

PROJECT REPORT

ON

EXPLORE INDIA

SUBMITTED BY

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JAIKRANTI COLLEGE OF COMPUTER SCIENCE AND MANAGEMENT STUDIES
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JAIKRANTI COLLEGE OF COMPUTER SCIENCE AND MANAGEMENT STUDIES, KATRAJ, PUNE-46

CERTIFICATE

Ashwini Ashok Kshetri students of TYBBA(CA) have satisfactorily completed their project work entitled "Explore India" And submitted the project for the fulfilment of Bachelor of Business Administration (Computer Applications) as per the syllabus of Savitribai Phule University of Pune, during the academic year 2019-20.

Date:		
Place:		
Project Guide	HOD	Principal
Internal Examiner		External Examiner

ABSTRACT

This report describes a tourism website which will be helpful for the tourists who needs to gather information about different places that they are interested to visit within India. According to a report, India is expected to establish itself as the third largest travel and tourism economy in the world by 2028 in terms of direct and total GDP, a 2018 economic impact report by World Travel & Tourism Council (WTTC) has said.

This project will help tourist to gather information related to the tourist places in India. The availability of videos will help the tourists to get a brief idea about the places. Tourist can gather information regarding different places they wish to visit and can plan their trip without any travel package. This would be really useful for the tourists as they will be getting the required information, videos and images all under one roof. User can see the location of each place on live maps which would be helpful in planning the trip. Users can contact the admin regarding any queries about the place.

ACKNOWLEDGEMENT

No project is ever complete without the guidance of those experts who have already traded this past before and hence become master of it and as a result, our leader. So I would like to take this opportunity to take all those individuals who have helped us in visualizing this project. I express my deep gratitude to my project guide prof. Priyanka Bhosale mam and prof. Deepali Shilvant Mam for providing timely assistant to my query and guidance that he gave owing to his experience in this field for past many years. He had indeed been a lighthouse for us in this journey.

I extend my sincere appreciation to all my Professors from Jaikranti college of computer science and management studies, for their valuable insights and tips during the designing of the project. Their contributions have been valuable in so many ways that I find it difficult to acknowledge of them individually.

I am also great full to my HOD Prof. Deepali Shilvant for extending her help directly and indirectly through various channels in my project work.

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DECLARATION

I hereby declare that the project entitled, "Explore India" done at place where the project is done, has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university. The project is done in partial fulfillment of the requirements for the award of degree of BACHELOR OF BUSINESS ADMINISTRATION(COMPUTER APPLICATION) to be submitted as final semester project as part of our curriculum.

Chapter 1 Introduction

INTRODUCTION

Explore India is a web based application which helps the user to explore different places within India and gather information about the places that they are interested to visit through a user friendly UI.

Users can watch videos related to the places that they are interested to visit. It also provides the user to see the location of the place on live maps. There will be a admin panel from where the admin can manage users, add new places to the webpage, remove places, add location co-ordinates etc. Admin can add details of the places that needs to be shown on the webpage through an interactive form. Admin can add images and videos of each places for better understanding of the place.

Markers can be added to the maps by adding the latitude and longitude of each place. Places can be dynamically added through the dashboard which helps in saving time and effort. Users can contact the admin for any queries or any suggestions by filling a form on the webpage. This will help admin in understanding the problems the user face and make necessary changes on the webpage. Admin can manage the users through the dashboard. In the dashboard setting, admin can update his profile, change password, logout etc.

The webpage will be responsive and can be viewed on any device. This helps the users to view the webpage on any device like mobiles, laptops, computers, tablets etc.

1.1) OBJECTIVES

The main objectives of the web application are as follows:

- To provide information regarding major tourist places within India.
- To provide images and videos of each places so that the user will get a clear idea about the place.
- To show the location of each places on google maps through markers.
- Show details about the top destinations that can be visited there.
- Users can contact the admin regarding any queries related to the places.

1.2) PROBLEM STATEMENT

Designing and developing web based interface for tourism operator system. The aim of the project is to overcome the issue of the current system by providing more information related to the places so that the user can plan their trip accordingly.

User can view the location of each places through live google maps. This helps in better understanding of the place. Other drawback will be the lack of videos available because users will get a clear idea about the place only after watching videos.

1.3) SCOPE

The system will be beneficial in the following ways:

- Majority of the people visit tour agents to plan their trip that is time consuming and a bit costly.
- Based on the information provided on the web application, users can plan their trip accordingly without booking any packages.
- Users will get information regarding all the major tourist places within India under one roof.
- Addition of videos and images gives a lot of information to the users about the place they are planning to visit.

Chapter 2 System Analysis

2.1) EXISTING SYSTEM

Nowadays, there are lot of websites that provides tourism related information and tour packages to the tourists. People prefer to use such websites to gather information or book packages rather than going to the tour agents which is time consuming and also a bit costly. The drawbacks of the current system used are:

- Users only get information regarding the tour packages that are provided in the websites.
- They don't get more details about the place because of the lack of videos available.
- Users will have to search information about the places on google because of lack of information.
- They will not get exact details regarding the activities that can be done in each place, top places that needs to be visited etc.
- Tourists will not be able to plan a trip on their own based on the information that are provided.
- Most of the websites do not provide location of the place so it becomes difficult for the users to plan the trip.

2.2) PROPOSED SYSTEM

WORKING –

User can search a specific place from a list of specified places included in the webpage. Each place while consist information about the weather, nearest airport and railway station, languages spoken etc. There will be a list of videos from which the user will get more details about the place.

A live map will show the location of all the tourist places that is available on the web application. Apart from these, it will also contain information regarding the top places to be visited there and other activities to be done. The user queries will be maintained in the database. Admin can add new places, remove existing places, manage users etc through the dashboard. Adding new places and removing the old one dynamically through the dashboard helps in saving time. The live maps can also be updated through the dashboard by providing the latitude and longitude of the location.

ADVANTAGES –

To overcome the drawbacks of the existing system, the following features will be added to the web application -

- Provide information of each tourist places so that users will not have to google for getting information.
- Provide more videos related to the place which helps in getting a clear idea about the place.
- Users can view live maps of each and every tourist places that are available on the web application.
- User can contact the admin for any queries related to the places they wish to visit.

2.3) HARDWARE REQUIREMENTS

Hardware Specification:

Hardware requirements for this system are as listed follows:

Processor	i5 8 th Gen
Operating System	ws 10

2.4) SOFTWARE REQUIREMENTS

Software requirements for this system are as listed follows:

Front End	HTML5, CSS3, jQuery, JavaScript					
Back End	MySQL, AJAX					

2.5) Justification of selection of Technology

HTML5 -

HTML5 stands for Hypertext Markup Language revision 5. It is a markup language for the structure and presentation of World Wide Web contents. HTML simply means it is a language for describing web-pages using ordinary text.

HTML is not a complex programming language. HTML5 is simply just an umbrella term for the next generation of web apps and how functionality will be expanded with better markup (HTML), better style (CSS), and better interactivity (JavaScript).

CSS3 -

CSS3 stands for Cascading Style Sheets. It is used for the designing of a webpage. CSS is the standard and preferred mechanism for formatting HTML pages. CSS consist of a group of formatting rules that you use to control the layout and appearance of the content on a web page.

One of the really great feature of CSS is that you can store all the CSS rules in one document and keep that document separate from the HTML content and link them together.

JavaScript -

JavaScript (JS) is a scripting languages, primarily used on the Web. It is used to enhance HTML pages and is commonly found embedded in HTML code. JavaScript is an interpreted language.

Thus, it doesn't need to be compiled. Although it shares many of the features and structures of the full Java language, it was developed independently. It was originally developed by Netscape as a means to add dynamic and interactive elements to websites.

JavaScript is a client-side scripting language, which means the source code is processed by the client's web browser rather than on the web server. This means JavaScript functions can run after a web page has loaded without communicating with the server.

PHP -

PHP Stands for "Hypertext Preprocessor." PHP is an HTML-embedded Web scripting language. This means PHP code can be inserted into the HTML of a Web page. A lot of syntax of PHP is borrowed from other languages such as C, Java and Perl. However, PHP has many aunique features and specific functions as well.

When a PHP page is accessed, the PHP code is read or "parsed" by the server the page resides on. The output from the PHP functions on the page are typically returned as HTML code, which can be read by the browser. Because the PHP code is transformed into HTML before the page is loaded, users cannot view the PHP code on a page. This make PHP pages secure enough to access databases and other secure information.

MySQL -

MySQL, pronounced either "My S-Q-L" or "My Sequel," is an open source relational database management system. It is based on the structure query language (SQL), which is used for adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE can be used with MySQL.

These pages are often referred to as "dynamic," meaning the content of each page is generated from a database as the page loads. Websites that use dynamic Web pages are often referred to as database-driven websites.

jQuery –

jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation, and Ajax much simpler with an easy-to-use API that works across a multitude of browsers. With a combination of versatility and extensibility, jQuery has changed the way that millions of people write JavaScript.

jQuery's syntax is designed to make it easier to navigate a document, select DOM elements, create animations, handle events, and develop Ajax applications. jQuery also provides capabilities for developers to create plug-ins on top of the JavaScript library. This enables developers to create abstractions for low-level interaction and animation, advanced effects and high-level, themeable widgets.

AJAX -

AJAX stands for Asynchronous JavaScript and XML. AJAX is a new technique for creating better, faster, and more interactive web applications with the help of XML, HTML, CSS, and Java Script.

With AJAX, when you hit submit, JavaScript will make a request to the server, interpret the results, and update the current screen. In the purest sense, the user would never know that anything was even transmitted to the server. AJAX is a web browser technology independent of web server software.

Chapter 3 Gantt Chart

GANTT CHART

A Gantt chart is a series of horizontal lines which shows the amount of work done or production completed in certain periods of time in relation to the amount planned for those periods.

	Months	August		September		October		December		January		February		
Task	Dates	1 to 7	7 to 18	20 to 30	1 to 7	8 to 22	5 to 20	21 to 30	1 to 7	8 to 25	1 to 8	9 to 17	2 to 8	9 to 12
Project finalization														
Requirement gathering														
Wireframe designing														
System anlysis														
Documentation														
UI designing														
Dashboard designing														
Database coding														
Backend coding														
Merging backend with UI														
Testing														
Debugging														
Implementation														

<u>Chapter 4</u> <u>System Design</u>

4.1) ER DIAGRAMS

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is an object, a component of data. An entity set is a collection of similar entities. These entities can have attributes that define its properties. An ER diagram is a means of visualizing how the information a system produces is related. There are five main components of an ERD:

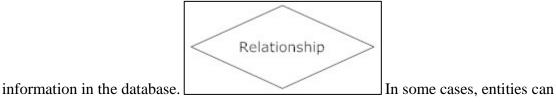
• Entities, which are represented by rectangles. An entity is an object or concept about

which you want to store information.

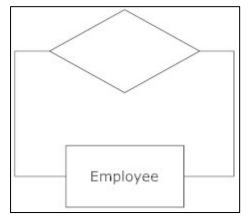
A weak entity is an entity that must defined by a foreign key relationship with another entity as it cannot be

uniquely identified by its own attributes alone.

• Actions, which are represented by diamond shapes, show how two entities share



be self-linked. For example, employees can supervise other employees.



• **Attributes**, which are represented by ovals. A key attribute is the unique, distinguishing characteristic of the entity. For example, an employee's social security number might be the employee's key attribute.



A multivalued attribute can have more than one value. For

Attribute

example, an employee entity can have multiple skill values.

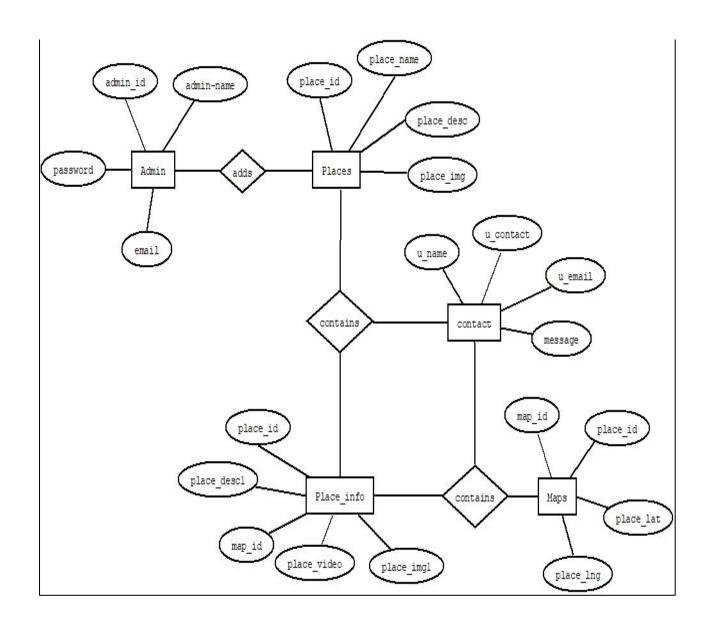
derived attribute is based on another attribute. For example, an employee's monthly



salary is based on the employee's annual salary.

- Connecting lines, solid lines that connect attributes to show the relationships of entities in the diagram.
- Cardinality specifies how many instances of an entity relate to one instance of another entity. Ordinality is also closely linked to cardinality. While cardinality specifies the occurrences of a relationship, ordinality describes the relationship as either mandatory or optional. In other words, cardinality specifies the maximum number of relationships and ordinality specifies the absolute minimum number of relationships.

E-R Diagram:



4.2) UML DIAGRAMS

• Use Case Diagram –

A UML use case diagram is the primary form of system/software requirements for a new software program under developed. Use cases specify the expected behavior (what), and not the exact method of making it happen (how). Use cases once specified can be denoted both textual and visual representation (such as UML). A key concept of use case modeling is that it helps us design a system from end user's perspective. It is an effective technique for communicating system behavior in the user's terms by specifying all externally visible system behavior.

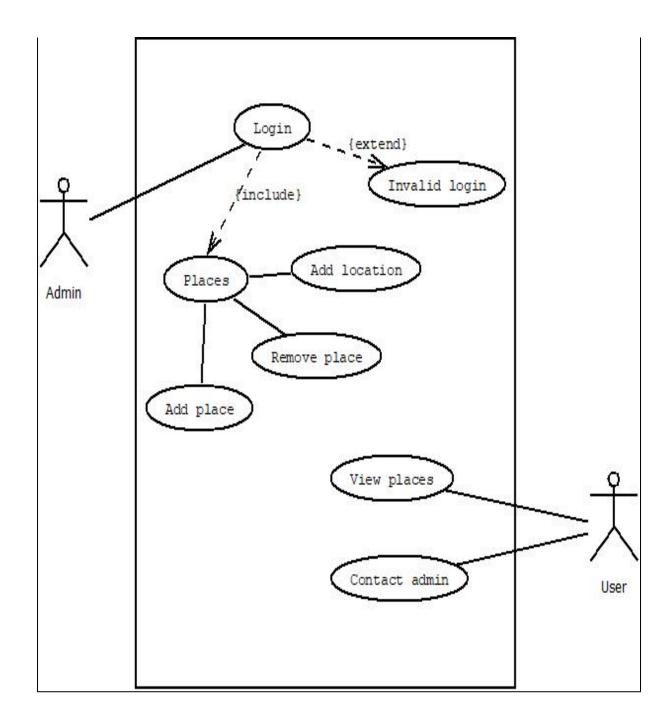
A use case diagram is usually simple. It does not show the detail of the use cases:

- It only summarizes some of the relationships between use cases, actors, and systems.
- It does not show the order in which steps are performed to achieve the goals of each use case.

As said, a use case diagram should be simple and contains only a few shapes. If yours contain more than 20 use cases, you are probably misusing use case diagram.

Use case diagrams are typically develop in early stage of development and people often apply use case modeling for the following purposes:

- Specify the context of a system
- Capture the requirements of a system
- Validate a systems architecture
- Drive implementation and generate test cases
- Developed by analysts together with domain experts



• Statechart Diagram –

A Statechart diagram describes a state machine. State machine can be defined as a machine which defines different states of an object and these states are controlled by external or internal events.

Statechart diagram is one of the five UML diagrams used to model the dynamic nature of a system. They define different states of an object during its lifetime and these states are changed by events. Statechart diagrams are useful to model the reactive systems. Reactive systems can be defined as a system that responds to external or internal events.

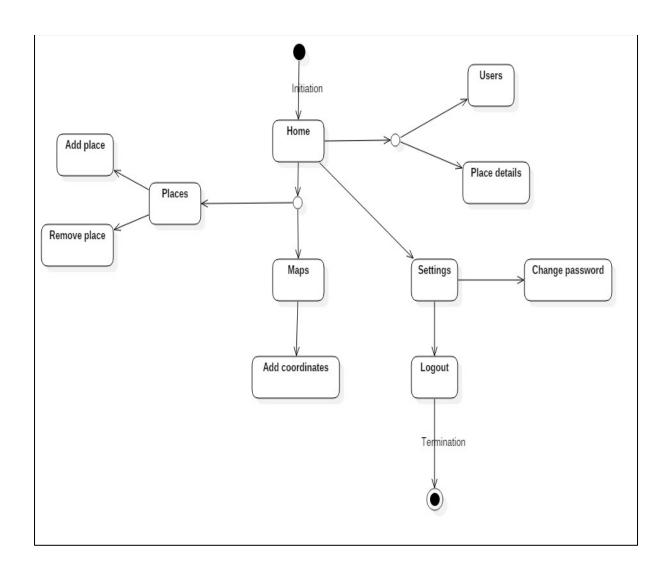
Statechart diagram describes the flow of control from one state to another state. States are defined as a condition in which an object exists and it changes when some event is triggered. The most important purpose of Statechart diagram is to model lifetime of an object from creation to termination.

Statechart diagrams are also used for forward and reverse engineering of a system. However, the main purpose is to model the reactive system.

Following are the main purposes of using Statechart diagrams –

- To model the dynamic aspect of a system.
- To model the life time of a reactive system.
- To describe different states of an object during its life time.
- Define a state machine to model the states of an object.

Statechart diagram -



• Activity Diagram –

An activity diagram visually presents a series of actions or flow of control in a system similar to a flowchart or a data flow diagram. Activity diagrams are often used in business process modeling. They can also describe the steps in a use case diagram. Activities modeled can be sequential and concurrent. In both cases an activity diagram will have a beginning (an initial state) and an end (a final state).

In between there are ways to depict activities, flows, decisions, guards, merge and time events and more. Learn about activity diagram symbols below:

Basic Activity Diagram Notations and Symbols

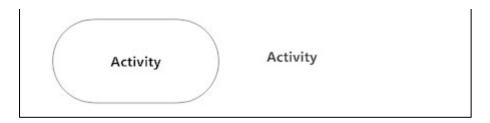
Initial State or Start Point

A small filled circle followed by an arrow represents the initial action state or the start point for any activity diagram. For activity diagram using swimlanes, make sure the start point is placed in the top left corner of the first column.



Activity or Action State

An action state represents the non-interruptible action of objects. You can draw an action state in SmartDraw using a rectangle with rounded corners.



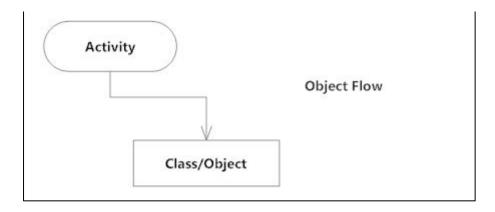
Action Flow

Action flows, also called edges and paths, illustrate the transitions from one action state to another. They are usually drawn with an arrowed line.



Object Flow

Object flow refers to the creation and modification of objects by activities. An object flow arrow from an action to an object means that the action creates or influences the object. An object flow arrow from an object to an action indicates that the action state uses the object.

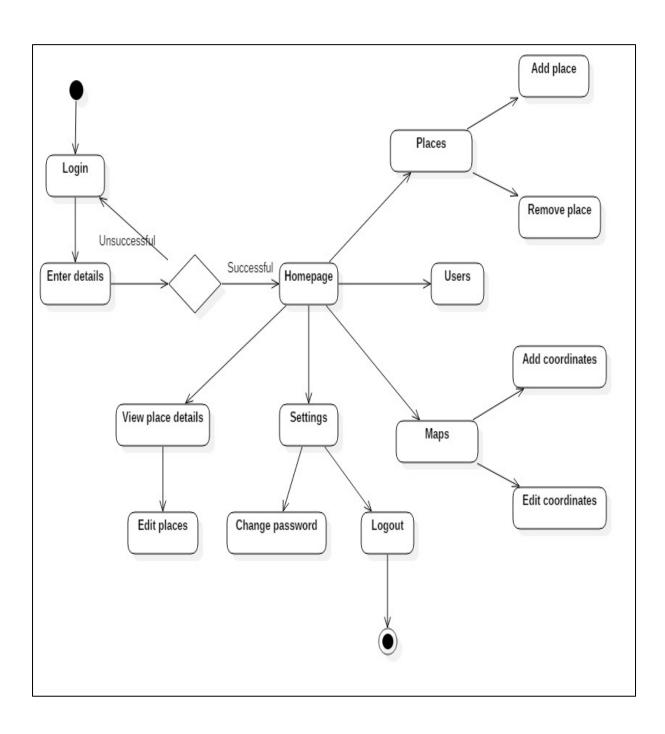


Decisions and Branching

A diamond represents a decision with alternate paths. When an activity requires a decision prior to moving on to the next activity, add a diamond between the two activities. The outgoing alternates should be labeled with a condition or guard expression. You can also label one of the paths "else."



Activity Diagram -



• Sequence Diagram –

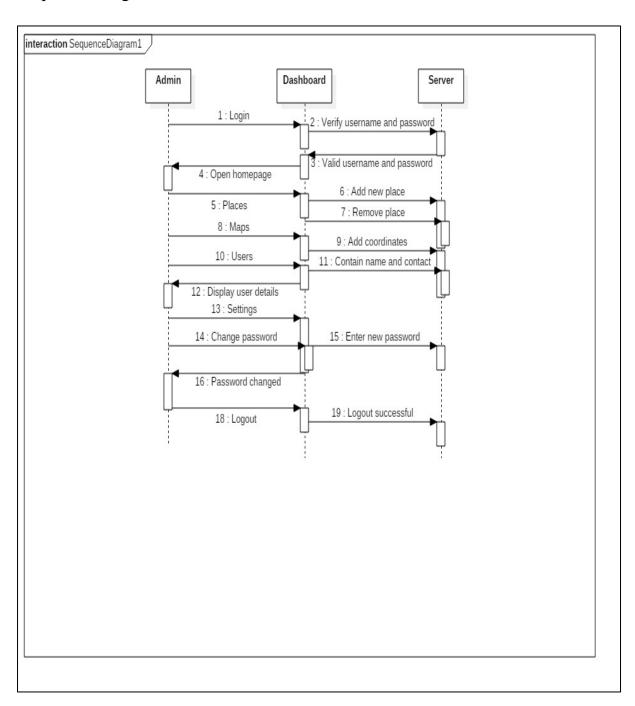
Sequence Diagrams are interaction diagrams that detail how operations are carried out. They capture the interaction between objects in the context of a collaboration. Sequence Diagrams are time focus and they show the order of the interaction visually by using the vertical axis of the diagram to represent time what messages are sent and when.

Sequence Diagrams captures the interaction that takes place in a collaboration that either realizes a use case or an operation and high-level interactions between user of the system and the system, between the system and other systems, or between subsystems.

Purpose of Sequence Diagram

- Model high-level interaction between active objects in a system
- Model the interaction between object instances within a collaboration that realizes a
 use case
- Model the interaction between objects within a collaboration that realizes an operation
- Either model generic interactions (showing all possible paths through the interaction) or specific instances of a interaction (showing just one path through the interaction)

Sequence Diagram –



Chapter 5 Implementation & Testing

5.2) TESTING APPROACH

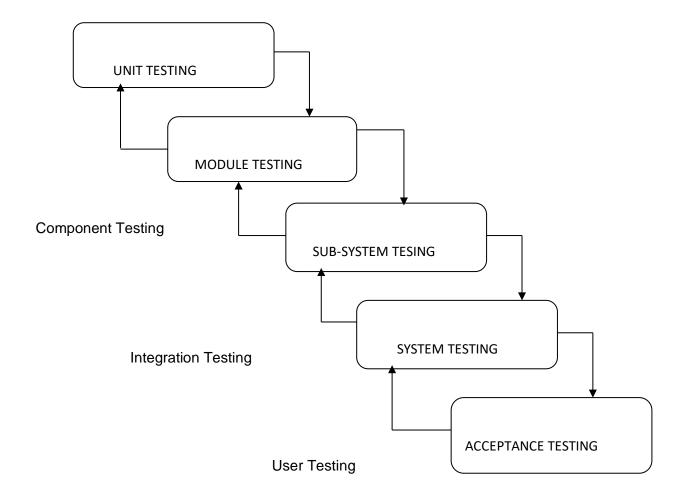
Testing -

Software Testing is an empirical investigation conducted to provide stakeholders with information about the quality of the product or service under test, with respect to the context in which it is intended to operate. Software Testing also provides an objective, independent view of the software to allow the business to appreciate and understand the risks at implementation of the software. Test techniques include, but are not limited to, the process of executing a program or application with the intent of finding software bugs. Software Testing, depending on the testing method employed, can be implemented at any time in the development process, however the most test effort is employed after the requirements have been defined and coding process has been completed.

STRATEGIC APPROACH TO SOFTWARE TESTING -

The software engineering process can be viewed as a spiral. Initially system engineering defines the role of software and leads to software requirement analysis where the information domain, functions, behavior, performance, constraints and validation criteria for software are established. Moving inward along the spiral, we come to design and finally to coding. To develop computer software we spiral in along streamlines that decrease the level of abstraction on each turn.

Testing progress by moving outward along the spiral to integration testing, where the focus is on the design and the construction of the software architecture. Talking another turn on outward on the spiral we encounter validation testing where requirements established as part of software requirements analysis are validated against the software that has been constructed. Finally we arrive at system testing, where the software and other system elements are tested as a whole.



Unit Testing -

The primary goal of unit testing is to take the smallest piece of testable software in the application, isolate it from the remainder of the code, and determine whether it behaves exactly as you expect. Each unit is tested separately before integrating them into modules to test the interfaces between modules. Unit testing has proven its value in that a large percentage of defects are identified during its use.

Unit testing is a software verification and validation method where the programmer gains confidence that individual units of source code are fit for use. A unit is the smallest testable part of an application. In procedural programming a unit may be an individual program, function, procedure, etc., while in object-

oriented programming, the smallest unit is a class, which may belong to a base/super class, abstract class or derived/child class.

Integration Testing -

Integration testing, also known as integration and testing (I&T), is a software development process which program units are combined and tested as groups in multiple ways. Integration testing is a component of Extreme Programming (XP), a pragmatic method of software development that takes a meticulous approach to building a product by means of continual testing and revision.

There are two major ways of carrying out an integration test, called the bottom-up method and the top-down method. Bottom-up integration testing begins with unit testing, followed by tests of progressively higher-level combinations of units called modules or builds. In a comprehensive software development environment, bottom-up testing is usually done first, followed by top-down testing.

Validation testing -

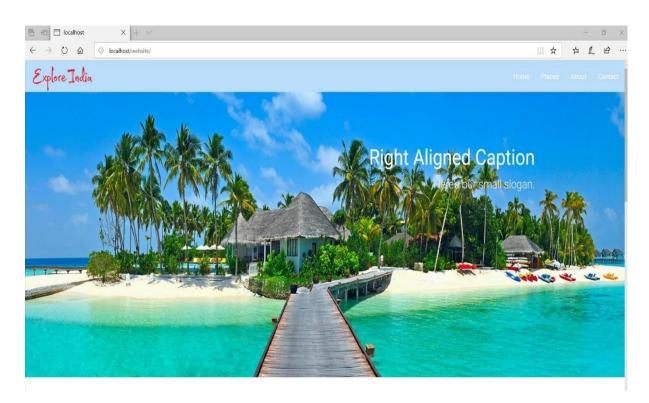
At the validation level, testing focuses on user visible actions and user recognizable output from the system. Validations testing is said to be successful when software functions in a manner that can be reasonably expected by the customer. Two types of validation testing.

- Alpha testing is simulated or actual operational testing by potential users/customers or an independent test team at the developers' site. Alpha testing is often employed for offthe-shelf software as a form of internal acceptance testing, before the software goes to beta testing.
- Beta testing comes after alpha testing. Versions of the software, known as beta version,
 are released to a limited audience outside of the programming team. The software is
 released to groups of people so that further testing can ensure the product has few faults
 or bugs. Sometimes, beta versions are made available to the open public to increase the
 feedback field to a maximal number of future users.
- **Gray box testing** Grey box testing is the combination of black box and white box testing. Intention of this testing is to find out defects related to bad design or bad implementation of the system .it is used for web application.

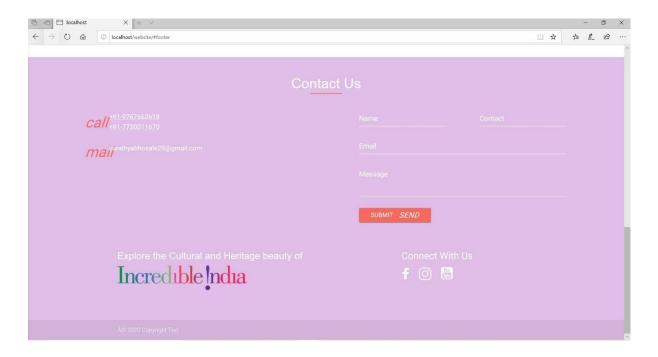
Chapter 6 Results & Discussions

OUTPUT SCREEN

HOMEPAGE

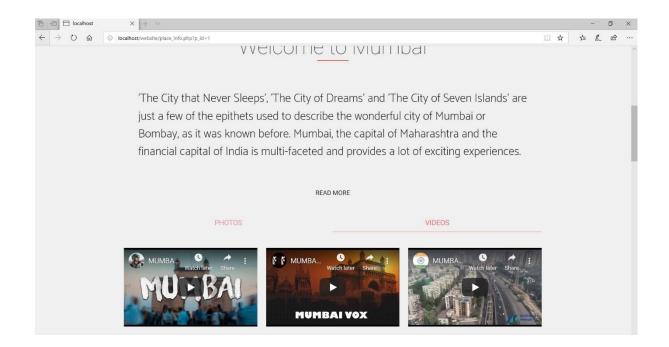


CONTACT



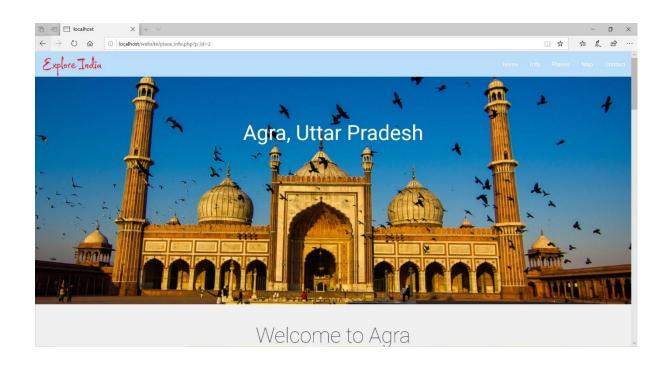
PLACE INFORMATION

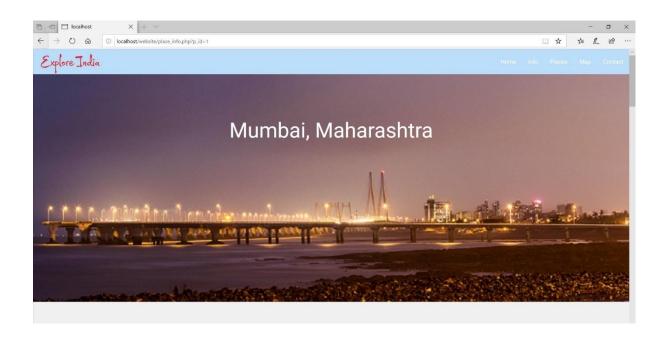


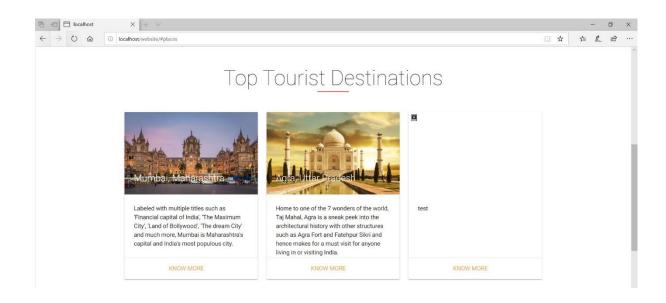












Chapter 7 Future Enhancement

FUTURE ENHANCEMENT

- Users can add reviews for each place based on their experience when they visited there.
- Login and signup page can be added for users.
- Nearby hotels of each place can be shown.
- Information related to the place like weather, best time to visit, nearest railway station and airport, distance from major Indian cities etc. can be added.
- The webpage will contain the link of other tourist websites through which the user can book packages.

Chapter 8 References

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