GURU NANAK DEV UNIVERSITY, AMRITSAR

Software Training Report

On

ZoomCar

Submitted in the partial fulfillment of the requirement for the award of degree of Bachelors of Technology

In

COMPUTER SCIENCE & ENGINEERING

Batch

(2013-2017)



Submitted to Submitted By-

Ms. Kiranbir Kaur Samridhi

Ms. Priyanka Mahajan (2013CSA1136)

DEPARTMENT OF COMPUTER ENGINEERING AND TECHNOLOGY

DECLARATION

I, **Samridhi** student of B.tech 8th Sem. CSE 2013-2017, hereby declare that six months industrial training report entitled "ZOOMCAR" submitted in partial fulfillment of the requirement for the award of degree of Bachelor of Technology in Computer Science & Engineering in our original work and has not been submitted for the award in any other university or institution.

Ms. Kiranbir Kaur (Guide)

Ms Priyanka Mahajan (Co-Guide)

Samridhi

(2013CSA1136)

ACKNOWLEDGEMENT

This project is an acknowledgement in itself to the intensity, drive and competence of many individuals, who have contributed to it. I list here only a few of them. One individual is Mr. **Amrinder Pal Singh,** of V.M.M Education, Amritsar. I am extremely thankful to him for devoting his valuable time and imparting knowledge to us. With his valuable guidance, the course up to the completion of software became smooth without much cared hurdles. He was always friendly and encouraging during the development of project.

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I thank **Ms. Kiranbir Kaur**, Project guide, for providing me with an excellent project and guiding me in completing our project successfully.

I pay special thanks to all the staff members of the Department of Computer Science for their help at every stage. They helped in every respect during the tenure..

Lastly, I thank my parents and friends for their moral support in every sphere. Their vital push infused sense of insurgency in me, I am thankful to them for their assistance and cooperation.

Samridhi

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Company Profile

VMM Education

VMM Education's journey started in January 2005 with a vision of bringing computer education of global standard to the holy city of Amritsar. Today seven years later, VMM Education or VMM, as it is popularly known, is the largest and the most trusted computer centre of the region, with annual turn out of more than 1000 students.

It specializes in six weeks training in Java, Microsoft .NET and PHP; six months training in IOS, Android, PHP, Python and Advanced Java, while keeping the syllabus up to date with current industry standards. We have managed to successfully train over seven thousand engineers who are currently working in Global Multinationals like TCS, Tech Mahindra, Infosys, CSC or pursuing higher studies in world-class Institutions.

VMM is today the favourite choice among students of various engineering colleges for pursuing their six months or six weeks industrial training. A unique "industry-endorsed curriculum," crafted by professionals of VMM which enhances the job-readiness and employability of learners and equips them for the IT Industry. We offer air-conditioned labs and classrooms that are equipped with the latest hardware and software technologies required for the training.

To provide IT education which can match with the global IT standards, VMM also undertakes industrial projects from UK & USA under the banner of Venus Software Solutions like im4schools.co.uk and more. This allows the students to work on live projects and make projects for the industry. Some of our products include Point of sale software for Super Markets with barcode reader support, Finger print attendance Management System that works for schools, colleges and other institutes, Remote LAN Controller which is used to view remote desktops on LAN or WAN.

Problem Analysis

- People or for example University students have to go somewhere but are not having any conveyance.
- They have to depend on their friends or the public transport, which can be troublesome at times.
- And there are people of the city itself who have spare vehicles at home and are willing to rent them out for some hours or days at their convenience.
- Thus a platform is required where the people who want to rent a self driving car and people who can provide their cars on rent, such a plateform is Zoomcar.

Project Plan

Introduction to Project

A project that is totally based on giving the car/bikes on rent for self- drive to anywhere in the town or outside the city. Giving a short introduction to the project -it just simplifies the car rentals so that the people who are coming from different countries, states or cities can book their own car for their ease to travel any place they want to. Adding more to it, we have seen an application of zoom-car which exhibits the same criteria followed by this project but this project not only includes car but also the bikes which would be provided to the clients. The front end of the project is Advance Java and the back end would be MySQL. There would be 3 interfaces –Admin Interface, Vehicle owner Interface, User Interface.

FEATURES OF EXSISTING PROJECT

- User can get a car on rent
- User can give a car on rent.
- Admin can add and delete the car categories.
- Admin can manage the all cars details under a particular category.
- User can go anywhere and can ride himself.
- > Provide the service of e-wallet
- Provide the security to users while they are pooling.
- Provide the history of car booking at to user
- > Provide the transaction details of both seeker and provider

Feasibility Study

LIMITATION OF EXSISTING PROJECT

- > Do not provide the service of e-wallet.
- > Do not provide the history of Booking.
- Can't differentiate between human n robot.
- Do not provide the details of both seeker and provider

OVERCOME THE LIMITATION

- Provide the service of e-wallet
- Provide the history of Booking.
- Provide the transaction details of both seeker and provider

E-WALLET SERVICE

A user can do payment via e-wallet services, if he failed to pay the cash. Respective money will be deducted from his account

Description of all the interfaces is as follows:

Admin Interface:

- 1. Login
- 2. Change/Recover Password
- 3. Manage Cars/Bikes
- 4. Update Additional information about vehicles (price range, description etc.)
- 5. Manage Merchants
- 6. View Bookings

Vehicle Owner Interface:

- 1. Registration / Login
- 2. Change/Recover Password
- 3. Manage Vehicles under specified categories
- 5. Vehicle owner can view bookings of his vehicles

User Interface:

- 1. Sign-up/Login
- 2. Change/Recover Password
- 3. Search vehicle based on category and city from where car is availed.
- 4. Book vehicle by providing specified date and time.
- 5. Payment can be done through online gateway or can be paid directly to the service center.

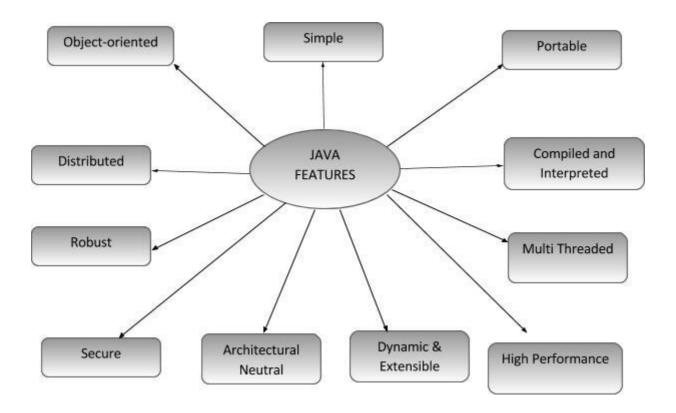
Technologies Used

Front End

1) <u>Java:</u>

Java is a general purpose and the most popular object-oriented programming language. Java was developed by James Gosling and his colleagues at Sun Microsystems in the early 1990's.

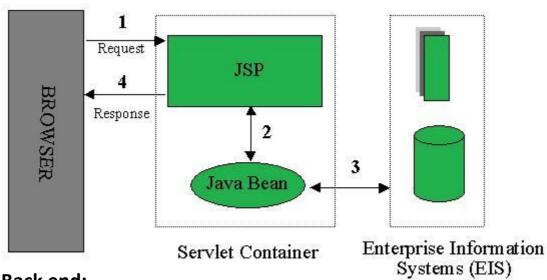
Due to its simplicity and easy to learn and advanced features, we opted this language for our six months industrial training. This language supports many interesting features that make it an ideal language for software development. In addition to the object-oriented features, it also provides features such as platform independence, security, multithreading, portability; etc. which makes it well suited for the web and networked services, applications, platform-independent desktops, robotics and any other embedded devices.



2) JSP (Java Server Pages)

JSP technology is used to create dynamic web applications. JSP pages are easier to maintain then a Servlet. JSP pages are opposite of Servlets as a servlet adds HTML code inside Java code, while JSP adds Java code inside HTML using JSP tags. Everything a Servlet can do, a JSP page can also do it.

JSP enables us to write HTML pages containing tags, inside which we can include powerful Java programs. Using JSP, one can easily separate Presentation and Business logic as a web designer can design and update JSP pages creating the presentation layer and java developer can write server side complex computational code without concerning the web design. And both the layers can easily interact over HTTP requests.



Back end:



MySQL:

MySQL is an open source Relational Database Management System. MySQL is very fast reliable and flexible Database Management System. It provides a very high performance and is multi-threaded and multi-user Relational Database management system.

MySQL is one of the most popular relational database Management System on the web. The MySQL Database has become the world's most popular open source Database, because it is free and available on almost all the platforms. The MySQL can run on Unix, Windows, and Mac OS.

Features:

The following list describes some of the important Features of MySQL Database Software.

- Written in C and C++.
- Tested with a broad range of different compilers.
- Works on many different platforms.
- The server is available as a separate program for use in a client/server networked environment. It is also available as a library that can be embedded (linked) into standalone applications. Such applications can be used in isolation or in environments where no network is available.

Statements and Functions

- Full operator and function support in the SELECT and WHERE clauses of queries. For example:
- Full support for SQL GROUP BY and ORDER BY clauses. Support for group functions such as COUNT().
- Support for LEFT OUTER JOIN and RIGHT OUTER JOIN with both standard SQL and ODBC syntax.
- Security- A privilege and password system that is very flexible and secure, and that
 allows host-based verification. Passwords are secure because all password traffic is
 encrypted when you connect to a server.
- Scalability and Limits- Handles large databases. We use MySQL Server with databases that contain 50 million records. We also know of users who use MySQL Server with 60,000 tables and about 5,000,000,000 rows.
- Up to 64 indexes per table are allowed (32 before **MySQL** 4.1.2). Each index may consist of 1 to 16 columns or parts of columns. The maximum index width is 1000 bytes (500 before **MySQL** 4.1.2).
- Connectivity- Clients can connect to the MySQL server using TCP/IP sockets on any platform. On Windows systems in the NT family (NT, 2000, XP, or 2003), clients can connect using named pipes. On Unix systems, clients can connect using Unix domain socket files.
- In **MySQL** versions 4.1 and higher, Windows servers also support shared-memory connections if started with the --shared-memory option. Clients can connect through shared memory by using the -- protocol=memory option.
- The Connector/J interface provides MySQL support for Java client programs that use JDBC connections. Clients can be run on Windows or Unix. Connector/J source is available.

Hardware/software Requirements:

HARDWARE REQUIREMENTS:

Hardware requirements include that hardware which is required for its working. It includes:

- Pentium 4 Computer
- 512 MB RAM
- High Speed Internet Connection

SOFTWARE REQUIREMENTS:

The technical specifications of requirements for the software are as follows:

- Operating System (Windows, Linux, MacOS)
- Java run time environment
- NetBeans (Java IDE with Android development plugins)
- Any Web Browser (Chrome, Firefox, etc.)

Tools to be Used:

1.JAVA DEVELOPMENT KIT (JDK)

The Java Development Kit (JDK) is a software package that includes all the basic components

that makeup the java environment. These include the Java compiler, Java Interpreter, an

applet viewer that lets you see applets without opening a Java-compatible web browser,

Debugger, Class file disassembler, Header and Stub file generator and Document Generator.

2. NetBeans - INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)

NetBeans IDE 8.0

Reading module storage...done.

NetBeans IDE and NetBeans Platform are based on software from netbeans.org, which has been dual licensed under the Common Development and Distribution License (CDDL) and the GNU General Public License version 2 with Classpath exception. For more information, please visit www.netbeans.org.

NetBeans IDE is a free, open source, popular integrated development environment used

by many developers. It provides built-in support for developing in Java, C, C++, XML, and

HTML.

Minimum Hardware Configurations for Windows:

Microsoft Windows XP Professional SP3/Vista SP1/Windows 7 Professional:

Processor: 800MHz Intel Pentium III or equivalent

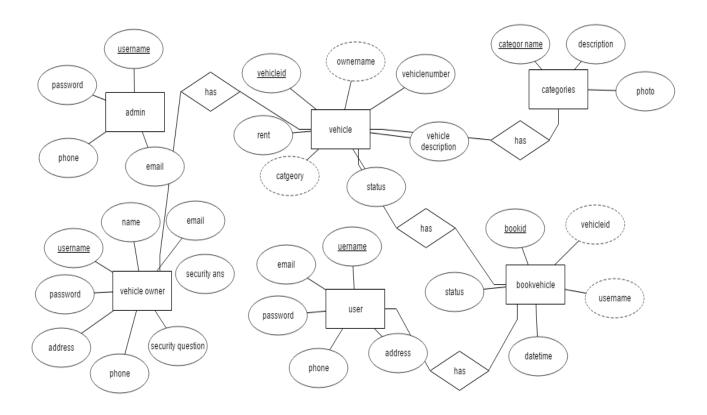
Memory: 512 MB

Disk space: 750 MB of free disk space

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Design

ER Diagram



<u>Tables</u>

Admin

Username	Varchar	Primary key
Password	Varchar	
Name	Varchar	
Email	Varchar	
Phoneno	Long	

User table

Username	Varchar	Primary key
Password	Varchar	
Email	Varchar	
Phoneno	Long	
Address	Varchar	

Categories

Catname	Varchar	Primary key
Description	Varchar	
Photo	Varchar	

Vehicle

Vehicleid	Int	Primary key
Catname	Varchar	Foreign key to categories
Ownername	Varchar	Foreign key to vehicle
		owner
Rent	Int	
Description	Varchar	
Status	Varchar	
Vehicle number	varchar	

Vehicle owner

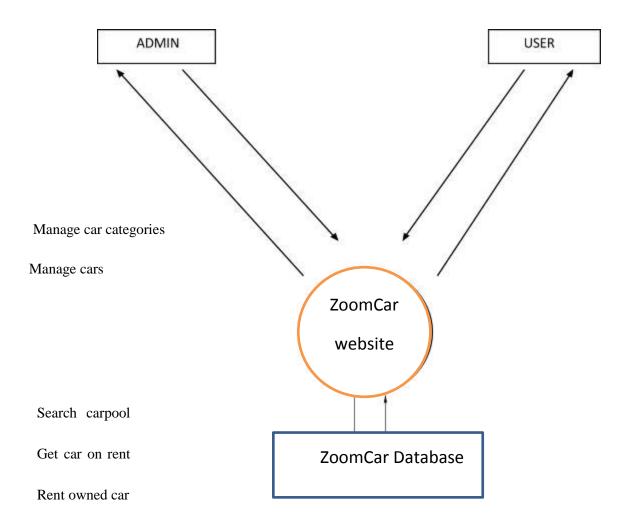
Username	Varchar	Primary key
Password	Varchar	
Name	Varchar	
Phone	Long	
Email	Varchar	
Security question	Varchar	
Security answer	Varchar	
Address	varchar	

Book table

Bookid	Int	Primary key
Username	Varchar	Foreign key to user
Vehicle id	Int	Foreign key to vehicle
Status	Varchar	
Datetime	Timestamp	

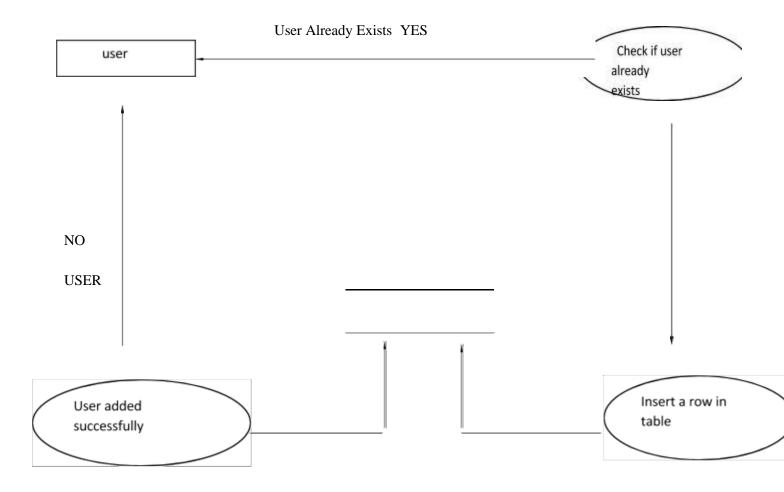
DATA FLOW DIAGRAMS

LEVEL 0 DFD



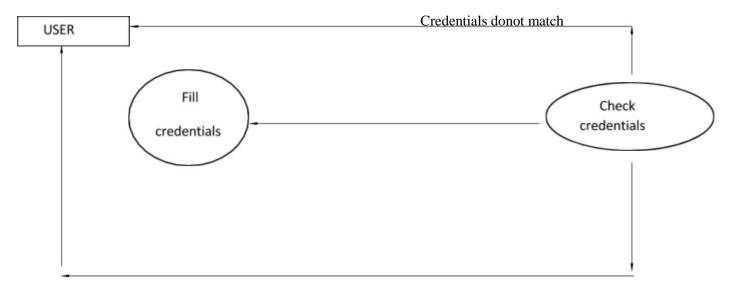
LEVEL 1 DFD

USER SIGNUP



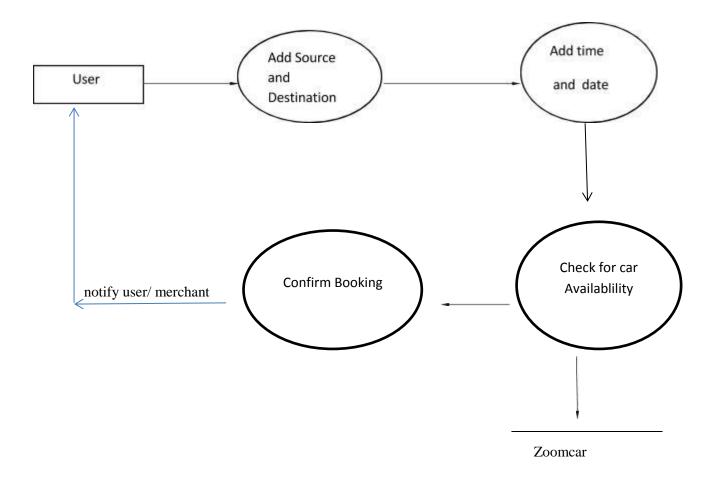
USER LOGIN

LEVEL 1 DFD



Credentials match

LEVEL 1 DFD



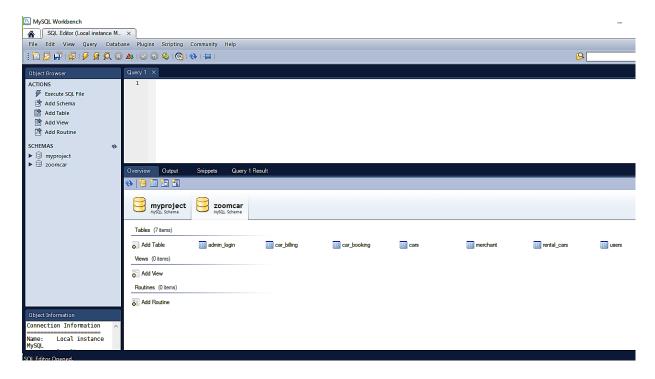
Testing

The checks for validations are:

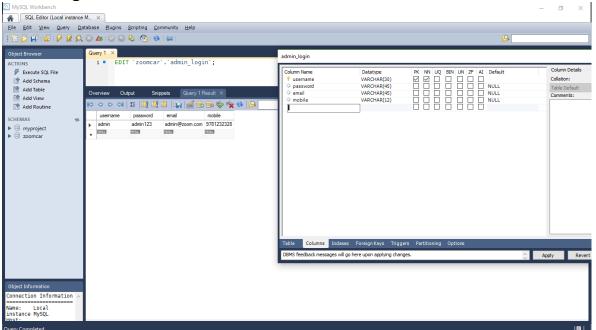
- A person book a car of a previous date that is past by.
- Person can enter the date of return of car to be less than the date of car booking
- The car is not booked if it is not available on a particular date
- Username and password checks are used.
- A merchant can't manage the cars/ bikes if he is blocked by the admin, or his status is not yet approved.

Screenshots

Database overview

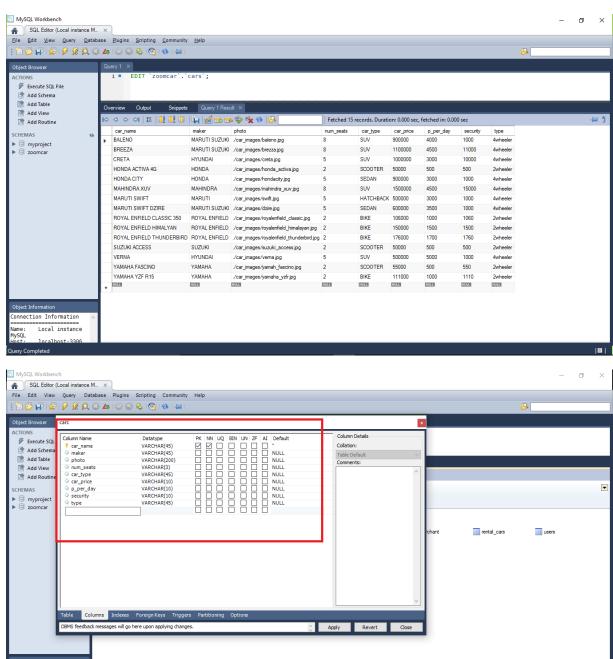


Admin login

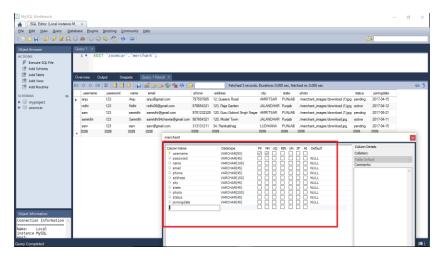


Vehicle Categories –Cars and bikes

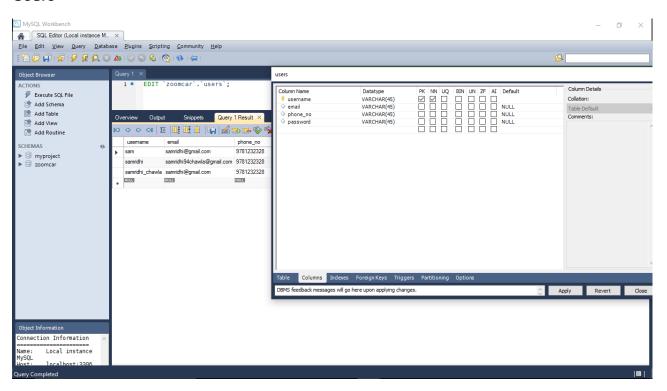
Connection Information



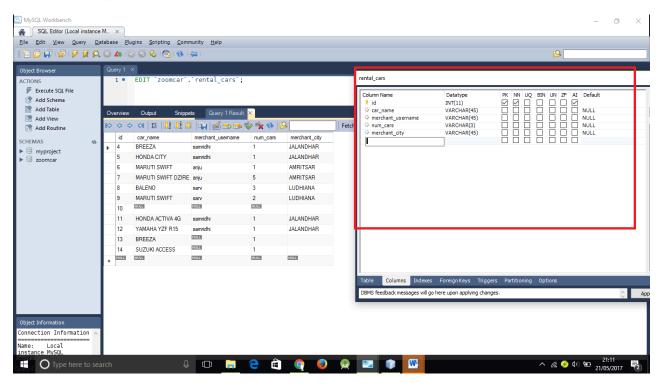
Merchant(The sellers)



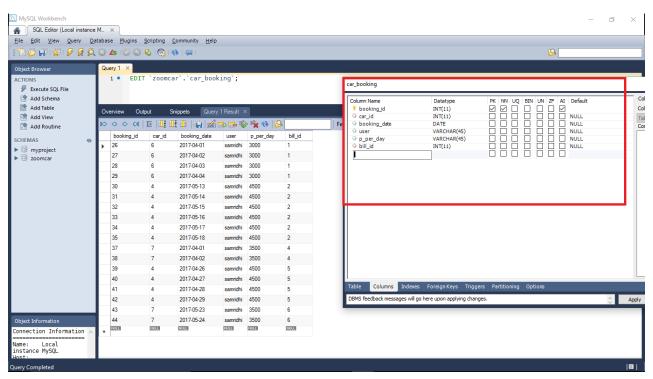
Users



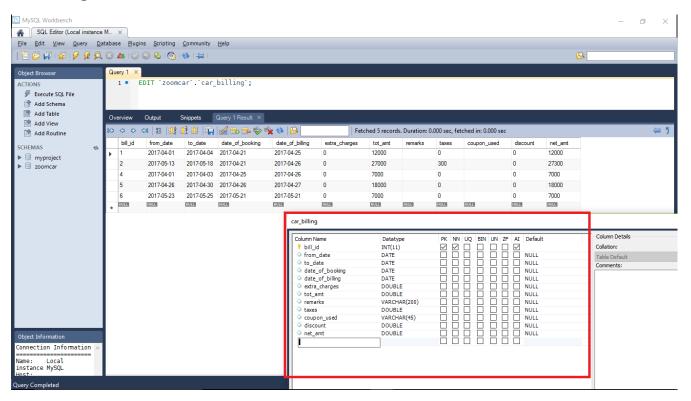
Vehicles owned by merchants Available for booking – table rental_cars



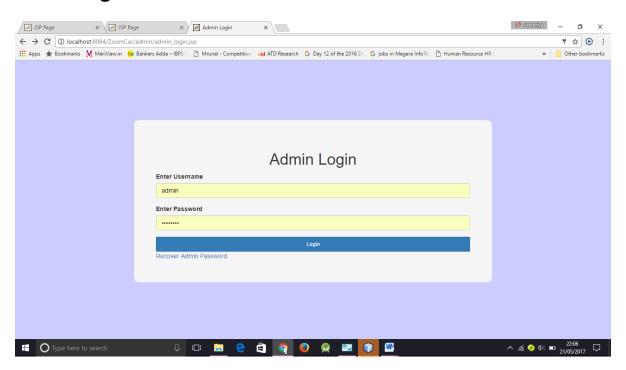
Car Booking table



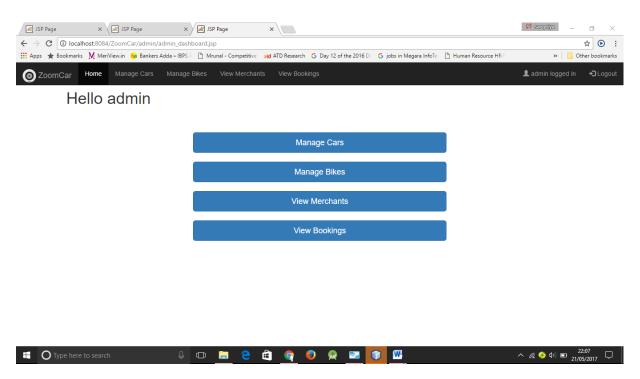
Car Billing Table



Admin login

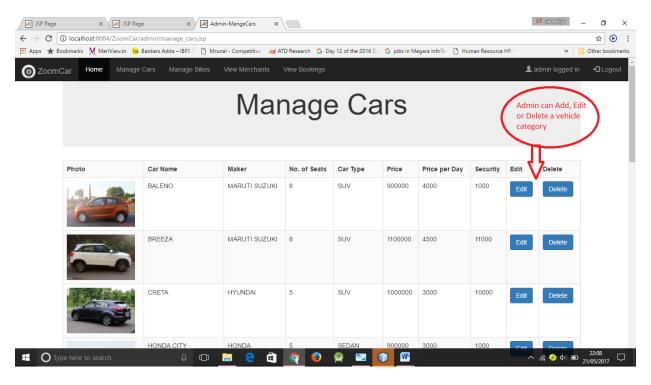


Admin dashboard

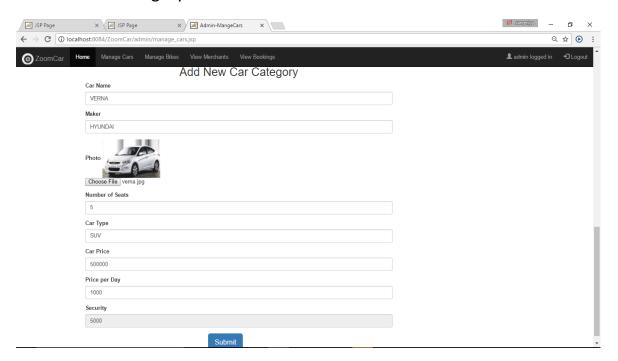


Admin Modules

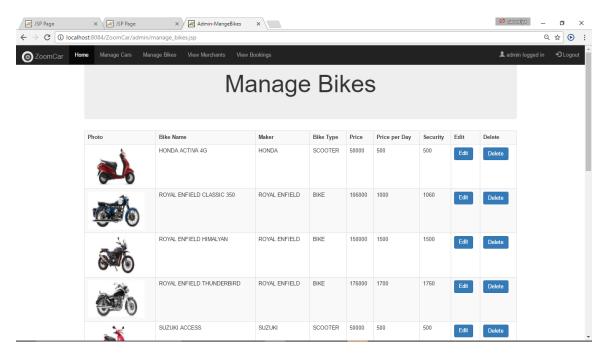
Manage Cars



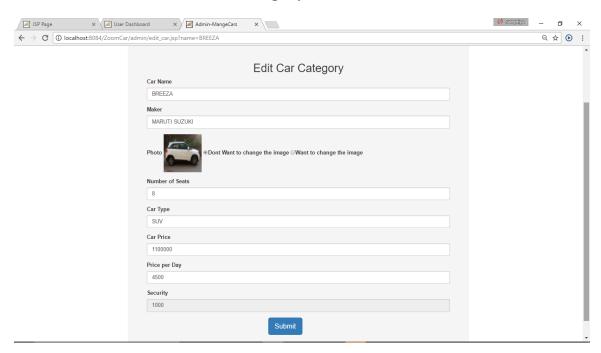
Add new Car Category



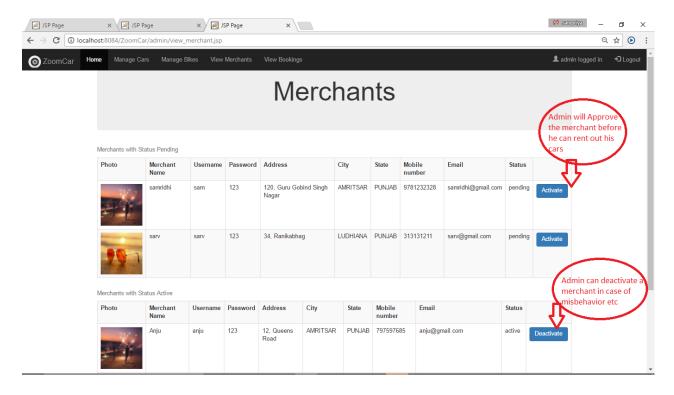
Manage Bikes



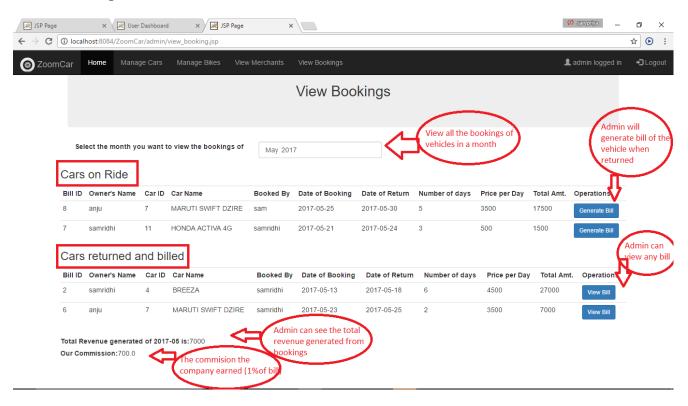
Edit the details of the vehicle category



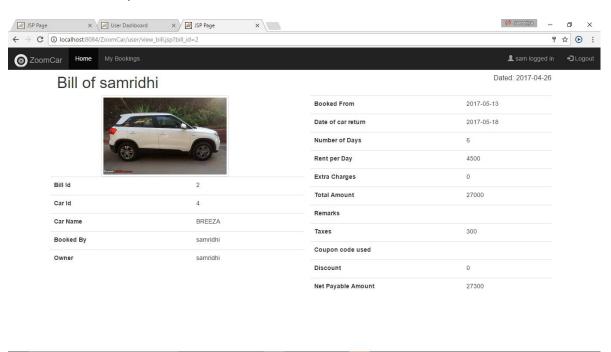
Manage Merchants- Activate or Deactivate the merchants



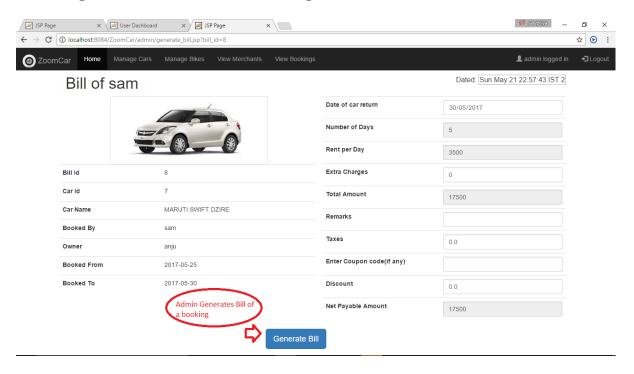
View Bookings of the vehicles



View Bill of A particular bill id

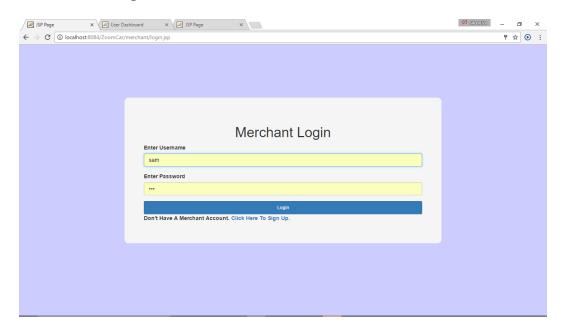


Admin generates Bill for a booking

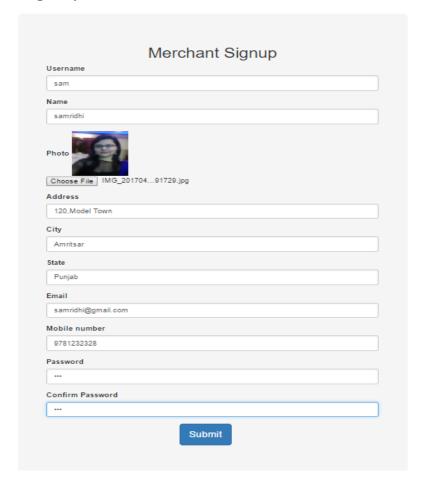


Merchant Module

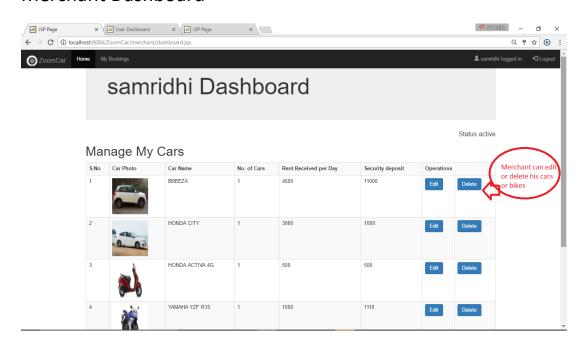
Merchant Login



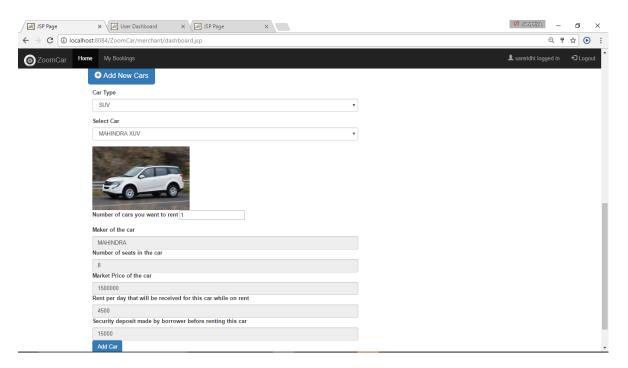
Merchant Sign up form



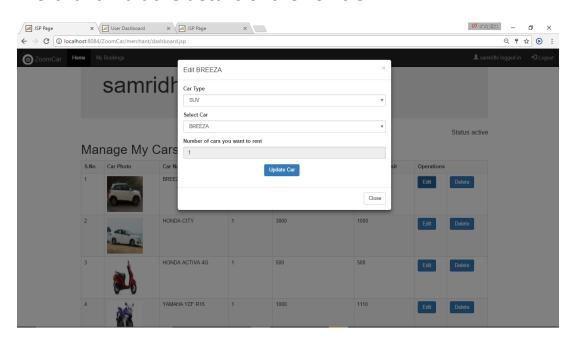
Merchant Dashboard



Merchant – Add Vehicle to rent

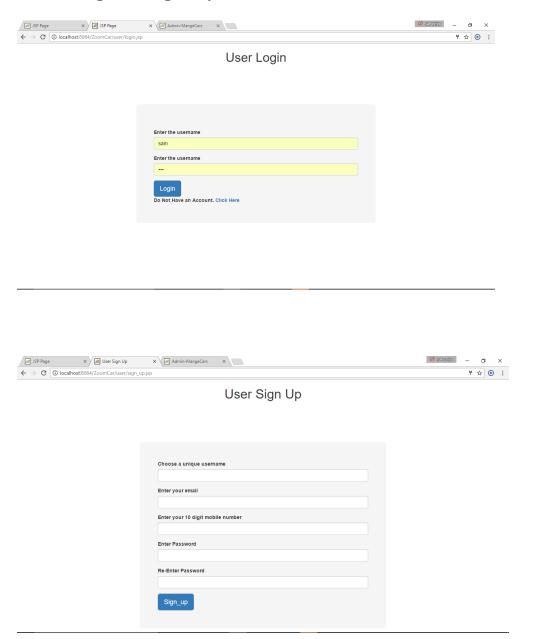


Merchant- Edit the details of the vehicle

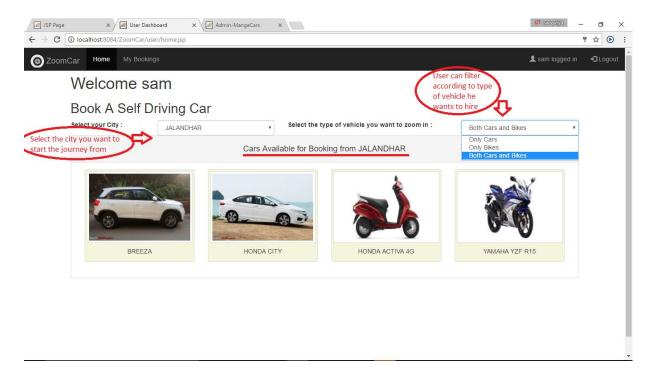


User Module

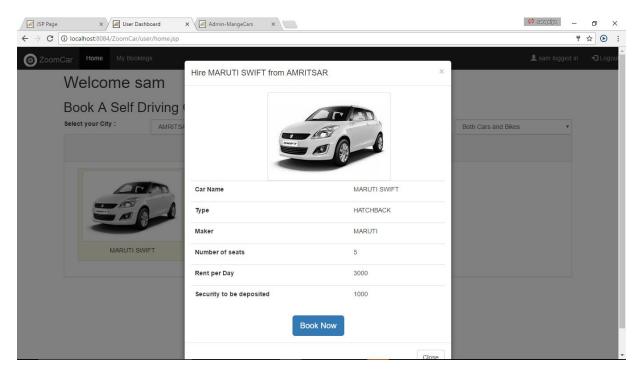
User Login / sign up



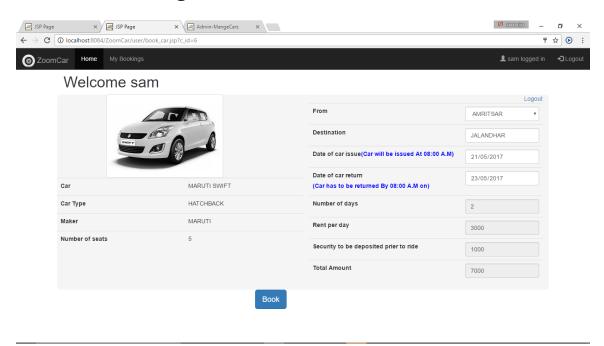
User Home page to book cars/Bikes



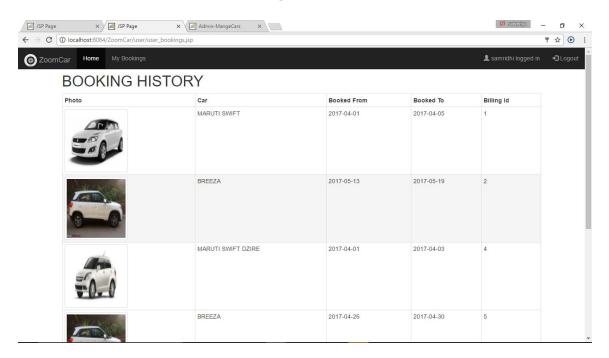
Car Booking - select the car



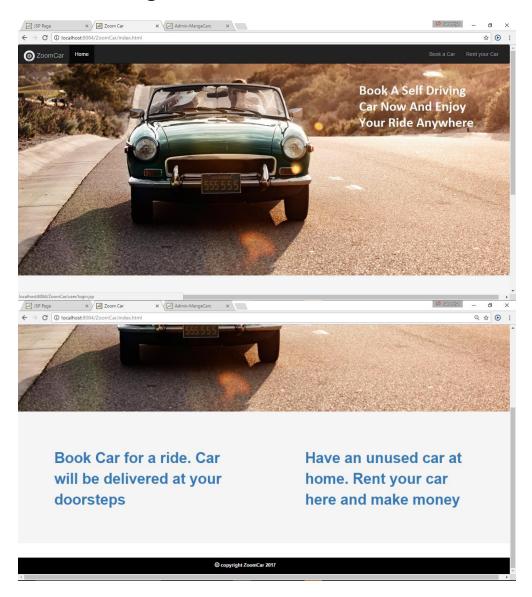
Confirm Booking



User Can view his Bookings



The Main Page of Website



Suggestions and Recommendations:

BIBLIOGRAPHY

- www.tutorialspoint.com
- www.w3schools.com
- www.stackoverflow.com