

ATMIYA UNIVERSITY

RAJKOT



A

Report On

City Guide

Under subject of

PROJECT

B. TECH, Semester – VII
(Computer Engineering)

Submitted by:

1. Arati Modhwadiya

(201002020)

Prof. Janak Maru

(Faculty Guide)

Prof. Tosai M. Bhalodia

(Head of the Department)

Academic Year

(2022-23)

CANDIDATE'S DECLARATION

We hereby declare that the work presented in this project entitled “**City Guide**” submitted towards completion of project in **7th Semester** of B. Tech. (Computer Engineering) is an authentic record of our original work carried out under the guidance of “**Prof. Janak Maru**”.

We have not submitted the matter embodied in this project for the award of any other degree.

Semester: 7th

Place: Rajkot

Signature:

Arati Modhwadiya (201002020)

ATMIYA UNIVERSITY
RAJKOT



CERTIFICATE

Date:

This is to certify that the “**City Guide**” has been carried out by **Arati Modhwadiya** under my guidance in fulfillment of the subject Project in **COMPUTER ENGINEERING (7th Semester)** of Atmiya University, Rajkot during the academic year 2022-23.

Prof. Janak maru

(Project Guide)

Prof. Tosal M. Bhalodia

(Head of the Department)

ACKNOWLEDGEMENT

We have taken many efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. We would like to extend our sincere thanks to all of them.

We are highly indebted to **Prof. Janak Maru** for their guidance and constant supervision as well as for providing necessary information regarding the Project titled “**City Guide**”. We would like to express our gratitude towards staff members of Computer Engineering Department, Atmiya University for their kind co- operation and encouragement which helped us in completion of this project.

We even thank and appreciate to our colleague in developing the project and people who have willingly helped us out with their abilities.

Arati Modhwadiya (201002020)

ABSTRACT

The main objectives of this website to know the package related to the trip and journey with best facility and current offer. Searching will be very easy. At a single click will be able to fetch the required data. Nowadays, there are multiple travel packages existing from the various websites to approximately all the locations over the world. This project will assist travelers to recommend the best Travel Package among all the packages relevant information such as image, hotel facility, transport facility and description about the places where they want to visit.

INDEX

Sr. No.	Title	Page No.
	Acknowledgement	II
	Abstract	III
	List of Figures	VI
	List of Tables	VII
1.	Introduction	8
1.1	Purpose	8
1.2	Scope	8
1.3	Technology and tool	8
2.	Project Management	10
2.1	Project Planning	10
2.1.1	Project Development Approach and Justification	10
2.1.2	Milestones and Deliverables	11
2.1.3	Roles and Responsibilities	11
2.1.4	Group Dependencies:	11
2.2	Project Scheduling	12
2.3	Risk Management	12
2.3.1	Risk Identification	12
2.3.2	Risk Analysis	13
3.	System Requirements Study	14
3.1	User Characteristics	14
3.2	Hardware and Software Requirements	14
3.2.1	Server-side hardware requirement	14
3.2.2	Software requirement	14
3.2.3	Client-Side requirement	15

4	System Analysis	16
4.1	Study of Current System	16
4.2	Problem and Weakness of Current System	16
5	System Design	17
5.1	System Design	17
5.1.1	Home Screen	17
5.1.2	Admin Login	17
5.2	Interface Design	18
5.2.1	Activity Diagram	18
5.2.1.1	Admin Activity Diagram	18
5.2.1.2	User Activity Diagram	19
5.2.2	UseCase Diagram	20
5.2.3	Data Flow Diagram	21
5.2.3.1	0Level DFD	21
5.2.3.2	1 Level DFD	21
6	Testing	22
6.1	Testing Plan	22
6.1.1	Design Testing	22
6.1.2	Implementation Testing	22
6.1.3	Coding Testing	22
6.2	Testing Strategy	22
6.3	Testing Method	23
6.3.1	Unit Testing	23
6.3.2	Integration Testing	24
6.3.3	Validation Testing	24
7	Conclusion	25
8	Limitations and Future Enhancement	26
8.1	Limitations	26
8.2	Future Enhancement	26
9	References	27

LIST OF FIGURES

Figure	Table Title	Page
5.1.1	Home Screen	17
5.1.2	Admin Login	17
5.2.1.1	Admin Activity Diagram	18
5.2.1.2	User Activity Diagram	19
5.2.2	Use Case Diagram	20
5.2.3.1	DFD Level 0	21
5.2.3.2	DFD Level 1	21

LIST OF TABLES

Table No.	Table Title	Page No.
3.2.1	Hardware Requirements	14
3.2.2	Software Requirements	14

CHAPTER – 1

INTRODUCTION

- **PURPOSE**

City Guide is an web will help in maintaining the operations performed related to sight-seeing and travelling. Most of the people in this world like to travel from one place to another no matter whether it is a small or large distance. Some people like to travel by train, flight, bus or by any other means of transport. The City Guide is designed for the travel agency in which there is an option of doing the railway or air ticket reservation in order to reach the intended destination. Booking of tickets will be done with a great ease and without any difficulty. This will be one of the interesting projects that one can work on and implement in real time world. The user interface must be simple and easy to understand.

- **SCOPE**

Scope of this project is very wide, any user can use this platform for tour guidance, especially for foreign user who wish to travel in our cities.

- **TECHNOLOGY AND TOOLS**

Frontend: Technologies used for designing the structure and layout of the web application.

- 1. HTML:**

- The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

- 2. CSS:**

- Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.

3. PHP:

- PHP (Hypertext Preprocessor) is known as a general-purpose scripting language that can be used to develop dynamic and interactive websites. It was among the first server-side languages that could be embedded into HTML, making it easier to add functionality to web pages without needing to call external files for data.

4. MySql:

- MySQL is an open-source relational database management system. Its name is a combination of "My", the name of co-founder Michael Widenius's daughter My, and "SQL", the abbreviation for Structured Query Language.

CHAPTER - 2

PROJECT MANAGEMENT

2.1 PROJECT PLANNING

Project Planning is concerned with identifying and measuring the activities, milestones and deliverables produced by the project. Project planning is undertaken and completed sometimes even before any development activity starts. Project planning consists of following essential activities:

- Scheduling manpower and other resources needed to develop the system.
- Staff organization and staffing plans.
- Risk identification, analysis, and accurate planning.
- Estimating some of the basic attributes of the project like cost, duration and efforts. the effectiveness of the subsequent planning activities is based on the accuracy of these estimations. Miscellaneous plans like quality assurance plan, configuration management plan, etc.

Project management involves planning, monitoring and control of the people, process, and the events that occurs as the software evolves from a preliminary concept to an operational implementation. Cost estimation is a relative activity that is concerned with the resources required to accomplish the project plan.

2.1.1 Project Development Approach and Justification

A Software process model is a simplified abstract representation of a software process, which is presented from a particular perspective. A process model for software engineering is chosen based on the nature of the project and application, the methods and tools to be used, and the controls and deliverables that are required. All software development can be characterized as a problem-solving loop which in four distinct stages is encountered:

- Requirement analysis
- Design
- Coding
- Testing
- Deployment

2.1.2 Milestones and Deliverables

Management needs information. As software is tangible, this information can only be provided as documents that describe the state of the software being developed without this information it is impossible to judge progress at different phases and therefore schedules cannot be determined or updated.

Milestone is an end point of the software process activity. At each milestone there should be formal output such as report that can be represented to the management. Milestones are the completion of the outputs for each activity. Deliverables are the requirements definition and the requirements specification.

Milestone represents the end of the distinct, logical stage in the project. Milestone may be internal project results that are used by the project manager to check progress. Deliverables are usually Milestones but reverse need not be true. We have divided the software process into activities for the following milestone that should be achieved.

2.1.3 Roles and Responsibilities

This phase defines the role and responsibilities of each and every member involved in developing the system. To develop this system there was only one group with two members working on the whole application. Each member was responsible for each and every part of developing the system. Each of the group members has sufficient knowledge in several programming languages. Our team structure is of mixed control team organization as it consists of both democratic and chief programmer organization.

2.1.4 Group Dependencies

The structure chosen for the system is the chief programmer structure. In this system, Chief Programmer team for the structure is used because in the organization, a senior engineer provides the technical leadership and is designated as the chief programmer. The chief programmer partitions the task into small activities and assign them to the team members. He also verifies and integrates the products developed by different team members and they work under the constant supervision of the chief programmer. For this system reporting entity represents myself and the role of chief programmer is played by my internal guide.

2.2 PROJECT SCHEDULING

The scheduling is the peak of a planning activity, a primary component of software project management. When combined with estimation methods and risk analysis, scheduling establishes a roadmap for project management. The characteristics of the project are used to adapt an appropriate task set for doing work.

2.3 RISK MANAGEMENT

Risk management consists of a series of steps that help a software development team to understand and manage uncertain problems that may arise during the course of software development and can plague a software project. Risks are the dangerous conditions or potential problems for the system which may damage the system functionalities to very high level which would not be acceptable at any cost. So, in order to make our system stable and give its 100% performance we must have identify those risks, analyze their occurrences and effects on our system and must prevent them to occur.

2.3.1 Risk Identification

Risk identification is a first systematic attempt to specify risks to project plan, scheduling resources, project development. It may be carried out as a team process using brainstorming approach.

Technology risk: Technical risks concern implementation, potential design, interfacing, testing, and maintenance problems

- Database Corruptness
- Garbage Collection

People Risks: These risks are concerns with the team and its members who are taking part in developing the system.

- Leaking an important data
- Failure of the administration
- Lack of knowledge
- Lack of clear product vision.
- Technical staff conflict
- Poor communication between people.

Tools Risks: These are more concerned with tools used to develop the system

- Tools containing bugs.
- Lack of tools.

General Risks: General Risks are the risks, which are concerned with the mentality and resources.

- Rapidly changing requirements.
- Lack of resources can cause great harm to efficiency and timely productivity.
- Changes in requirements can cause a great harm to implementation, designing and schedule of developing the system.
- Insufficient planning and task identification.

2.3.2 Risk Analysis

“Risk analysis = risk assessment + risk management + risk communication.”

Risk analysis is employed in its broadest sense to include:

Risk assessment

Involves identifying sources of potential harm, assessing the likelihood that harm will occur and the consequences if harm does occur.

For this project It might be: -

- System Crash

Risk management

Evaluates which risks identified in the risk assessment process require management and selects and implements the plans or actions that are required to ensure that those risks are controlled.

Precautions taken to make risks minimal are as under: -

- Periodical backups are taken to avoid major loss in case of system crash.

Risk communication

Involves an interactive dialogue between stakeholders and risk assessors and risk managers which actively informs the other processes.

Steps taken for risk communication is as under: -

- All the possible risks are listed out during communication and project is developed taking care of that risks.
- Probability of certain risks is negotiated with client.

CHAPTER – 3

SYSTEM REQUIREMENT STUDY

3.1 USER CHARACTERISTICS

1. User
 - Create profile
 - Manage Profile
 - Book hotel ticket
 - Book travel tickets
 - View city Information

3.2 HARDWARE AND SOFTWARE REQUIREMENT SPECIFICATION

This shows minimum requirements to carry on to run this system efficiently.

3.2.1 Hardware Requirements

Table 3.2.1.1 Backend Hardware Requirements

Devices	Description
Processor	Intel Core Duo 2.0 or higher
RAM	512 MB or more
ROM	10 GB or more

3.2.2 Software Requirements

Table 3.2.2.1 Software Requirements

For What	Software
Operating System	Windows 7/8/10, Linux
Server	NGINX or Apache Server
Backend	PHP,MySql

3.2.3 Client-Side Requirements

Table 3.2.3.1 Client-Side Requirements for Web App

For What	Requirement
Browser	Any compatible browser

CHAPTER – 4

SYSTEM ANALYSIS

4.1 STUDY OF CURRENT SYSTEM

In the present system, a customer has to approach various agencies to find details of places and to book tickets. This often requires a lot of time and effort. A customer may not get the desired information from these offices and often the customer may be misguided. It is tedious for a customer to plan a particular journey and have it executed properly.

4.2 PROBLEMS AND WEAKNESS OF CURRENT SYSTEM

- All work consider manually.
- In Manual Booking System Customer has to go to the Travelling office.
- Ask enquiry for Travelling then Book ticket Finally Paid Payment & Collect Receipt.
- Difficult To Maintain the Customer Details of Package and Payment Receipt in Register.
- They Register Tour Package in the notebook.
- Add advertisement in Local newspaper or Local Market.
- Use Travelling Facility For the Limited Area or Person.

Chapter – 5

5.1 System Design:

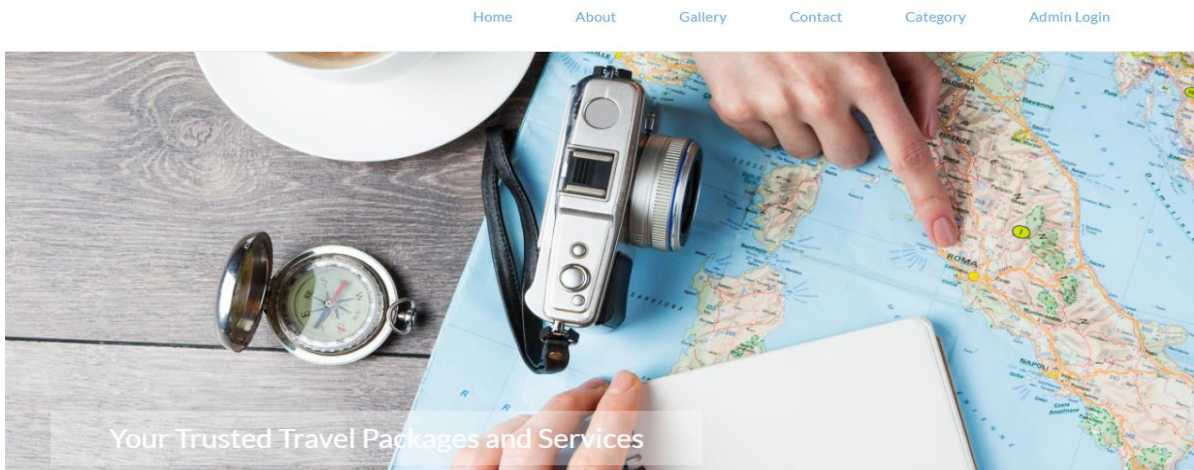


Figure 5.1.1 Home Screen

A screenshot of an admin login form. The form is contained within a white box with a blue header bar at the top. It features two input fields: "User Name" and "Password", each with a corresponding text label to its left. Below the input fields is a "LOGIN" button. The entire form is set against a light blue background.

Figure 5.1.2 Admin Login

5.2 INTERFACE DESIGN

5.2.1 Activity Diagram

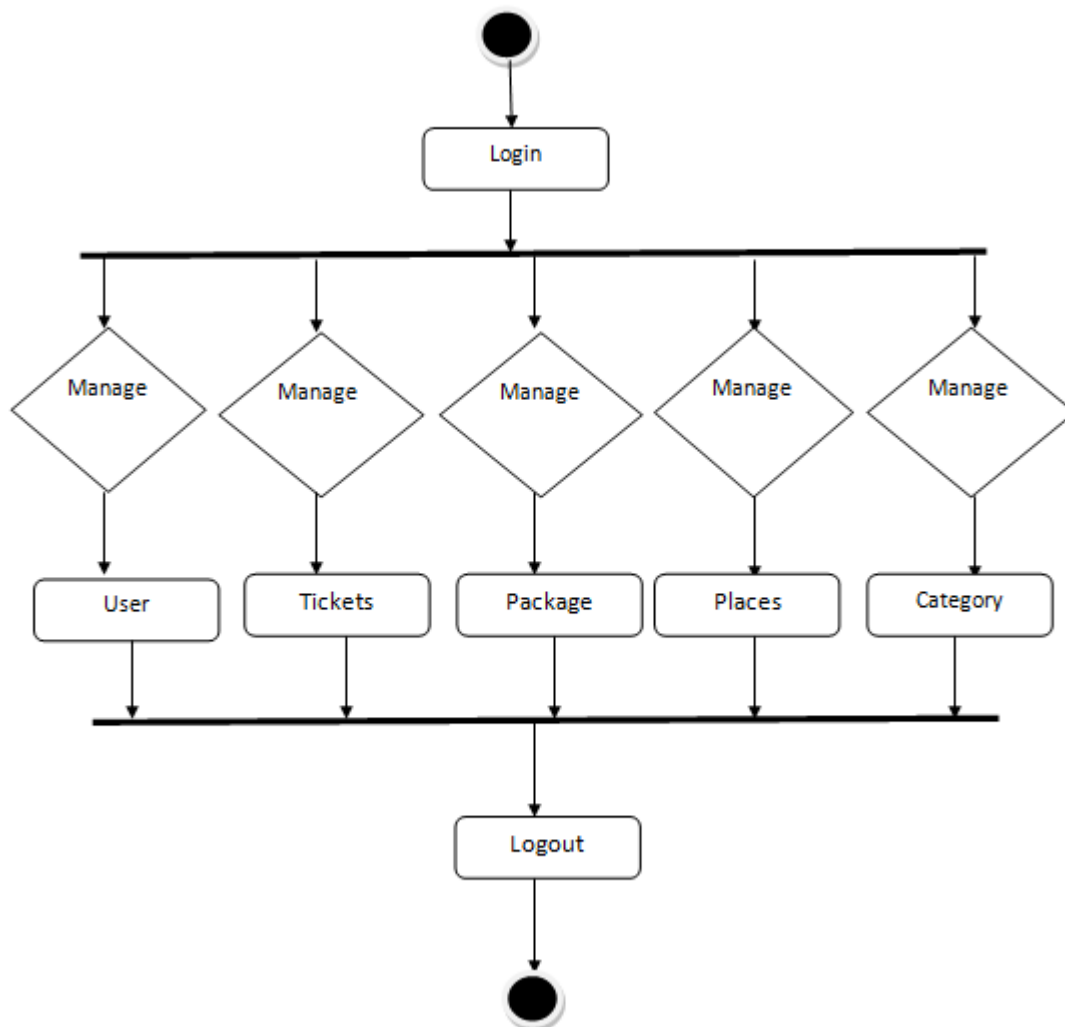


Figure 5.2.1.1Admin Activity Diagram

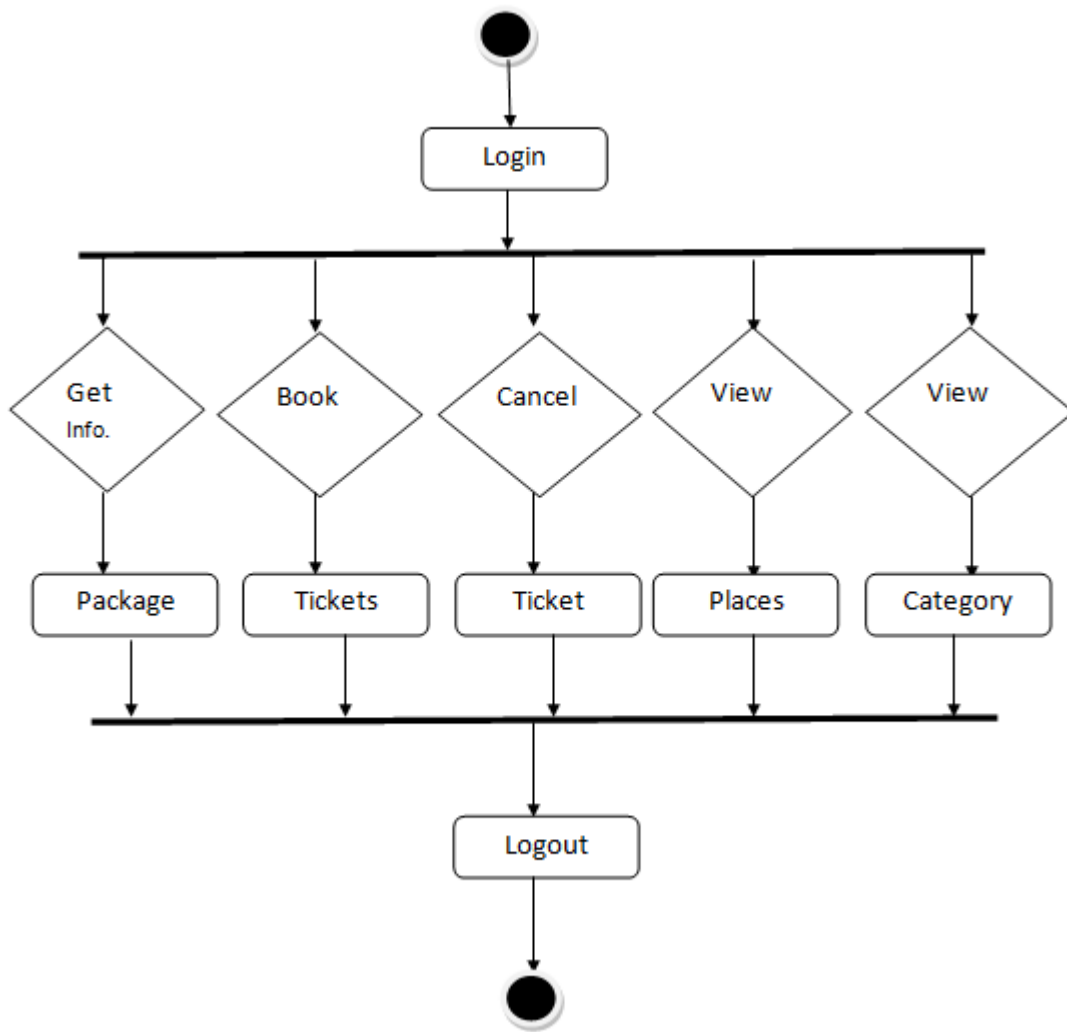


Figure 5.2.1.2 User Activity Diagram

5.2.2 Use Case Diagram

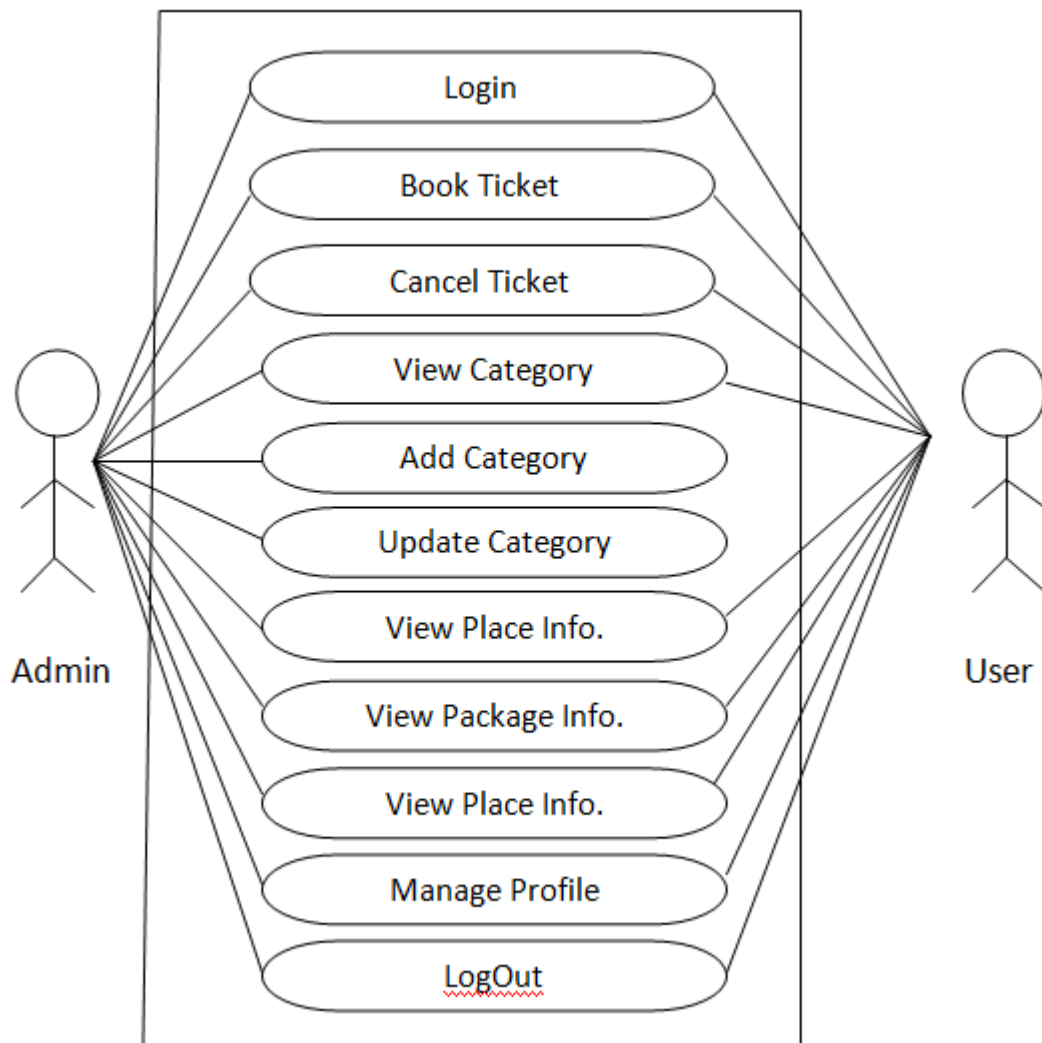


Figure 5.2.2 Use Case Diagram

5.2.3 Data Flow Diagram

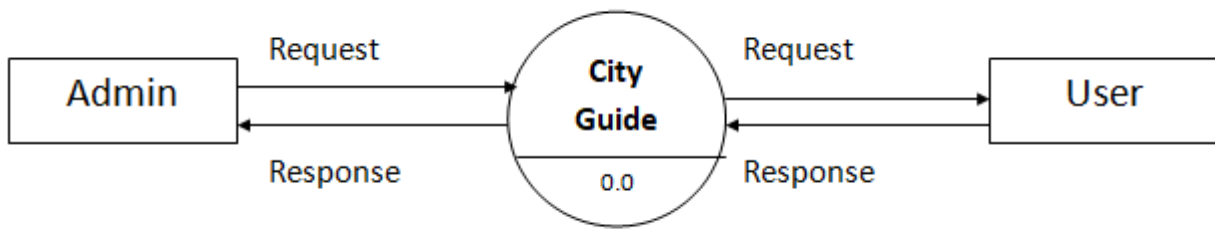


Figure 5.2.1 DFD Level 0

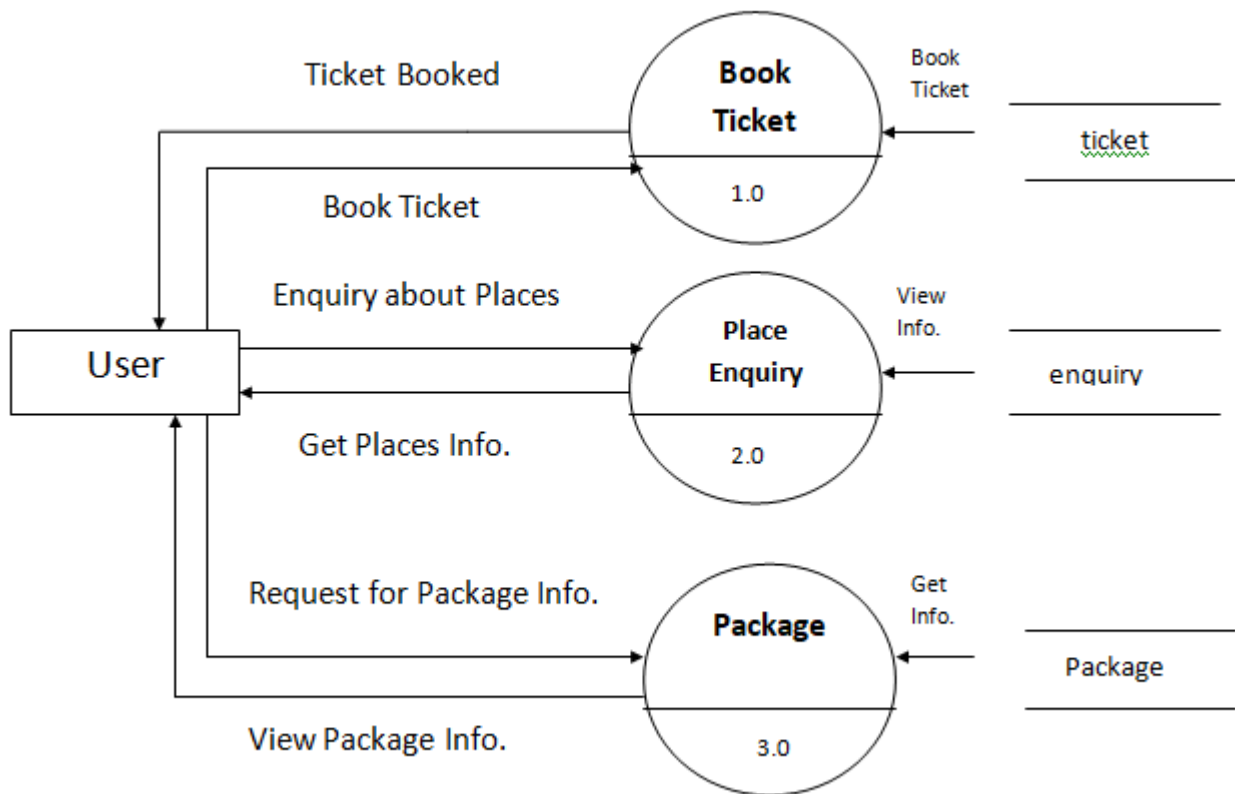


Figure 5.3.2 DFD Level 1

CHAPTER-6

TESTING

Various parameters like implementation environment, program modules and coding standards are explained in previous chapter while this chapter is aimed to provide brief account of testing the software.

There are two principal motives of testing the software

1. To rectify the error in execution
2. To check the viability of software

The testing ensures that the software is according to the required specification standards and performs the task meant for it.

7.1 TESTING PLAN

Testing is carried out at the following three stages:

6.1.1 Design Testing:

The design errors are to be rectified at the initial stage. Such errors are very difficult to repair after the execution of software.

6.1.2 Implementation Testing:

The errors occurred at this stage can't be overlooked because such errors do not allow the further process.

6.1.3 Coding Testing:

The coding procedure plays significant role in software designing. The improper coding of any software can generate inconsistent results. Such errors may occur due to incorrect syntax or false logic. If the errors at coding stage remain unnoticed may give rise to grave failure of the system.

6.2 TESTING STRATEGY

A strategy for software testing integrates software test case design method into a well-planned series of steps that result in the successful construction of the software. The strategy provides the roadmap that describes the steps to be conducted as a part of testing, then these steps are planned and then undertaken, and how much effort, time and resource will be required.

- We have tested our whole system using bottom up testing strategy.
- Bottom up testing involves integrating and testing the modules to the lower levels in the hierarchy, and then working up hierarchy of modules until the final module is tested.
- Bottom up testing strategy shows how actual testing is to be done with whole system but it does not show any detail about each module testing.
- For each module testing we have decided to test each lower level module with white box testing strategy.
- When all modules are tested successfully then We will move to one step up and continue with white box testing strategy.

Why White Box Testing in my Project?

During the project we were making the applications, we knew how it should proceed internally; we needed to Debugging also for testing our small functions and removing bugs.

Why interface Testing in our Project?

We examined the code to be tested and explicitly list each call to an external component. In the system, standards test for GUIs have been performed, which are as follows.

- Name of the form in system is given appropriately.
- All navigation functions were verified for correctness.
- Validations for all inputs in forms were done.
- Whether the system prompts the user with appropriate message as and when invalid information is entered.
- All required fields aren't left blank.

6.3 TESTING METHOD

6.3.1 Unit Testing

The unit testing is meant for testing smallest unit of software. There are two approaches namely bottom-up and top-down.

In bottom up approach the last module is tested and then moving towards the first module while top down approach reverses the action. In present work we opt for the first one.

The bottom up approach for the current project is carried out as shown in.

6.3.2 Integration Testing

The integration testing is meant to test all the modules simultaneously because it is possible that all the modules may function correctly when tested individually. But they may not work altogether and may lead to unexpected outcome.

6.3.3 Validation Testing

After the integration testing software is completely assembled as a package, interfacing error have been uncovered and corrected, and then validation testing may begin. Validation can be defined in many ways but a simple definition is what a validation succeeds when software functions in a manner that can be reasonably accepted by the user.

CHAPTER – 7

CONCLUSION

City Guide is a website that can provide the users with the required tourism guidance required anytime and anywhere. This is a combination of smartphone and Internet services. The tour management website contributes a reasonable way for the users to schedule their trips, since it provides detailed information about the tourist places including description, image and map. This method includes various features/services such as delivering customized packages, online ticket booking, etc.

CHAPTER – 8

LIMITATIONS AND FUTURE ENHANCEMENTS

• LIMITATIONS

Though we tried our best in developing this system but as limitations are mere parts of any system so are of our system. Some limitations of our project are:

- **Low Storage Capacity:** Due to low storage capacity we limited our web to only accept file attachments that are very small in size.
- **Lack of testing machine:** Due to lack of a Mac we were not able to test our web on browsers like Safari and make it more optimized and user friendly.

• FUTURE ENHANCEMENT

- In the future it will be enhanced by providing City Guide System for multiple cities on our websites.
- In future, we will give facility of online donation.
- We will include more functionality as per user require.
- Multiple package can be booked by one customer at a time.
- Updated feature should be enhanced for all modules.
- Not a single website is ever considered as complete forever firstly because there is always something new requirement also growing day by day.
- More facilities will be enhanced in this project, such as:
- Online payment option.
- Create Manual package by need of customers

CHAPTER – 9

REFERENCES

Websites:

- www.geeksforgeeks.com
- www.learn-php.org
- www.codecademy.com