

CORPORATE AIRPORT SCHEDULING MANAGEMENT APPLICATION

Project report submitted in partial fulfillment of the requirement for
the degree of Bachelor of Technology

in

Computer Science and Engineering

By

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Under the supervision of

(Dr. Amit Kumar Singh)

to



Department of Computer Science & Engineering and Information
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**Jaypee University of Information Technology Waknaghat, Solan-173234,
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CERTIFICATE

I hereby declare that the work presented in this report entitled “**Corporate Airport Management System Application**”my own work carried out over a period from August 2016 to June 2017 under my supervision of Dr. Amit Kr. Singh (Assistant Professor).

, Jaypee University of Information Technology, Wagnaghat is an authentic record of my own work carried out over a period from August 2016 to June 2017 under my supervision of Dr. Amit Kr. Singh (Assistant Professor).

The matter embodied in the report has not been submitted for the award of any other degree or diploma.

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This is to certify that the above statement made by the candidate is true to the best of my knowledge.

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DECLARATION


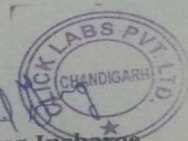
Declaration

I hereby declare that the work presented in this report entitled "Corporate Airport Scheduling Management" is an authentic record of my own work carried out over a period from February 2017 to August 2017 under the guidance of Anmol Garg (Web Developer), in click-labs, Chandigarh. As a requirement for the partial fulfillment of the degree of **Bachelor of Technology in Computer Science and Engineering**, in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat, Solan.

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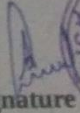


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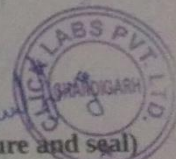
CERTIFICATE

Certificate

This is to certify that Deepali Gautam enrollment number 131208 has completed industrial training during the period from 06-February-2017 to 05-August-2017 in our organization for partial fulfillment of the degree of **Bachelor of Technology in Computer Science and Engineering** in the department of Computer Science & Engineering and Information Technology, Jaypee University of Information Technology Waknaghat, Solan. She was trained in Android Development.

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LIST OF ABBREVIATIONS

HTML: Hyper Text Markup language

CSS: Cascading Style Sheet

MVC: ModelView Controller

AJAX: Asynchronous JavaScript and XML

CASM: Corporate Airport Scheduling management

DOM: Document Object Model

HTTP: Hyper Text Transfer Protocol

API: Application Programming Interface

OSF: Open Source Framework

JSP: Java Server Pages

UML: Unified Modelling Language

ESR: Extended Support Release

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ABSTRACT

As online service and Web-based computer programs has recently honored with more extremely important and explicitly changed(for improvement) in today world. People have found that nowadays businesses can be managed with more easy and efficient way.

Flight services have made a great amount of advantages on internet, as earlier everything was done on telephones only, manually.

With modern technology used in flight bookings nowadays, people can view all the flight timings, can see the flight names, their way points and many more.

With one click of a button, customers can easily make their bookings in a very efficient way or manner. All the things are done in a well-designed fashion.

Records to improve the (quality of being very near to the reality or true number), flexibility, reliability, and to remove the human's error or mistakes. This project on Airline Management Systemtries to provide some amount of automation in airlines management.

The goal or aim of the project is provide airline systems their business procedure more with less waste. It is also believed that automated system is very must, as with quick pace of life everything is changing "more work with less waste".

This is very in Airline Systems.

Also, after user planed their trip he/she are able to add stop also. where they can also request special orders like lunch or any other thing. This project also provide facility to add new passengers, pilots, air planes and trip. User Can perform all the necessary operations like Create, Read, Update & Delete.

Generally, some persons face issues to add their waypoints offline which can be avoided using our website

CHAPTER 1

Introduction:Corporate Airport Scheduling Management

1 Introduction:

The project“**CASM(Corporate Airport Scheduling Management)**” is an event management based project.In this user can plan their trip and save them on scheduler. Also after user planned the trip he/she able to add stop also,where they can also request special orders likelunch or any other thing.This project also provide facility to add new passengers, pilots,air planes and trip.User Can perform all the necessary operations like Create,Read, Update& Delete.

Generally, some persons face issues to add their waypoints offline which can be avoided using our website.

1.1 Features of the Project:

a) Sign Up:

To Sign up on this website first of all click on the “New User”. This form is for those users who visit this website first time. The new form is shown on your computer screen. Fill this form carefully and then click on submit button. Your registration is completed.

b) Login:

To login in this site you must Signup first in this site. After sign up you will be automatically login in this site to explore more about the further uses of this website.

c) Add Trip:

After the signup process, user is redirected to index page, where You fill the form and when clicked on Add Trip, your trip is shown on scheduler. On Clicking Your

trip event on scheduler, user is redirected to add waypoint page where user can add stop and also request special orders too.

d) Add Passenger:

It is not very difficult to add the passenger. User just have to select manage item from side menu bar. Then a partial view is shown, user can add passenger and also update the profile.

e) Add Pilot:

It is not very difficult to add the pilot. User just have to select manage item from side menu bar. Then a partial view is shown, where user can add pilot and also update the profile.

f) Add Airplanes:

It is not very difficult to add the Airplanes. User just have to select manage item from side menu bar. Then a partial view is shown, where user can add AirPlanes and also update the profile.

1.2 Objectives of the Project:

The main goal of the project is to provide an easy platform for the users. Users now can schedule their bookings according to their choice, anytime.

Easy UI designs have been provided in the project. Earlier systems realized that handling too many requests made it very difficult for the service providers.

So a better system has been developed, providing freedom to user also.

Users do not face any problems.

1.3 Methodology:

This project transverse a lot of areas ranging from business concepts to computing field, & required to perform several researches to be able to achieve the project objectives. The aspects covers include: Airlines industry: This incorporates study on how the airline booking business is being done presently, process involved and opportunity that exist for improvement. AngularJS Technology used for the development of the application.

1.4 Organization:

The whole project is divided into parts mainly frontend, backend & admin panel. Angular JS is a latest technology, so client's requirement is framed into one and we have created the frontend phase of the project.

CHAPTER 2

Tools & Technologies Used

2.1 Angular JS:

AngularJS is not a library but a structural framework used basically making for dynamic web apps. Angular is a client-side model view ideal recognized windows JavaScript framework used for writing computer applications with two main features data binding and dependency injection. It allows to decorate your HTML page. [1] It's built and maintained by Google and offers a fantastic spin on the web and its upcoming features and standards.

It extends markup DOM with more properties and makes it quicker to respond to user actions [2]. Angular JS is a free source , anybody can use it very easily, it is properly licenced.

and dependency injection. It allows to decorate your HTML page. [1] It's built and maintained by Google and offers a fantastic spin on the web and its upcoming features and standards.

It is used to create a SPA(Single program Application).

It extends markup DOM with more properties and makes it quicker to respond to user actions. AngularJS is an open source framework, completely free, and used by couple of developers in the world. It is licensed under the version 2.0[2]

The difference is solved by:

A **library**—It a collection of many code and data used for developing web sites computer programs. The code is in responsible and it calls into the library when it sees fit. e.g., jQuery.

Frameworks—

AngularJS takes another or different approach. It tries to reduce the impedance mismatch, like as DOM event handling. Grouping of markup language into reusable parts.[2].

It calls the code every time and validates it. Main feature include information binding , DOM etc

2.1.1FeaturesofAngular JS:

1) **MVC** – The framework is built on the famous idea of unique ideacalled MVC (Model-View-Controller). It is a design pattern used in almost all modern web applications or computer programs. This pattern is based on splitting or breaking the business logic layer, the data layer, and presentation layer into separate sections based on MVC pattern. The division into different sections is done so that each one section could be managed more easily and in a way, that produces a lot with very little time. [3]

In Angular JS, it is very simple to develop application in a clean MVC manner. We just have to split our application code into MVC components - Model, View and the Controller.

2)**Data- Model Binding** – By using this we don't have to write special codes to bind our data to the HTML controls. This can be doneeasily by Angular by just adding a few snippets or parts of code.

3) **Writing the less code** – When writing out DOM something great amount of JavaScript was required to be written to design any application. But with Angular JS, we just need to write less amount of code you need to write for DOM manipulations.

4) Testing: Testing is must for every application Angular JS is designed in such a way that we one can test right from the start to end. So, it is very simple to test any of the components of application through unit testing and endtoend testing and many more.

5)Dependency -Injection: Dependency Injection specifies or talks about a particular pattern in which services is used simply, we do not have to incorporated. It is an important feature of Angular JS. [3]

2.1.2 Angular JS MVC Architecture:

MVC refers for Model View Controller. It is a software design pattern used particularly for developing dynamic web applications. It is a very known architecture because it differentiates application from user layer.

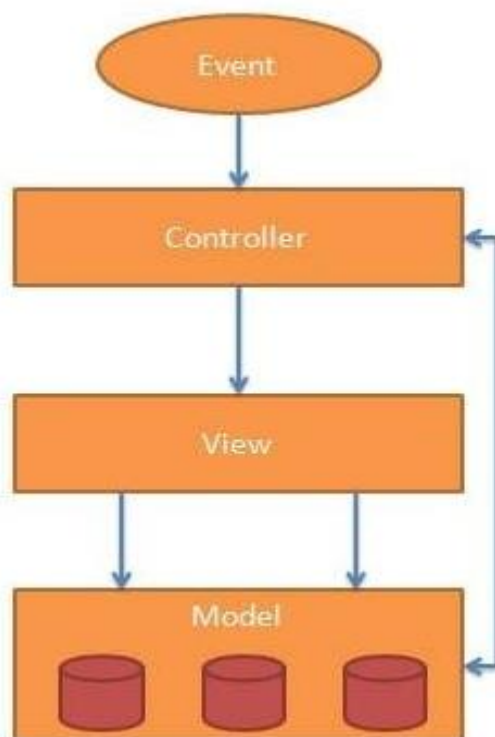


Figure 1- MVC Model

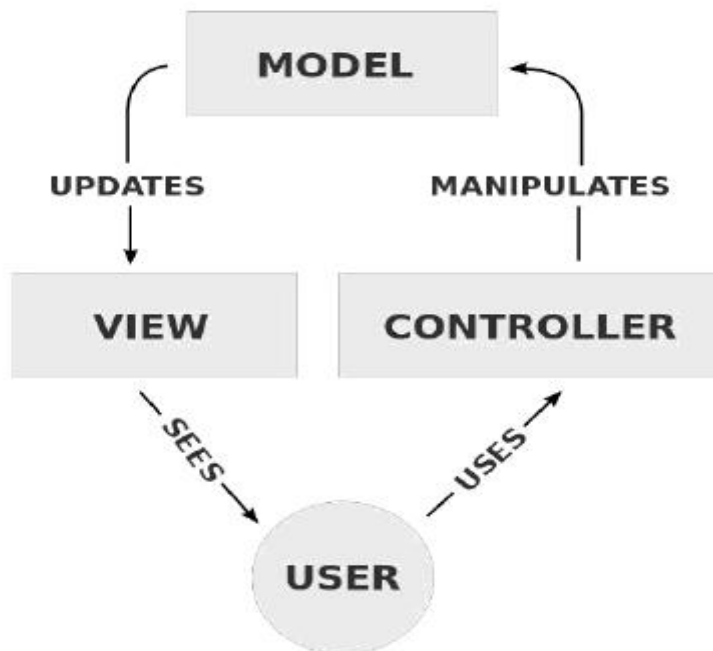


Figure 2 -MVC Structure

The MVC is created of three subsequent parts:

1. **Model:** It is the main primary part of the architecture responsible for managing application information of web applications. It responds to the requests returning from view and to the directions from controller and it updates itself.
2. **View:** It is responsible for displaying all information or solely a little of information to the users. Its main purpose is that it specifies the information in an exceeding format rendered by the AJAX technology
3. **Controller:** It controls the relations between models and views. It responds to user inputs and give the output to the user. It acts like an intermediary between model and & view. The controller receives the input, checks and validates the things that brings the change in data model[3]

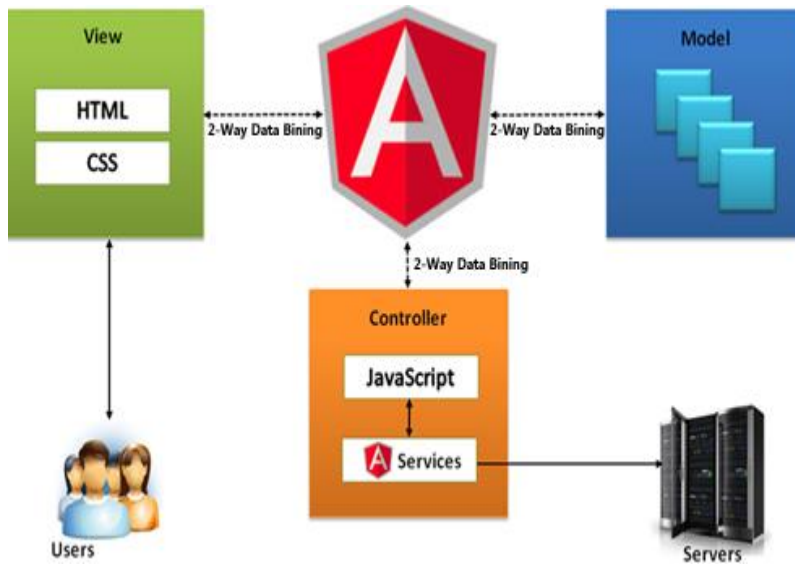


Figure 3- Process of MVC

2.1.3 Angular JS Advantages over JavaScript:

- 1) **OSF**-Since it is an open supply framework so the number of errors or mistakes are minimum
- 2) **Two-way binding**– Angular.js keeps the information and presentation layer in synchronize. Now we donot have to write additional or more JavaScript code to keep the data in our HTML code and our data later in synchronized form. Angular.js will automatically do this for us now. Now we just need to specify which control is to connect to which part of themodel in the website.
- 3) **Routing** – Angular can take care of routing which suggests moving from one view to another view in the scenario. This is the key elementary of single page applications; whereby we will be able to move to different functionalities in your net applications supported on user interaction but stay on the equivalent or same page.
- 4) Angular supports testing, both unit testing as well as integration testing also.

5) It elongates or enlarges HTML by giving its own components which are known as directives. At a higher/upper level, directives are called as markers on a component or fragment an attribute, element name, and comment or CSS class that tells AngularJS's HTML compiler to connect a specified/particular behavior to that DOM element. These directives facilitate in extending the functionalities of existing HTML components to present additional powers to your web applications.

2.1.4 Angular JS Directives:

AngularJS is calculated as a structured Java called Script file, and it is value added into a web page with a tag referred to as <script> tag:

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular.min.js"></script>
```

Angular JS extends Mark Up language FILE:

AngularJS extends mark-up language with (**ng-directives**).

AngularJS directives permits or allow the developers to specify custom and reusable mark-up language parts & attributes that specifies information bindings and the behaviour of presentation parts. A number of the foremost ordinarily used and enforced directives are:

- ng-app: This directive starts or drives associate AngularJS Application.
- ng-init: This directive is used to initialize the application information.
- ng-model: This directive defines the model specifies variable to be employed in AngularJS.
- ng-repeat: This directive uses repeats mark-up language parts for every and each item in a collection.
- ng-controller: It defines the controller object of an associate application.
- ng-click: It specifies associate expression once a component is clicked.
- ng-bind: It binds the content of an HTML part to application information.
- ng-change: It specifies an expression to evaluate when content is being modified by the user.
- ng-view: The base directive is responsible for handling routes that resolve JSON

There are many more directives(custom directives) and angular JS gives extra provision to make custom directives too[5].

2.1.5 Data Binding:

Data binding is a very useful and robustfeature employed in software development technologies today. It acts as an intermediary between the view & business logic of the applications.

AngularJS trails the Two-Way data binding model.

One Way Data- Binding:

The one-way data binding is a general approach where a value is taken from the information model and inserted into a mark-up language component. There is no way to update model from view. It is employed in classical systems on net. These systems bind the information or data in only one direction or particular direction.

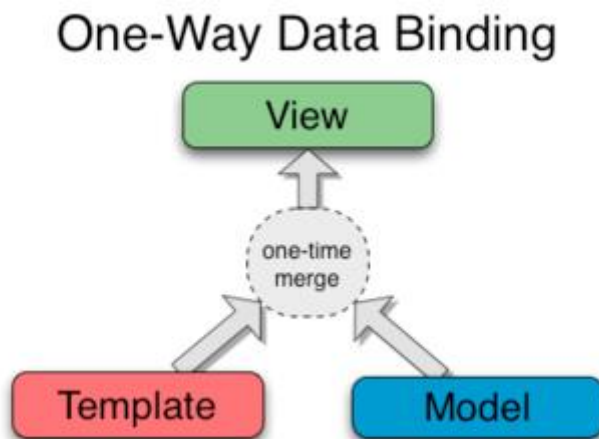


Figure 4- One way data binding

Two Way Data-Binding:

Data-binding in Angular apps is that the automatic synchronization of information between the model and view components.

When data within the model changes, the view reflects the modification, and once when data within the view changes, the model is updated yet. This happens at once and automatically, which makes sure that the model and the view is updated every time the modification is made in the program[4].

AngularJS two-way function called binding is its most outstanding or important feature, responsibilities. Instead, templates are painting in plain mark-up language in step with knowledgecontained in a scope outlined within the model.

Data-binding in Angular apps is that the automatic synchronization of information between the model and view componentsand uses \$scope a an object are reflected

within the model. This bypasses the requirements to actively handles the DOM and encourages bootstrapping & fast prototyping of net applications.

AngularJS detects changes in models by creating comparison between the present values with values hold on previously in a method called dirty-checking.

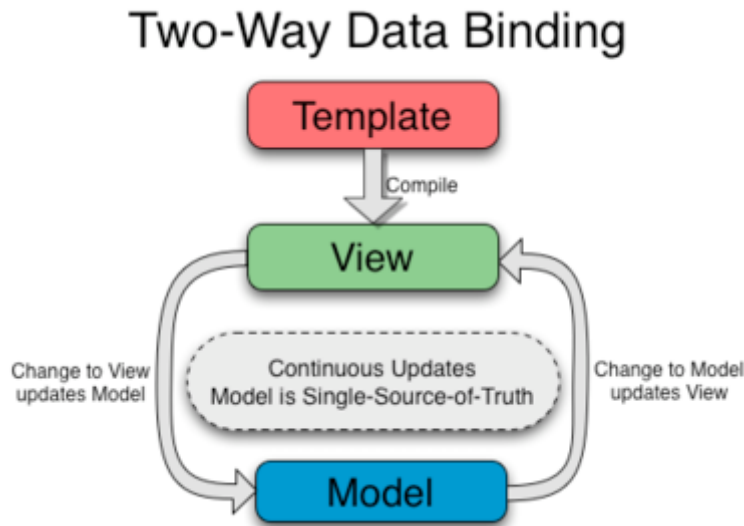


Figure 5- Two Way data binding

2.1.6 Angular JS Expressions:

Expressions in Angular usually bind the app data to the html pages. Expressions are unit written within brackets like - {{expression}}. Expressions acts in same way as “ng-bind” directives do. AngularJS application expressions are unit completely exact JS the information’s where are they being employed

Syntax: ng-bind="expression"

2.1.7 Angular JS Controllers:

AngularJS controllers are primarily used to look upon the direction of data of AngularJS applications. A controller is delineate used by “ng-controller” directive. A controller could be a object of JS attributes or characteristics and functions. Every controller accepts the scope as a para-meter or object that called to the module that controllers sometimes controls.

2.1.8 Angular JS Scope:

The Scope of an Angular language is an object that's nominal as a binding part between the HTML (view) and also the JavaScript controller. It plays a necessary or main role of joining controller with the views. It is available for both the views and the controllers.

2.1.9 Angular JS Filters:

Filters are used as unit to change or modify the data and may be clubbed in expression or directives using pipe characters.

2.1.10 Angular JS \$http:

The AngularJSservice makes a request to the server, and then returns a response back.

Syntax: app. controller ('myCtrl', function (\$scope, \$http)

2.1.11 Angular JS Routing:

If you would like to navigate to completely different pages in your application or websites, but you also want the application to be a SPA (Single Page Application), with no page reloading, you can use the ng-Route module feature provided by Angular JS.

The ng-Route module *routes* your application to completely different pages while not reloading the whole applications.

Syntax for routing:

```
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.4/angular-route.js"></script>
```

Then we have to feature ng-Route the as a dependency within the application module:

```
var app = angular. Module("myApp", ["ngRoute"]);
```

2.1.12 Angular JS API:

API stands for - **A**pplication **P**rogramming **I**nterface.

The AngularJS Global API is a set of global JavaScript functions for performing common tasks like:

- It Compares objects
- Iterating objects
- Helps in changing information
- The Global API functions are accessed using the angular object.

Following is a list of some common API functions that are being used:

angular. Lowercase(): converts a string to lowercase

angular. Uppercase (): converts a string to uppercase

angular. is String (): returns true if the reference is the string

2.1.13 Advantages of Angular JS:

It is developed and maintained by Google

It is incredibly easy& straightforward

Uses Two-way data or information binding

Easy use of custom directives

Dependency injection(important feature)

Client side MVC framework with Angular JS

Provision of Filters

2.1.14 Disadvantages of Angular JS:

The libraries have to be compelled to be AngularJS specific Nature of AngularJS framework.

The framework is extremely complicated

2.1.15 Pros of MVC Structure:

- 1) **Concurrent development** -It means that Multiple developers can work at the same time on the model, controller and views.
- 2) **High cohesion** - MVC allows logical grouping of related actions on a controller together. The views for an explicit model are also clubbed along into one unit.
- 3) **Low coupling** - The very imp. property of the MVC framework is that there's low coupling among models, views or controllers
- 4) **Ease of modification** – As the result of the separation of responsibilities, future development or modification is simpler.
- 5) **Multiple views for a model** - Models will have multiple views.

2.1.16 Cons of MVC Structure:

- 1) **Code info navigability** -New layers of abstraction has been used in MVC model. It has decomposition property also.
- 2) **Multi-artefact consistency**–Molding an article into three scattering Thus, requiring users to develop consistency of documentation.
- 3) **Pronounced learning curve** - Data on more technologies become most useful. MVC is most skillfull.

2.2 Bootstrap:

Bootstrap is that the most popular and well used mark-up languages, CSS and JavaScript framework for developing a responsive and mobile friendly website or application.

Bootstrap is free for use in front-end net for coming up with internet websites and web It uses markup- language gives optionality of adding buttons .

Different from several net frameworks, it bothers itself with front-end development solely

.

2.2.1 Features of Bootstrap:

Bootstrap three– Google chrome , net explorer ,Firefox, Opera, and Safari .It in addition supports latest Firefox Extended Support Release (ESR).

Bootstrap uses 2.0 for latest technology.

What Bootstrap package contains?

Scaffolding: Bootstrap provides a basic structure with Grid Systems, link design, and background and many more features.

CSS: Bootstrap approaches with the feature of global CSS settings, basic mark-up language components style &a latest grid system.

Components: Bootstrap accommodatescomponents/parts built to produce dropdowns bars and many other components can be checked again.

JavaScript Plugins: Bootstrap has lots of customlike jQuery plugins. We can simplyembody them all, or one by one in our program.

Customize: The parts are customizable and one will customize Bootstrap's components, less range of variables, and jQuery plugins to urge own style.

2.3 Media Queries:

To make a website a lot of responsiveness we use Media queries.

Media query is a well known cascading technique that is in CSS3.

It uses the @media rule to containsa block of CSS properties only if a certain condition is true.

For ex: If the browser size is smaller than 600px, the backside color will reflect to black:

```
@media only screen and (max-width: 600px) {  
    body {  
        background-color: black;  
    }  
}
```

2.4 AJAX:

AJAX main features include:

- It Reads the information from a web server -when the page has loaded
- Then it updates a web page while not reloading the page
- Finally sends the data to a web server - within the background

AJAX = Asynchronous **J**avaScript **a**nd **X**ML.

AJAX is basically not a programming language.

AJAX just uses a mix of:

- A browser built-in XMLcommunication protocols XMLHttpRequest object (to request data from a web server)
- JavaScript & Mark-up language DOM (to show or use the data)

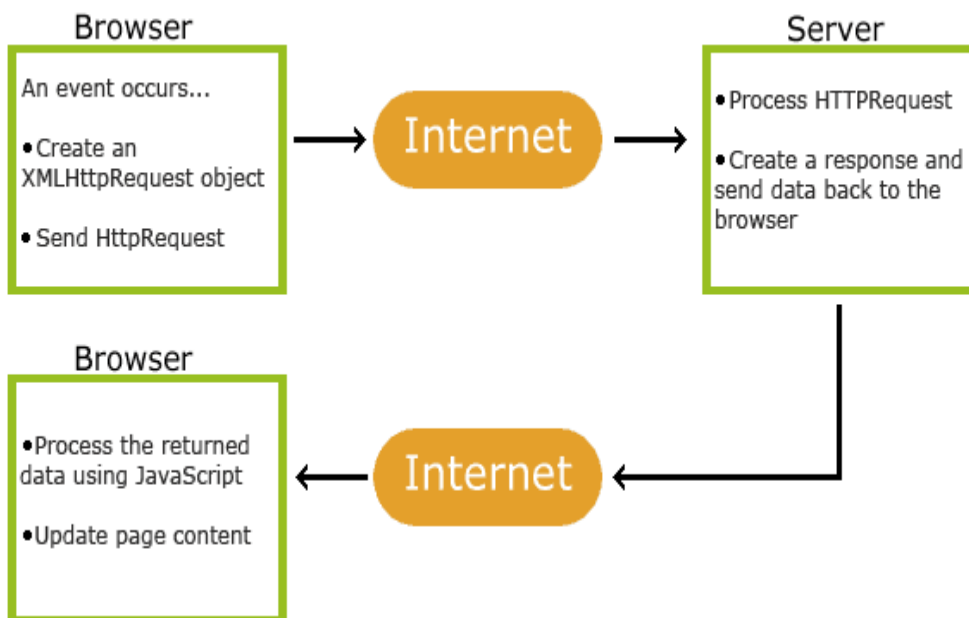


Figure 6- Working of AJAX

- 1) An event happens in a web page (the page is loaded, once a button is clicked).
- 2) An XMLHttpRequest object is automatically created by the JavaScript.
- 3) The XMLHttpRequest object then sends a request to a web server.
- 4) The server then processes the request.
- 5) The server sends a response back forth to the online page.
- 6) The response is being read or browsed by JavaScript.
- 7) The Proper action (like page update) is being performed by JavaScript.

2.5 JavaScript:

JavaScript (sometimes referred to as JS) is a programming language that is used to give additional functionality in a website.

This allows users to perform abstraction at low level and animation, more high level effects & high-level, apps. The approach to the creation of strong dynamic internet pages & net apps

2.6 jQuery:

- 1) It is a multi-browser basically a client side and uses JavaScript
- 2) . jQuery additionally provides opportunities for developers to form plug-ins on top of the JavaScript library.
- 3) It is open source authorized under the MIT. jQuery's syntax is used to make it simpler to navigate through a document, choose DOM parts, produce animation, handle events. jQuery additionally provides opportunities for developers to form plug-ins on top of the JavaScript library.
- 4) This allows users to perform abstraction at low level and animation, more high level effects & high-level, apps. The approach to the creation of strong dynamic internet pages & net apps[5].

2.7 TOOLS USED:

2.7.1 Microsoft Visual Code Editor:

Visual IDE Code is a code editor or an environment where it provides the user or developer a platform, where user codes his program, It is licensed under Microsoft for windows.

It is also customizable i.e. user will customize or users can modify the editor's theme, keyboard shortcuts, and preferences.

It is free and open-source, although we can download official site beneath a proprietary license available on internet.

2.7.2 Features of Visual Studio:

Visual Studio Code is latest called as source code editor.

It handles a variety of programming languages & a collection of features that may or may not be accessible for a given language.

Visual studio do not give access to many features, there is a command palette.

The command palette may be a command-line interface provided within.

CHAPTER 3

System Development

3.1 System Development Life cycle:

This chapter will illustrate the difference between different system development Lifecycle approach namely Waterfall and Spiral models, also the picked framework Development lifecycle approach utilized all through the venture. Distinctive philosophies to help in the advancement of the software are discussed.

Software development life cycle is a structure imposed on the development of a software product developments. So, spiral model is employed in cases wherever the need is not understood or troublesome to specify this methodology is distinctive potential risk to the system during this model, the computer code is developed in an exceedingly series of progressive releases with the

first stages being either paper models or prototypes. Later iterations become more and more complete versions of the To control the “level of complexity a number of SDLC model” or is called or created such as “Waterfall model”, “Spiral incremental”, V-model and “prototype model”.

There are basic 7 phases of SDLC:

System study and design

Feasibility study

System design

Coding Implementations

Testing phases

Documentation

Maintenance

System Study -The most important task in creating software product is extracting the requirements from the client.

Specification – Client gives the required specification of the project.

Design - The architecture of a software system refers to an abstract representation of that system.

Implementation- The design is then implemented into coding process , where actual working is done for the project.

Testing - Testing of part of software specially was code by two different engineers must work together, testing is an for the internal design pattern in a project important part

Documentation–The main part of documentation is checking for the internal design patterns in project , it also include part which is being done.

Maintenance -After the project delivery one has to keep record of what has been delivered to the client ,Maintenance is important .

3.1.1 Waterfall Model:

Waterfall approach was initial method Model to be introduced and followed wide in software system Engineering to confirm success of the project. within the falls model, the total method of software system development is split into separate method phases. The phases in are: Requirement Specifications, Software Design, Implementation and Testing & Maintenance as shown within the figure below. of these parts are associated with one another so second part is started as and once outlined set of goals are achieved for initial phase.

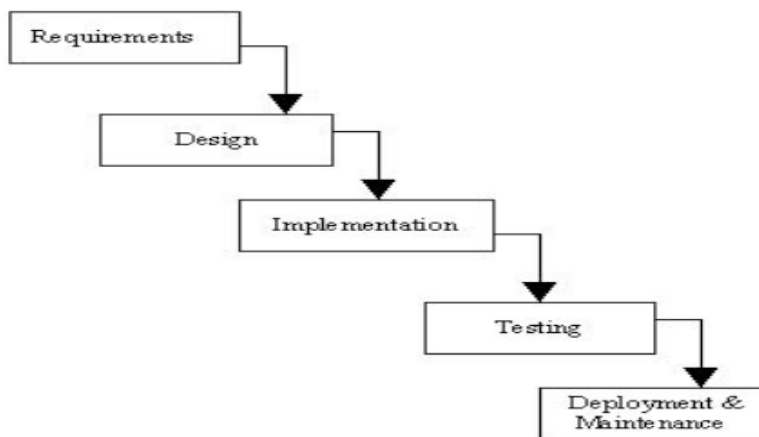


Figure 7- Waterfall model

3.1.2 Spiral Model:

The spiral model was recommended by Barry Bohme in 1988 associate degree to falls model however follows a biological process or unvarying approach to system developments. So, spiral model is employed in cases wherever the need is not understood or troublesome to specify. the most feature of this methodology is distinctive potential risk to the system during this model, the computer code is developed in an exceedingly series of progressive releases with the first stages being either paper models or prototypes. Later iterations become more and more complete versions of the merchandise. Furthermore, there aren't any phases for necessities specification, style or testing within the spiral model. So, spiral model is employed in cases wherever the

need is not understood or troublesome to specify. the most feature of this methodology is distinctive potential risk to the system.

3.1.3 Summary:

This chapter explains the chosen software package development lifecycle is that the falls model that the project can adopt. Also, it looked into however this project goes regarding the various stages of the event cycle. It mentioned the various implementation methodology chosen which will be used as resolution to the event of the software package.

3.2 Requirements analysis and design:

3.2.1 Hardware Requirements:

Operating System: Linux 16.04 LTS, Windows 7

Web Browser: Mozilla Firefox, Google Chrome, Internet Explorer, Microsoft Edge
Processor Intel Pentium and above.

3.2.2 Software Requirements:

Web Browser: Mozilla Firefox, Google Chrome, Internet Explorer, Microsoft Edge

Framework: AngularJS, JavaScript, HTML, CSS

IDE: Visual Studio Code

Bootstrap for styling

3.3 Design Documentation:

3.3.1 Design:

Before start developing the project, one must first analyse the needs and requirements. We make a list of primary needs that we want our application to satisfy. Also, list down the secondary needs. The Internet is the biggest source of online trade and commerce that has changed business activities across the world. It helps in easy transactions which enable direct access to both service providers and clients for effective exchange of goods and services.

3.3.2 Data Flow Diagrams (DFD):

Data Flow Diagrams were developed basically by Larry Constantine as a medium of expressing system requirements in a graphical form. DFD is also known as bubble chart and has a purpose of clarifying system requirements and identifying major transformations and will become the program in the system design. Data flow Diagram is a graphical representation of data flow of project, to draw DFD we use three notations:

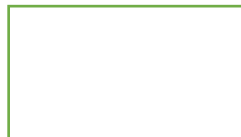
Circle - It represents the process.

Squares - It represents the source and destination;

Arrows - It represents the data flow.

DFD Symbols are as follows:

Boxes define source or destination of system data flow. Example



Arrows identify the data flow or data in motion. It is a pipe line through which information flows.



Circles or Bubbles represent process transform, incoming into outgoing data flow.



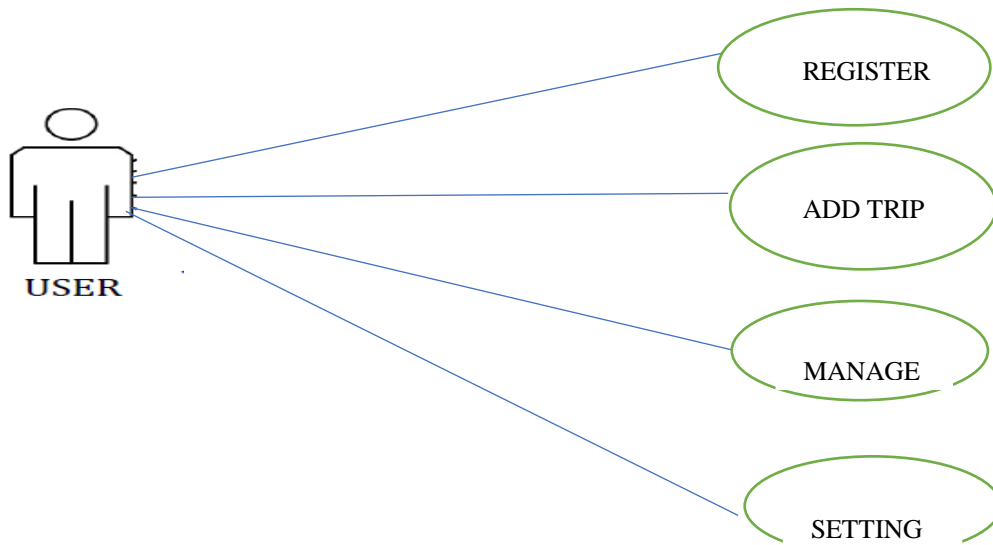
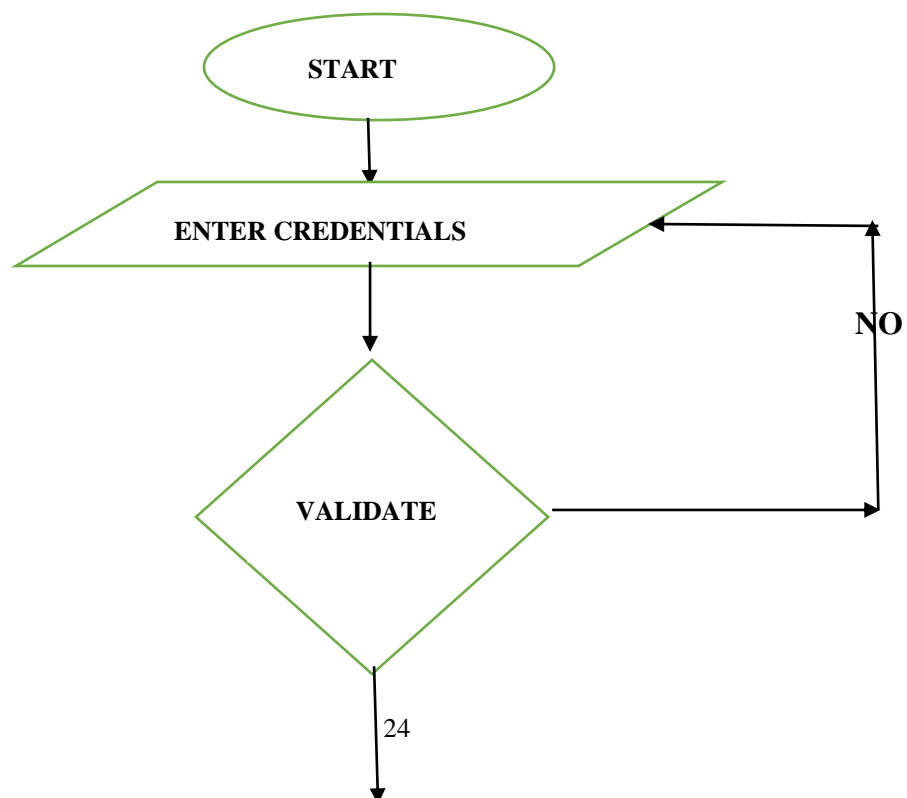


Figure 9 – Use case diagram

3.3.5 Context diagram:

1) Admin panel:



YES

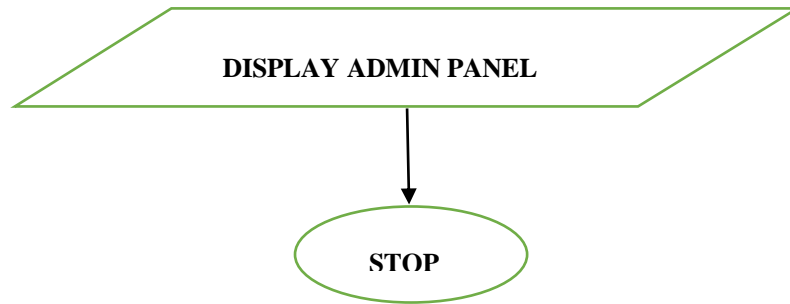
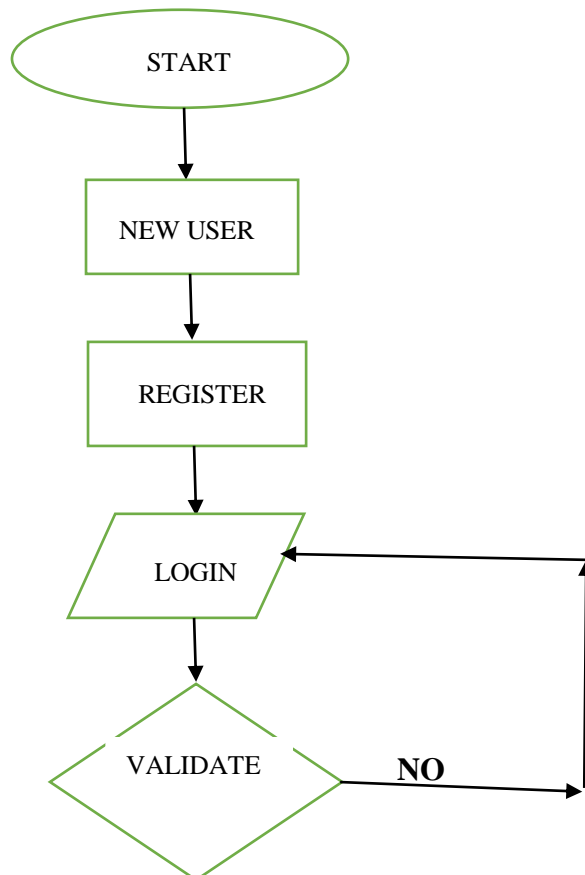


Figure 10 – Admin Panel

2) Flow of the website:



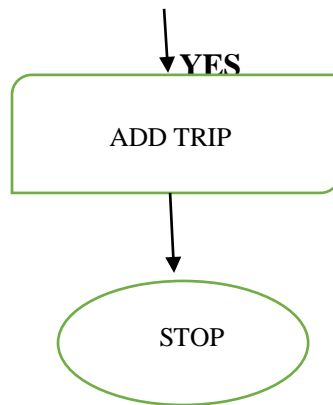


Figure 11 - Work flow

CHAPTER 4

Practical Application & Implementation

4.1 Implementation:

- a) Homepage:

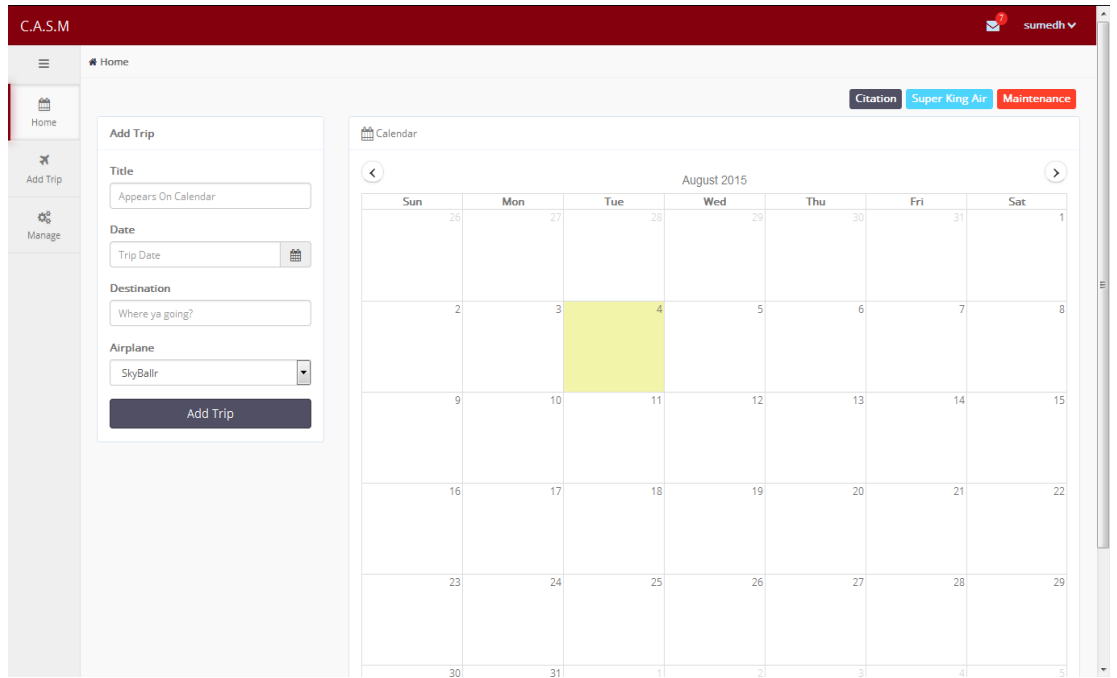


Figure 12-Homepage

- b) User Sign Up to register into the site. By using this page, user will be able to register into the website.

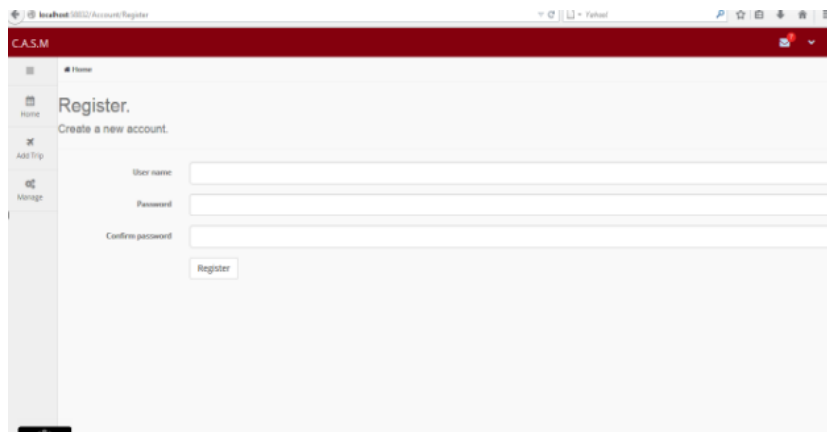


Figure 13- user sign up

- c) Login. This page is used to login into the site as a regular user. After filling the user id and password press the submit button to login into the site.

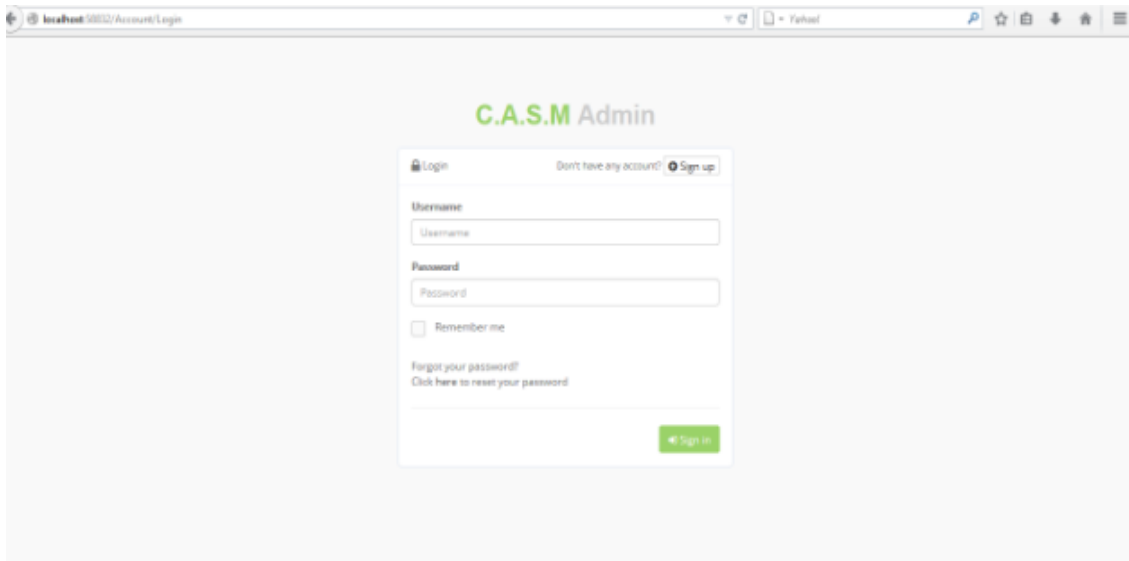


Figure 14 – Login Page

- d) **Edit Trip:** To edit the trip, user can also add new stop and request special orders too.

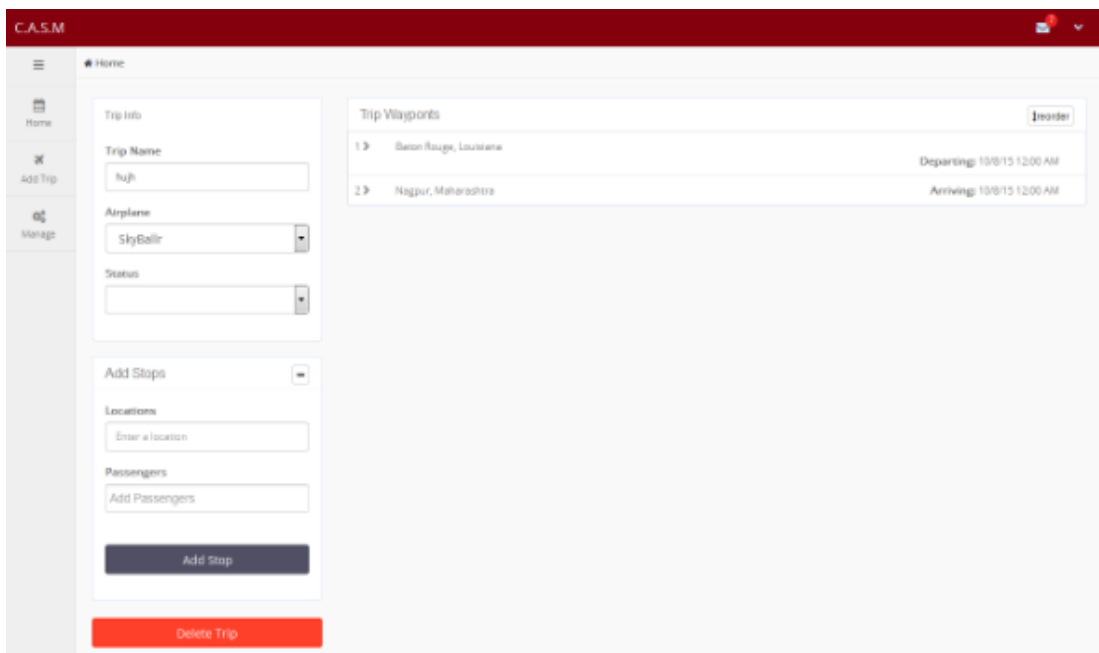


Figure 15 – Edit Trip

- e) **Passengers:** To Create new passenger, Update passenger profile screen.

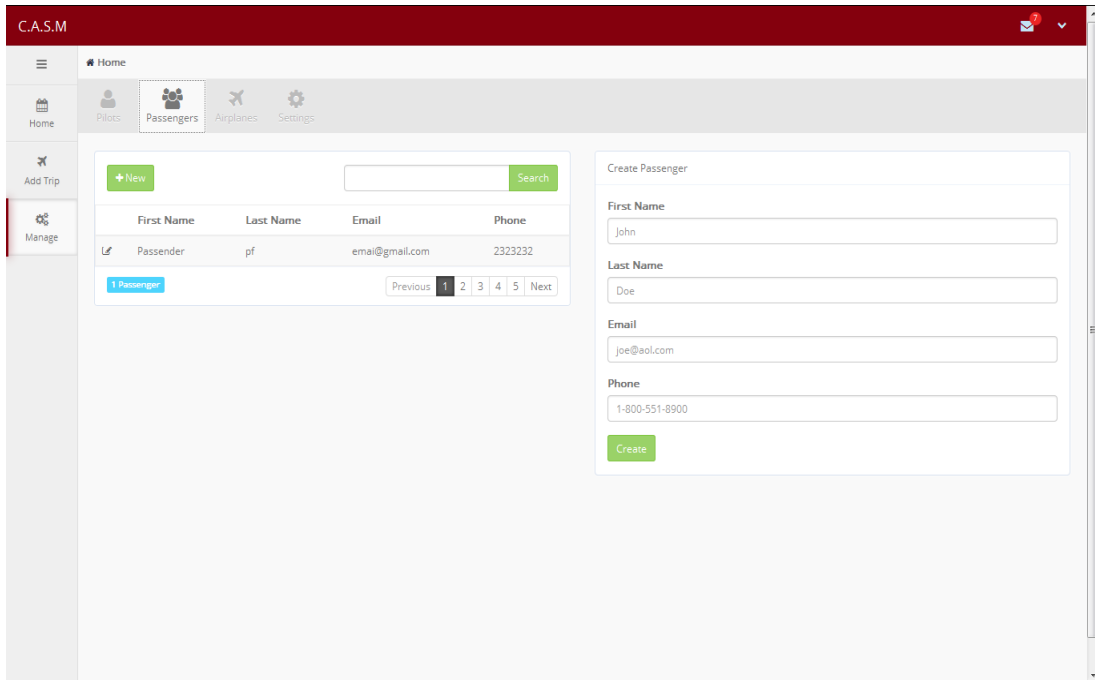


Figure 16- Passengers CRUD (Create, Read, Update, Delete)

f) Pilots: To Create new pilot, Update pilot profile screen.

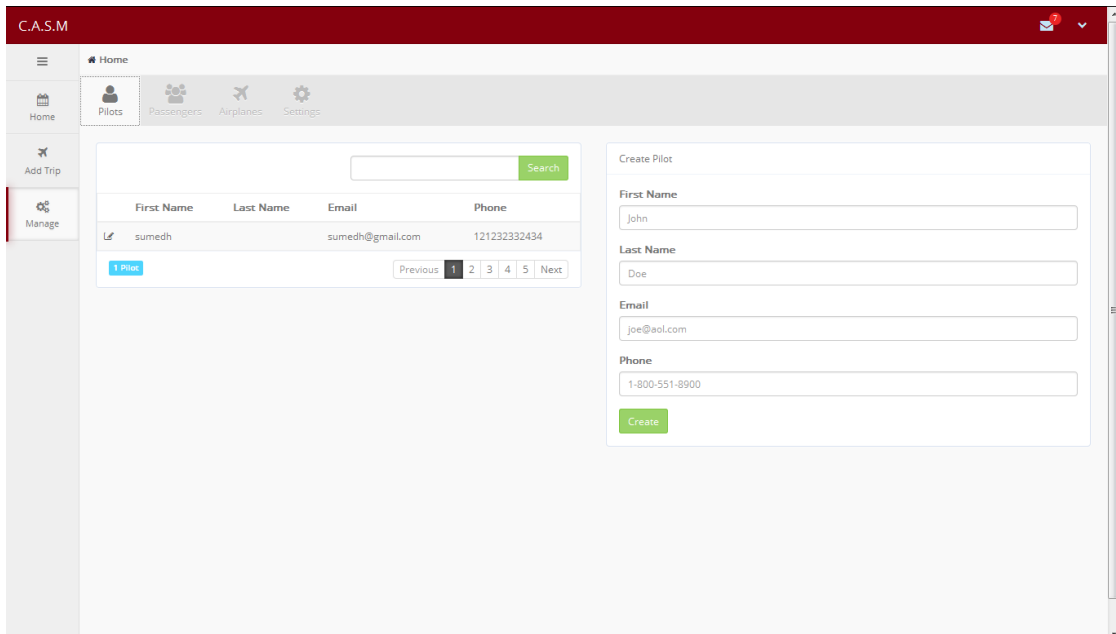


Figure 17-Pilots CRUD (Create, Read, Update, Delete)

g) Air Planes: To Add New Plane, Update Plane screen.

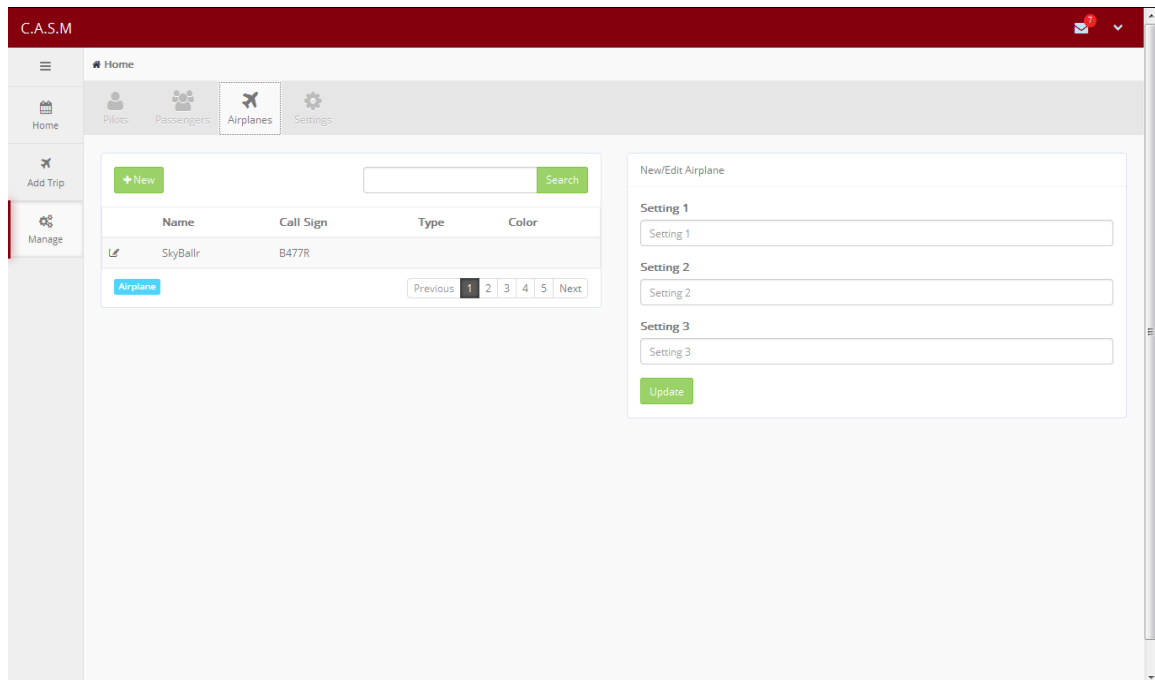


Figure 18-Adding airplanes

4.2 Testing:

In the end of each and every action performed on the application which is under testing process, we just need to check if the model or the application appears to fulfil all the client's needs and requirements. Performance testing is to be performed to check the bounds of the application Under Dynamic Testing code is executed.

It validates for the functional behavior of the software system, memory or mainframe usage and overall performance of the computer system. The main aim of the testing is to validate that the software product works in accordance with the business requirements of the application. Before pushing the build release, sanity testing is performed to test the basic flow of the application.

In the end of each and every action performed on the application which is under testing process, we just need to check if the model or the application appears to fulfil all the client's needs and requirements. Performance testing is to be performed to check the bounds of the application Under Dynamic Testing code is executed.

A fault is a specific illustration of an error. An error may be caused of several faults in a system. A failure is the in ability of a system or element/component to perform its required function within the required limits.

A failure may be produced once a fault is executed.It also include part of activitiestatic analysis and dynamic too

Static analysis explores If the outputs obtained are identical as the expected ones then the product meets the functional requirements given by the client. Mainly checks for source code.

Dynamic keeps a check on the behavior of the software , to provide information such as execution traces, timing of the profiles of clients, mainly covers all the information.

Phases of test:

Web Testing: As the project works on a website, so web testing is defined as checking If the outputs obtained are identical as the expected ones then the product meets the functional requirements given by the client.

Web Application Testing Checklist:

1. Functionality:

- All webpages in the project are checked for functioning accurately and ensure no broken link are available Content should be clear with no spelling or grammatical errors.

Test HTML and CSS to confirm that search engines can crawl your site easily. This will include

- Checking for Syntax Errors and more
- Readable Colour Schemas in relative context

2. Usability:

This aspect of testing became an unique element of any project. It can be **carried out** testing team to the target most of the individuals of the web application.

Test the site Navigation:

- Menus, buttons or Links to completely different pages on your site should be easily and simply visible & consistent on all webpages.
- Content should be clear with no spelling or grammatical errors.

3.Logical view Testing:

3 phases have to be tested –app, internet & backend

- **Application:** application is very important application and be only shown to the administrator, not the end user. If there occur any errors then they are caught by the application and be only shown to the administrator, not the end user.
- **Web Server:** Takes a look at net handling every error with none service accessed.

4.Need for succinctly testing:

This is very necessary for inline website which store the sensitive and or data credit cards/money etc. This will incorporate-

- Get check the non-accessed to security page shouldn't permissible.
- The files shouldn't be accessible without appropriate access of the client permission.
- The Check sessions are automatically killed once long user inactivity
- On use of SSL certificates, website ought to re-direct to encrypted different SSL pages.

4.3 Types of testing:

4.3.1 Black Box Testing:

It is also commonly known as Functional Testing. It tests the general functional requirements of product. Inputs are provided to the product and outputs are then verified. If the outputs obtained are identical as the expected ones then the product meets the functional requirements given by the client. During this type of testing, the interior procedures are not taken into notice. In the end of each and every action performed on the application which is under testing process, we just need to check if the model or the application appears to fulfil all the client's needs and requirements. Performance testing is to be performed to check the bounds of the application Under Dynamic Testing code is executed.

4.3.2 White Box Testing:

It is also called as Structure Testing. It mainly focuses on the internal functioning of the product, means internally not outside. It tests for the loops of the Procedure, Decision points, Execution paths etc. White box testing uses certain information of programming code to look at the outputs. The test is accurate only if the tester is aware of what the program is meant to do. We will then see if the program diverges from its intended goal. White box testing does not clarify for errors which are caused by omission, and all visible code must also be readable.

The information of internal coding structure is required in advance, so it becomes very easy to find out which type of input or information will facilitate in testing the application effectively.

The other most vital advantage of white box testing is that it helps in optimizing the code. It helps in eliminating the additional lines of code, which may herald hidden defects.

CHAPTER 5

Conclusion and Future Scope

5.1 Conclusion:

The project “CASM” is made working for Online Airport Scheduling Management System. This website completes all requirements for that.

It can store the information regarding the user’s profile & other information in very effective, easy and safe manners. All the information of the user is secure in this website because of the use of user id and password. User is also allowed to change his/her password. User can also update his/her information by using edit profile link.

If the user doesn’t sign up in this site or do not register in this site then the user is not allowed to see the personal information of the other users. In this website user can give his/her reviews to us. We will try to help as many people as we can. In the end, we can say that it is a perfect website for Online Airport Scheduling Management System in World which will give the best experience to our user.

5.2 Future Scope:

The future scope of the project is that it makes easy for the people to manage their flight timings. Its ease of use is very helpful now days, by just sitting at home one can book their flights, manage their requirements and many more.

The proposed system is totally computer based, and it is very user friendly, with the modern technology being used in this project.

It improves the quality of work and reduces the amount of time being used earlier in manual technique. day to day activities have become efficient with this technology.

Every details can be accessed within a minute.

It is more securer in the future.

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[2]Sneha Ambedkar, Angular JS, International Journal of Scientific & Engineering Research, Volume 7, Issue 2, February-2016.

[3]Brad Green, Shyam Seshadri, AngularJS, O'Reilly, First Edition, MVC Architecture, Vol 7, No. 5 (2014) pp.317-322

BOOKS:

[4]ng-book by Arti Lerner -A complete guide

[5]Angular JS a comprehensive guide by- Todd Motto

APPENDIX

Angular JS: It is powerful framework used for making dynamic websites. It enables you to use markup language as your helping language and enablesu to elongate markup language syntax to make your elements clear.

MVC: Model view Controller is a platform which helps in building web applications in a clean and accurate way.

DOM: It is a programming interface which uses application programming language , basically used for manipulating our document written for a needed project

One Way Data Binding:A way data binding in AngularJS means binding data from Model to the View.

Two Way Data Binding:Two-way **data binding means** that User Interface fields are bound to model **data** dynamically specified once when a UI field changes, the model **data** changes with it & vice-versa.

Media Queries:It is a great technique in which CSS technique is used , mainly used for mobile and websites .

Bootstrap: Bootstrap the most popular markup language, CSS, & JavaScript framework for developing responsive, mobile-first web sites.

Routing: If you would like to navigate to different pages in your application, but you also want the application to be a SPA (Single Page Applications), with no page reloading, you can make use of the ng-route module.

