

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JnanaSangama, Belgavi-590018, Karnataka



MINI PROJECT REPORT

On

“COMPARE TOOL FOR PHONE AND CAR”

Submitted in the partial fulfillment of the requirement for the V Semester

Bachelor of Engineering

In

INFORMATION SCIENCE AND ENGINEERING

Submitted by

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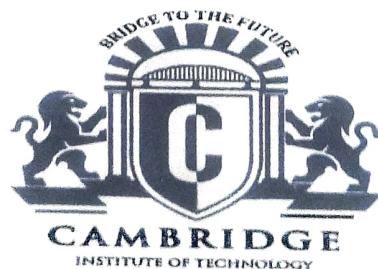
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CERTIFICATE

This is to certify that the Mini Project work entitled "**COMPARE TOOL FOR PHONE AND CAR**" is a bonafied work carried out by **BISHWAJIT SHAW** and **MAAZ RAHMAN** in partial fulfillment for the award of Degree of Bachelors in Information Science and Engineering of Visvesvaraya Technological University, Belagavi during the year 2018-2019.

It is certified that all the corrections/suggestions indicated for internal assessment have been incorporated in the Report. The report has been approved as it satisfies the academic requirements in respect of Mini-Project work prescribed for said degree.

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BISHWAJIT SHAW

MAAZ RAHMAN

ABSTRACT

COMPARE TOOL FOR PHONE AND CAR

It is a system software which provides information about the cars and mobile phones.

Before buying a Car and a Mobile it's best to compare its feature and characteristic with other cars and mobile with other Mobiles. This project car and mobile comparison system focuses on providing buyers an estimate of the similarities and dissimilarities between two cars and two mobile phones. User can select two cars or two mobiles and the system will generate a brief report indicating the benefits and defects. Thus it helps user to analyze the cars effectively and user can make best decision before buying.

The system has an admin login that has sole control over it. He can post and add different cars and mobile. The user logs into the system and can search for his car or mobile. The system then shows various car options for comparison with respect to the desired one or then shows various mobile options for comparison with respect to the desired one. Hence user can check out varieties of features and can compare it.

This system is developed on Jframes platform and supported by a Sql database to store user specific details.

Advantages

- This system will help the user to easily find out best car and mobiles.
- It helps user to analyze the cars or mobiles effectively and user can make best decision before buying.
- User can check out varieties of features and can compare it.
- User can select car and mobiles based on his preference

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CHAPTER 1

INTRODUCTION

Systems of linear equations are a useful way to solve common problems in different areas of life. One of the most powerful ways to use them is in a comparison model where two similar situations are compared side by side to determine which one is better. In this project, you will be choosing two cars that you are interested in purchasing and then using systems of linear equations to decide which one is the better for you.

Before buying a Car and a Mobile it's best to compare its feature and characteristic with other cars and mobile with other Mobiles. This project car and mobile comparison system focuses on providing buyers an estimate of the similarities and dissimilarities between two cars and two mobile phones. User can select two cars or two mobiles and the system will generate a brief report indicating the benefits and defects. Thus it helps user to analyze the cars effectively and user can make best decision before buying.

The system has an admin login that has sole control over it. He can post and add different cars and mobile. The user logs into the system and can search for his car or mobile. The system then shows various car options for comparison with respect to the desired one or then shows various mobile options for comparison with respect to the desired one. Hence user can check out varieties of features and can compare it.

It is very fast and advance technique which uses SQL DataBase Management System to Retrieve

Required output according to the input of the company and model of the Car and Mobile and it displays better output and clearly makes you to visualize the features of the car and the mobile phones and cost and tells which is better so you can plan to buy the car or model with good picture about the car or mobile which you are gonna buy.

CHAPTER 2

HARDWARE AND SOFTWARE REQUIREMENTS

- **Software Requirement Specifications**

Operating System : Windows 10
Front End : JFrames
Back End : Oracle 11g
Documentation : Microsoft Office 2012

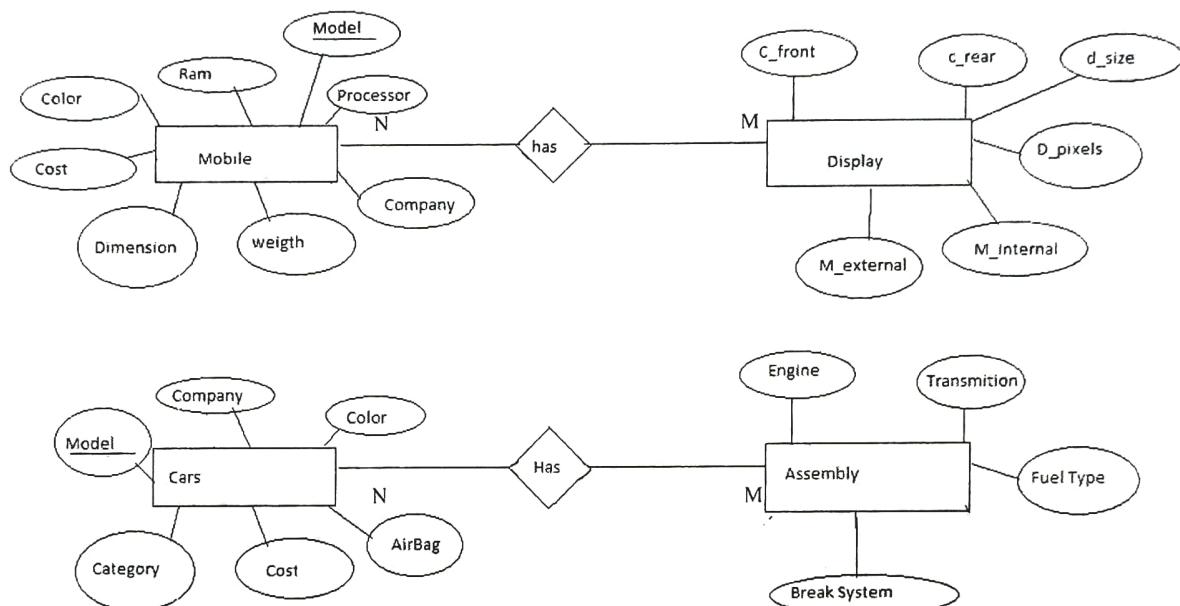
- **Hardware Requirement Specifications**

Computer Processor	Core i3
Processor Speed	2.3 GHz Processor
Hard Disk	20GB or more
RAM	Min 2GB

CHAPTER 3

ENTITY RELATIONSHIP DIAGRAM

An entity relationship diagram (ERD) shows the relationship of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagram illustrate the logical structure of database.

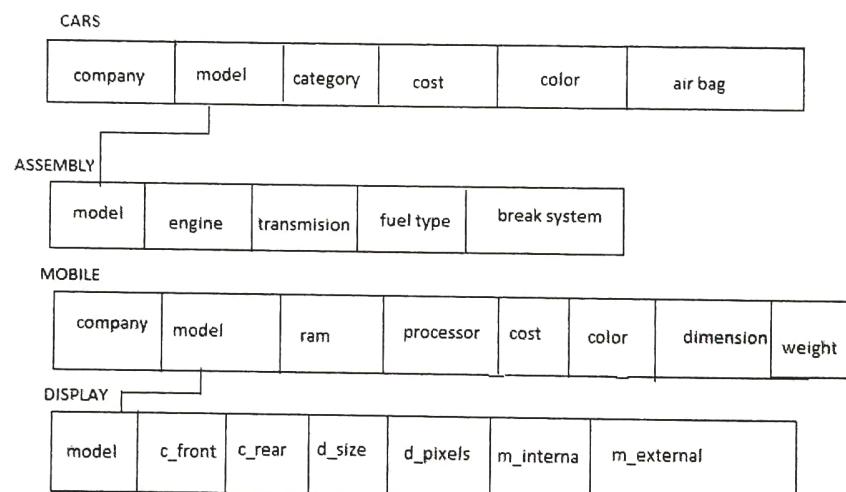


CHAPTER 4

SCHEMA DIAGRAM

A database schema is the skeleton structure that represents the logical view of the entire database. It defines how the data is organized and how the relations among them are associated. It formulates all the constraints that are to be applied on the data.

A database schema defines its entities and the relationship among them. It contains a descriptive detail of the database, which can be depicted by means of schema diagrams.



CHAPTER 5

IMPLEMENTATION

5.1 Backend Implementation

5.1.1 Create Statement

The `CREATE TABLE` statement is used to create a new table in a database.

SYNTAX CREATE TABLE *table_name* (
 column1 datatype,
 column2 datatype,
 column3 datatype,);

The column parameters specify the names of the columns of the table.

The data type parameter specifies the type of data the column can hold (e.g. varchar, integer, date, etc.).

SQL>create table car

(company varchar(10),

model varchar(15) primary key,

category varchar(10),

Costnumber (15),

Colorvarchar(30)

Airbagsvarchar(20));

SQL>create table assembly

(model varchar(15) references car(model) on delete cascade);

engine varchar(15);

transmission varchar(16);

```
fuel_type varchar(15),  
break_system varchar(15)  
primary key (model));
```

```
SQL>create table mobile  
(company varchar(15),  
model varchar(15) primary key,  
ram varchar(5),  
processor varchar(20),  
weight varchar(10),  
dimension varchar(15));
```

```
SQL>create table display  
(model varchar(15) references mobile(model) on delete cascade,  
c_front varchar(10),  
c_rear varchar(10),  
d_size varchar(10),  
d_pixels varchar(10),  
m_internal varchar(10),  
m_external varchar(15),  
cost varchar(10));
```

5.1.2 DESC STATEMENTS

SQL> desc car;

Name	Null?	Type
COMPANY		VARCHAR2 (10)
MODEL	NOT NULL	VARCHAR2(15)
CATEGORY		VARCHAR2(10)
COST		NUMBER(15)
COLOR		VARCHAR2(30)
AIRBAGS		VARCHAR2(20)

SQL> desc assembly;

Name	Null?	Type
MODEL	NOT NULL	VARCHAR2 (15)
ENGINE		VARCHAR2 (15)
TRANSMISSION		VARCHAR2 (16)
FUEL_TYPE		VARCHAR2 (15)
BREAK_SYSTEM		VARCHAR2(15)

SQL> desc display;

Name	Null?	Type
MODEL		VARCHAR2(15)
C_FRONT		VARCHAR2(10)
C_REAR		VARCHAR2(10)
D_SIZE		VARCHAR2(10)
D_PIXELS		VARCHAR2(10)
M_INTERNAL		VARCHAR2(10)
M_EXTERNAL		VARCHAR2(15)

SQL> desc mobile;

Name	Null?	Type
COMPANY		VARCHAR2(15)
MODEL	NOT NULL	VARCHAR2(15)
RAM		VARCHAR2(5)
PROCESSOR		VARCHAR2 (20)
WEIGHT		VARCHAR2 (10)
DIMENSION		VARCHAR2(15)
COST		VARCHAR2(10)

5.1.3 Insert Statement

The INSERT statement adds one or more new rows of data to a database table.

SYNTAX

```
Insert into table_name values (value1,value2....);
```

```
insert into car values('audi','a3','sedan',5900000,'white,black,5+','front 2 rear 2');
```

```
insert into assembly values('a3','1926 cc','auto','diesel','vent disc');
```

```
insert into mobile values('mi','note 5','3|4 gb','Snapdragon 650','190 g','5.5');
```

```
insert into display values('note 5','5MP','12MP','5.5"','720X1080','64GB','upto 64gb','13000');
```

5.1.4 SELECT STATEMENTS

SQL> select *from car;

COMPANY	MODEL	CATEGORY	COST COLOR	AIRBAGS
Audi	a3	sedan	5900000 white,black,5+	front 2 rear 2
audi	a5	sedan	6300000 white,red,7+	front 2 rear 2
audi	q3	suv	4000000 white,black,4+	front 2 rear 3
bmw	x5	suv	7000000 brown,blue,5+	front 3 rear 3
bmw	7	sedan	12000000 black,blue,5+	front 3 rear 2
tata	nexon	hatchback	900000 white,blue,5+	front 3 rear 2
tata	safari	suv	1500000 white,5+	front 2 rear 3
jaguar	xf	sedan	6100000 blue,white,6+	front 2 rear 2
jaguar	f pace	suv	6300000 blue,black,5+	front 3 rear 4

SQL> select *from assembly;

MODEL	ENGINE	TRANSMISSION	FUEL_TYPE	BREAK_SYSTEM
a3	1926 cc	auto	diesel	vent disc
a5	1966 cc	auto/manual	diesel	disc
q3	2016 cc	auto	diesel/petrol	vent disc
x5	2126 cc	auto/manual	diesel/petrol	vent disc
7	1926 cc	auto/manual	diesel	disc
nexon	1426 cc	manual	diesel	disc
safari	1626 cc	manual	diesel	disc
xf	1826 cc	auto/manual	diesel	vent disc
f pace	2126 cc	auto	diesel	vent disc

SQL> select *from mobile;

COMPANY	MODEL	RAM	PROCESSOR	WEIGHT
DIMENSION	COST			
mi	note 5	3 gb	Snapdragon 650	190 g 5.5 13000
MI	POCOF1	6gb	Snapdragon 845	160 g 5.513000
Oneplus	1	6gb	Snapdragon 450	183 g 5.5 13000

SQL> select *from display;

MODEL M_EXTERNAL	C_FRONT	C_REAR	D_SIZE	D_PIXELS	M_INTERNAL	
note 5	5MP	12MP	5.5"	720X1080	64GB	upto 64gb
POCOF1	5MP	12MP	5.5"	720X1080	64GB	upto 64gb
1	8MP	13MP	5.5"	720X1080	64GB	-

5.2 FRONT END IMPLEMENTATION

5.2.1 Connection Code

```
import java.sql.*;
import javax.swing.*;
public class MySqlConnect {
    Connection con=null;
    public static Connection ConnectDB(){
        try{
            Class.forName("oracle.jdbc.OracleDriver");
            Connection
            conn=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","raj","123");
            // JOptionPane.showMessageDialog(null,"connected to database");
            return conn;
        }
        catch(Exception e){
            JOptionPane.showMessageDialog(null, e);
            return null;
        }
    }
}
```

5.2 INSERT CODE

5.2.2 INSERT CODE FOR CAR:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
  
    try {  
  
        Connect1 a=new Connect1();  
  
    } catch (Exception ex) {  
  
        Logger.getLogger(AddCars1.class.getName()).log(Level.SEVERE, null, ex);  
  
    }  
  
    class Connect1  
  
    {  
  
        public Connect1() throws SQLException  
  
        {  
  
            conn=MySqlConnect.ConnectDB();  
  
            PreparedStatement st=conn.prepareStatement(" insert into car values(?,?,?,?,?,?,?,?,?,?)");  
  
            st.setString(1,tf12.getText());  
  
            st.setString(2,tffl.getText());  
  
            st.setString(3,tf3.getText());  
  
            st.setString(4,tf4.getText());  
  
            st.setString(5,tf5.getText());  
  
            st.setString(6,tf6.getText());  
  
            st.setString(7,tf8.getText());  
  
            st.setString(8,tf9.getText());  
  
            st.setString(9,tf10.getText());  
        }  
    }  
}
```

```
st.setString(10, tf11.getText());  
int a=st.executeUpdate();  
  
if(a>0)  
{  
    JOptionPane.showMessageDialog(null,"database updated");  
}  
}
```

5.2.3 INSERT CODE FOR MOBILE:

```
private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {  
  
    try {  
        Connect1 a=new Connect1();  
    } catch (Exception ex) {  
        Logger.getLogger(AddCars1.class.getName()).log(Level.SEVERE, null, ex);  
    }  
  
    class Connect1 {  
  
        public Connect1() throws SQLException  
        {  
            conn= MySqlConnect.ConnectDB();  
  
            PreparedStatement st=conn.prepareStatement(" insert into mobile  
values(?,?,?,?,?,?,?,?,?,?)");  
        }  
    }  
}
```

```
st.setString(1,f1.getText());
st.setString(2,f2.getText());
st.setString(3,f3.getText());
st.setString(4,f4.getText());
st.setString(5,f5.getText());
st.setString(6,f6.getText());
st.setString(7,f7.getText());
st.setString(8,f8.getText());
st.setString(9,f9.getText());
st.setString(10,f10.getText());
st.setString(11,f11.getText());
st.setString(12,f12.getText());
st.setString(13,f13.getText());
int a=st.executeUpdate();
if(a>0)
{
    JOptionPane.showMessageDialog(null,"database updated");
}
}
```

5.3 DELETE CODE

5.3.1 DELETE CODE FOR CAR:

```
class Connect1 {  
  
    public Connect1()  
    {  
  
        conn=MySqlConnect.ConnectDB();  
  
        String Sql="delete from car where model=?";  
  
        try{  
  
            pst=conn.prepareStatement(Sql);  
  
            pst.setString(1,String.valueOf(combo2.getSelectedItem()));  
  
            int a=pst.executeUpdate();  
  
            if(a>0)  
            {  
  
                JOptionPane.showMessageDialog(null,"database updated");  
  
            }  
  
        }catch(Exception e)  
        {  
  
            JOptionPane.showMessageDialog(null, e);  
  
        }  
  
    }  
}
```

5.3.2 DELETE CODE FOR MOBILE:

```
class Connect1 {  
  
    public Connect1() {  
  
        conn= MySqlConnect.ConnectDB();  
  
        String Sql="delete from mobile where model=?";  
  
        try{  
  
            pst=conn.prepareStatement(Sql);  
  
            pst.setString(1, String.valueOf(combo2.getSelectedItem()));  
  
            int a=pst.executeUpdate();  
  
            if(a>0)  
  
            {  
  
                JOptionPane.showMessageDialog(null,"database updated");  
  
            }  
  
        }catch(Exception e)  
  
        {  
  
            JOptionPane.showMessageDialog(null, e);  
  
        }  
  
    }  
  
}
```

5.4 DISPLAY CODE

5.4.1 DISPLAY CODE FOR CAR:

```
class Connect1 {  
  
    public Connect1() throws SQLException  
  
    {  
  
        conn= MySqlConnect.ConnectDB();  
  
        String Str2="select * from car where model='"+st2+"'";  
  
        String Str="select * from car where model='"+st1+"'";  
  
        Statement pst2=conn.createStatement();  
  
        Statement pst1=conn.createStatement();  
  
        ResultSet rs=pst1.executeQuery(Str);  
  
        while(rs. Next())  
  
        {  
  
            st3=rs.getString("company");  
  
            st4=rs.getString("model");  
  
            st5=rs.getString("category");  
  
            st6=rs.getString("cost");  
  
            st7=rs.getString("color");  
  
            st8=rs.getString("airbags");  
  
            st9=rs.getString("engine");  
  
            st10=rs.getString("transmission");  
  
            s11=rs.getString("fuel_type");
```

```
s12=rs.getString("bs");

}

ResultSet rs1=pst2.executeQuery(Str2);

while(rs1.next())

{

    s1=rs1.getString("company");

    s2=rs1.getString("model");

    s3=rs1.getString("category");

    s4=rs1.getString("cost");

    s5=rs1.getString("color");

    s6=rs1.getString("airbags");

    s7=rs1.getString("engine");

    s8=rs1.getString("transmission");

    s9=rs1.getString("fuel_type");

    s10=rs1.getString("bs");

}

}

}

}
```

5.4.2 DISPLAY CODE FOR MOBILE:

```
class Connect {  
    public Connect() throws SQLException  
    {  
        conn=MySqlConnect.ConnectDB();  
  
        String Str2="select * from mobile where model='"+et2+"'";  
  
        String Str="select * from mobile where model='"+et1+"'";  
  
        Statement st2=conn.createStatement();  
  
        Statement st1=conn.createStatement();  
  
        ResultSet rs=st1.executeQuery(Str);  
  
        while(rs.next())  
        {  
            et3=rs.getString("company");  
            et4=rs.getString("model");  
            et5=rs.getString("ram");  
            et6=rs.getString("processor");  
            et7=rs.getString("weight");  
            et8=rs.getString("dimension");  
            et9=rs.getString("c_front")  
            et10=rs.getString("c_rear");  
            et11=rs.getString("d_size"); et12=rs.getString("d_pixels");  
            et13=rs.getString("m_internal");
```

```
et14=rs.getString("m_external");
et15=rs.getString("cost");System.out.println(et3+et4+et5+et6+et7+et8);

}

ResultSet rs1=st2.executeQuery(Str2);

while(rs1.next())

{

e1=rs1.getString("company");
e2=rs1.getString("model");
e3=rs1.getString("ram");
e4=rs1.getString("processor");
e5=rs1.getString("weight");
e6=rs1.getString("dimension");
e7=rs1.getString("c_front");
e8=rs1.getString("c_rear");
e9=rs1.getString("d_size"); e10=rs1.getString("d_pixels");
e11=rs1.getString("m_internal");
e12=rs1.getString("m_external");
e13=rs1.getString("cost");

}

}

}

}
```

CHAPTER 6

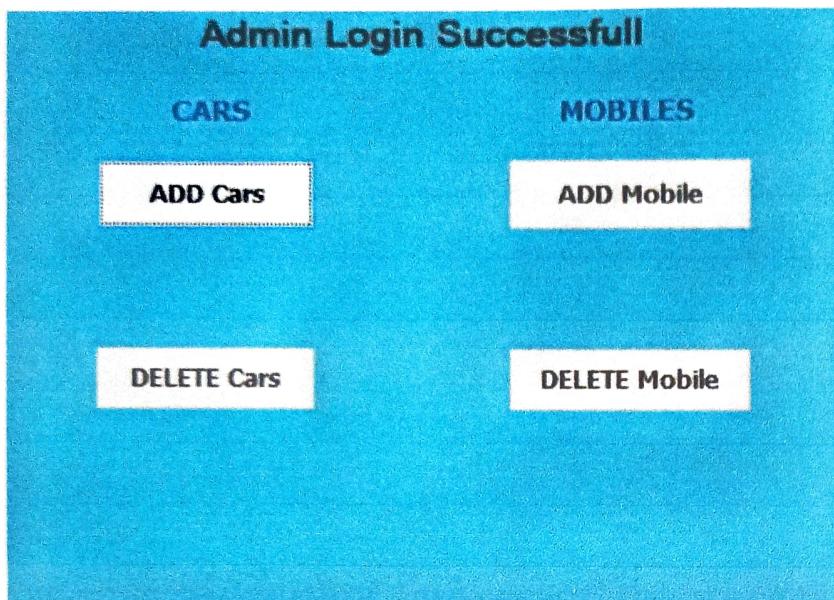
SNAPSHOTS

6.1 LOGIN

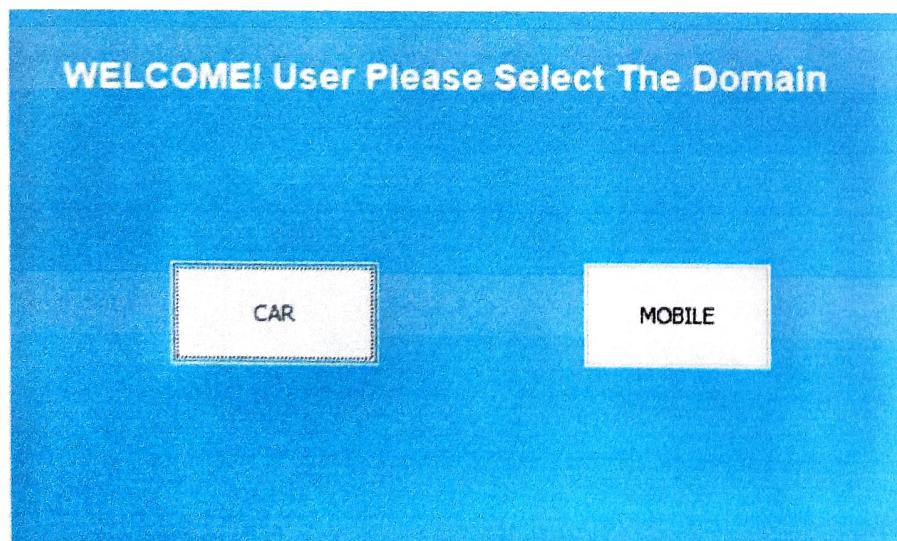
The image shows a dark-themed login form. At the top center, the word "LOGIN" is written in white capital letters. Below it, there are three input fields: "Username:" followed by a redacted input field, "Password:" followed by a redacted input field, and "User Type:" followed by a dropdown menu set to "Admin". At the bottom center is a white rectangular button with the word "Submit" in black capital letters.

6.2 HOME PAGE

6.2.1 ADMIN



6.2.2 USER



6.3 INSERTION

6.3.1 INSERTION FOR CAR

ADD New Car

Company:	Engine:
Model:	Transition:
Color:	Fuel-Type:
Catagory:	Break-System:
AirBags:	
Cost:	

6.3.2 INSERTION FOR MOBILE

Add New Mobile Phone

Company:	Front Camera:
Model:	Rear Camera:
Processor:	Inbuilt Memory:
Ram:	External Memory:
weight:	Display size:
Pixels:	
Cost:	
Dimensions:	<input type="button" value="OK"/>

6.4 DELETION

6.4.1 DELETION FOR CAR

Please Select The Company and Model of the Car to be Deleted

Company:

Model:

6.4.2 DELETION FOR MOBILE

Please Select The Company and Model of the Mobile to be Deleted

Company:

Model:

6.5 DISPLAYING

6.5.1 DISPLAYING FOR CAR

Select Car Comapny and Model

Company: VS Company:

Model: Model:

6.5.2 DISPLAYING FOR MOBILE

Select Mobile Company and Model

Company:

Company:

VS

Model:

Model:

SUBMIT

ATC Mobile Comparison

Mobile	Mobile
Company:	
Model:	
Ram:	
Processor:	
Weight:	
Dimension:	
Front Camer:	
Rear Camer:	
Display size:	
Display Pixels:	
Inbuilt Memory:	
External Memory:	
Cost:	

CHAPTER 7

CONCLUSION

This project is designed to meet the requirements of a COMPARE TOOL FOR PHONE AND CAR.

For designing the system we have used simple data flow diagram. Overall the project teaches us the essential skills like:

- 1.** Using system analysis and design techniques like data flow diagram in designing the system.
- 2.** Understanding programming logic and language along with utilities like report forms, queries etc.