## CAR SHOWROOM SERVICE MANAGEMENT SYSTEM

#### A PROJECT REPORT

submitted By

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 $\mathbf{to}$ 

the APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of the degree

 $\mathbf{of}$ 

Master of Computer Applications



## Department of Computer Applications

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**Declaration** 

I undersigned hereby declare that the project report CAR SHOWROOM SERVICE MAN-

AGEMENT SYSTEM, submitted for partial fulfillment of the requirements for the award of

degree of Master of Computer Applications of the APJ Abdul Kalam Technological University,

Kerala is a bonafide work done by me under supervision of Dr. Sabitha S S S. This submission

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#### **CERTIFICATE**

This is to certify that the report entitled CAR SHOWROOM SERVICE MANAGE-MENT SYSTEM submitted by KEERTHANA V M(TVE20MCA2035) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Master of Computer Applications is a bonafide record of the project work carried out by him/her under my guidance and supervision. This report in any form has not been submitted to any University or Institute for any purpose.

Dr.Sabitha S
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Prof. Deepa S S Head of the Department

## Acknowledgement

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## **ABSTRACT**

The project entitled "Car showroom service management system" is aimed to serve the interest of customers and to cover a widely distributed system. The goal of the system is to computerize the service management process of car showrooms. In this system customers can book their slot for the car service, fill up their requirements, post complaints and feedbacks about the services and also view the current status of their car service with the help of website. There will be a customer id given to customer at the time of purchasing so each customer can login with the id.

#### MODULE DESCRIPTION

This project is divided into three modules. Administrator module, Service engineer module and Customer module.

- 1. Administrator module includes: Login, registration of Service Engineer and Customer, product entry view and edit, stock entry and view, sales processes, analysis of services and assign job to Service Engineer, check the status of the job and change password
- 2. Service Engineer module includes: Login, view assigned job, view all jobs, update status and change password
- 3. Customer module includes: Login, book the service date, fill up the requirements, check the status of their service, post complaints and feedbacks, ratings for the service and change password.

A customer always expects services to be offered as soon as possible and the organization is responsible for making sure its customers stay satisfied. The long term success of a company is mainly dependent on the satisfaction level of the customers. Car showroom service management system will prove an advantage to the companies in the internet world.

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# Chapter 1

## Introduction

Car Showroom Service Management System is aimed to serve the interest of customers and to cover a widely distributed system. The goal of the system is to computerize the service management process of car showroom. In this system customers can book their service date and can register their complaints also can view the status of their complaint and booking date with the help of website. There will be a customer id given at the time of purchasing so each customer can login with the id.

The document requirement specification provides the details for how the user interviews are conducted. UML diagrams are designed and finally the detailed specific requirement specification document also. The chapter includes the narration of proposed system and its advantages over existing system.

## 1.1 OBJECTIVE

- Car Showroom Service Management System is mainly used for booking service date.
- It helps to register complaints.
- It also helps to view the current status of booking and complaint registration.
- It helps the customers to view their service details over the past years.
- Reduces the traditional effort of recording details manually.

## 1.2 SCOPE

The main aim of this system is to transform manual effort to web based application. The scope of the application is wide and can be used with any Car showroom. The proposed system can reduce human effort by providing all of these facilities through online without any complications also we get easier and faster response of complain

# Chapter 2

## LITERATURE REVIEW

## 2.1 IDENTIFICATION OF NEEDS

## 2.1.1 Existing System

The existing system management process are manually done which is

- Time consuming.
- Larger Effort.
- Not easily portable.
- Customer need to call the authority and register complaint.
- Customer has no provision to know the service details
- Data redundancy is high.

## 2.1.2 Proposed System

The proposed system allows the customer to book service date according their convince. It helps to access and process data efficiently. Requires lesser effort compared to that of manually recording the details.

## 2.1.3 Advantages

• Customer can book service date.

- Customer can register their complaints and also can view the status of complaint.
- Service details are visible to the customer.
- Faster response to the customer complaints
- Reduces manual effort and better service.

# Chapter 3

## SYSTEM ANALYSIS

## 3.1 Module Description

There are 3 modules in the proposed system:

#### 3.1.1 Admin Module

The administrator is the authority who can validate customers that register on the website. The administrator interface consists of a username and password using which the admin can log in to his portal. By logging in the admin can perform the following task:

#### Register User and Service Engineer

Customer who wish to use the services of the 'CAR SHOWROOM SERVICE MANAGE-MENT SYSTEM - Website' need to register first. On registering, they can access the services of showroom. Admin is the one who register the user and service engineer and a username and password is given to them so that they can login with that credential.

#### Product entry, view and edit

Admin can enter the products that are needed for the showroom and also can edit and delete the products.

#### View complaints and service booking request

Admin can view the request from the users for the service date booking.and also can view the complaints posted by the user

#### Assign job to service Engineer

admin assign jobs to the service engineer according to the booking request from the user and also can view the service details of the assigned work

#### 3.1.2 Service Engineer Module

The Service Engineer is one of the main part of the system. Service Engineer needs to register first after which they can login to the system .The main functions of the applicant are:

#### View Profile

This is the Service Engineer home page. The Service Engineer profile is displayed in the home page of the Service Engineer wherein personal details of the Service Engineer is displayed

#### **Edit Profile**

The personal details of the service engineer can be edited or updated through this functionality provided by the portal.

#### View assigned jobs and complaints

Service Engineer can view the jobs and complaints that are assigned by the admin and also can update the service details. .

#### 3.1.3 User Module

The main functions of the user module are: .

#### View Profile

Here, the user can view their profile. user will be able to view their profile upon logging in and also can edit the details.

#### Post complaints

User can post the complaints with a reference no.and also can view the status of their complaints by using the reference number

#### Book service Date

User can book the service date with their requirements specified and also can view booking conformation through the website.

#### View service details

Here user can view the service details over the past years in this page with service date and serviced engineers name.

## 3.2 PRELIMINARY INVESTIGATION

The preliminary investigation often called the feasibility study or system survey is the initial investigation of the problem. It consists of the groundwork necessary to determine whether the project should be pursued or not. As a system analyst, it is required to determine what the problem is and what to do about it. The net result will be a rough plan for proceeding with the project and investigation of software for analysis is the essential part.

In the current scenario we are recording the management process manually which is not easily portable and accessible. Recording information manually is also time consuming and it needs large effort. By using this website we can overcome those difficulties.

## 3.3 FEASIBILITY STUDY

Feasibility study is the analysis that is used to determine whether a project is technically, economically feasible or not in an organization. It tells us whether a project is worth doing, whether it is economically feasible or whether it can be implemented or not. This analysis is carried out to find whether the resources available in the organization is sufficient or not.

• Conducting preliminary analysis.

- Prepare an income statement.
- Conduct a market survey, or perform market research.
- Plan business organization and operations.
- Prepare an opening day balance sheet.
- Review and analyze all data.
- Make a go/no go decision.

There are five types of feasibility study –

- Technical
- Economical
- legal
- operational
- scheduling feasibility.

## 3.4 Technical Feasibility

This system is technically feasible without requiring any additional hardware or software.

The venue and equipment will not suffer unexpected damage or loss. Our proposed system is technically feasible because

- The hardware and software required are easy to install and handle.
- The necessary hardware configuration and software platform is already there.

## 3.5 Economical Feasibility

Economically feasible. The developed system was well within the budget. It does not require any additional charges. This was achieved because most of the technologies are freely available. This system will not result in any financial loss.

## 3.6 Operational Feasibility

The application can be easily handled by the user. It is more efficient and organized. The system can be easily operated by the user. The event is organized sufficiently well that all parties are satisfied. It offers better service and also minimum time is required. This system will ensure data accuracy. Hence it is operationally feasible.

## 3.7 Behavioural Feasibility

Estimation should be made of how strong a reaction of user staff is likely to have towards the development of car showroom service management system. Introduction of this software does not require any special effort to educate and train the staff because this software is not so complicated and easy to understand. Only the system administrator needs to handle the database.

## 3.8 Schedule feasibility

Time evaluation is the most important consideration in the development of project. The time schedule required for the developed of this project is very important since more development time effect machine time, cost and cause delay in the development

# Chapter 4

# SOFTWARE REQUIREMENT SPECIFICATION

## 4.1 Software Requirement

• Front end: PHP 5.3.10

• Back end: MySQL Server

 $\bullet$  Web Technologies: CSS, HTML, AJAX, JQUERY

• Web Servers: XAMPP Server

## 4.2 Hardware Requirements

• Processor : Intel Core i3

• Memory: 512 MB

• Disk Space: 750 MB of Disc Space

• Operating System: Window XP/ Windows7/ Windows8/ Windows10/Linux/ Mac

## 4.3 Functional Requirements

Functional requirements outline the intended behaviour of the system. This behaviour may be denoted as tasks or functions that the specifies system is intended to perform. The proposed system consists of the following parts. They are given below:

#### 4.3.1 HTML

HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages. This language is used to annotate (make notes for the computer) text so that a machine can understand it and manipulate text accordingly. HTML is a markup language used by the browser to manipulate text, images, and other content, in order to display it in the required format.

#### 4.3.2 CSS

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable. CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects. CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML

## 4.3.3 Java Script

Client-side JavaScript is the most common form of the language. The script should be included in or referenced by an HTML document for the code to be interpreted by the browser. It means that a web page need not be a static HTML, but can include programs that interact with the user, control the browser, and dynamically create HTML content. The JavaScript client-side mechanism provides many advantages over traditional CGI server-side scripts. For example,

you might use JavaScript to check if the user has entered a valid e-mail address in a form field The JavaScript code is executed when the user submits the form, and only if all the entries are valid, they would be submitted to the Web Server. JavaScript can be used to trap user-initiated events such as button clicks, link navigation, and other actions that the user initiates explicitly or implicitly.

#### **4.3.4 APACHE**

Commonly known as Apache HTTP Server, it is a web server that can be used to serve both static as well as dynamic web pages. Apache is available for a variety of operating systems like: Microsoft Windows, Novell Netware, Unix etc. It provides different modules to add functionality to the basic server.

#### 4.3.5 PHP

It is an open source server side scripting language that can be used to develop a whole range of dynamic web application. The PHP language was originally implemented using a PHP interpreter. Several compilers like phc, Roadsend, Raven, etc. now exist, which decouple the PHP language from the interpreter. Advantages of compilation include not only better execution speed, but also obfuscation, static analysis, and improved interoperability with code written in other languages. PHP supports Object Oriented Programming functionality. PHP source code is compiled on the fly to an internal format that can be executed by the PHP engine. In order to speed up execution time and not have to compile the PHP source code every time the web page is accessed, PHP scripts can also be deployed in executable format using a PHP compiler. PHP primarily act as a filter, taking input from a file or stream containing text and/or PHP instructions and outputs another stream of data most commonly the output will be HTML. PHP now focuses mainly on server side scripting, and it is similar to other server side scripting languages that provide dynamic content from a web server to a client, such as Microsoft's Active Server Pages, Sun Microsystem's Java Server Pages, and modperl.

## 4.3.6 MYSQL

It is one of the most popular open source relational database management systems that make the best use of SQL to process data in a database. Currently managed by a company called MYSQL AB, it offers excellent quickstart capability with the average time from software download to installation completion being less than fifteen minutes.

Some of the features of MySQL are:

- Crossplatform support, Stored procedures, Triggers, Cursors, and Updatable Views.
- Independent storage engines MyISAM, InnoDB, and MySQL.
- SSL support, Query caching, nested SELECTs, Replication support.
- Fulltext indexing and searching using MyISAM engine.
- Embedded database library.
- Partial Unicode support(UTF8 and UCS2).

## 4.4 Non-Functional requirements

Non-Functional requirements define the general qualities of the software product. Nonfunctional requirement is in effect a constraint placed on the system or the development process. They are usually associated with the product descriptions such as maintainability, usability, portability, etc. It mainly limits the solutions for the problem. The solution should be good enough to meet the non- functional requirements.

## 4.5 Performance Requirements

- Accuracy: Accuracy in the functioning and the nature of user-friendliness should be maintained in the system.
- Speed: The system must be capable of offering speed.

## 4.6 Quality Requirements

- Transparency: The system provides correct data to all participants.
- Scalability: The applications will meet all of the functional requirements.

- Maintainability: The system should be maintainable. It should keep backups to atone for system failures and should log its activities periodically.
- Reliability: The acceptable threshold fort the downtime should be as long as possible. i.e. mean time between failures should be as large as possible. And if the system is broken, the time required to get the system back up again should be minimum.
- Consistency: The data should be consistent and precise .The system would need a stable internet connection to store and retrieve data from the database.

## Chapter 5

# **Design And Implementation**

## 5.1 System Design

System Design's main aim is to identify the modules that should be in the system, the specifications of these modules and how they interact with each other to produce the desired results. At the end of system design all the major data structures, file formats and the major modules in the system and their specifications are decided. The most creative and challenging phase of the system development process is design phase, it is a solution, a "how to" approach to the creation of the proposed system Design, the first step in the development of an engineered product is initiated only after a clear exposition of expected product functions becomes available. Based on the user requirements and the detailed analysis of a new system, the new system must be designed. This is the phase of system designing. Normally the design proceeds in two stages: preliminary or general design, structure or detailed design.

- Preliminary or general design: In the preliminary or general design, the features of the new system are specified. The costs of implementing these features and benefits to be derived are estimated. If the project is still considered to be feasible, we move to detailed design stage.
- Structure or detailed design: In the detailed design stage, computer oriented work begins in the earnest. At this stage, the design of the system becomes more structured. Structured design is a blue print of a computer system solution to a given problem having the same

components and inter- relationship among the same components as the original problem. Input, output and processing specifications are drawn up in detail .In the design stage, the programming language and the platform in which the new system will run are also decided. There are several tools and techniques used for designing.

## 5.2 Input Design

The input design is the link between the information system and the user. It comprises the developing specification and procedures for data preparation and those steps are necessary to put transaction data into a usable form for processing can be achieved by inspecting the computer to read data from a written or printed document or it can occur by having people keying the data directly into the system. The design of input focuses on controlling the amount of input required, controlling the errors, avoiding delay, avoiding extra steps and keeping the process simple. The input is designed in such a way so that it provides security and ease of use with retaining the privacy. Input Design considered the following things:

- What data should be given as input?
- How the data should be arranged or coded?
- The dialog to guide the operating personnel in providing input.
- Methods for preparing input validations and steps to follow when error occur.

## 5.3 Output Design

A quality output is one, which meets the requirements of the end user and presents the information clearly. In any system results of processing are communicated to the users and to other system through outputs. In output design it is determined how the information is to be displaced for immediate need and also the hard copy output. It is the most important and direct source information to the user. Efficient and intelligent output design improves the system's relationship to help user decision-making.

• Designing computer output should proceed in an organized, well thought out manner; the right output must be developed while ensuring that each output element is designed

so that people will find the system can use easily and effectively. When analysing and designing computer output, they should identify the specific output that is needed to meet the requirements.

- Select methods for presenting information.
- Create document, report, or other formats that contain information produced by the system.

## 5.4 Flow Chart diagram

A flowchart is a type of diagram that represents a workflow or process. A flowchart can also be defined as a diagrammatic representation of an algorithm, a step-by-step approach to solving a task.

The flowchart shows the steps as boxes of various kinds, and their order by connecting the boxes with arrows. This diagrammatic representation illustrates a solution model to a given problem. Flowcharts are used in analyzing, designing, documenting or managing a process or program in various fields Flowcharts are used in designing and documenting simple processes or programs. Like other types of diagrams, they help visualize what is going on and thereby help understand a process, and perhaps also find less-obvious features within the process, like flaws and bottlenecks. There are different types of flowcharts: each type has its own set of boxes and notations. The two most common types of boxes in a flowchart are:

- A processing step, usually called activity, and denoted as a rectangular box.
- decision, usually denoted as a diamond.

## 5.5 System Flow Chart

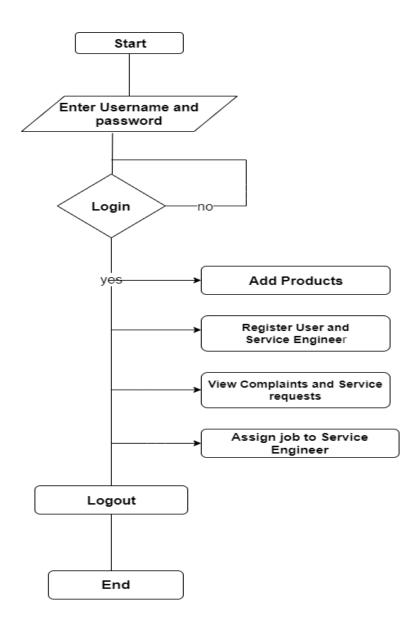


Figure 5.1: Flow Chart-Admin

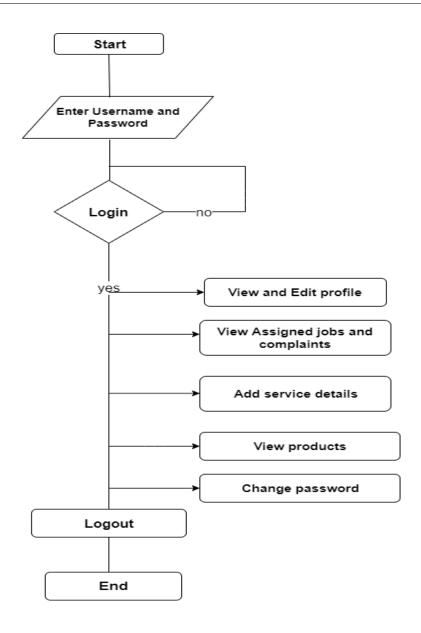


Figure 5.2: Flow Chart-Service Engineer

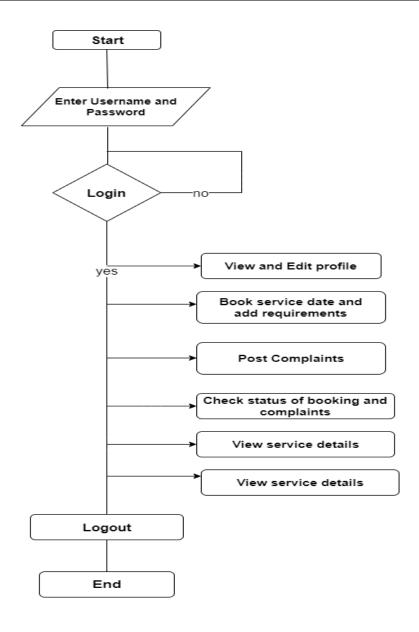


Figure 5.3: Flow Chart-User

## 5.6 Use Case Diagram

The use case model for any system consists of a set of 'use cases'. Intuitively, use cases represent the different ways in which a system can be used by the users. The use case corresponds to the high level requirements . The use case do not mention any specific algorithm to be used, nor the internal data representation, internal structure of the software, etc. A use case typically represents a sequence of interactions between the user and the system. These interactions consists

of one main line sequence. The main line sequence represents the normal interaction between the user and the system . Several variations to the mainline sequence may also exist . Typically a variation from the mainline sequence occur when some specific conditions hold.

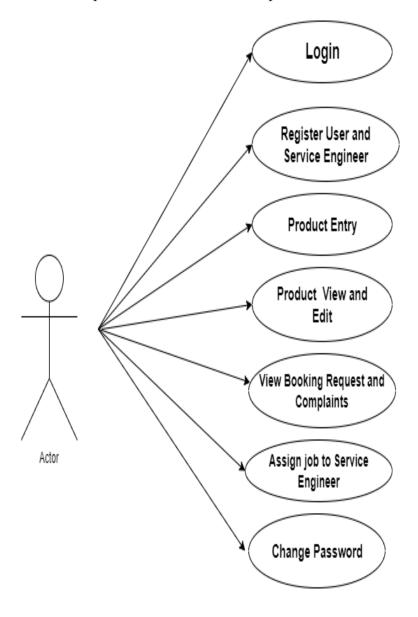


Figure 5.4: Use Case Diagram-Admin

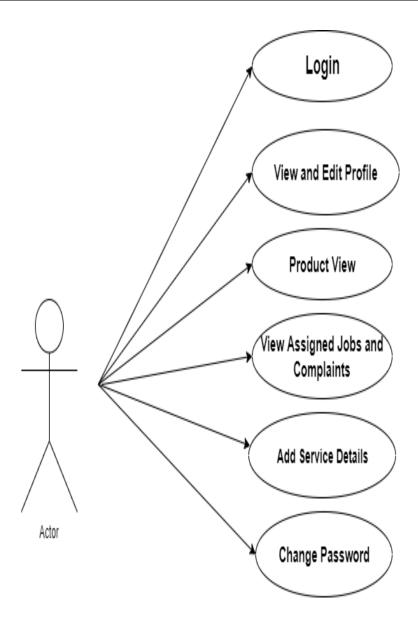


Figure 5.5: Use Case Diagram-Service Engineer

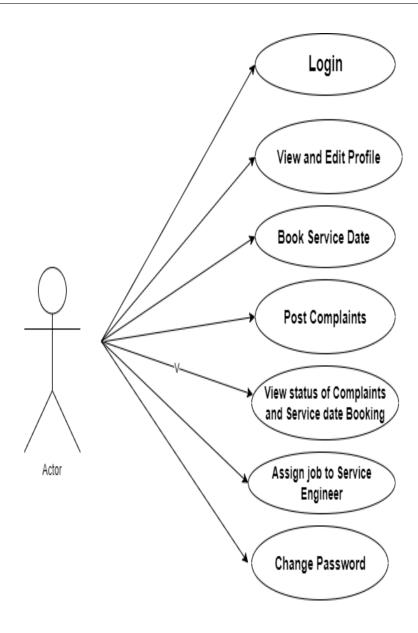


Figure 5.6: Use Case Diagram-User

## 5.7 TABLE STRUCTURE

Table design refers to how the logical data structures are to be physically stored in the storage device. The design of the table includes decision making on the nature and content of the files such as whether it is to be used for storing master details, transaction details or reference information. Various factors are considered during the table design phase of the system analysis. Some of them are listed below; Table design also deals with the design of physical database. The designing of the tables in the database done according to the rules specified for databases as described above.

## 5.8 Database Design

NAME	TYPE	KEY
admin_id	int(11)	primary key
name	varchar(50)	
phone	varchar(15)	
address	varchar(50)	
email	varchar(50)	
username	varchar(40)	
password	varchar(20)	

Figure 5.7: Admin Login table

NAME	TYPE	KEY
username	varchar(20)	primary key
password	varchar(20)	
usertype	int(3)	

Figure 5.8: Login form table

NAME	TYPE	KEY
no	int(11)	primary key
id	int(11)	
user_id	int(11)	
se_id	int(11)	
name	varchar(50)	
usrname	varchar(20)	
email	varchar(20)	
phone	varchar(15)	
subject	varchar(100)	
complaint	varchar(100)	
ref	int(11)	
action	varchar(50)	

Figure 5.9: Assign complaint table

NAME	TYPE	KEY
rno	int(11)	Text
ruser_id	int(11)	
rrequester_info	text	
request_id	int(11)	
request_desc	text	
requester_name	text	
requester_add1	varchar(30)	
requester_add2	varchar(30)	
requester_city	varchar(29)	
requester_state	varchar(40)	
	int(11)	
requester_zip	varchar(40)	
requester_email	varchar(30)	
assign_tech	varchar(40)	
se_id	int(11)	
assign_date	date	

Figure 5.10: Assign work table

NAME	TYPE	KEY
no	int(11)	primary key
user_id	int(11)	
ref	int(11)	
name	varchar(30)	
phone	varchar(50)	
complaint	varchar(50)	
action	varchar50)	

Figure 5.11: Complaint remark table

NAME	TYPE	KEY
id	int(11)	primary key
barcode	int(11)	
name	varchar(30)	
brand	varchar(53)	
qty	int(11)	
price	int(11)	
image	varchar(50)	
description	varchar(50)	

Figure 5.12: Product table

NAME	TYPE	KEY
complaint_id	int(11)	primary key
user_id	int(11)	
ref	int(11)	
name	varchar(50)	
phone	varchar(50)	
email	varchar(50)	
username	varchar(50)	
subject	varchar(40)	
complaint	varchar(40)	
document	varchar(50)	
regdate	timestamp	
lastupdationdate	timestamp	
status	status	

Figure 5.13: Complaint table

NAME	TYPE	KEY
ser_id	int(11)	primary key
ruser_id	int(11)	
req_id	int(11)	
name	varchar(50)	
phone	varchar(50)	
email	varchar(50)	
ref_inf0	varchar(50)	
desc	varchar(40)	
se_name	varchar(40)	
service_details	varchar(50)	
model	varchar	
date	int(11)	
number	date	
total	int(11)	

Figure 5.14: service detail table

### 5.9 Screenshots

#### 5.9.1 User Interface

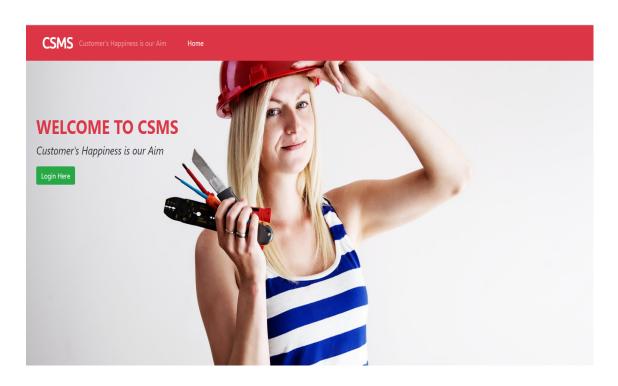


Figure 5.15: Home Page

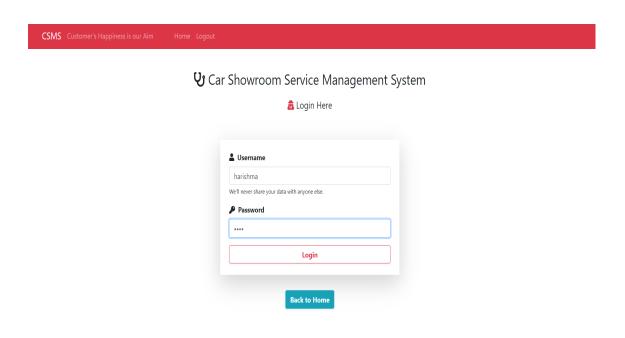


Figure 5.16: Login Page

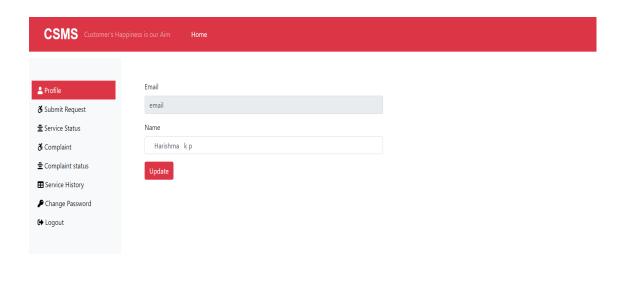


Figure 5.17: View profile Page

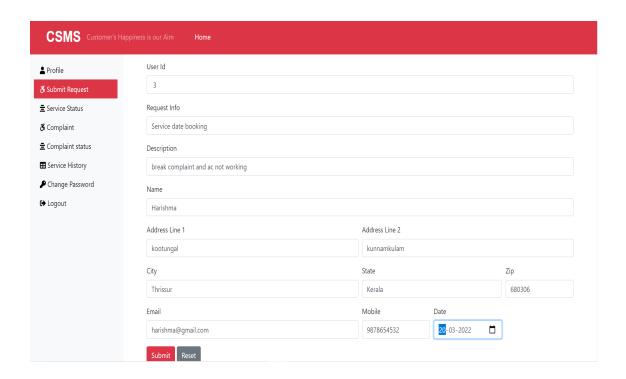


Figure 5.18: Submit Request Page

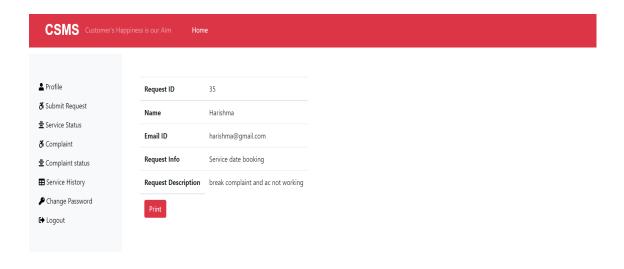


Figure 5.19: Request id Page

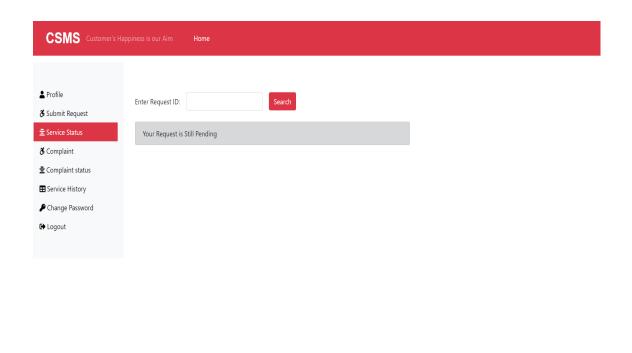


Figure 5.20: Request Status Page

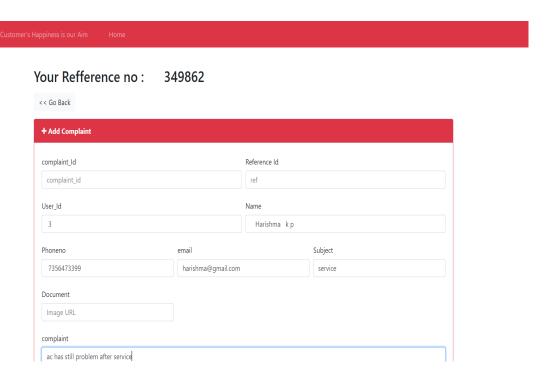


Figure 5.21: Complaint Register Page

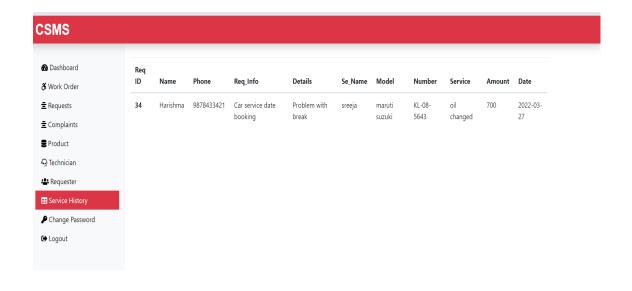


Figure 5.22: Service DetailsPage

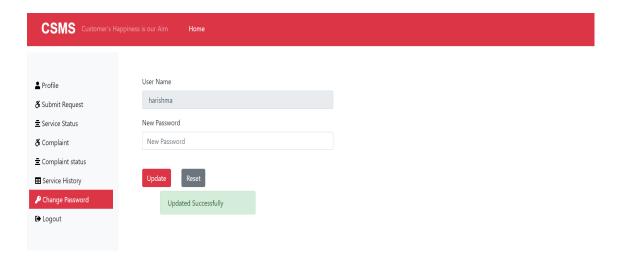


Figure 5.23: Change Password Page

#### 5.9.2 Admin Interface

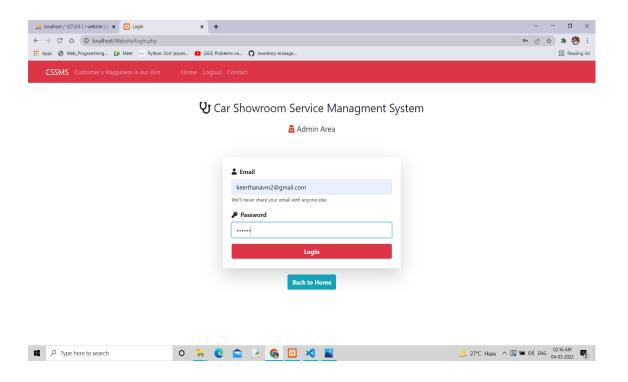


Figure 5.24: Admin Login Page



Figure 5.25: Admin Dashboard Page

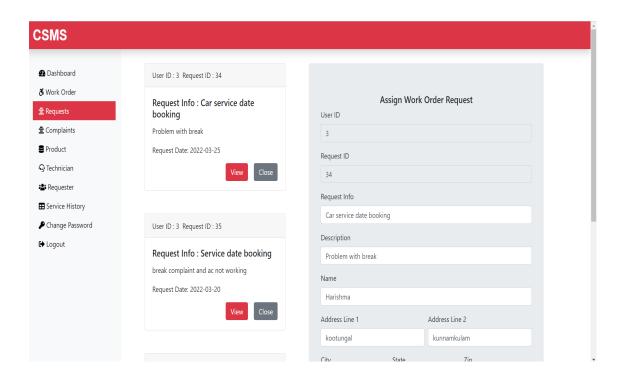


Figure 5.26: Request View Page

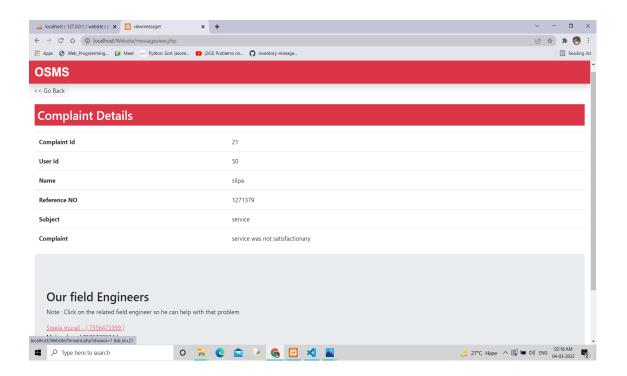


Figure 5.27: Complaint view Page

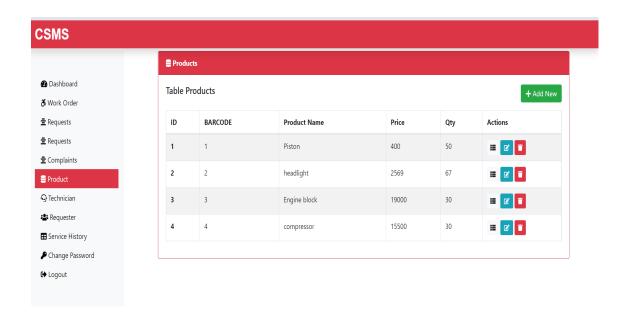


Figure 5.28: Product Entry Page

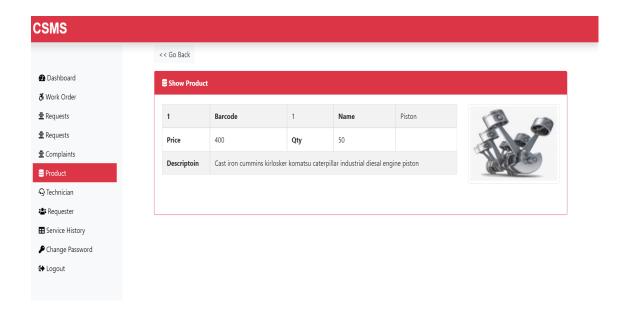


Figure 5.29: Product View Page





Figure 5.30: List of Service Engineer Page

### 5.9.3 Service Engineer Interface



Figure 5.31: Service Engineer dashboard Page

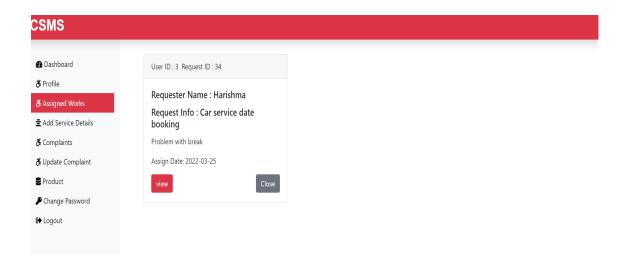


Figure 5.32: View Assigned Job Page

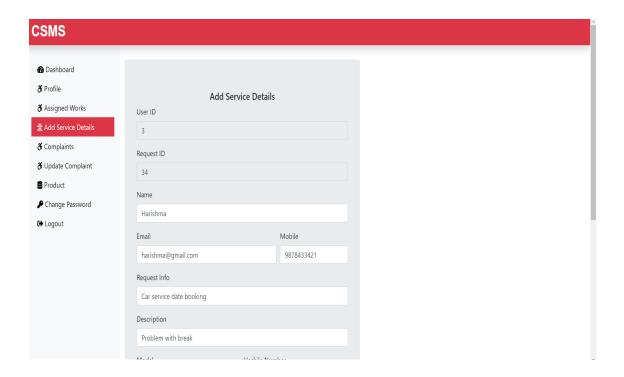


Figure 5.33: Service details add Page

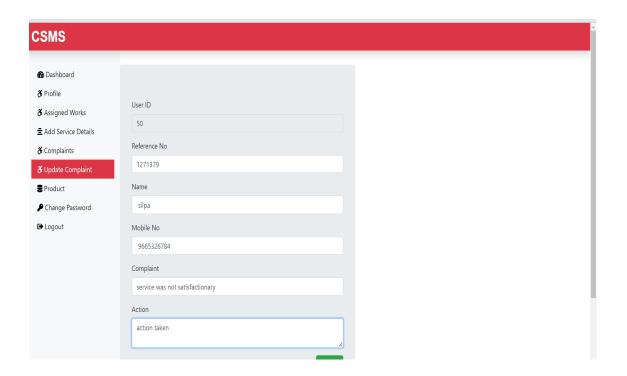


Figure 5.34: Update Complaint Page

## Coding

### 6.1 index.php

```
<!-- Custom CSS -->
 <link rel="stylesheet" href="css/custom.css">
 <title>CSMS</title>
</head>
<body>
 <!-- Start Navigation -->
 <nav class="navbar navbar-expand-sm navbar-dark bg-danger pl-5 fixed-top">
   <a href="index.php" class="navbar-brand">CSMS</a>
   <span class="navbar-text">Customer's Happiness is our Aim
   <button type="button" class="navbar-toggler" data-toggle="collapse"</pre>
      data-target="#myMenu">
     <span class="navbar-toggler-icon"></span>
   </button>
   <div class="collapse navbar-collapse" id="myMenu">
     <a href="mainhome.php" class="nav-link">Home</a>
     </111>
   </div>
 </nav> <!-- End Navigation -->
 <!-- Start Header Jumbotron-->
 <header class="jumbotron back-image" style="background-image:</pre>
    url(images/Banner1.jpeg);">
   <div class="myclass mainHeading">
     <h1 class="text-uppercase text-danger font-weight-bold">Welcome to CSMS</h1>
     Customer's Happiness is our Aim
     <a href="loginpage.php" class="btn btn-success mr-4">Login Here</a>
   </div>
 </header> <!-- End Header Jumbotron -->
 <div class="container">
```

```
<!--Introduction Section-->
 <div class="jumbotron">
   <h3 class="text-center">CSMS Services</h3>
   >
     CSMS is a leading chain of multi-brand Car service
     workshops offering
     wide array of services. We focus on enhancing your uses experience by
        offering world-class
     Car maintenance services. Our sole mission is To provide Car care
     services to
     keep the Car fit and healthy and customers happy and smiling.
     With well-equipped Car Electronic Appliances service centers and fully
        trained mechanics, we
     provide quality
     services with excellent packages that are designed to offer you great savings.
     Our state-of-art workshops are conveniently located in many cities across the
         country. Now you
     can book
     your service online by doing Registration.
   </div>
</div>
<!--Introduction Section End-->
<!-- Start Services -->
<div class="container text-center border-bottom" id="Services">
 <h2>Our Services</h2>
 <div class="row mt-4">
   <div class="col-sm-4 mb-4">
     <a href="#"><i class="fas fa-tv fa-8x text-success"></i></a>
     <h4 class="mt-4">Car Services</h4>
   </div>
```

```
<div class="col-sm-4 mb-4">
     <a href="#"><i class="fas fa-sliders-h fa-8x text-primary"></i></a>
     <h4 class="mt-4">Preventive Maintenance</h4>
   </div>
   <div class="col-sm-4 mb-4">
     <a href="#"><i class="fas fa-cogs fa-8x text-info"></i></a>
     <h4 class="mt-4">Fault Repair</h4>
   </div>
 </div>
</div> <!-- End Services -->
<!-- Start Happy Customer -->
<div class="jumbotron bg-danger" id="Customer">
 <!-- Start Happy Customer Jumbotron -->
 <div class="container">
   <!-- Start Customer Container -->
   <h2 class="text-center text-white">Happy Customers</h2>
   <div class="row mt-5">
     <div class="col-lg-3 col-sm-6">
       <!-- Start Customer 1st Column-->
       <div class="card shadow-lg mb-2">
         <div class="card-body text-center">
          <img src="images/avtar1.jpeg" class="img-fluid" style="border-radius:</pre>
              100px;">
          <h4 class="card-title">Rahul Krishna</h4>
           wow nice service and quality of work is
              extraordinary.. Mr kiran who was taking care of my car is very
              friendly.overall it is a good customer experience.
         </div>
       </div>
     </div> <!-- End Customer 1st Column-->
     <div class="col-lg-3 col-sm-6">
```

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```
<!-- Start Customer 2nd Column-->
 <div class="card shadow-lg mb-2">
   <div class="card-body text-center">
     <img src="images/avtar2.jpeg" class="img-fluid" style="border-radius:</pre>
        100px;">
     <h4 class="card-title">Sona</h4>
     Cool crew.Beautiful work.Best price for quality
        work if budget is not an issue. Honest opinin advice and sincere work
        will be done
   </div>
 </div>
</div> <!-- End Customer 2nd Column-->
<div class="col-lg-3 col-sm-6">
 <!-- Start Customer 3rd Column-->
 <div class="card shadow-lg mb-2">
   <div class="card-body text-center">
     <img src="images/avtar3.jpeg" class="img-fluid" style="border-radius:</pre>
        100px;">
     <h4 class="card-title">vishnu vyasan</h4>
     Responsible management.Professional
        approach.Experienced work force.Moderate fees.
   </div>
 </div>
</div> <!-- End Customer 3rd Column-->
<div class="col-lg-3 col-sm-6">
 <!-- Start Customer 4th Column-->
 <div class="card shadow-lg mb-2">
   <div class="card-body text-center">
     <img src="images/avtar4.jpeg" class="img-fluid" style="border-radius:</pre>
        100px;">
     <h4 class="card-title">Jyoti </h4>
```

```
One of the best car showroom service center with
              well experienced service engineer and quick services.
        </div>
       </div>
     </div> <!-- End Customer 4th Column-->
   </div> <!-- End Customer Row-->
 </div> <!-- End Customer Container -->
</div> <!-- End Customer Jumbotron -->
<!--Start Contact Us-->
<div class="container" id="Contact">
 <!--Start Contact Us Container-->
 <h2 class="text-center mb-4">Contact US</h2> <!-- Contact Us Heading -->
 <div class="row">
   <div class="col-md-4 text-center">
     <!-- Start Contact Us 2nd Column-->
     <strong>Headquarter:</strong> <br>
     CSMA Pvt Ltd, <br>
     sec IV, East fort <br>
     Thrissur - 680306 <br>
     Phone: +91 7585423121 <br>
     <a href="#" target="_blank">www.csms.com</a> <br>
     <br><br>>
     <strong>Ernakulam Branch:</strong> <br>
     cSMS Pvt Ltd, <br>
     Ashok Nagar, Fort kochi <br>
     Kerala - 405002 <br>
     Phone: +9745322112 <br>
     <a href="#" target="_blank">www.csms.com</a> <br>
   </div> <!-- End Contact Us 2nd Column-->
```

```
</div> <!-- End Contact Us Row-->
</div> <!-- End Contact Us Container-->
<!-- End Contact Us -->
<!-- Start Footer-->
<footer class="container-fluid bg-dark text-white mt-5" style="border-top: 3px</pre>
   solid #DC3545;">
 <div class="container">
   <!-- Start Footer Container -->
   <div class="row py-3">
     <!-- Start Footer Row -->
     <div class="col-md-6">
       <!-- Start Footer 1st Column -->
       <span class="pr-2">Follow Us: </span>
       <a href="https://www.facebook.com/harishma.kp.9" target="_blank"</pre>
           class="pr-2 fi-color"><i class="fab fa-facebook-f"></i></a>
       <a href="https://www.twitter.com/das_mohan?t=cBsSfGtajP15rrqYLdW-gg7&s=09"</pre>
          target="_blank" class="pr-2 fi-color"><i class="fab fa-twitter"></i></a>
       <a href="#" target="_blank" class="pr-2 fi-color"><i class="fab
          fa-youtube"></i></a>
       <a href="https://www.google.co.in" target="_blank" class="pr-2 fi-color"><i</pre>
           class="fab fa-google-plus-g"></i></a>
       <a href="#" target="_blank" class="pr-2 fi-color"><i class="fas
          fa-rss"></i></a>
     </div> <!-- End Footer 1st Column -->
     <div class="col-md-6 text-right">
       <!-- Start Footer 2nd Column -->
       <small> Designed by keerthana &copy; 2021.
       </small>
       <small class="ml-2"><a href="login.php">Admin Login</a></small>
     </div> <!-- End Footer 2nd Column -->
   </div> <!-- End Footer Row -->
  </div> <!-- End Footer Container -->
```

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## Testing and Implementation

#### 7.1 Testing and Types of Testing Used

Once a software is developed, the major activity is to test whether the actual results match with the experimental results. This process is called testing. It's used to make sure that the developed system is defect free. The main aim of testing is to find the errors and missing operations by executing the program. It also ensure that all of the objectives of the project are met by the developer. The objective of testing is not only to evaluate the bugs in the created software but also finding the ways to improve the efficiency, usability and accuracy of it. It aims to measure the functionality, specification and performance of a software program. Tests are performed on the created software and their results are compared with the expected documentation. When there are too much errors occurred, debugging is performed. And the result after debugging is tested again to make sure that the software is error free. The major testing processes applied to this project are unit testing, integration testing and system testing. In unit testing, our aim is to test all individual units of the software. It makes sure that all the units of the software work as intended. In integration testing, the combined individual units are tested to check whether it meets the intended function or not. It helps us to find out the faults that may arise when the units are combined. In system testing the entire software is tested to make sure that it satisfies all of the requirements.

#### 7.1.1 Unit Testing

It involves the basic testing of a piece of code, the size of which is often undefined in practice. During the unit testing it is tested to know whether that particular unit in the proper manner as expecting, if not appropriate modifications are applied to get proper outputs

#### 7.1.2 Integration Testing

Integration testing (sometimes called integration and testing, abbreviated IT) is the phase in software testing in which individual software modules are combined and tested as a group. Integration testing is conducted to evaluate the compliance of a system or component with specified functional requirements.

#### 7.1.3 System Testing

System Testing is a type of software testing that is performed on a complete integrated system to evaluate the compliance of the system with the corresponding requirements. In system testing, integration testing passed components are taken as input.

### Results and Discussion

The main objective of the project is to book the service date by the user according to their convince and to view the service details. Despite offering a wide range of advantages over the existing system, 'CAR SHOWROOM SERVICE MANAGEMENT SYSTEM 'has its own set of limitations. But the limitations are outnumbered by the advantages that the project offers and they can be overcome in the future.

### 8.1 Advantages and Limitations

#### 8.1.1 Advantages

- Can book the service date and add the requirements.
- Can view the service details over the past years.
- User can check the status of complaint and service date booking
- quick response to complaints

#### 8.1.2 Limitations

- Lack of disabled-friendly features
- Lack of Automatic notifications to the users on their mobile number or email

### Conclusion and Future Scope

The significance of the Project titled 'CAR SHOWROOM SERVICE MANAGEMENT SYSTEM' is that user can directly book the date for the service of his/her vehicle by adding their requirements and once the booking date is confirmed by the admin the user can check the status. The main advantage is that user can view the service details over the past years and also can make complaints

The future scope of this project is that the work can be extended to multiple dimensions. Future development on this topic may lead to creating an AI-powered website which learns the specific requirements or interests of the customer community and provides them with highly customised notifications. An automated notification feature can also be added to the website which notifies the customer whenever the booking date is confirmed.

# **Bibliography**

- [1] Elias.M.Awad,System Analysis and Design McGraw-Hill,2nd edition
- [2] Ian Gorton Springer, Essential Software Project Management, 4th edition