ABEDA INAMDAR SENIOR COLLEGE

DOT NET PROJECT

PROJECT NAME:- ONLINE CAR RENTAL SYSTEM

M.Sc(COMPUTER SCIENCE)

By-

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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_capcity	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

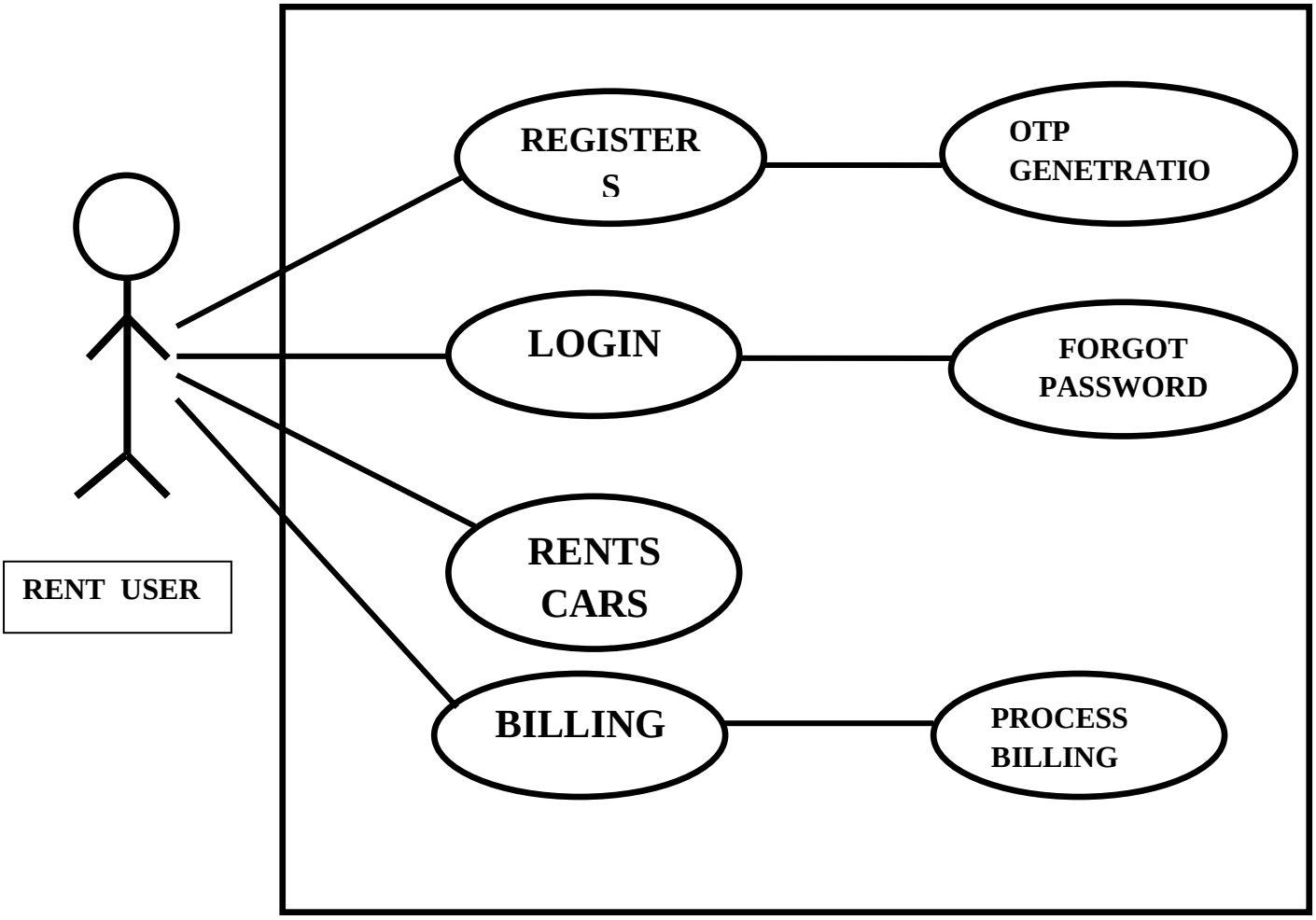
S.NO	FIELD NAME	DATA TYPE	CONSTRAINTS	REFERENCES
1.	B_ID	int		
2.	c_no	varchar(10)	Foreign Key	CAR_DETAIL
3.	dtstart	varchar(30)		
5.	dtend	varchar(30)		
6.	Pickupaddress	varchar(50)		
7.	Dropaddress	varchar(50)		
8.	origincity	varchar(50)		
9.	totalcharge	varchar(50)		
10.	r_phone	varchar(10)	Foreign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

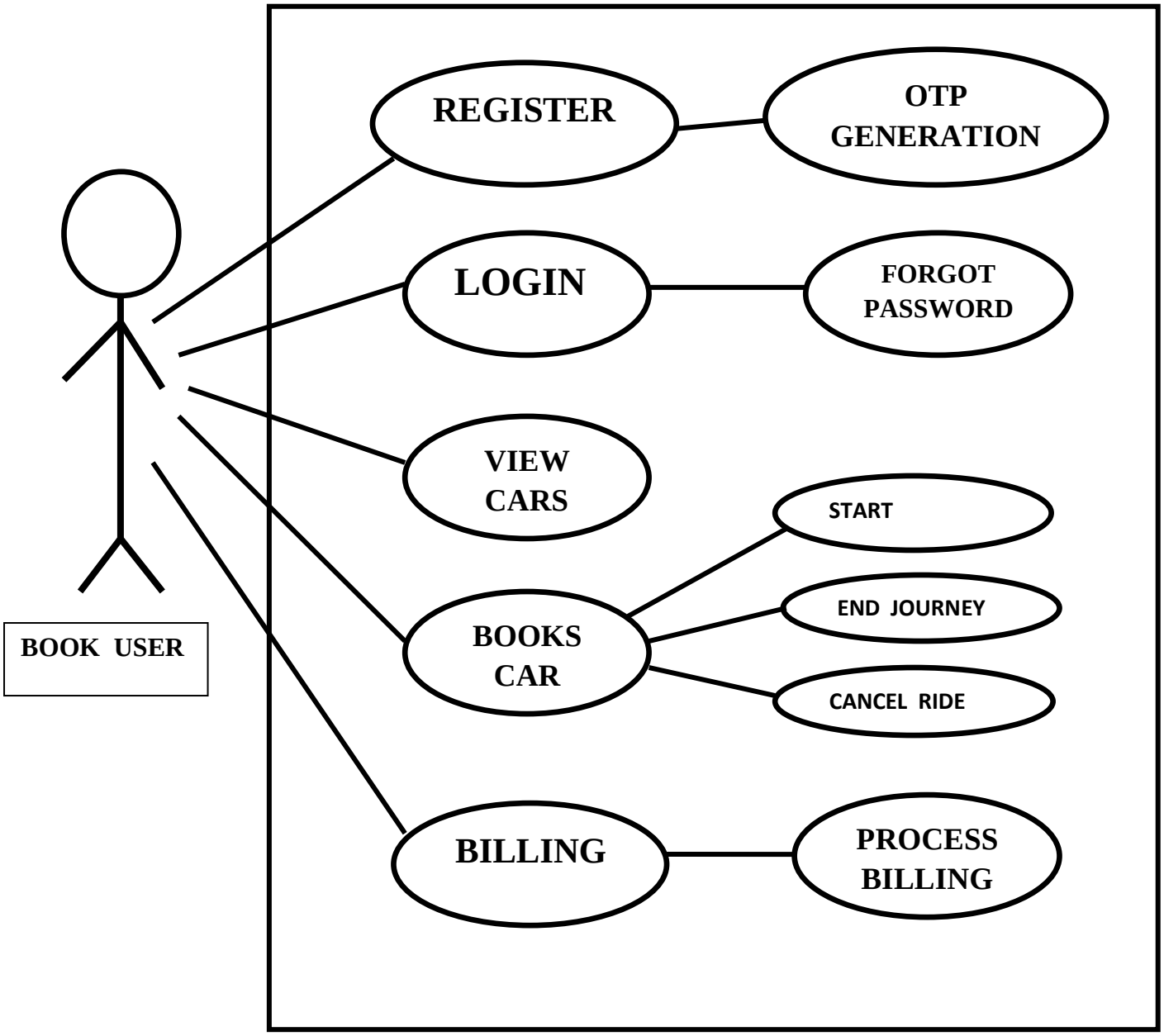
UML DIAGRAMS

USE CASE DIAGRAM

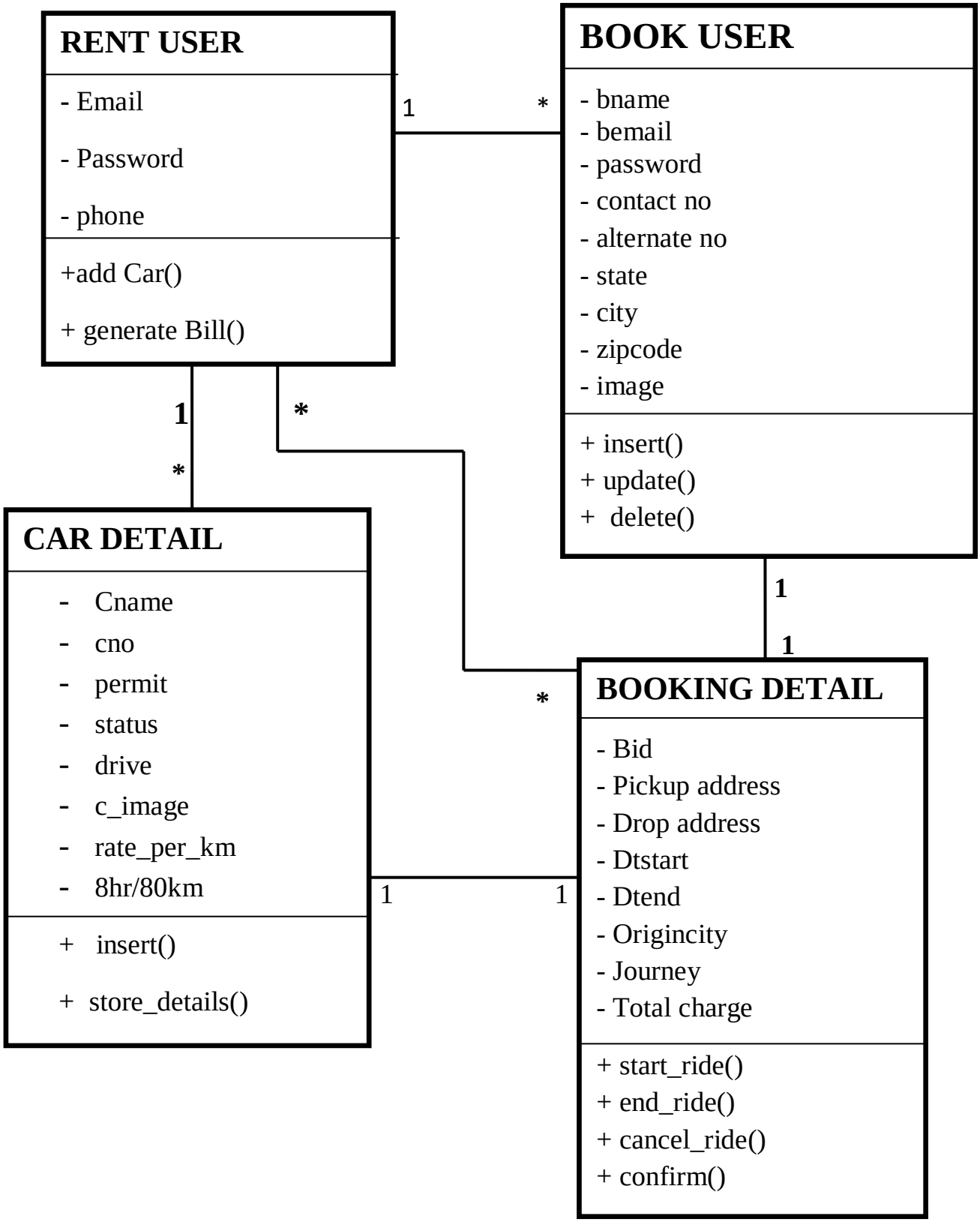
❖ RENT USER



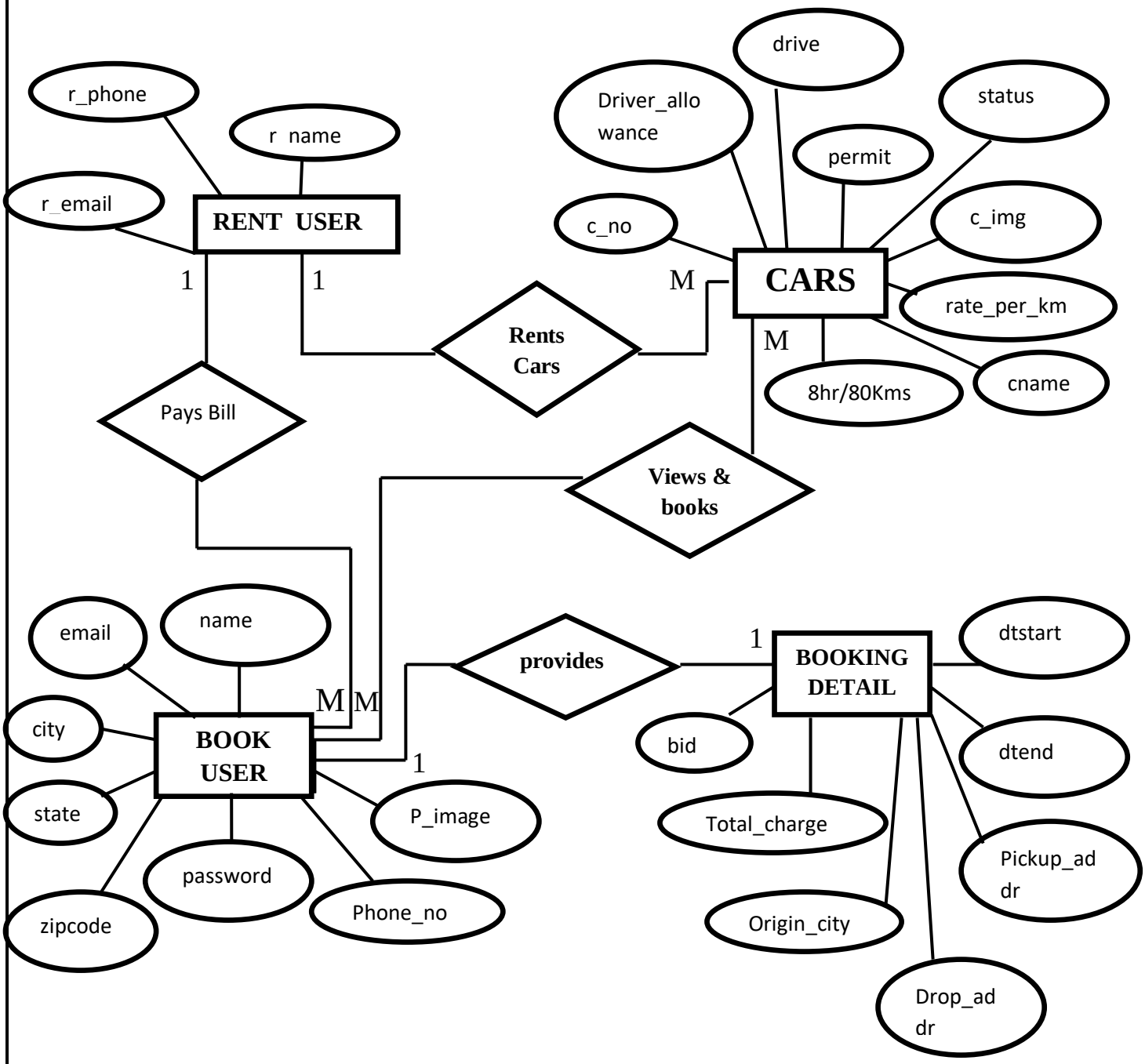
❖ **BOOK USER**


REGISTER
OTP GENERATION
LOGIN
FORGOT PASSWORD
VIEW CARS
START
END JOURNEY
BOOKS CAR
CANCEL RIDE
BILLING
PROCESS BILLING
BOOK USER

CLASS DIAGRAM

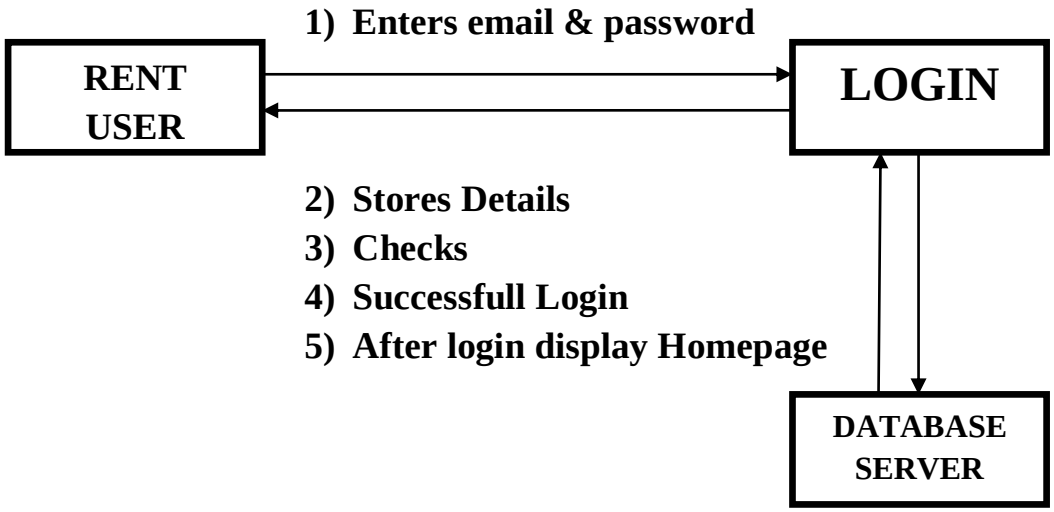


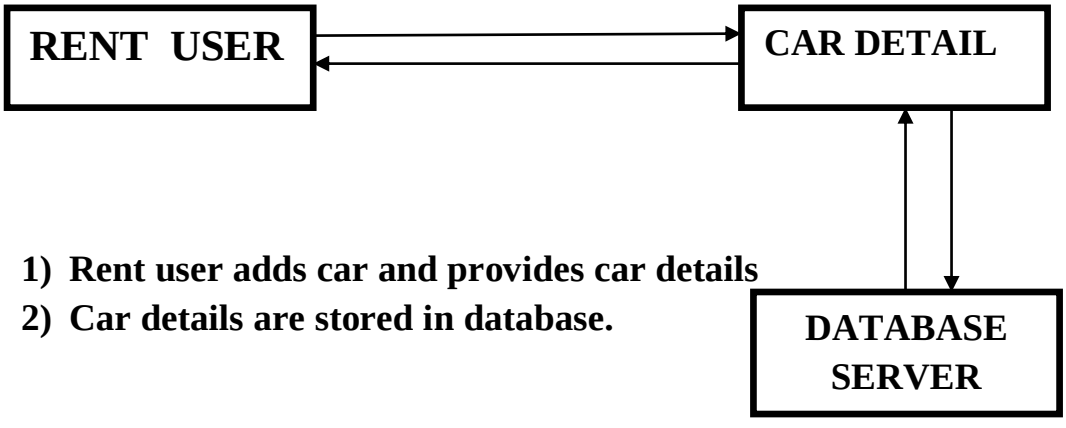
ER- DIAGRAM


r_phone
r_name
r_email
RENT USER
1
1
Rents Cars
M
CARS
drive
Driver_allowance
status
permit
c_no
c_img
rate_per_km
M
8hr/80Kms
cname
Pays Bill
Views & books
email
name
city
BOOK USER
M
M
1
provides
1
BOOKING DETAIL
dtstart
bid
dtend
state
P_image
Total_charge
password
Pickup_addr
zipcode
Phone_no
Origin_city
Drop_addr

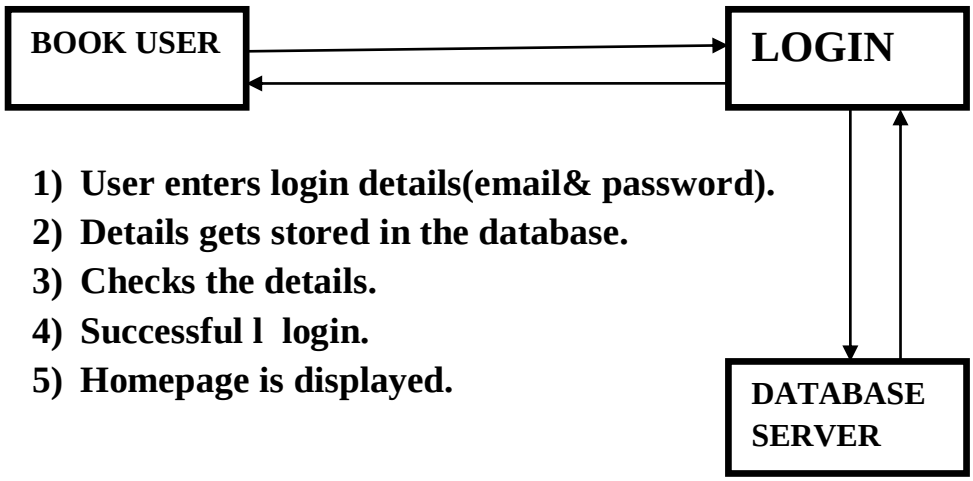
COLLABORATION DIAGRAMS

1) RENT USER

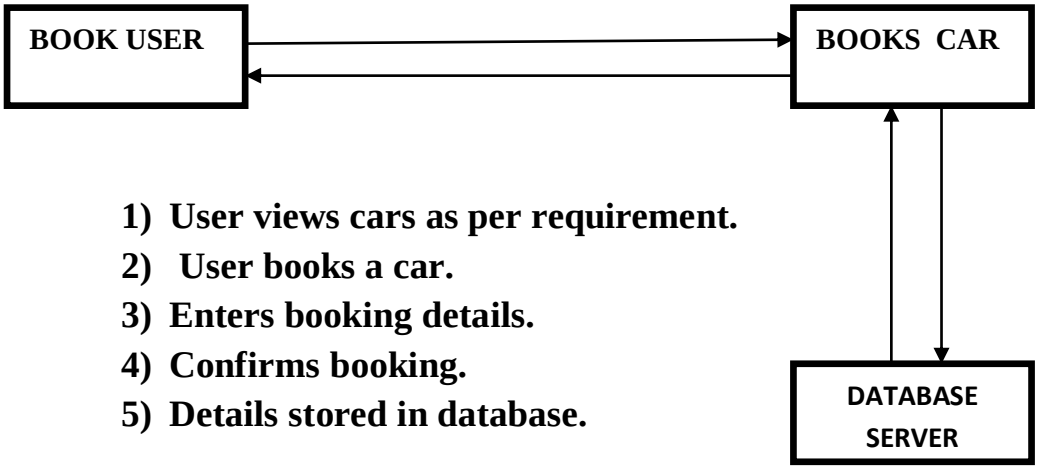




3) BOOK USER

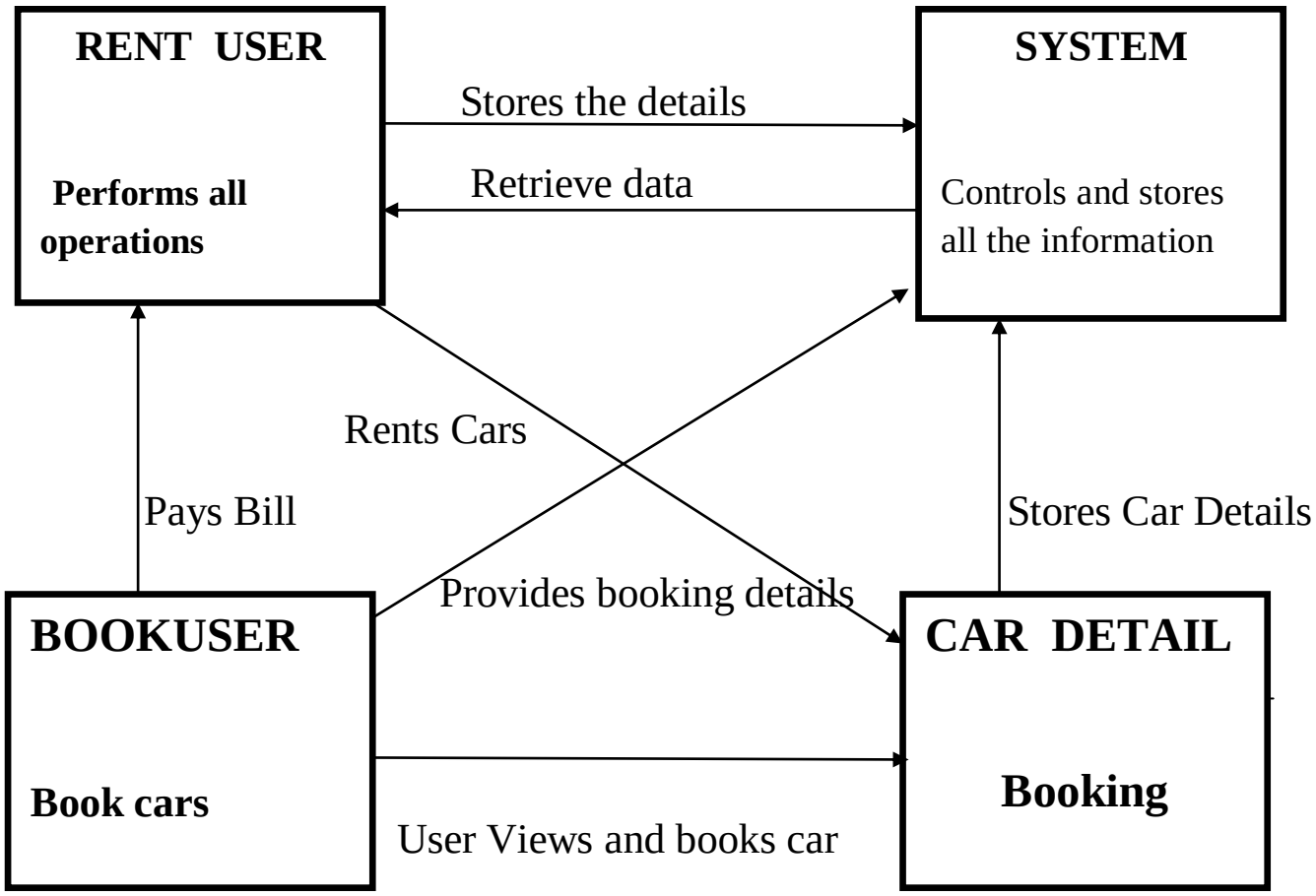


1) User enters login details(email& password).
2) Details gets stored in the database.
3) Checks the details.
4) Successful l login.
5) Homepage is displayed.



1) User views cars as per requirement.
2) User books a car.
3) Enters booking details.
4) Confirms booking.
5) Details stored in database.

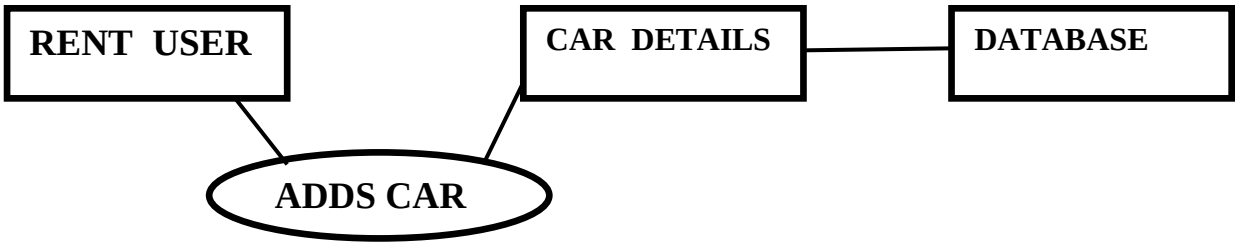
STATE CHART DIAGRAM



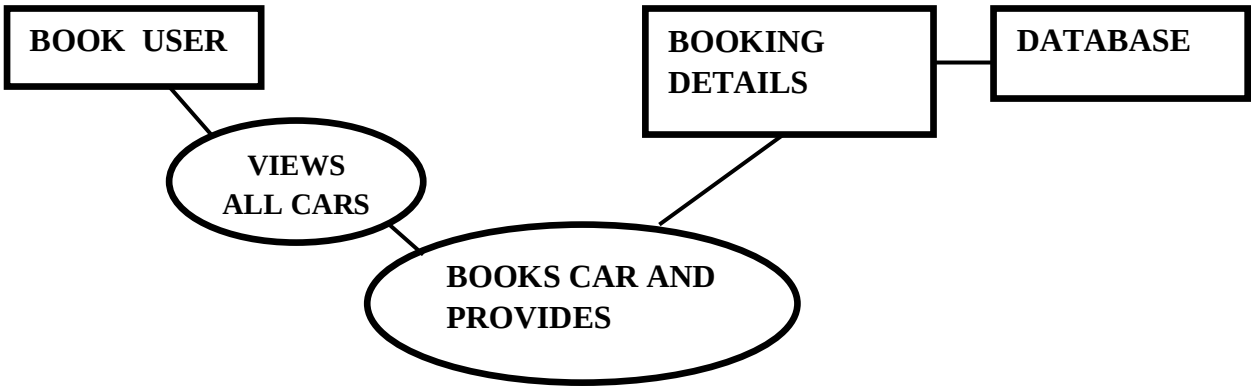
DATA FLOW

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.

BIBLOGRAPHY

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

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2) **COMPLETE HTML:** Steven Holzner
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