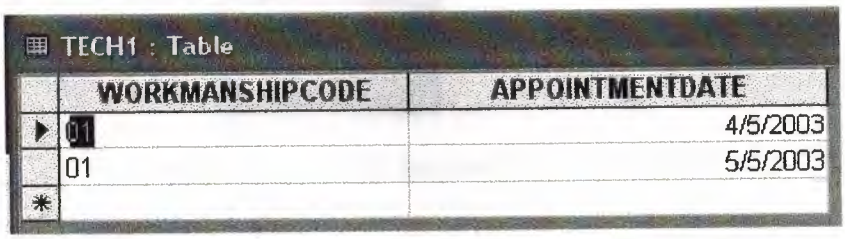


Figure3.3.2a. Function of the button in the form

behind ıt's code

Figure3.3.2a.in the form's button

Private Sub Command1_Click()

DoCmd.OpenTable "TECH2"

End Sub

When you click this button going to open TECH2 table

TECH2 : Table

WORKMANSHIPCODE	APPOINTMENTDATE
02	5/5/2003
02	6/5/2003

Figure3.3.1a. Function of the button in the form

behind ıt's code

Figure3.3.1a.in the form's button

Private Sub Command2_Click()

DoCmd.OpenTable "TECH3"

End Sub

When you click this button going to open TECH3 table

TECH3 : Table

WORKMANSHIPCO	APPOINTMENTDATE
03	5/5/2003
03	6/5/2003

Figure3.3.1a. Function of the button in the form

behind ıt's code

Figure3.3.2a stock button in the new enter

Private Sub Command12_Click()

DoCmd.OpenForm "STOCK"

End Sub

When you click this button going to open stock form

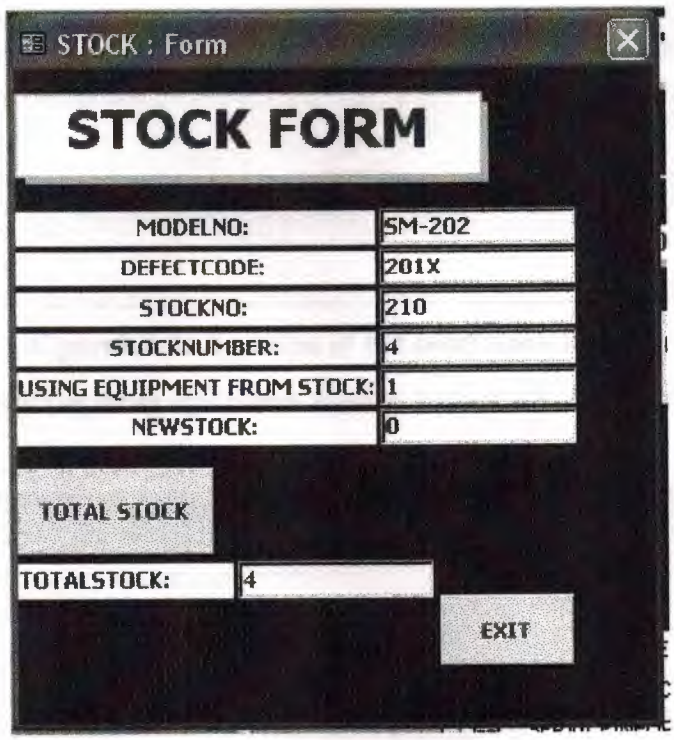


Figure3.3.2a.stock form

behind it's code

Figure3.3.2a.button of the stock form

```
Private Sub Command7_Click()
STOCKNUMBER = InputBox("STOCKNUMBER")
USINGEQUIPMENTFROMSTOCK=
InputBox("USINGEQUIPMENTFROMSTOCK")
NEWSTOCK = InputBox("NEWSTOCK")
TOTALSTOCK=Val(STOCKNUMBER)+
Val(USINGEQUIPMENTFROMSTOCK) + Val(NEWSTOCK)
STOCKNUMBER = Val(TOTALSTOCK)
MsgBox "THE TOTAL STOCK IS " & TOTALSTOCK
End Sub
```

Total stock button is a function of the form.Which is calculating the stock elements.When you clisk it going to open

- First enter the stock number and click OK

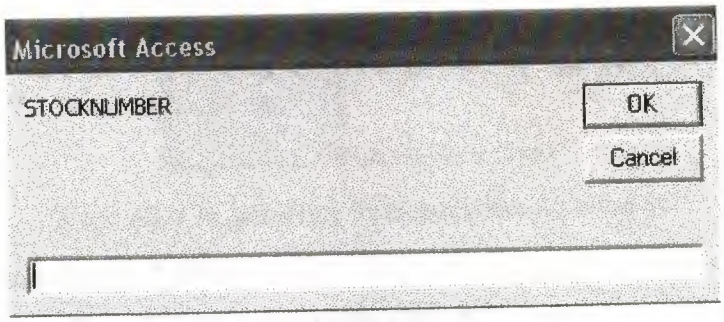


Figure3.3.2a.function of the totol stock button

- Second enter the using eguipment number from stock and click OK

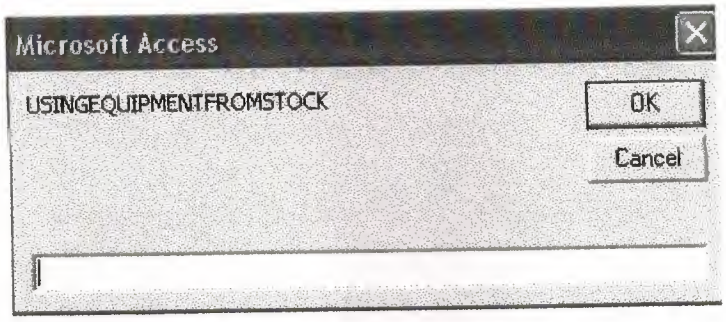


Figure3.3.2a.function of the totol stock button

- Third enter the new stock if new stock there is and click OK

Figure3.3.2a.function of the totol stock button

- After it is calculating all enters variables and going to show result with a message

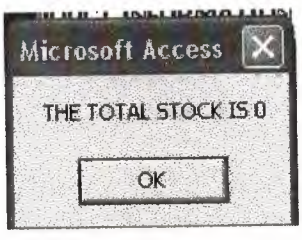


Figure3.3.2a.result of the totalstock button

behind it's code

Figure3.3.3a.product button in the new enter

Private Sub Command17_Click()

DoCmd.OpenForm "PRODUCTINFORMATION"

When you click this button going to open product information form

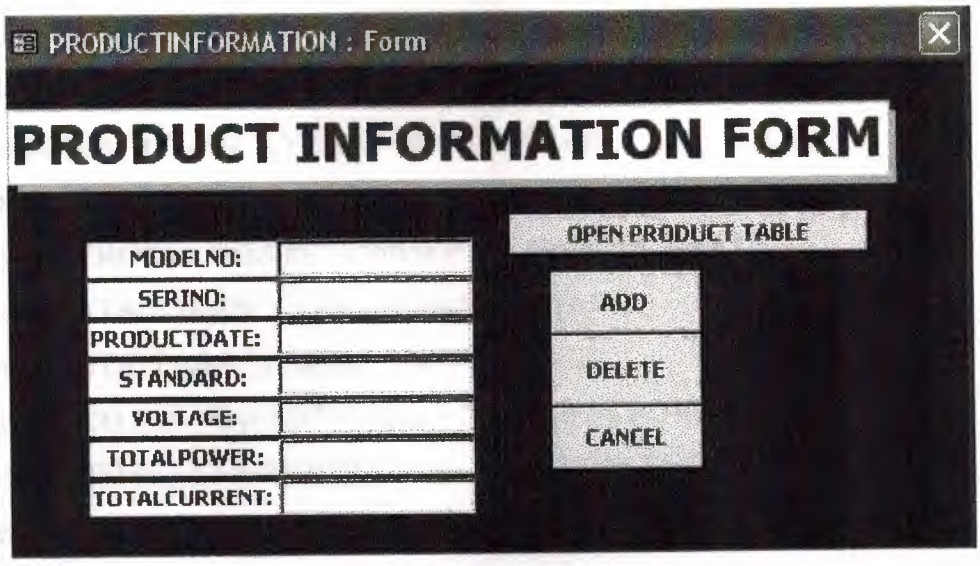


Figure3.3.3a.product information form

behind ıt's code

Figure3.3.3a.buttons of the product information form

Private Sub Command11_Click()

DoCmd.OpenTable "PRODUCTINFORMATIONTBL"

End Sub

When you click it going to open product informationtbl

behind their codes

Figure3.3.3a.buttons of the product information form

Private Sub Command8_Click()

Dim db As DAO.Database

Dim rs As DAO.Recordset

Dim S As String

Set db = CurrentDb()

S = "SELECT*FROM PRODUCTINFORMATIONTBL where SERINO='" &

Me.SERINO & "'"

Set rs = db.OpenRecordset(S)

If rs.EOF And rs.BOF Then

```
MsgBox "you can add"
rs.AddNew
rs.Fields("MODELNO").Value = Me.MODELNO
rs.Fields("SERINO").Value = Me.SERINO
rs.Fields("PRODUCTDATE").Value = Me.PRODUCTDATE
rs.Fields("STANDARD").Value = Me.STANDARD
rs.Fields("VOLTAGE").Value = Me.VOLTAGE
rs.Fields("TOTALPOWER").Value = Me.TOTALPOWER
rs.Fields("TOTALCURRENT").Value = Me.TOTALCURRENT
rs.Update
Else
MsgBox "THE RECORD IS ALREADY THERE"
End If
End Sub

Private Sub Command9_Click()
Dim db As DAO.Database
Dim rs As DAO.Recordset
Dim S As String
Set db = CurrentDb()
Set rs = db.OpenRecordset("PRODUCTINFORMATIONTBL")
S = "SELECT*FROM PRODUCTINFORMATIONTBL where SERINO='" &
Me.SERINO & "'"
If rs.EOF And rs.BOF Then
MsgBox "no record found"
Else
rs.Delete
End If

End Sub

Private Sub Command10_Click()
DoCmd.Close acForm, "PRODUCTINFORMATION"
End Sub
```

behind it's code

Figure3.3.4a.service information form button in the new enter

Private Sub Command22_Click()

DoCmd.OpenForm "SERVICEINFORMATION"

End Sub

When you click this button going to open service information form

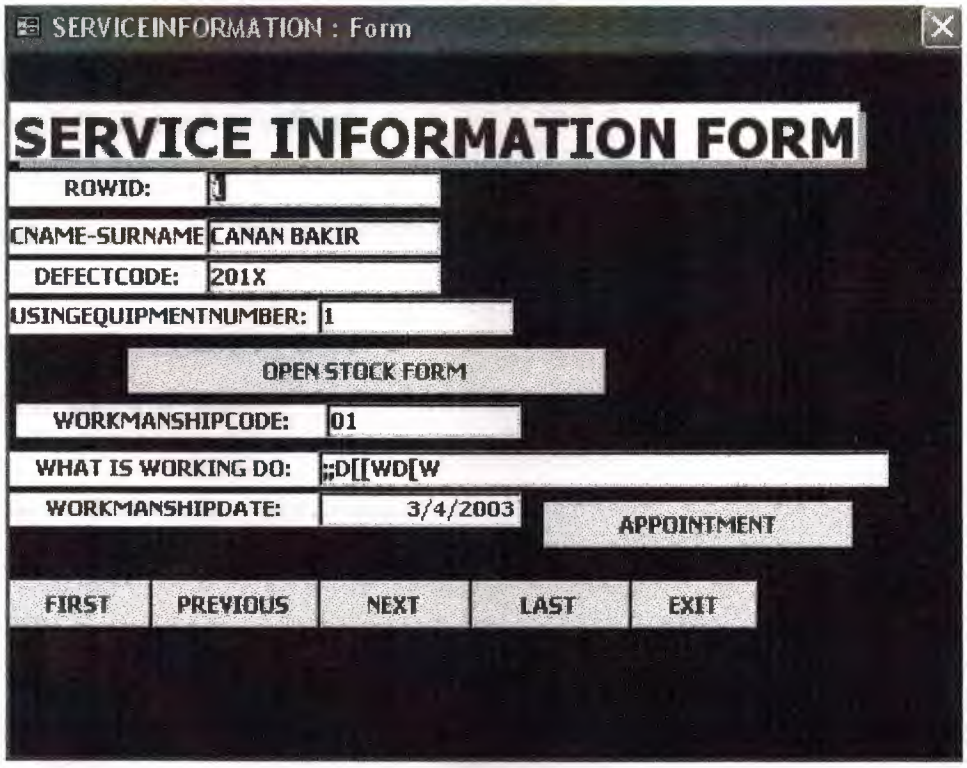


Figure3.3.4a.service information form

behind it's code

Figure3.3.4a.service information form's button

Private Sub Command15_Click()

DoCmd.OpenForm "STOCK"

End Sub

When you click this button going to open stock form

behind it's code

Figure3.3.4a.service information form's button

```
Private Sub Command16_Click()
DoCmd.OpenForm "APPOINTMENT"
End Sub
```

When you click this button going to open Appointment form

behind their codes

Figure3.3.4a.service information form's button

```
Private Sub Command9_Click()
DoCmd.GoToRecord , , acFirst

End Sub

Private Sub Command10_Click()
On Error GoTo errmgs

DoCmd.GoToRecord , , acPrevious
a:
Exit Sub

errmgs: MsgBox "there is no previous record", vbInformation
DoCmd.GoToRecord , , acFirst
GoTo a:
End Sub

Private Sub Command11_Click()
On Error GoTo errmgs
DoCmd.GoToRecord , , acNext
a:
Exit Sub
errmgs: MsgBox "there is no next record", vbInformation
DoCmd.GoToRecord , , acPrevious
End Sub
```

Private Sub Command12_Click()

DoCmd.GoToRecord , , acLast

End Sub

Private Sub Command14_Click()

DoCmd.Close acForm, "SERVICEINFORMATION"

End Sub

- First button is going to show first record
- Previous button is going to show previous record

İf there is no previous record going to show a message

- Next button is going to show next record

İf there is no next record going to show a message

behind ıt's code

Figure3.3.4b.Technician form button in the new enter

Private Sub Command24_Click()

DoCmd.OpenForm "TECHNICIAN"

End Sub

When you click this button going to open Technician form

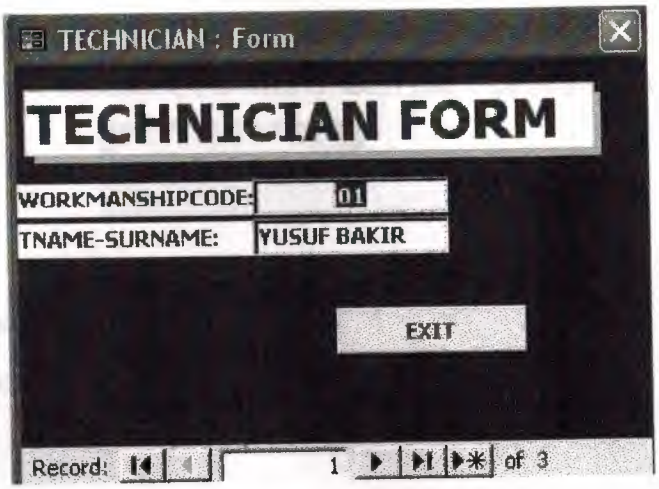


Figure3.3.4b.Technician form

you are making new technician record wirt technician form.

behind ıt's code

Figure3.3.2.DEFECT INFORMATIONS

Private Sub Command3_Click()

DoCmd.OpenForm "DEFECTINFORMATION"

End Sub

When you click this button going to open Defectınformations form.

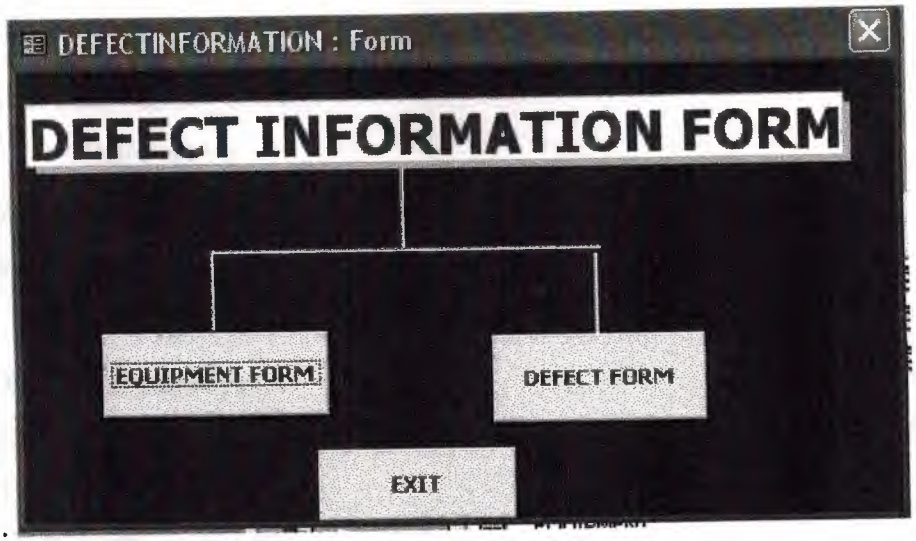


Figure3.3.2.DEFECT INFORMATIONS form

It has two component button.EQUIPMENT form and DEFECT form

behind it's code

Figure3.3.2a.Equipment form button

```
Private Sub Command4_Click()
DoCmd.OpenForm "EQUIPMENT"
End Sub
```

When you click this button going to open Equipment form.

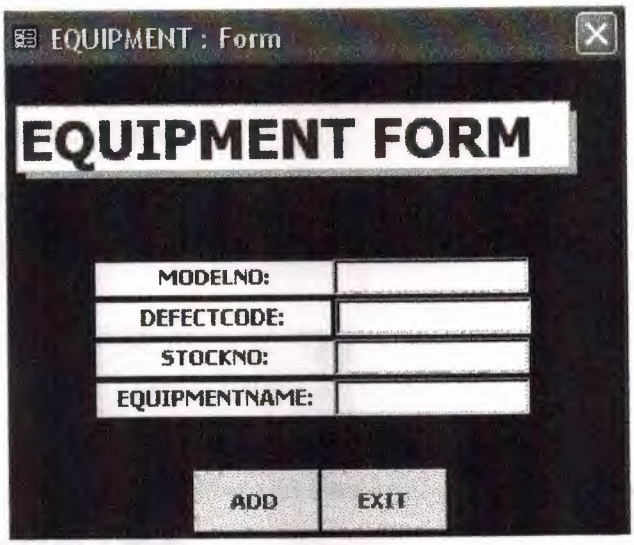


Figure3.3.2a.Equipment form

behind their code

Figure3.3.2a. The buttons of Equipment form

```
Private Sub Command8_Click()
Dim db As DAO.Database
Dim rs As DAO.Recordset
Dim S As String

Set db = CurrentDb()
S = "SELECT * FROM EQUIPMENTTBL WHERE DEFECTCODE='" &
Me.DEFECTCODE & "'"
Set rs = db.OpenRecordset(S)
```

```
If rs.EOF And rs.BOF Then
   rs.AddNew
    rs.Fields("MODELNO").Value = Me.MODELNO
    rs.Fields("DEFECTCODE").Value = Me.DEFECTCODE
    rs.Fields("STOCKNO").Value = Me.STOCKNO
    rs.Fields("EQUIPMENTNAME").Value = Me.EQUIPMENTNAME

    rs.Update
   MsgBox " This record is already present "
   End If
End Sub

Private Sub Command6_Click()
DoCmd.Close acForm, "EQUIPMENT"
End Sub
```

behind it's code

Figure3.3.2b.DEFECT forms button in the defectinformation form

```
Private Sub Command6_Click()
DoCmd.OpenForm "DEFECT"
End Sub
```

When you click this button going to open Defect form.

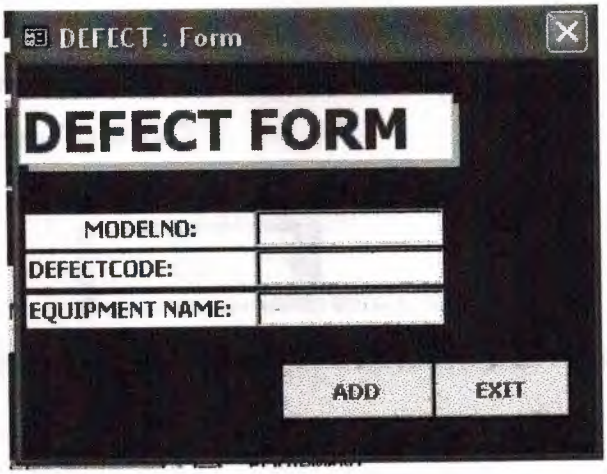
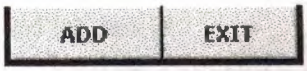


Figure3.3.2b.DEFECT forms



behind their code

Figure3.3.2b. The buttons of Defect form

```
Private Sub Command9_Click()
Dim db As DAO.Database
Dim rs As DAO.Recordset
Dim S As String
Set db = CurrentDb()
S = "SELECT* FROM DEFECTTBL WHERE DEFECTCODE ='" &
Me.DEFECTCODE & "'"
Set rs = db.OpenRecordset(S)
If rs.EOF And rs.BOF Then

rs.AddNew
rs.Fields("MODELNO").Value = Me.MODELNO
rs.Fields("DEFECTCODE").Value = Me.DEFECTCODE

rs.Fields("EQUIPMENT NAME").Value = Me.EQUIPMENT_NAME

rs.Update
Else
MsgBox "the record is already there"
End If
End Sub

Private Sub Command5_Click()
DoCmd.Close acForm, "DEFECT"
End Sub
```

behind it's code

Figure3.3.2.The button of defectinformation form

```
Private Sub Command7_Click()
DoCmd.Close acForm, "DEFECTINFORMATION"
End Sub
```

CHAPTER FOUR

BUILDING QUERY

4.1.INTRODUCTION

Queries using the SQL select statement.The purpose of the SQL statement is to retrive and display data gathered from one or more database tables.SELECT is the most frequently used SQL command and can be used interactively to obtain immediate answers to queries,and embedded in a host program written in a language such as Visuals basic for more complex data retrival and reporting.

A good way to develop Visual basic database programs with embedded SQL is the develop and test the SQL statements Access first and then when they are proved correct,embedded them in the host VB program.

4.2.SELECT with single table

The sequence of processing in a SELECT command is

- FROM specifies the table(s) to be accessed
- WHERE filters the rows on some condition
- GROUP BY forms a single row from a group of rows
- HAVING filters the the groups on some condition
- SELECT specifies which results will be output
- ORDER BY Determines the order of the output rows.

4.2.1.Selecting columns

The simplest Select statement it is possible yo enter will retrieve all columns every row of a table.

4.2.2.DISTINCT

Douplicate outputs may arise because rows that are in order ways different may holdsimilar values of the projected columns.An relational algebraic project operation removes those duplicates.

Duplicate output rows can be removed using the DISTINCT option in the SELECT statement.

4.2.3.WHERE

The where clause in the SQL SELECT statement syntax is used to specify a subset of rows that will be delivered to the output.The test is applied to each row of the table in turn and if the condition in the WHERE clause is true for a row ,then the row will be output.This operation is sometimes known as a select or restrict.In the WHERE clause has decided which rows pass the test,the list of column expession decides which column data will be output.

SQL uses the following simple comparission('relational') operators:

=equals

< is less than

> is greater than

<= is less than or equal to

>=is greater than or equal to

<> is not equal to

4.2.4.LIKE

The like operator works with character fields and 'fuzzy matching'.The query contains an approximation to the spelling of the required column contents and all rows where the corresponding characters match up are retrived.

The general form of an SQL command containing LIKE İs:

SELECT...

FROM...

WHERE A LIKE B

...

4.2.5.BETWEEN

The BETWEEN operator can be used in a WHERE clause to select rows where the value of a column is within a given range.

4.2.6.IN

In situations where it is required to test the value of some column against a given set of values,the IN operator can be used.NOT IN can also be used,in which case the row passes the test if the value is not in the list.

4.2.7.AND,OR and NOT

Here we describe compound conditions in a WHERE clause of an SQL SELECT statement that use AND,OR and NOT.

4.2.8.GROUP BY

Groups are specified in the SQL SELECT command by the GROUP BY clause.After the groups have been performed there is the possibility of further filtering the results with the HAVING clause which acts on the group results in a simmilar way to the action of the WHERE clause on the table itself so that only data from selected groups will b eoutput.

4.2.9.HAVING

Afters the groups have been performed using GROUP BY,the group data that would be output can itself be filtered using the HAVING clause of SQL.HAVING thus acts towards groups in the same way that WHERE acts towards table rows.Instead of result begin output for every group,only selected groups pass through the filtering effect of HAVING.

4.2.10.ORDER BY

The purpose of the SQl ORDER BY clause is to sort the output and present it in either ascending order of an expression involving one or more columns of the table.The order of the rows in the table in the database is not altered;ORDER BY simply changes the orders in which the results of a Query are displayed.

The syntax of the ORDER BY clause is:

SELECT

ORDER BY expr[ASC | DSC] ,...

WHERE

Expr **isthe expression usualy a field,that the output will be sorted on;**

[ASC | DSC] **is optional.it means either ascending or descending;**

, . . . **means that there can be more than one expression which to sort**

and each of them can be in either ascending or descending.

4.3.How to create a query

Open the data base select the Query cick NEW

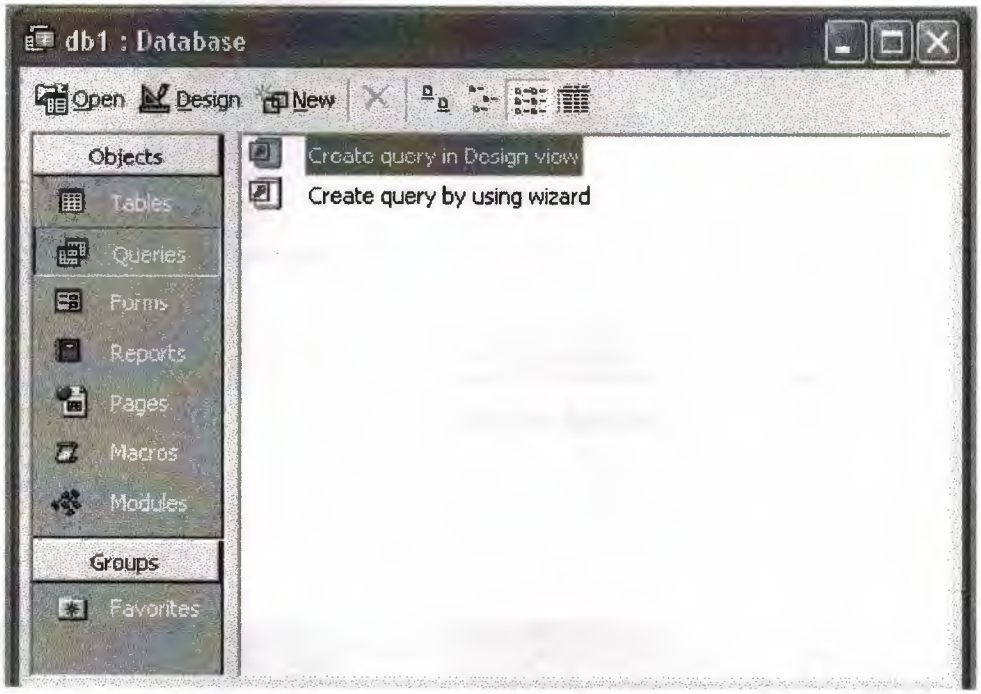


Figure. 4.3.1.Database for the query

Chosee design view click OK

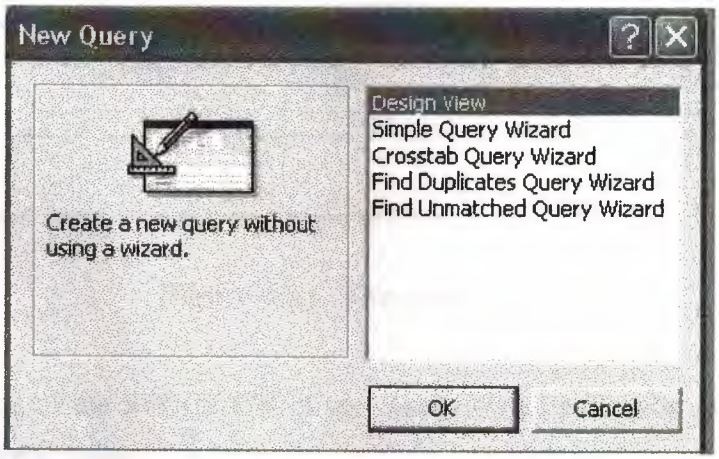


Figure 4.3.2.Design for the query

Select table and click ADD after click CLOSE

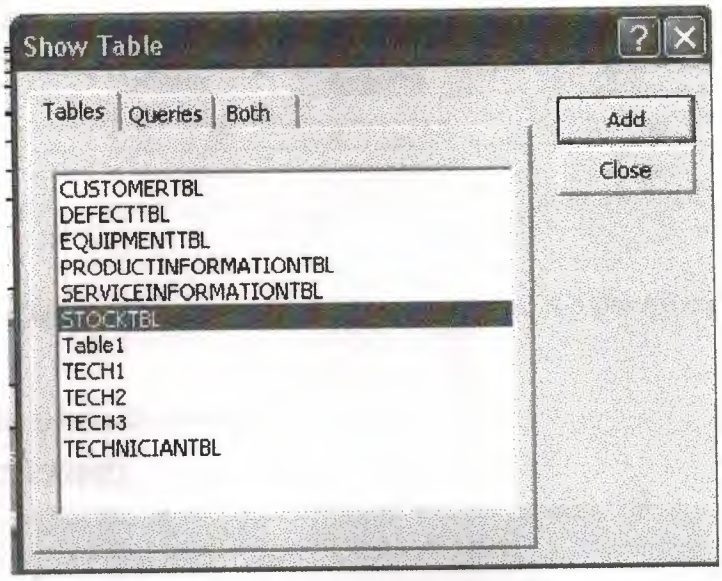


Figure 4.3.3.Add table for the query

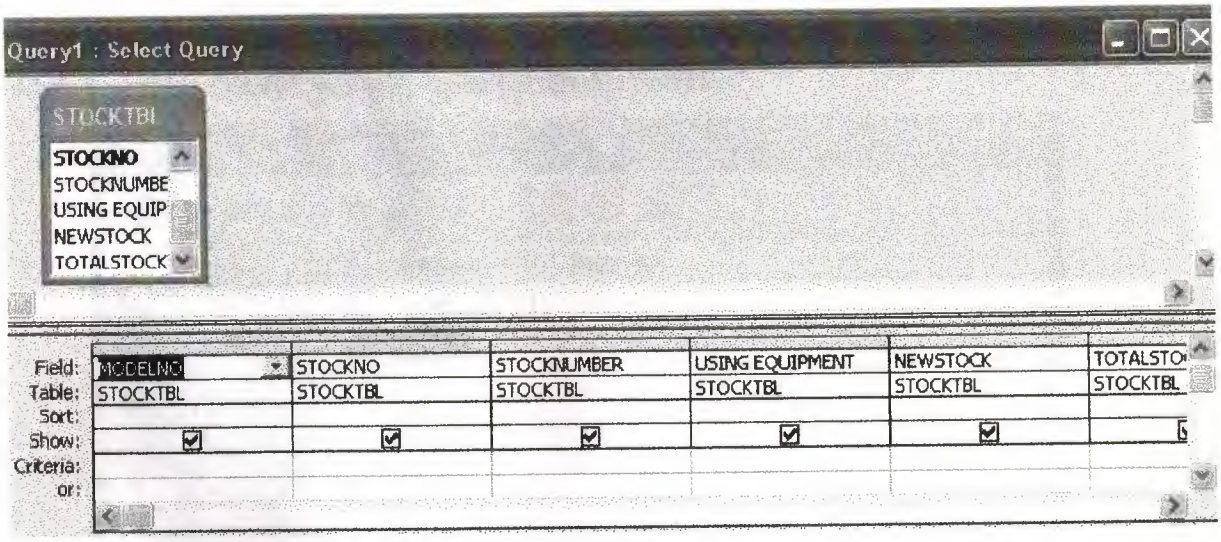


Figure 4.3.4. The query design

Enter all elemens of the STOCKTBL if you wanto create parameter query use uncheck in the criteria of the query

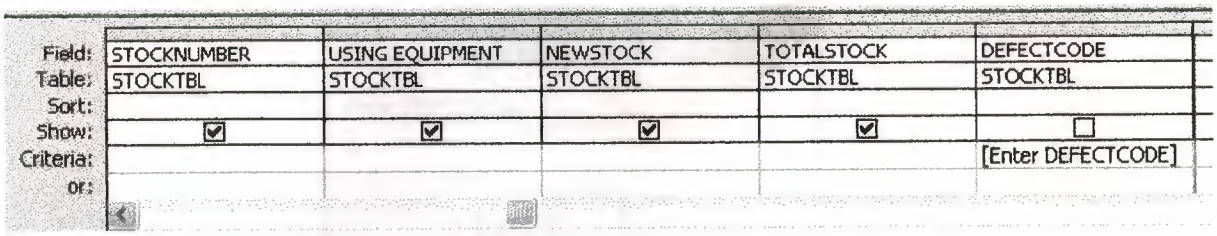


Figure 4.3.5.select the paremeter value for the query

write its code like this in the criteria:

[Enter DEFECTCODE]

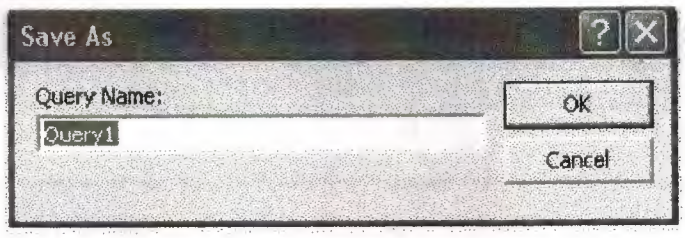


Figure 4.3.6.Save the query

when you click Query1 going to open paremeter window

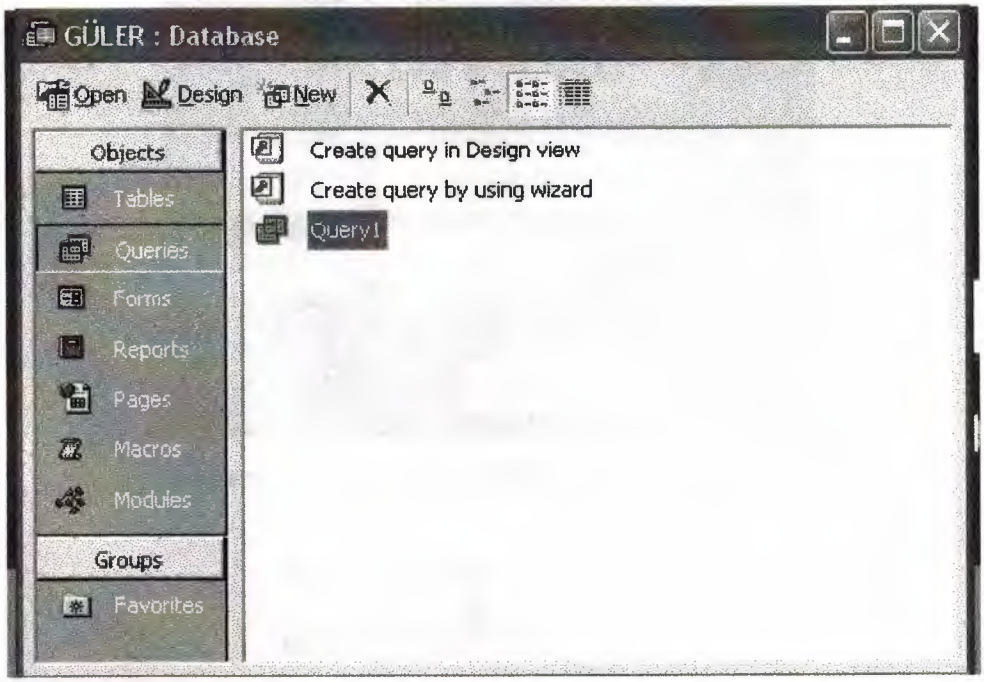


Figure 4.3.7.Creating query in the database

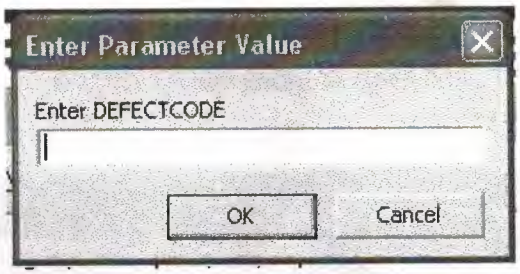


Figure 4.3.8.Paremeter window

Enter the parameter value of the query click OK going to open Query1

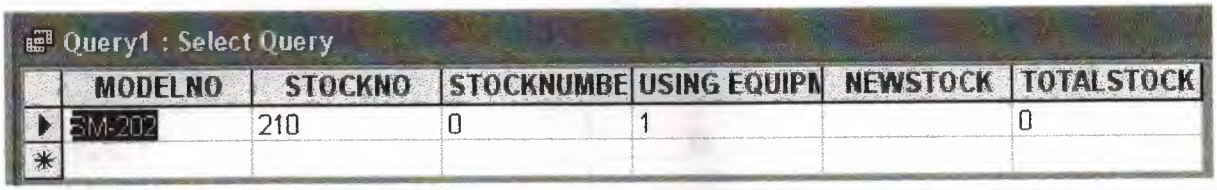


Figure 4.3.9. paremeter query design

And in my project this Query calling like this;

Figure 4.3.10. query calling from Main menü

it's behind code

Figure 4.3.11.Query button in the main menü

```
Private Sub Command6_Click()
DoCmd.OpenQuery "Query1"
End Sub
```

4.4.Creating the SQL

Open the Qery design rigth click the Query going to open SQL View and click

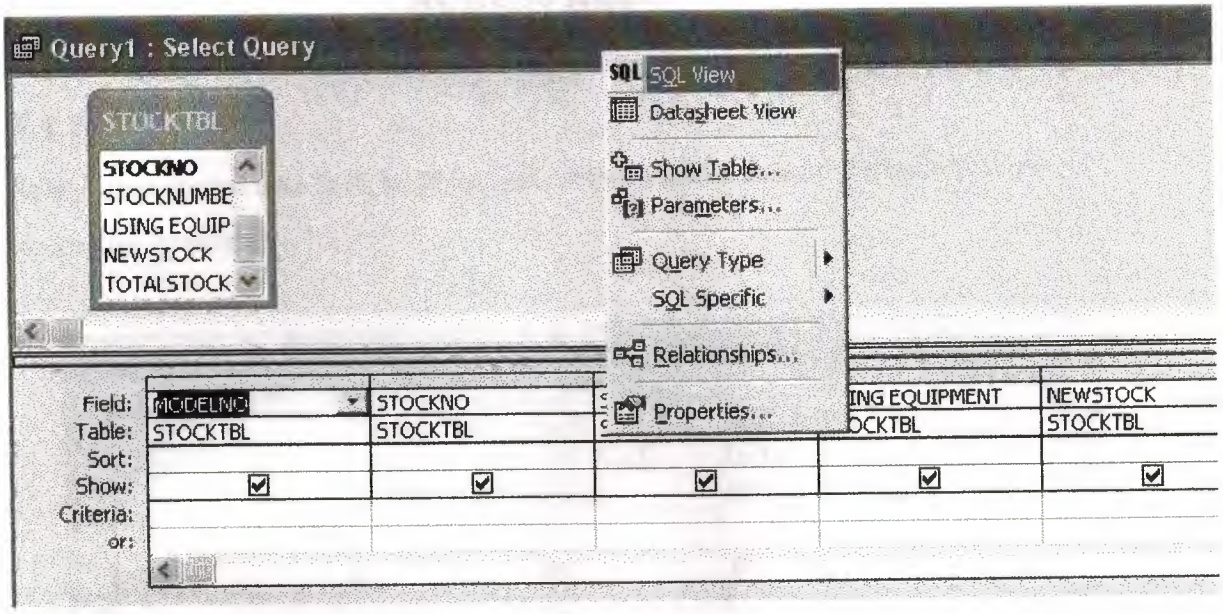


Figure 4.4.1.Designing of the SQL

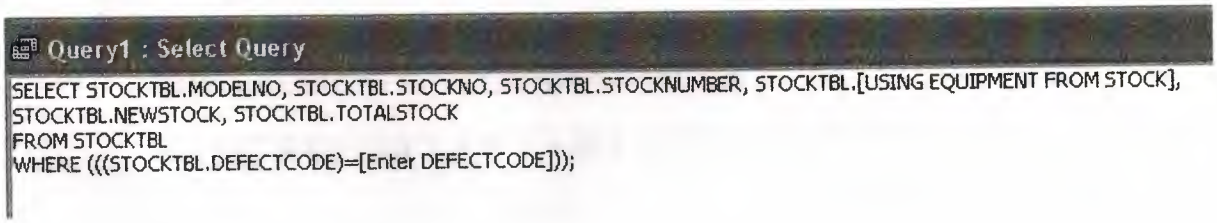


Figure.4.4.2.the codes of the paremeter query in the SQL

CHAPTER FIVE

ACCESS REPORTS

5.1.Introduction

When your output data is to be presented on paper,use Access reports to give an accractive apparence.

CUSTOMERTBL : Table

	ROWID	CNAME-SURNA	ADDRESS	TEL	CALLED DATE
+	1	GÜLER ONUK	HJAKSKLŞ	05338648871	3/5/2003
+	2	CANAN BAKIR	HSKKLSŞ	05338758376	5/5/2003
+	3	ZEYNEP BAKIF	KJSLL	KKSLŞS	5/5/2003
+	5				
+	re	er	erw	erw	

Figure5.1.a .customer table from an Access form

THE REPORT OF CUSTOMER RECORD

ROWID:	CNAME-SURNAME:	ADDRESS:	TEL:	CALLED DATE:	APPOINTMENT DATE:
1	GÜLER ONUK	HJAKSKLŞ	053386	3/5/2003	4/5/2003
2	CANAN BAKIR	HSKKLSŞ	053387	5/5/2003	6/5/2003

Figure5.1.b.customer table data presented using an Access Report

5.2.creating the reports

From data base window choose Reports and click new.

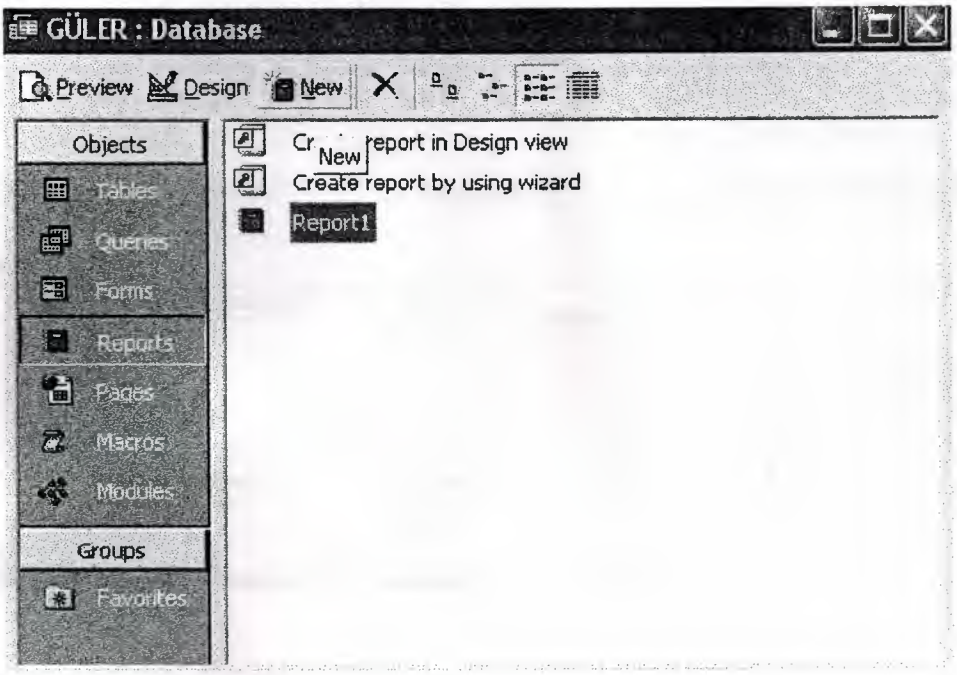


Figure.5.2.1.Database window

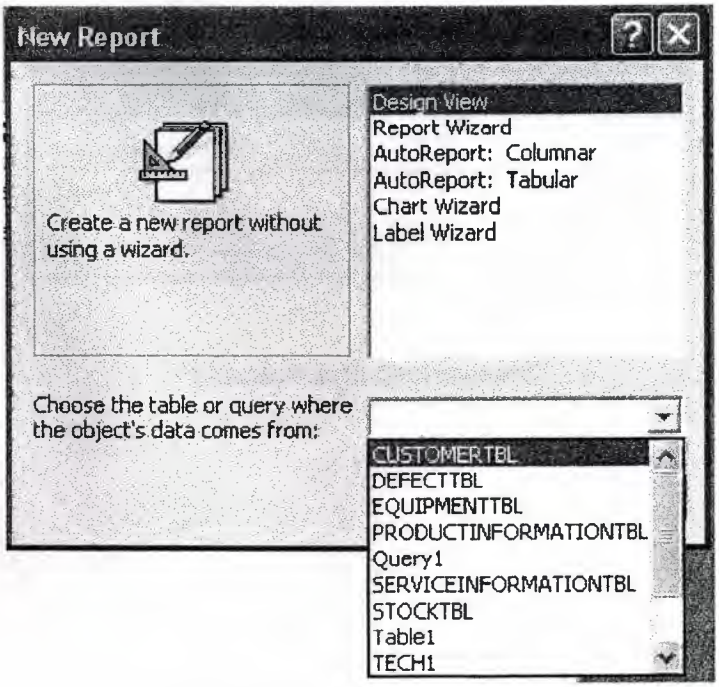


Figure.5.2.2.select table name

When you want to take its text document has to be connect it with MS World

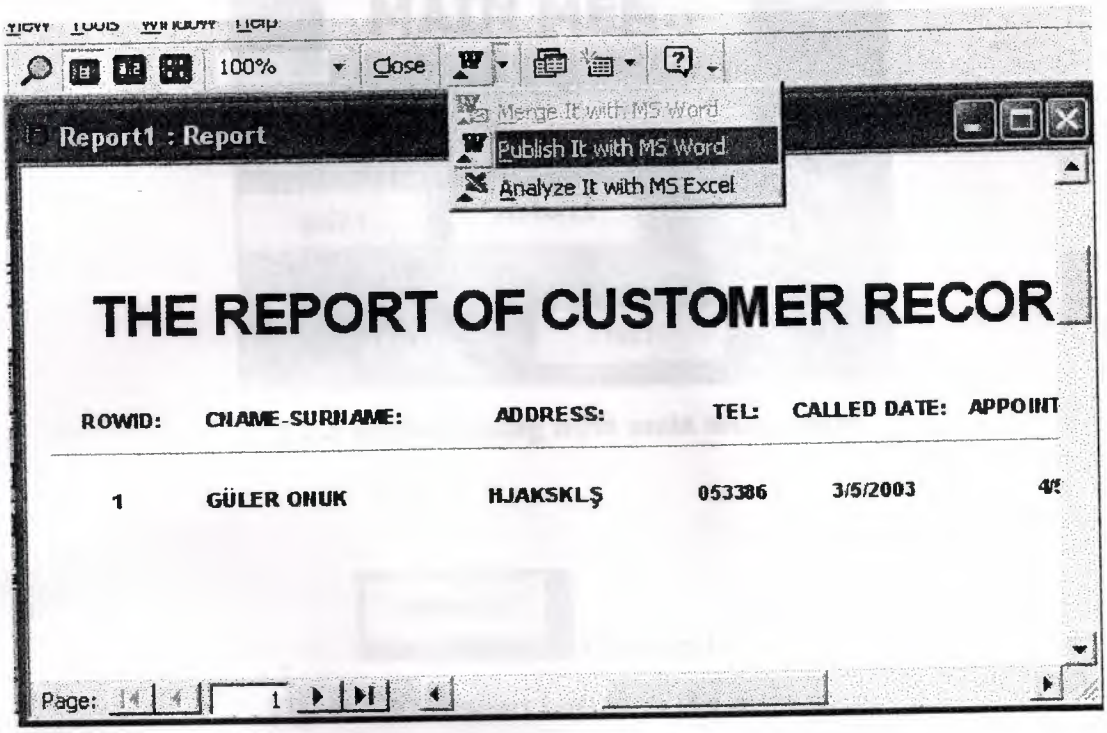


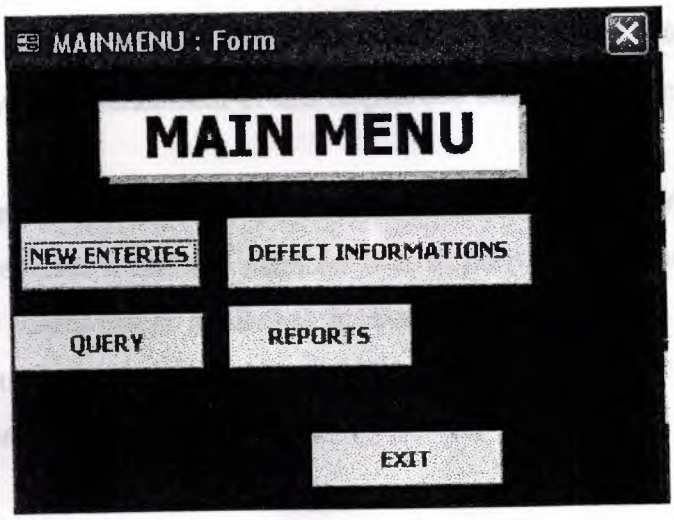
Figure.5.2.3b.Conect the report with MS word

THE REPORT OF CUSTOMER RECORD

ROWID:	CNAME-SURNAME:	ADDRESS:	TEL:	CALLED DATE:	APPOINTMENT DATE:
1	GÜLER ONUK	HJAKSKLŞ	053386	3/5/2003	4/5/2003
2	CANAN BAKIR	HSKKLSŞ	053387	5/5/2003	6/5/2003

Figure.5.2.4.View the report in MS word

And in my project this Report calling like this;



5.2.5.Report calling from main menü main

it's behind code

Figure 5.2.6.Report button in the main menü

Private Sub Command4_Click()

DoCmd.OpenReport "Reporta", acViewPreview

End Sub

CONCLUSION

Computer has become a vital and important part in daily life.And solutions provided by the advances by the advancement of it,is helpful and makes life easier.

This program can not promises the perfect solution ror a service management database system,however it can help many services to keep track of the equipments and their stocks.Many Extras can be inculuded in this application,it can be developed in visual basic as front end and access as back end data base system which will provide more stability in user interface design.

Access 2000 has emerged as an exciting new version of Microsoft's office database component.The new features in Access 2000 gives Access developpers a common development enviromentwither is with exel,world or power point.
It will now be easier than ever Access developpers to built cross-component applications that draw on the best of two or more office components.
The object browser can help Access developers learn and apply the object models from these other applications.

With VBA,there is still familiar procedures,moduless and debugging tools.There is the new ADO modules and new database format in Access 2000 Which has an advantage on how Access works.

A Microsoft Access table can contain up to 32 indexes,very complex tables that are part of many relationships may exceed the index limit,and you want be able to convert the database that contains these tables.Version 3.5 of the Microsoft jet database engine creates indexes on both sides of relationships between tables.

This application can be made a multi user,for servers like MS SQL server, because Access loses its speed with more than 10 users,on the other hand SQL sever supports an unlimitted ammount of users at the same time.

Still this application can be usen in the service shops by any server with no or little ange and tat' what' makes this program ready to use,its simple and basic design.

REFERENCES

1] Running Microsoft Access 97 by john L . Viescas

2] Database design and programming with ACCESS,SQL,VISUAL BASIC AND ASP by john Carter.