

**ABEDA INAMDAR SENIOR COLLEGE**

**DOT NET PROJECT**

**PROJECT NAME:- ONLINE CAR RENTAL  
SYSTEM**

**M.Sc(COMPUTER SCIENCE)**

**By-**

**PRITICA.MOSES.ARULDAS**

**ROLL NO – 46**

**SIFA.ALLAUDDIN.TANDEL**

**ROLL NO - 54**

**PROJECT GUIDE: SHAKILA SIDDAVATAM**

# CONTENTS

Sr. No.	Topics	Page No.
1	Project Name	1
2	Acknowledgement	3
3	Introduction	4
4	Problem Definition	5
5	Scope Of System	6
6	Proposed System	7
7	Feasibility Study	8
8	H/w & S/w Requirements	9
9	Data Dictionary	10
10	UML Diagrams	13
11	Form Design	25
12	Reports	41
13	Advantages & Limitations	42
14	Future Enhancement	43
15	References	44

## **ACKNOWLEDGEMENT**

We thank the almighty for giving us the courage & perseverance in completing the project. This project itself is an acknowledgement for all those who have given us their heart-felt co-operation in making it grand success.

We are thankful to our principal, Mrs. Shaila Bootwala for providing the necessary infrastructure and labs. We are greatly indebted to, Head of Computer Science Department, Mrs. Shakila Siddavatam for providing valuable guidance at every stage of this project work.

We are also thankful to the project coordinator, for extending their sincere & heartfelt guidance throughout this project work. Without their supervision and many hours of devoted guidance, stimulating & constructive criticism, this thesis would never come out in this form.

It is a pleasure to express our deep and sincere gratitude to the project guide Mrs. Shakila Siddavatam and is profoundly, grateful towards the unmatched help rendered by her. Our special thanks to all the lectures of .Net, for their valuable advises at every stage of this work.

Last but not the least; we would like to express our deep sincere and earnest thanks to our dear parents for their moral support and heartfelt co-operation in doing the project. We would also like to thanks our friends, whose direct or indirect help has enabled us to complete this work successfully.

## **INTRODUCTION**

It is an online system through which customers can view available cars, register, view profile and book car. Online Car Rental is the most integral part of many people's travel plans and is used all around the world to travel from place to place. The advancement in the information technology and internet penetration has greatly enhanced various business processes and communication between companies and the customers of which car rental industry is not left out. The car rental system provides complete functionality of listing and booking car. In this system, Tourism and Travelling facilities also provide.

## **SCOPE OF THE SYSTEM**

- The new system will be totally computerized system.
- A new system will provide features like time efficiency to show car details, user profiles and whatever the customer will give the feedback to the admin.
- This system will provide tourism and travelling facilities.
- An enquiry is easily done by user in the system.
- It will be the most useful software application for managing online car rental business.

## **PROPOSED SYSTEM**

- Design and implement a web based application for online reservation of car from a car renting business.
- The main purpose of the system is to provide an easy platform for people who are renting cars, where they can easily search and reserve their car online.
- Automation of current business process which was handled manually collecting details through telecommunication.

# **FEASIBILITY STUDY**

Feasibility study is the first and important matter to establish when we start a project. Feasibility means the extent to which appropriate data and information are readily available or can be obtained with available resources such as staff, time and equipments. The types of Feasibility study are:

## **1. Technical Feasibility**

We use different tools and technology to develop this project. To implement the system all the tools used have done different work like HTML(Hyper Text Markup Language) and ASP.NET using C# is used to build a basic structure of the project , BOOTSTRAP & CSS used for the design of the project, JS(Java Script) used for different alerts authentication and SQL MANAGEMENT STUDIO used for database connectivity.

## **2. Operational Feasibility**

Operational feasibility is a measure of how well proposed system solves the problems, and takes advantages of the opportunities identified during the scope definition and how it satisfies the requirements identified. Operational feasibility reviews the willingness of the organisation to support the proposed system.

## **3. Economical Feasibility**

In economical feasibility has benefits of two types:

- 1) The benefits derived from the creation of the project that can be measured in money:
  - Cost reduction.
  - Error reduction.
  - Increased flexibility.

- Increase the speed of activities.
- 2) The benefits derived from the development of the project:
- More timely information.
  - Faster decision making.
  - Increase accuracy.

## **SOFTWARE AND HARDWARE REQUIREMENTS**

### **Software Configuration**

Operating System : Windows 2000/NT/XP

RDBMS : SQL SERVER 2000

Software : Visual Studio .NET 2010

Front End Tool : ASP.NET with C#

### **Hardware Configuration**

RAM : 1 GB

HARD DISK : MINIMUM 20 GB



# **DATA DICTIONARY**

**TABLE 1 – RENTUSER TABLE**

S.NO	FIELD NAME	DATA TYPE	CONSTRAINTS	REFERENCE
1.	r_email	varchar(50)	ALLOW NULL	
2.	r_password	varchar(25)	ALLOW NULL	
3.	r_phone	varchar(10)	ALLOW NULL	

**TABLE 2 – CAR\_DETAIL TABLE**

S.NO	FIELD NAME	DATA TYPE	CONSTRAINTS	REFERENCE
1.	c_no	Int	Primary Key	
2.	c_type	varchar(30)	ALLOW NULL	
3.	c_permit	varchar(30)	ALLOW NULL	
4.	seating_capacity	varchar(20)	ALLOW NULL	
5.	drive	varchar(30)	ALLOW NULL	
6.	rate_per_km	varchar(30)	ALLOW NULL	
7.	driver_allowance	varchar(30)	ALLOW NULL	
8.	aftr_300kms	varchar(30)	ALLOW NULL	
9.	min_km_perday	varchar(30)	ALLOW NULL	
10.	hr8_80kms	varchar(30)	ALLOW NULL	
11.	extra_per_hr	varchar(30)	ALLOW NULL	
12.	extra_kms	varchar(30)	ALLOW NULL	
13.	image_id	varchar(300)	ALLOW NULL	
14.	city	varchar(50)	ALLOW NULL	
15.	status	varchar(50)	ALLOW NULL	
16.	dtstart	varchar(50)	ALLOW NULL	
17.	dtend	varchar(10)	ALLOW NULL	
18.	r_phone	varchar(10)	Foreign Key	RENTUSER

**TABLE 3 – BOOKUSER TABLE**

S.NO	FIELD NAME	DATA TYPE	CONSTRAINTS	REFERENCES
1.	b_name	varchar(50)	ALLOW NULL	
2.	b_state	varchar(50)	ALLOW NULL	
3.	b_Email	varchar(30)	ALLOW NULL	
4.	b_city	varchar(20)	ALLOW NULL	
5.	b_zipcode	varchar(10)	ALLOW NULL	
6.	b_phone	varchar(10)	ALLOW NULL	
7.	b_Aphone	varchar(10)	ALLOW NULL	
8.	b_password	varchar(30)	ALLOW NULL	
9.	b_profileimage	image	ALLOW NULL	

**TABLE 4 – BOOKING\_DETAIL TABLE**

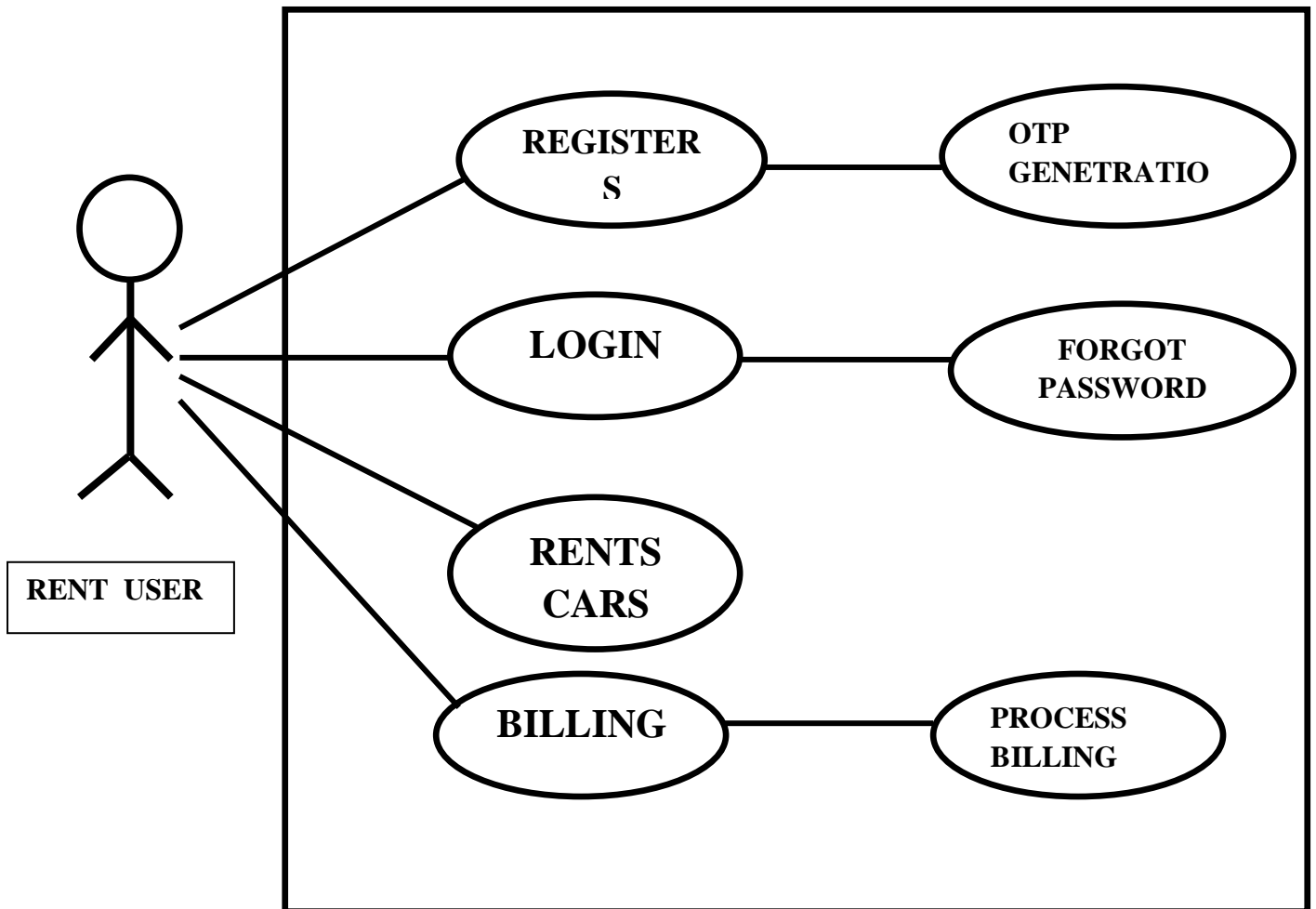
S.NO	FIELD NAME	DATA TYPE	CONSTRAINTS	REFERENCES
1.	B_ID	int		
2.	c_no	varchar(10)	Foreign Key	CAR_DETAIL
3.	dtstart	varchar(30)		
5.	dtend	varchar(30)		
6.	Pickupaddress	varchar(50)		
7.	Dropaddress	varchar(50)		
8.	origincity	varchar(50)		
9.	totalcharge	varchar(50)		
10.	r_phone	varchar(10)	Foreign Key	RENTUSER

11.	b_phone	varchar(10)		
12.	rate_per_km	varchar(20)		
13.	driver_allowance	varchar(20)		
14.	aftr_300kms	varchar(20)		
15.	journey	varchar(20)		
16.	Image_id	var		

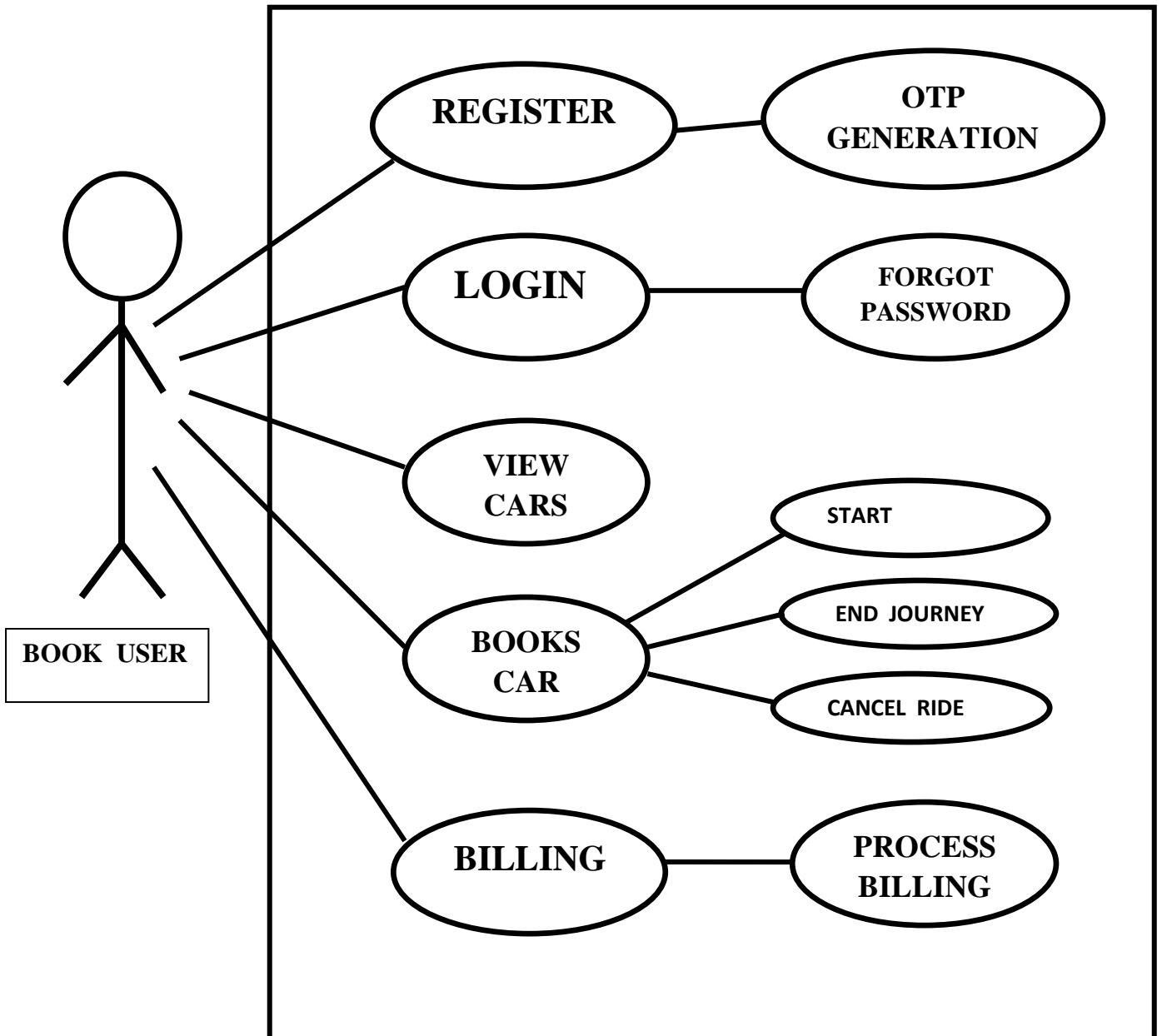
# UML DIAGRAMS

## USE CASE DIAGRAM

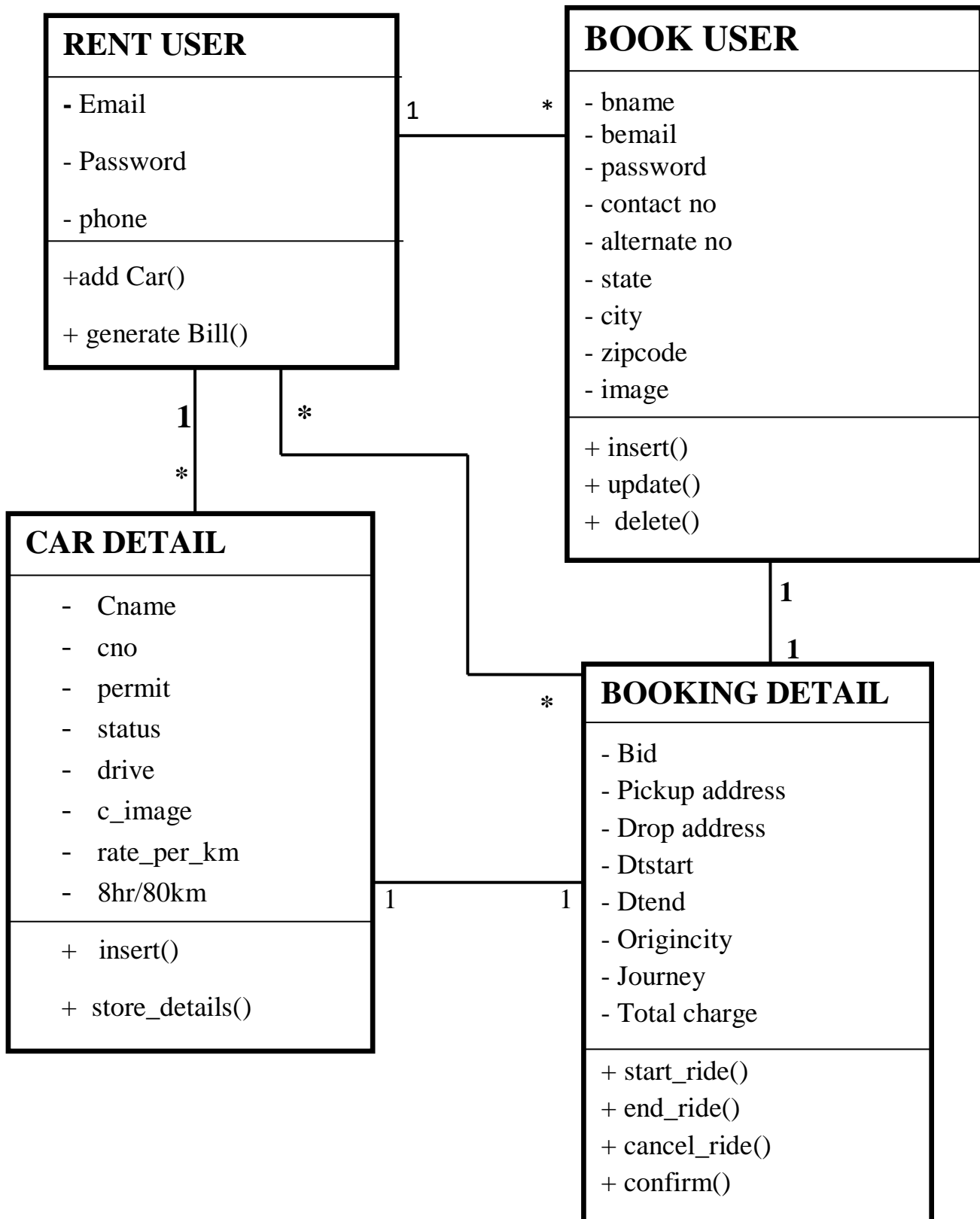
### ❖ RENT USER



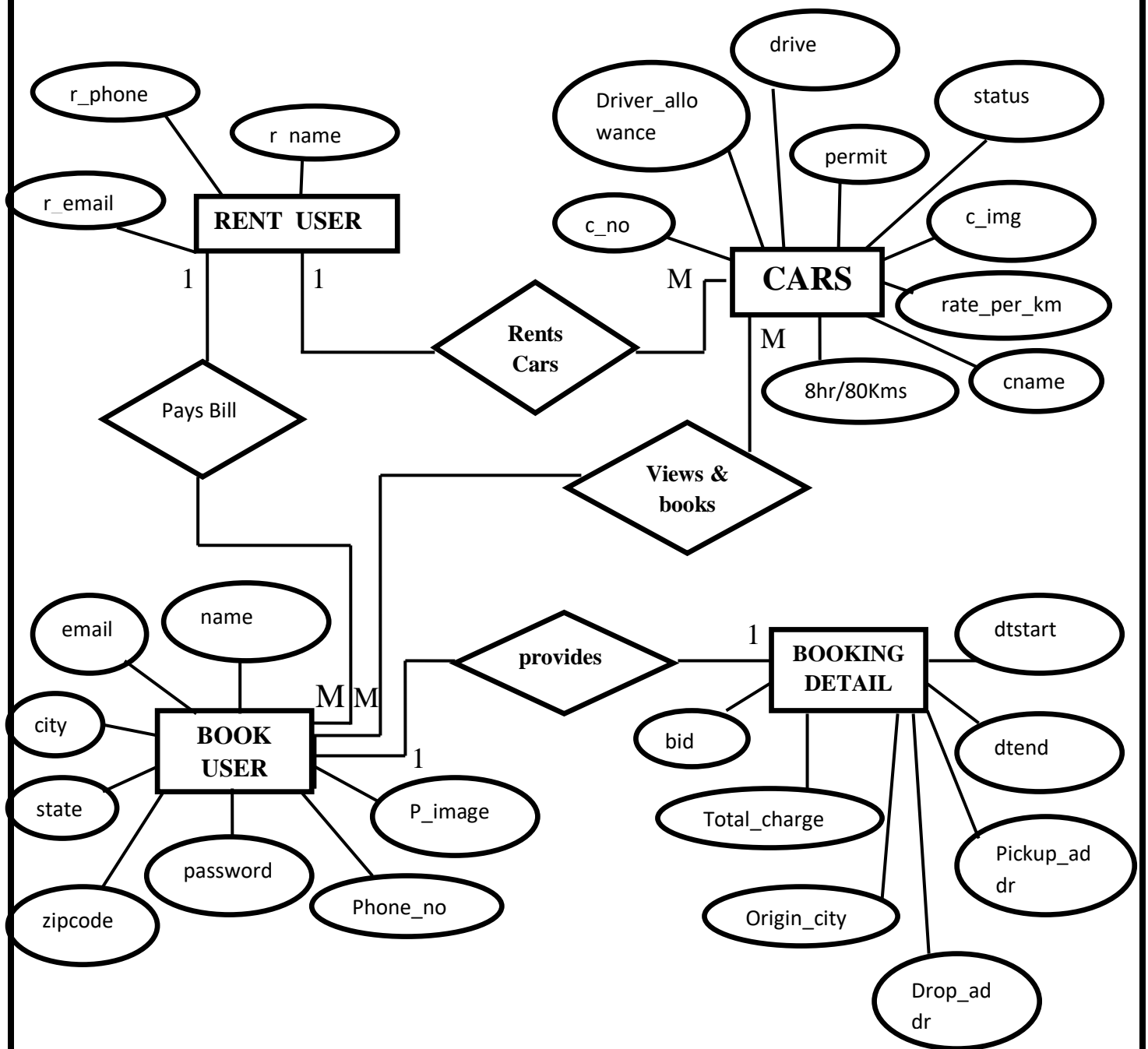
## ❖ BOOK USER



## CLASS DIAGRAM

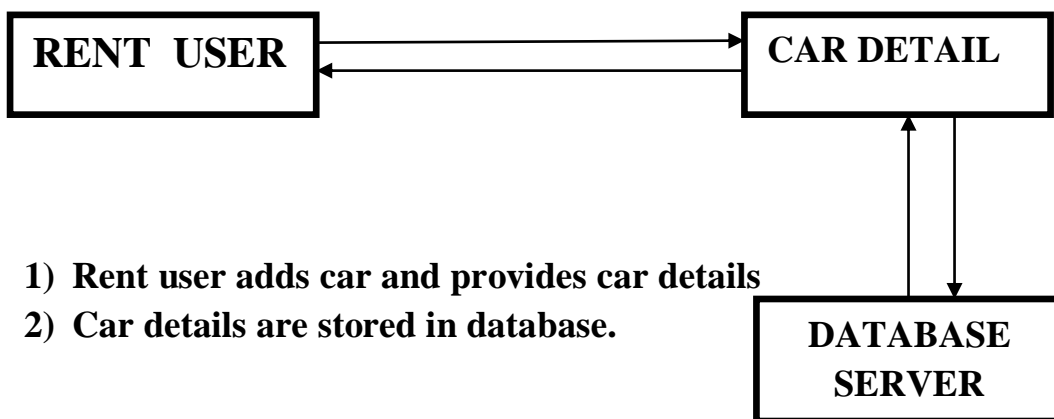
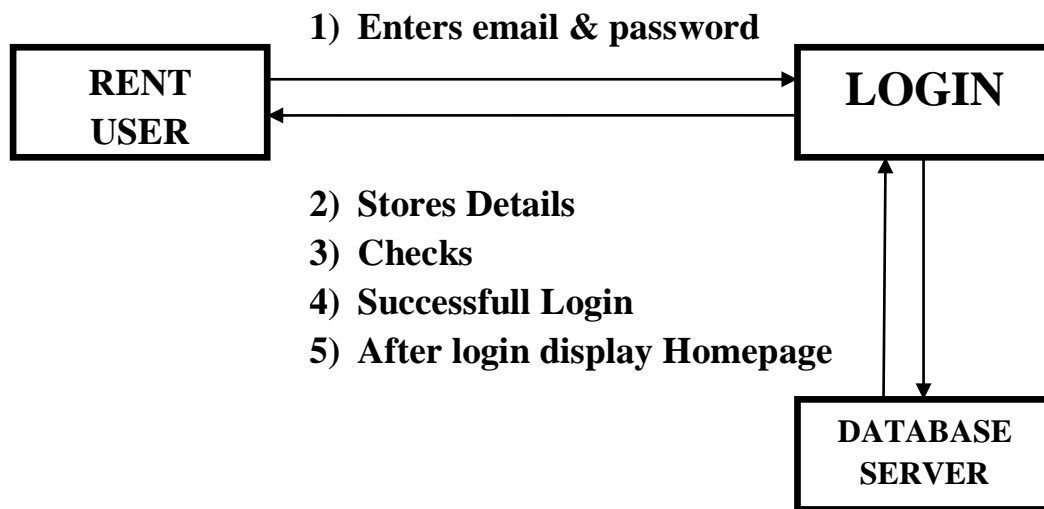


## ER- DIAGRAM



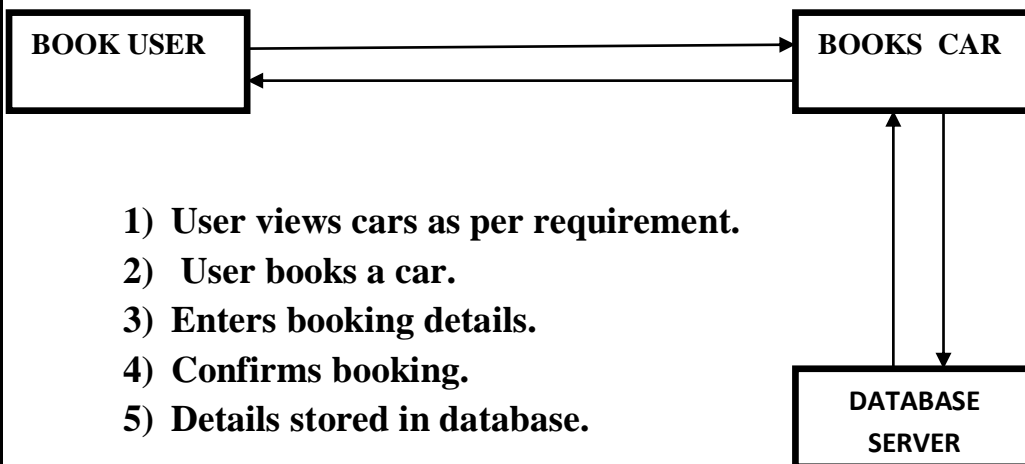
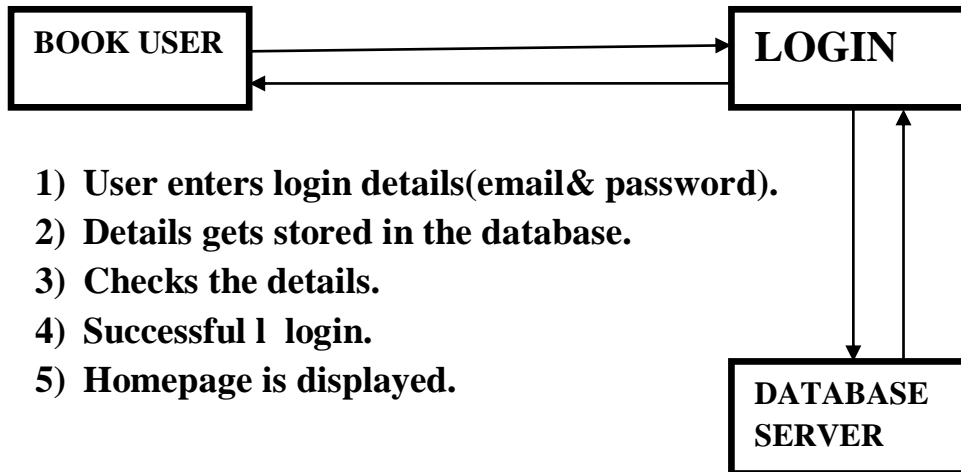
## COLLABORATION DIAGRAMS

### 1) RENT USER

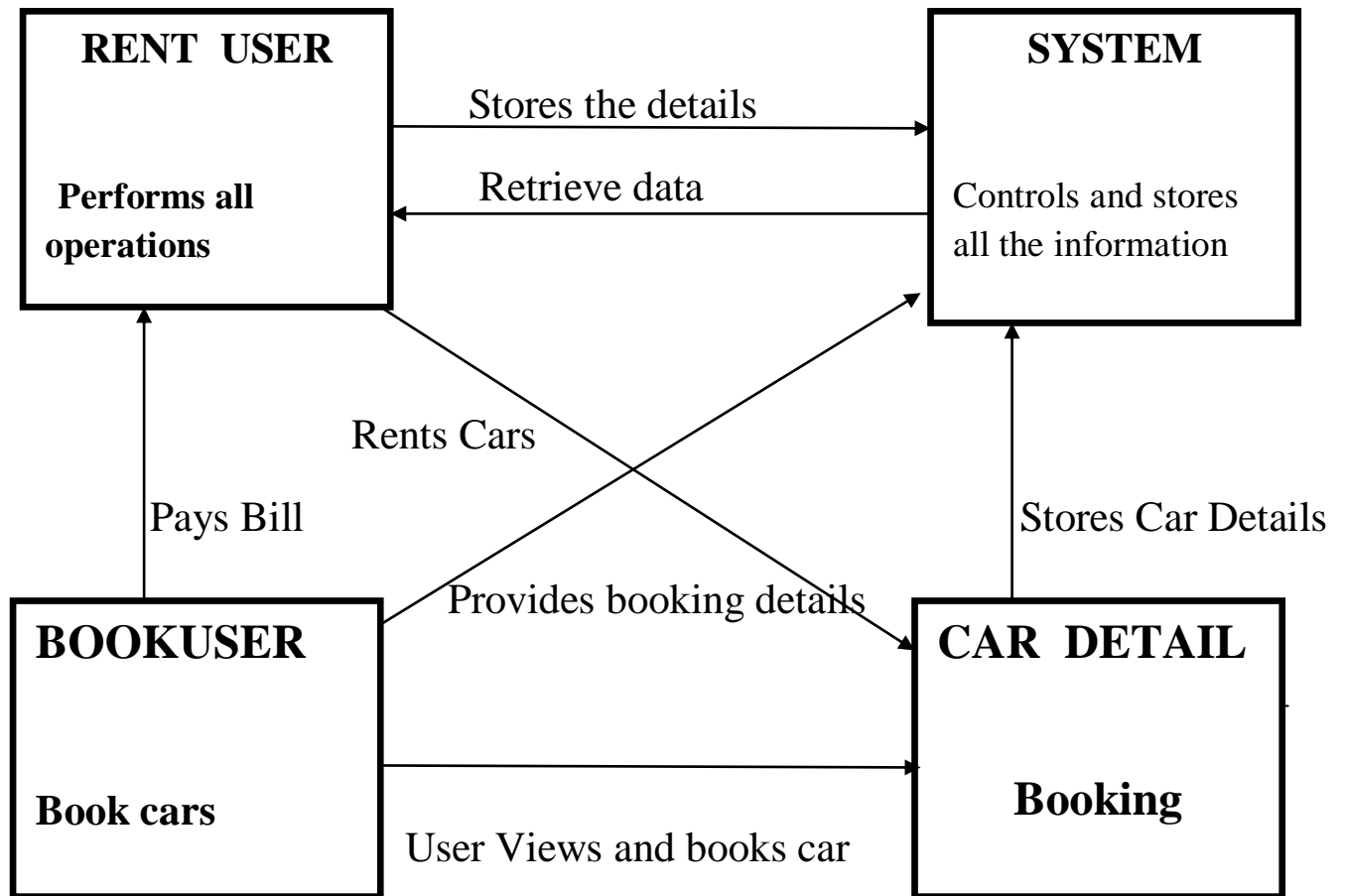




### 3) BOOK USER



## STATE CHART DIAGRAM

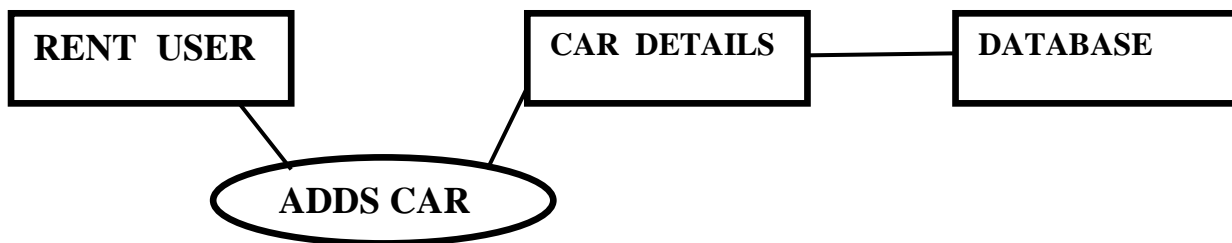


## DATA FLOW

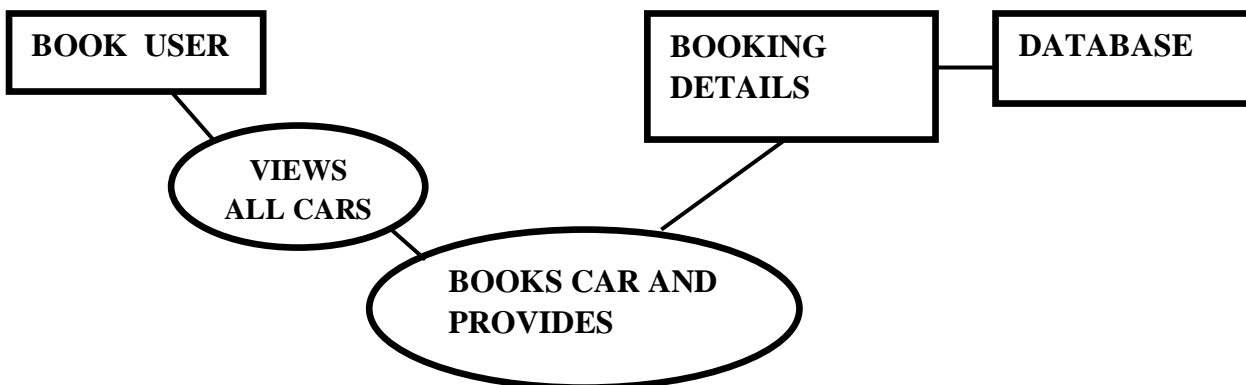
DFD Level 0



DFD LEVEL 1



DFD LEVEL 2



# **FORM DESIGNS**

## **ADVANTAGES**

The various advantages of this project are:

- It manages the data easily.
- We can reach the determined destination as required.
- Rental car is a convenient way.
- This applications have user friendly UI/UX and they are compatible with the all size of devices.
- All types of calculations including taxes, rental charges, charge per kms, and many more processes are automatically done by these software.
- Estimated costing of the ride or car rental rates provide transparency between car owners and customers.
- All the data stored in the software are encrypted and requires proper authentication to access.
- It also reduces manual work.

## **LIMITATIONS**

In order to perform the rent a car capability:

- Customers must login to their own profiles.
- Guests must create their own accounts.

The system does not allow rent the same car for the same date. If such a consequence happened, the system will give fatal error.

## **FUTURE ENHANCEMENT**

This application can be easily implemented under various situations.

We are working to increase automation in the system to increase user experience great.

Add the current project for easy booking.

## **CONCLUSION**

Car rental business has emerged with a new goodies compared to the past experience where every activity concerning car rental business is limited to a physical location only. Even though the physical location has not been totally eradicated; the nature of the functions and how these functions are achieved has been reshaped by the power of the internet. Nowadays, customers can reserve cars online, rent car online and have the car brought to their door step once the customer is a registered member or go to the office to pick the car. The web based car rental system has offered an advantage to both customers as well as Car rental company to efficiently and effectively manage the business and satisfies the customer needs at the click of a button.

## **BIBLIOGRAPHY**

The following books were referred during the analysis and execution phase of the project.

- 1) **SOFTWARE ENGINEERING:** By Roger.S. Pressman
- 2) **COMPLETE HTML:** Steven Holzner
- 3) **UNIFIED MODELING LANGUAGE:** By Grady  
Booch,Ranbaugh,Jacobson
- 4) **SQL FOR PROFESSIONALS :** By Jain
- 5) **C#.NET Black Book :** By Evangeleous Petereous
- 6) **MSDN 2005** By Microsoft



# CONTENTS

Sr. No.	Topics	Page No.
1	Project Name	
2	Acknowledgement	
3	Introduction	
4	Problem Definition	
5	Scope Of System	
6	Proposed System	
7	Feasibility Study	
8	H/w & S/w Requirements	
9	Data Dictionary	
10	UML Diagrams	
11	Form Design	
12	Reports	
13	Advantages & Limitations	
14	Future Enhancement	
15	References	