

A Project Report
On
Exploria – Online Tourist Attraction Booking System

Submitted in partial fulfilment of the requirements for the award of degree of
Bachelor of Computer Application (BCA Science)

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Ashutosh Dash

&

Anand Desai

1. ABSTRACT

The main objective of Exploria – Online Tourist Attraction Booking System is to develop software which helps tourists to book the tickets for the tourist attractions that they want to visit. The website provides an interactive GUI for the tourists to have a look on the most popular tourist attractions present in the major cities of India. They are also provided with a small information about the places and a photo gallery. It also enables them to get a guide from our end to guide them throughout the visit.

The system is a website that can be accessed and effectively used throughout the organization with proper login enabled. This system can be used as an application for the tourist to book tickets for the tourist attractions. It intends to help fast in fast access procedures in booking related activities and ensures to maintain the details of the customers. The tourists can visit the website to look for popular tourist attractions. The customer plays an important role in our project. Our project provides the facility of maintaining the details of the bookings and gets the requested list of tourist attractions.

Manual system requires a lot of manpower and time. With this project we aim to develop a web portal to solve this issue. Although such a project has a wide scope, this project contains the most important part i.e., booking tickets for popular tourist attractions online. It reduces manual work and consumes less time.

2. INTRODUCTION

2.1 MOTIVATION

Computer and information technology has a major influence on the society and the society is becoming more and more dependent on the technology. Going on is an era of simplifying almost all complicated works using computers. The last few years have witnessed a tremendous increase in the capabilities and use of computers. Manual processing makes the process slow and other problems such as inconsistency and ambiguity on operations. Proposed system intends user-friendly operations which may resolve ambiguity. At those ticket counters of the popular tourist places, people always have to stand in long queues which take a significant amount of time to get the tickets. This, not only results in wastage of time, but also takes the fun out of visiting there. So, Exploria helps us bringing this tedious task online so as to save time and energy.

2.2 PROBLEM STATEMENT

In present times, whenever tourists go to a tourist attraction, they first need to get the tickets in order to get in. For that, one has to be in a long queue outside the ticket counter. In the popular tourist attractions, where over 1 lakh tourists visit daily, it is a tedious and tiring task to stand in such long queues. Not only one's time gets wasted, but also one tends to lose interest in visiting that place anymore. This situation gets worse in case extreme weather conditions like summer or winter. It also does not provide one any guarantee of availability of tickets. Due to this, some people who directly go there come back empty-handed due to the long queues.

Additionally, it is also difficult for the tourists to get one good guide who can give accurate historical information. Due to the overcrowding of tourist in the popular tourist spots, one cannot easily find a guide.

2.3 PURPOSE/OBJECTIVES/GOALS:

Exploria provides an online medium to book tickets for popular tourist attractions of India by eliminating the need to stand in long queues, where there is no guarantee for availability of tickets. It enables people to make bookings beforehand to avoid any last moment hassles, thereby reducing the manual work. It will save time and energy which can be utilized in enjoying the visits to those tourist attractions. It also provides the customer the ability to get an authorized guide from our end beforehand, who will receive them on arrival and will be with them throughout the visit to provide historical, architectural and other information related to the particular tourist attraction.

Objectives of the project are:-

1. The main objective of Exploria is to reduce manual work and time.
2. It is difficult and time-consuming to stand in long queues for buying tickets. To avoid this problem we have planned to develop an online tourist attraction booking system.
3. To develop a website for tourists/customers which will provide a medium to book tickets online.
4. To make website which is much faster, easier at the same time avoiding conflicts.
5. To make the task of booking tickets easier which is also tiring as they have to stand in long queues taking up a lot of time.

2.4 PROJECT SCOPE AND LIMITATIONS:

- **PROJECT SCOPE -**

The project has a wide scope. Our project mainly helps in improving productivity and makes use of utilization of resources. Thus, it saves time and energy. The system intends user friendly operations which may uplift the user experience. The project is an online booking system, which provides ability to book tickets of tourist attractions online.

Our system also helps the customers to overcome the difficulty in standing in long queues. It helps in effective and timely utilization of time. The project facilitates user friendly, reliable and fast booking system. The customer himself/herself can carry out operations in a smooth and effective manner.

- **PROJECT LIMITATION -**

When customer looks for tourist attractions, he/she can only look for one city, and can make a booking for just one city.

3. SYSTEM ANALYSIS:

3.1 EXISTING SYSTEM:

In the tourist attractions, there exists a ticket counter like any other public place where one has to buy tickets to enter. In case of popular monuments like the Lotus Temple, one has to get in a queue which often is very long, to get to the counter. Assuming that the user has reached during the noon, he/she has to suffer in that broad daylight. During the peak hours, the situation gets even worse.

The earlier system is not computerized. All transactions in the system are done manually. To make this laborious job simple there was a need to computerize the system. Standing in queues, with no guarantee, to get the tickets turned out to be a tedious task. So, the best way is computerize. Computerization of the current environment. For example, in the earlier system, a ticket distributor sat in the ticket booth to give the tickets and the tourist had to pay directly on the counter. Then, he/she had to look for guides too to help them throughout the visit of the particular tourist attraction.

3.2 SCOPE AND LIMITATION OF EXISTING SYSTEM:

It takes so much time for a tourist to collect tickets, pay for them and also getting a guide. Poor management of crowd may also lead to wastage of time and energy. It will create frustration among the tourist who come with a great mood but, in the end go back with a bad mood.

6.

❖ LIMITATIONS IN EXISTING SYSTEM -

- Maximum manual work: Tourists have to stand in long queues.
- Errors: Sometimes, due to lack of transparency.
- Time consuming: Due to the overcrowding of some popular tourist spots.
- Energy consuming: Since, it's a tiring and tedious task.
- Spoils the mood: Probably, because most of the time is spent to find proper local guides.
- Lack of ease: No other option than standing in queues for getting tickets.

3.3 PROJECT PERSPECTIVE, FEATURES, STAKEHOLDERS:

3.3.1 PROJECT PERSPECTIVE -

The main objective of Exploria is to reduce manual work and time. It is difficult and time-consuming to stand in queues for getting tickets. To avoid this problem, we have planned to develop a web-based tourist attraction booking system.

Easy to book tickets at home.

Easy payment process, thanks to the online modes of payment like UPI, Credit Card, etc.

Saves the time of tourists.

Save energy of the tourists.

This process is transparent to customers.

3.3.2 FEATURES OF THE PROJECT -

1. Customer registration for each booking.
2. Choice of cities to visit.
3. Choice of famous tourist spots in each cities to visit.
4. Online method to book.
5. A quick information about each tourist spot available.
6. Easy to select tourist spots of choice.
7. Easy to arrange for a guide as well.
8. Transparency related to online payments.
9. Choice in mode of payment.
10. Security in data registration and online payment.
11. Saving of time of tourists/customers.
12. Ability to avoid standing in long queues.

3.3.3 STAKEHOLDERS -

1. Admin
2. Student
3. Recruiter

3.4 REQUIREMENT ANALYSIS:

Requirement analysis is the process of defining what the user requires from the system and defining the requirements clearly and in an unambiguous state. The outcome of the requirement analysis is the software developing activities. Thus, it deals with understanding the problem goals and constraints. This specification part mainly focuses on what had been found during analysis. A requirement is a relatively short and concise piece of information, expressed as a fact. It can be written as a sentence or can be expressed using some kind of diagram. Requirements are divided into two major types functional and nonfunctional.

3.4.1: FUNCTIONAL ANALYSIS -

We are overcoming the difficulty of buying tickets to popular tourist attractions, which were manual in the current system and here we have an online method for the same. Following is a list of functionalities of the system. More functionality that you find appropriate can be added to this list. And, in places where the description of functionality is not adequate, you can make appropriate assumptions and proceed.

- What inputs the system should accept.
- What outputs the system should produce.
- What data the system must store.

Inputs:

The employees handle the entire system. The role of employee in the system is to access the information like customer information, booking information, transaction information etc.,

Requirement Specification:

Complete specification of the system (with appropriate assumptions) constitutes this milestone. A document detailing the same should be written and a presentation on that be made.

Database Creation:

A database should be created, as per the rules for the purpose of maintenance of the records.

Implementation of the Front-End:

Implementation of the main screen giving the registration screen that follows the homepage giving various options to look for, are provided.

Integrating the Front-End with the Database:

The front-end developed in the earlier milestone will now be able to provide choices to customer to book. The data obtained is registered in the database successfully.

Processing:

As the system is a service-oriented project and there are certain calculations which take place like total amount to be made.

Storage Data: In this, we store all the details of customers, bookings made, transactions made, guides and tourist attractions.

Outputs: The project provides tickets to customers.

3.4.2: PERFORMANCE ANALYSIS -

- The completely separate business logic at server side from the user interface ensures good performance.
- The system exhibits high performance because it is well optimized. The business logic is already separate from the UI.
- We get the response within a few seconds.

3.4.3: SECURITY ANALYSIS -

The proposed system is secure enough due to the following aspects-

1. Only the authorized users can make bookings.
2. One customer cannot view details of bookings made by others.
3. One customer cannot view details of another customer.

4. SYSTEM DESIGN:

4.1 DESIGN CONSTRAINTS:

- COHESION:

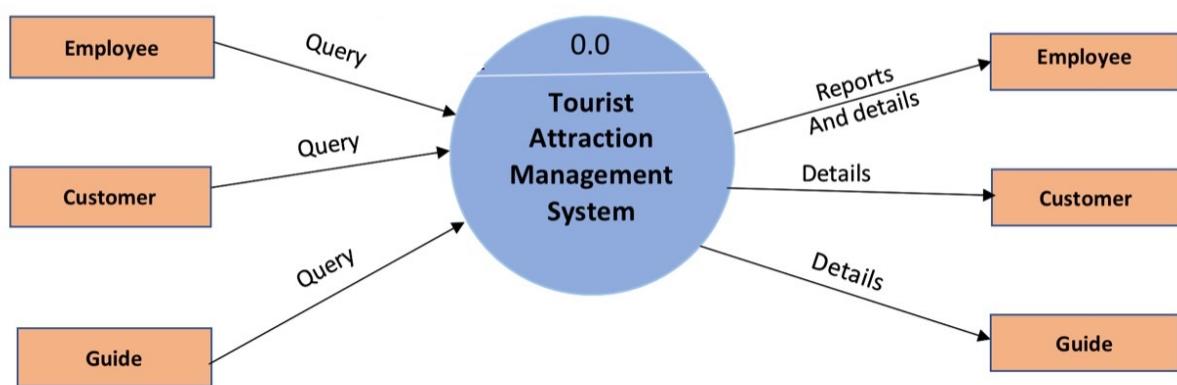
Cohesion refers to the degree to which the elements inside the module belong together. In Exploria, we have three modules Customer module, Guide module and Employee module. In this if we talk about the customer module, then the customer module has various objects that contribute to the module:

- 1) Registration: If the customer wants to register for making a booking then, this option is available in the customer module.
- 2) Select tourist spots of choice: If the customer wants to choose tourist spots of his/her choice then, this option is available in the customer module.
- 3) Select mode of payment: If the customer wants to select a mode of payment then, this option is available in the customer module.
- 4) Book a guide: If the student wants to book a guide for assistance then, he/she can check the history.

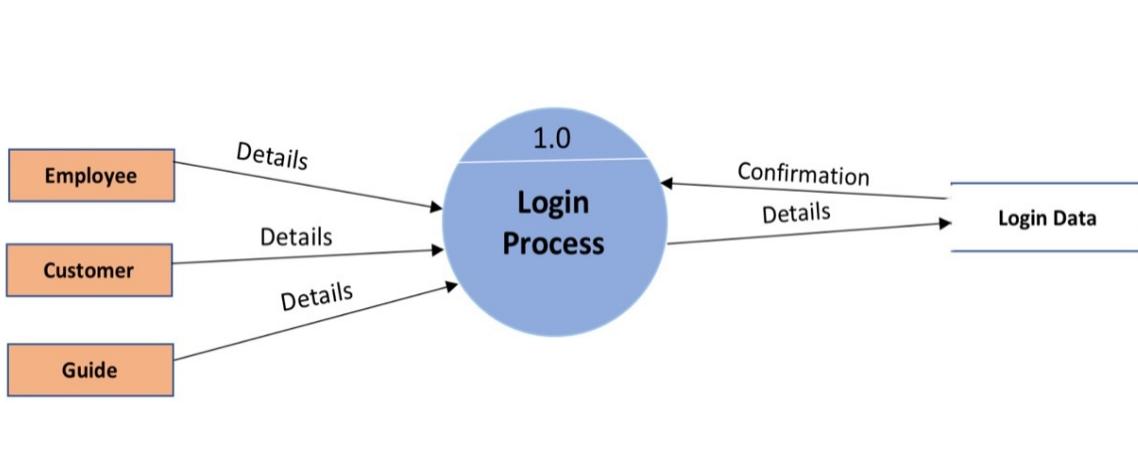
4.2 SYSTEM MODEL:

4.2.1 DATA FLOW DIAGRAM:

- CONTEXT LEVEL DIAGRAM -

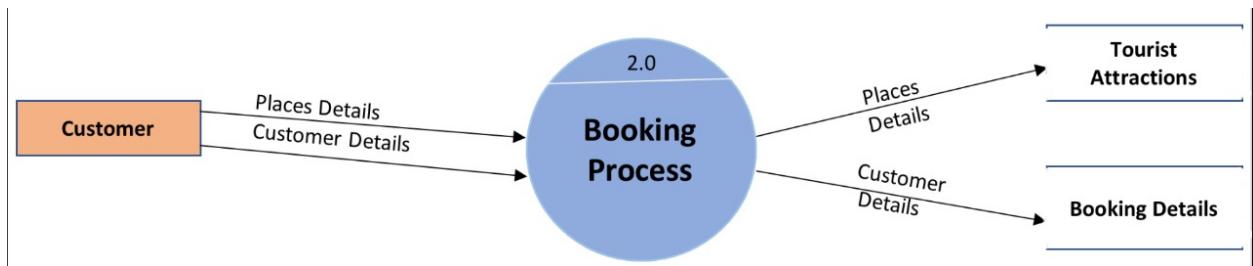


- FIRST LEVEL DFD -

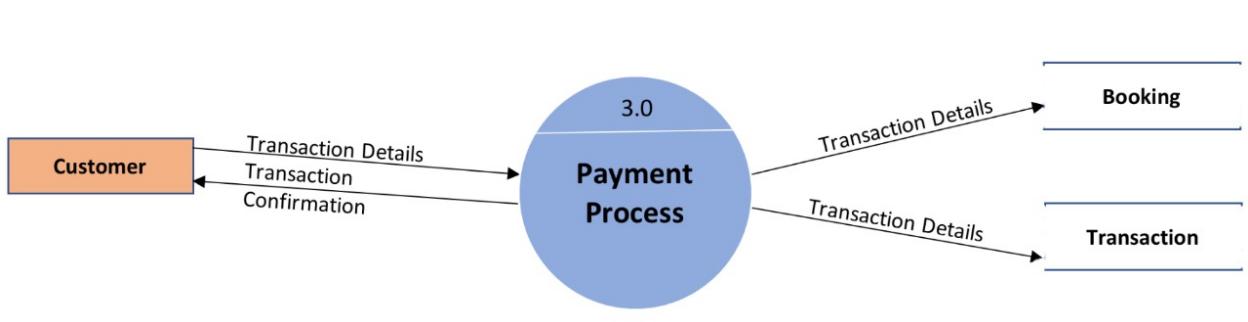


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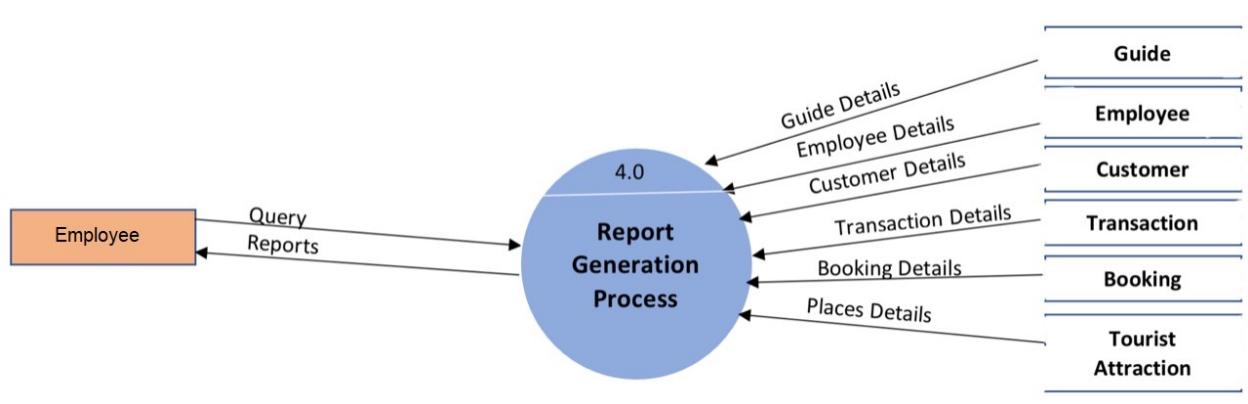
- SECOND LEVEL DFD-



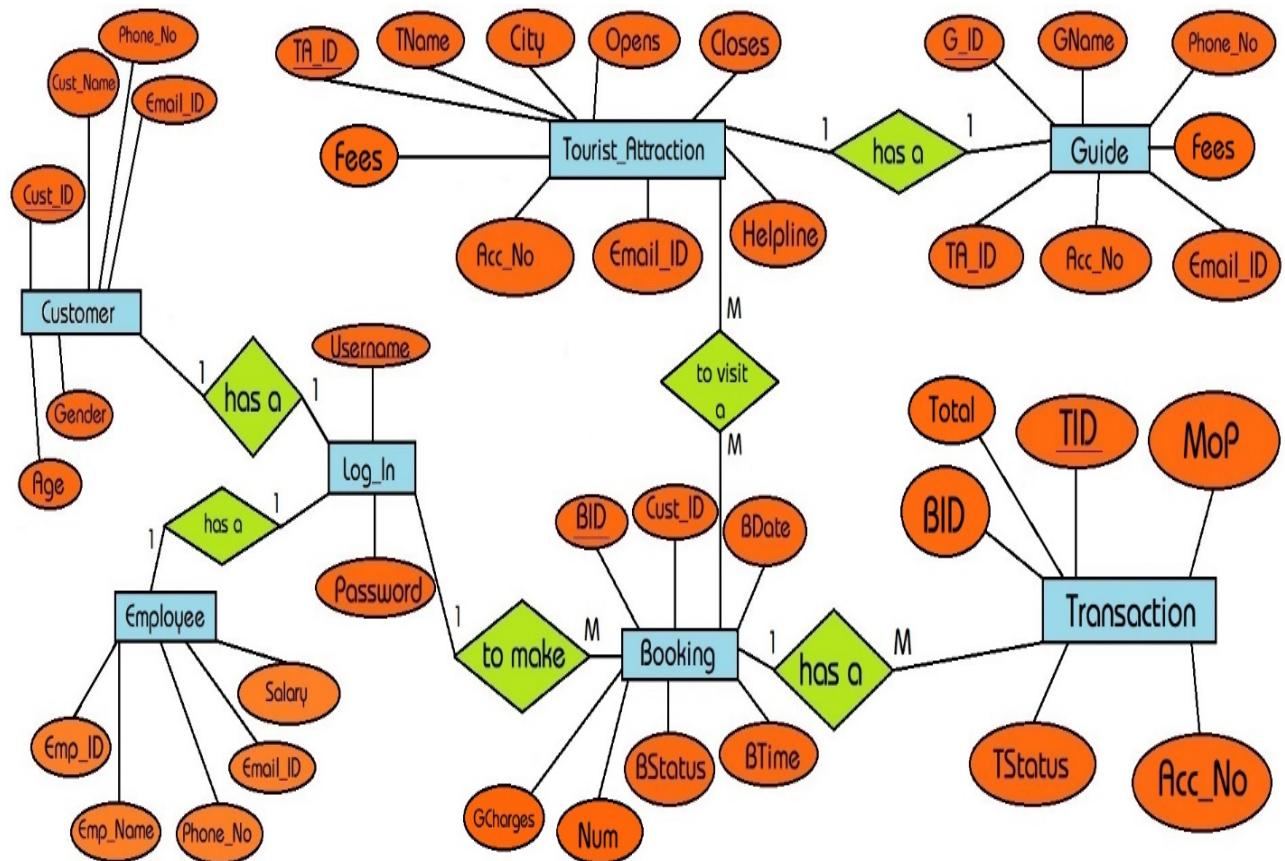
- THIRD LEVEL DFD -



- FOURTH LEVEL DFD -



4.2.2 DATA MODEL / ERD DIAGRAM:



4.2.3 DATABASE AND DATA DICTIONARY: -

◆ DATABASE -

Table name: Customer

Sr.no	Fields name	Datatype	Width	Constraint
1	Cust_ID	int	10	primary key
2	Cust_Name	char	30	not null
3	Phone_No	char	10	unique key
4	Email_ID	varchar	40	unique key
5	Gender	char	6	not null
6	Age	int	2	not null

Table name: Booking

Sr.no	Field name	Datatype	Width	Constraint
1	BID	int	9	primary key
2	Cust_ID	int	10	foreign key
3	BDate	varchar	10	-----
4	BTime	varchar	10	-----
5	BStatus	char	20	default
6	Num	int	3	-----
7	GCharges	int	5	default

Table name: Tourist_Attraction

Sr.no	Field name	Datatype	Width	Constraint
1	TA_ID	int	10	primary key
2	TName	char	20	not null
3	City	char	10	not null
4	Opens	time	--	not null
5	Closes	time	--	not null
6	Acc_No	int	10	unique
7	Email_ID	varchar	40	unique
8	Helpline	char	10	unique
9	Fees	int	5	default

Table name: bt

Sr.no	Field name	Datatype	Width	Constraint
1	BID	int	9	foreign key
2	TA_ID	int	10	foreign key

Table name: Employee

Sr.no	Fields name	Datatype	Width	Constraint
1	Emp_ID	int	6	primary key
2	Emp_Name	char	30	not null
3	Phone_No	char	10	unique key
4	Email_ID	varchar	40	unique key
5	Salary	float	10,2	not null

Table name: Guide

Sr.no	Field name	Datatype	Width	Constraint
1	GID	int	5	Primary key
2	GName	char	30	Not null
3	Phone No	char	10	Unique
4	Email ID	varchar	40	Unique
5	TA ID	int	10	Foreign key
6	Acc No	int	10	Unique
7	Fees	int	5	Default

Table name: Transaction

Sr.no	Field name	Datatype	Width	Constraint
1	TID	int	8	Primary key
2	MoP	char	10	-----
3	TStatus	char	20	Default
4	Acc No	int	10	-----
5	BID	int	9	Foreign key
6	Total	int	10	-----

Table name: Log_In

Sr.no	Field name	Datatype	Width	Constraint
1	Username	varchar	40	Primary key
2	Password	varchar	15	Not null

◆ DATA DICTIONARY: -

SR. NO	FIELDS NAME	DATA TYPE	WIDTH	CONSTRAINT	TABLE NAME	DATA DESCRIPTION
1	Cust ID	int	10	primary key	Customer	Customer ID
2	Cust Name	char	30	not null	Customer	Customer Name
3	Phone No	char	10	unique key	Customer	Phone Number
4	Email ID	varchar	40	unique key	Customer	Customer Email
5	Gender	char	6	not null	Customer	Customer Gender
6	Age	int	2	not null	Customer	Customer Age
7	BID	int	9	primary key	Booking	Booking ID
8	Cust ID	int	10	foreign key	Booking	Customer ID
9	BDate	varchar	10	-----	Booking	Booking for Date
10	BTime	varchar	10	-----	Booking	Booking for Time
11	BStatus	char	20	Default	Booking	Booking Status
12	Num	int	3	-----	Booking	No. of Tourists
13	GCharges	int	5	default	Booking	Guide Charges
14	TA ID	int	10	primary key	Tourist Attraction	Attraction ID
15	TName	char	20	not null	Tourist_Attraction	Attraction Name
16	City	char	10	not null	Tourist Attraction	City
17	Opens	time	--	not null	Tourist Attraction	Opening Time
18	Closes	time	--	not null	Tourist Attraction	Closing Time
19	Acc No	int	10	unique	Tourist Attraction	Account No.
20	Email_ID	varchar	40	unique	Tourist_Attraction	Attraction Email
21	Helpline	char	10	unique	Tourist Attraction	Helpline No.
22	Fees	int	5	default	Tourist Attraction	Attraction Fees
23	BID	int	9	foreign key	bt	Booking ID
24	TA ID	int	10	foreign key	bt	Attraction ID
25	Emp ID	int	6	primary key	Employee	Employee ID
26	Emp Name	char	30	not null	Employee	Employee Name
27	Phone No	char	10	unique key	Employee	Employee Phone
28	Email ID	varchar	40	unique key	Employee	Employee Email

29	Salary	float	10,2	not null	Employee	Employee Salary
30	GID	int	5	Primary key	Guide	Guide ID
31	GName	char	30	Not null	Guide	Guide Name
32	Phone No	char	10	Unique	Guide	Guide Phone
33	Email ID	varchar	40	Unique	Guide	Guide Email
34	TA ID	int	10	Foreign key	Guide	Attraction ID
35	Acc No	int	10	Unique	Guide	Guide Account
36	Fees	int	5	Default	Guide	Guide Fees
37	TID	int	8	Primary key	Transaction	Transaction ID
38	MoP	char	10	-----	Transaction	Mode of Payment
39	TStatus	char	20	Default	Transaction	Transaction Status
40	Acc No	int	10	-----	Transaction	Account Number
41	BID	int	9	Foreign key	Transaction	Booking ID
42	Total	int	10	-----	Transaction	Total Charges
43	Username	varchar	40	Primary key	Log_In	Username
44	Password	varchar	15	Not null	Log_In	Password

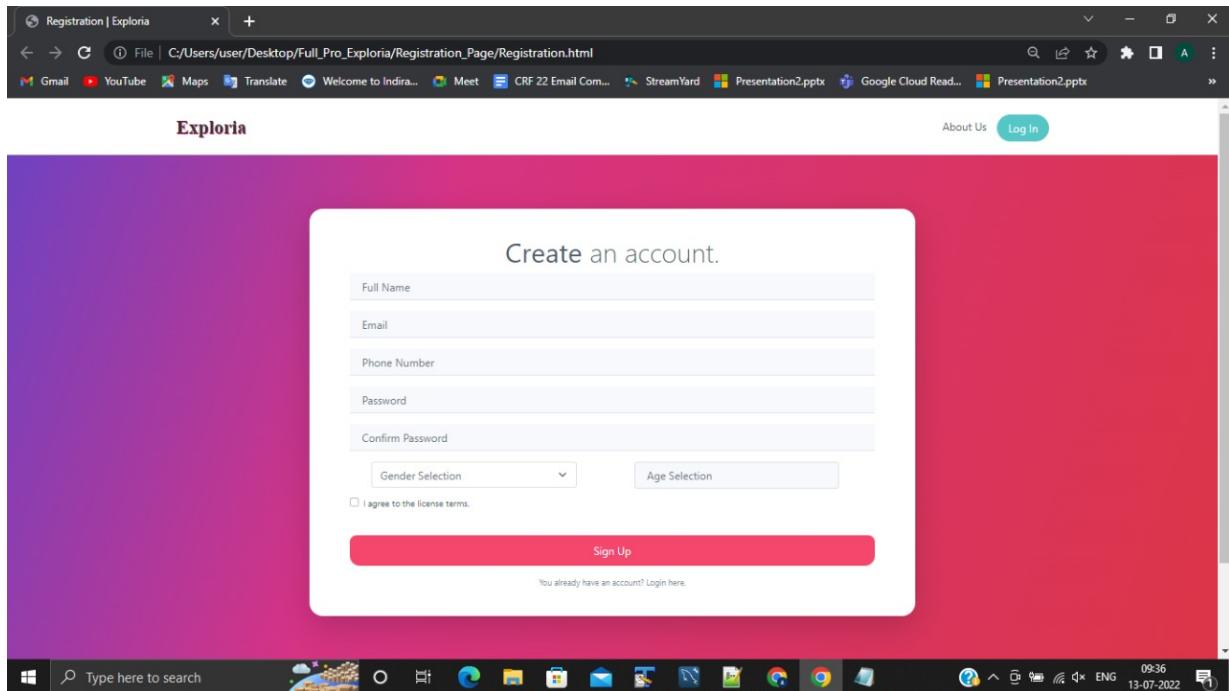
4.3 USER INTERFACE:

The user interface is based on the web browser. The application is developed using jsp and html along with CSS. The interface design is aimed at a flexible front-end communication to provide the user with clear information in navigating a user-friendly interface is planned.

- INPUT AND OUTPUT SCREENS –

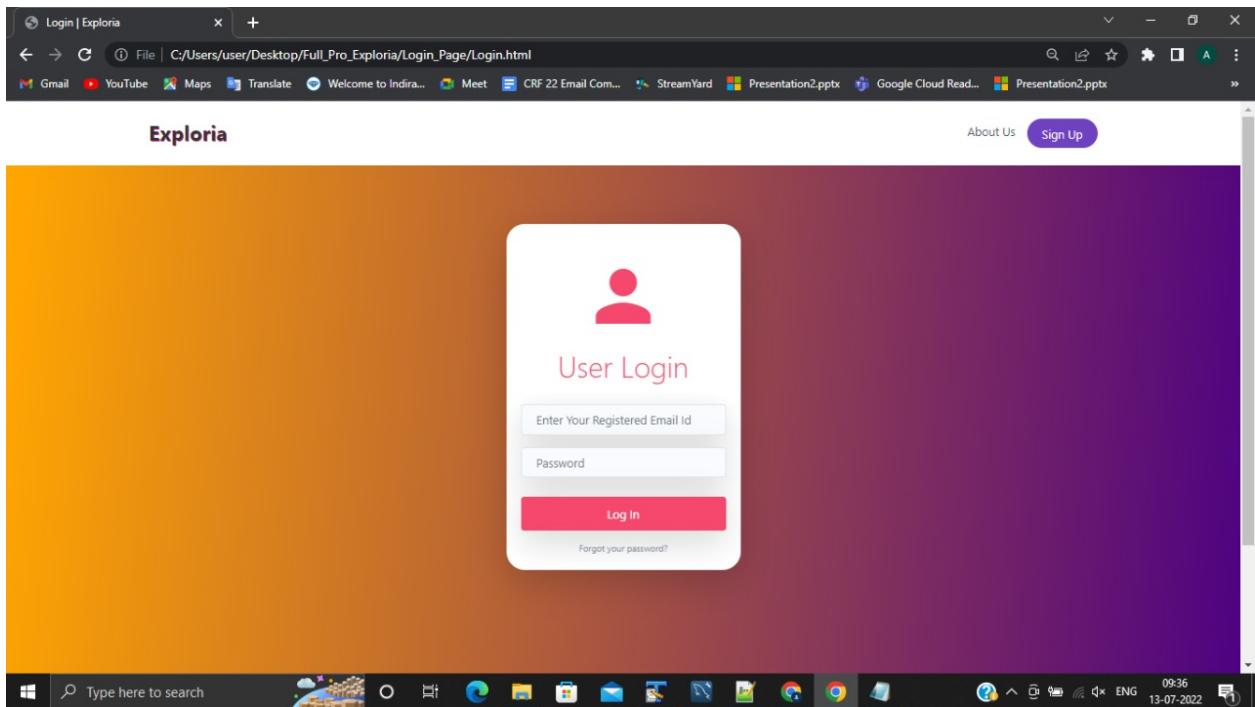
A. Customer Module:

Customer Registration –

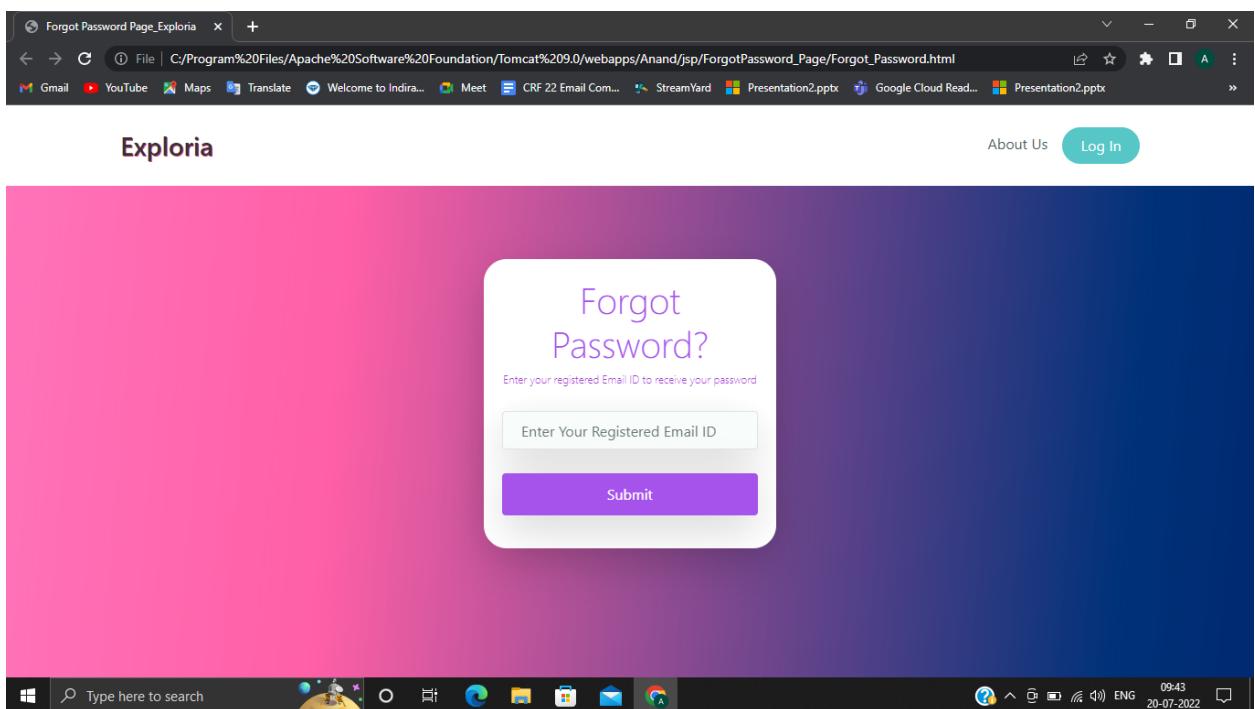


20.

Customer Login –

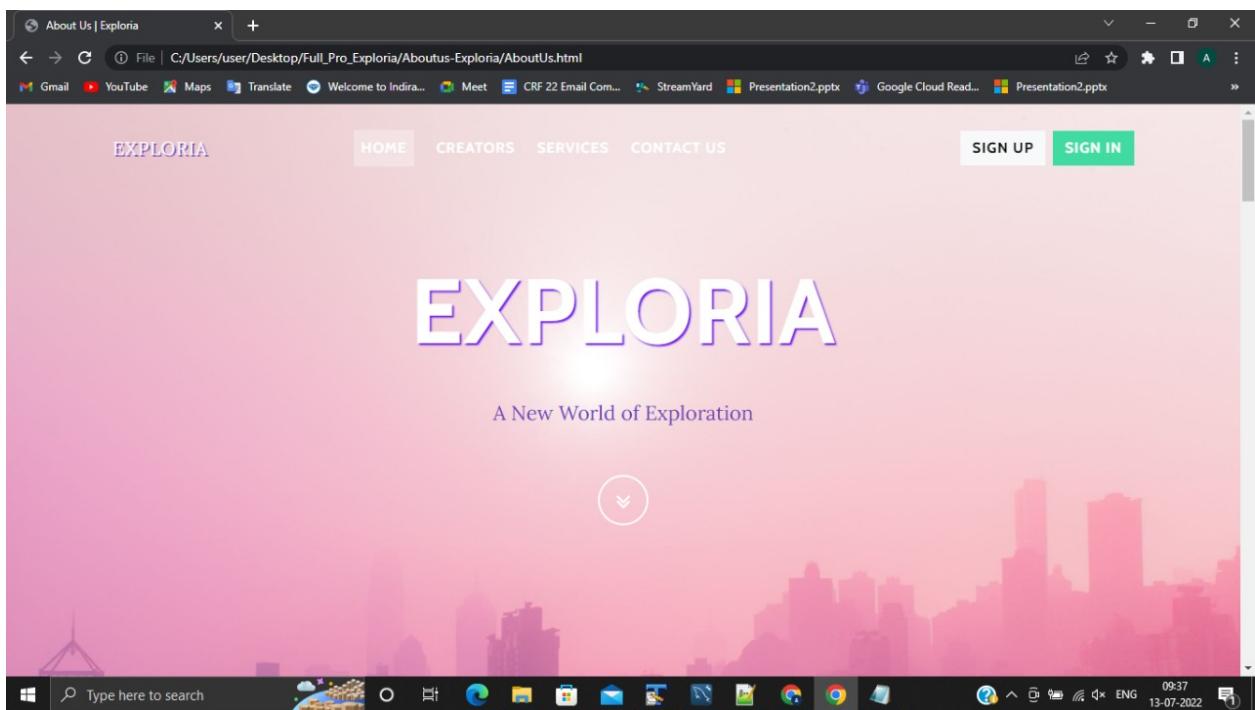


Customer Forgot Password -

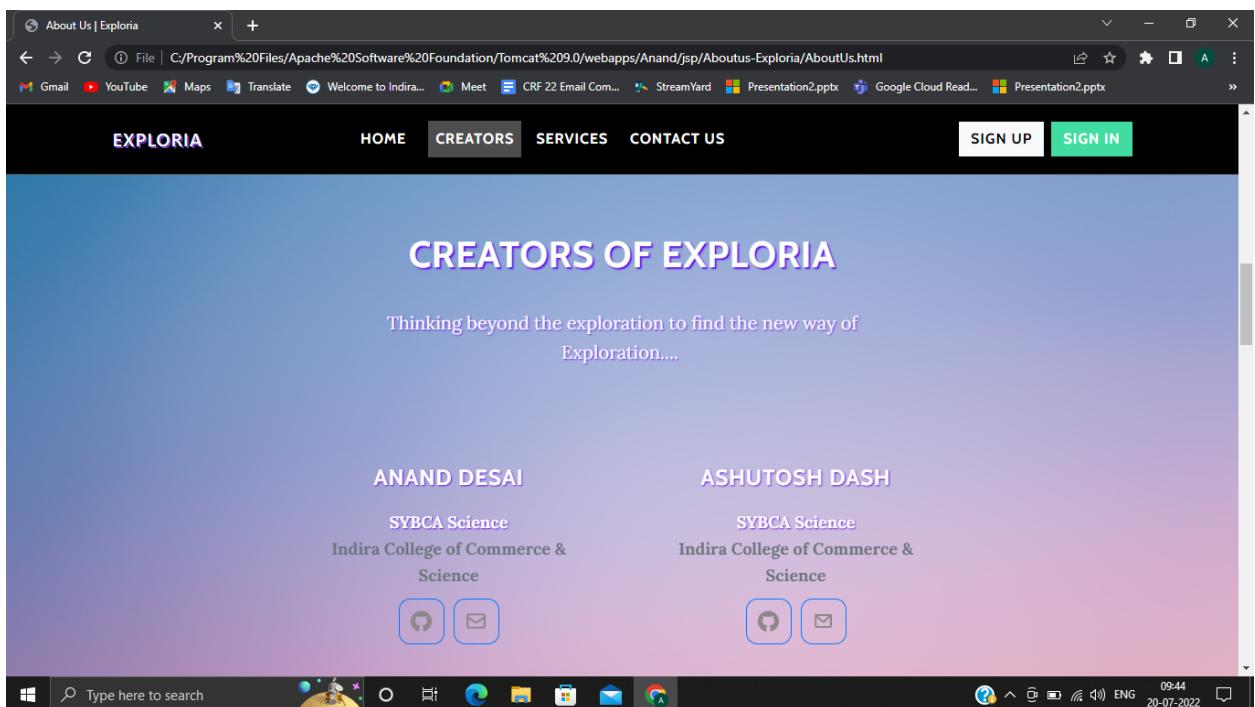


21.

Main Home -

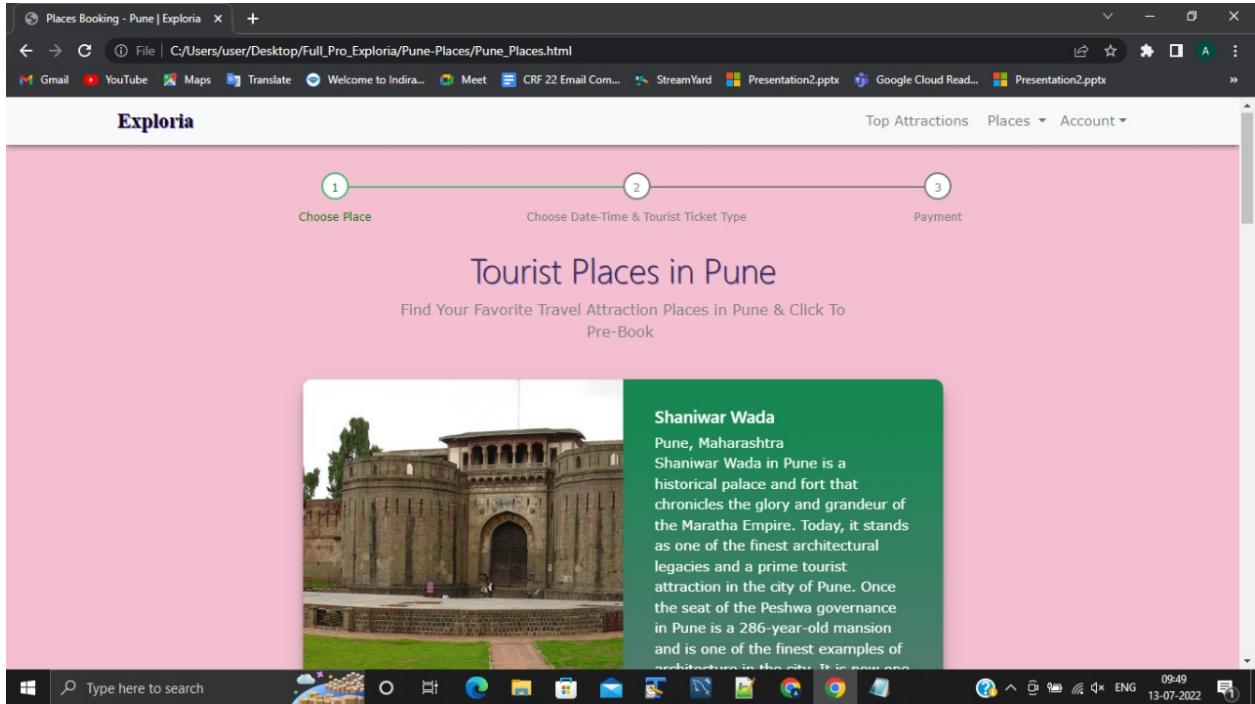


About Us -

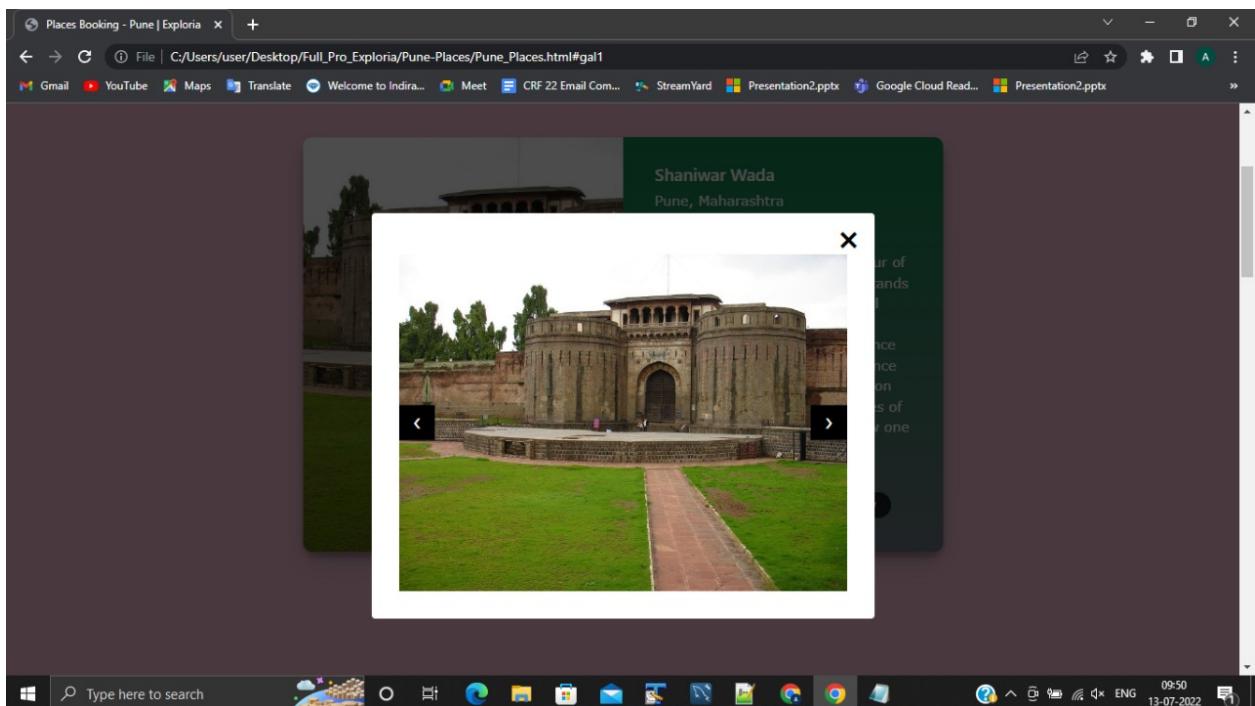


22.

Pune City –

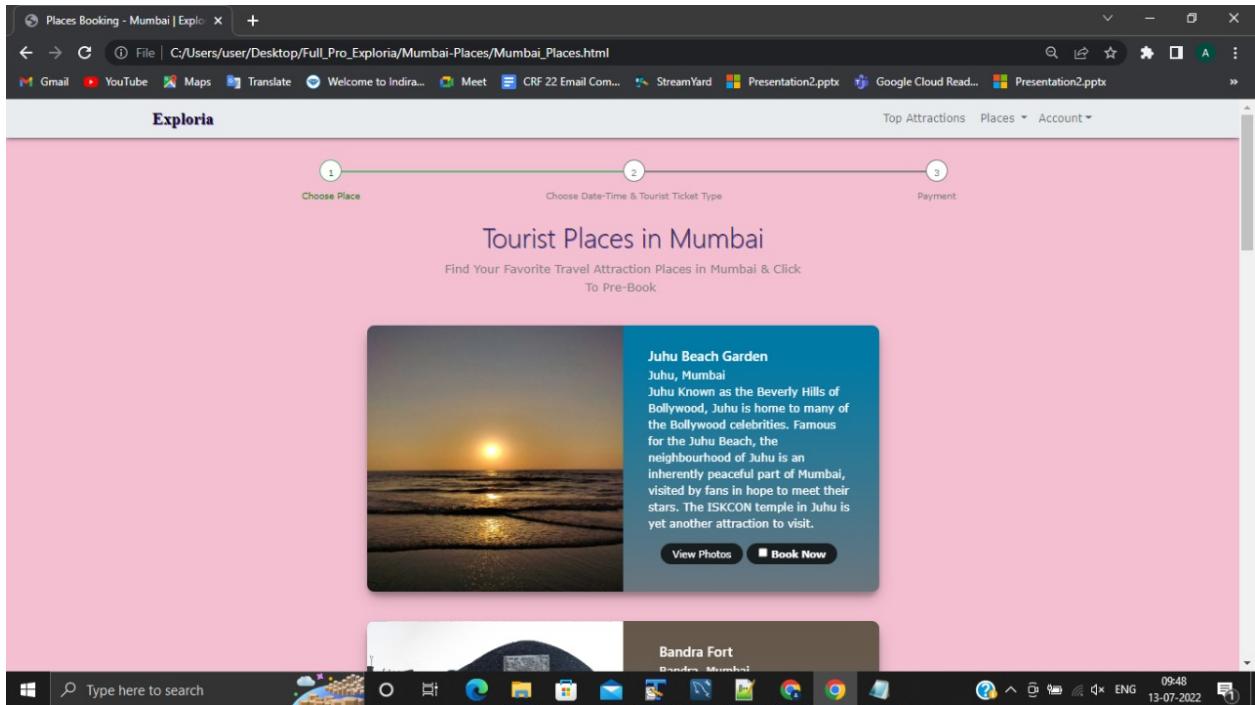


Pune Tourist Attractions –

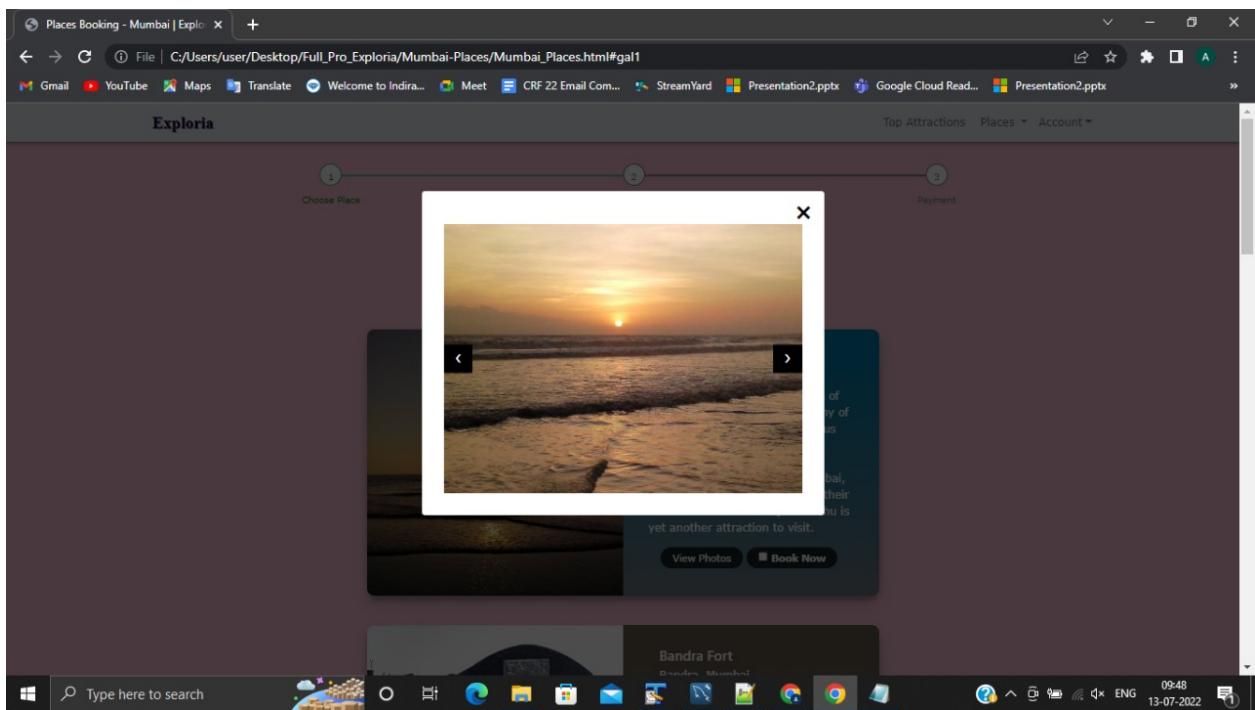


23.

Mumbai –

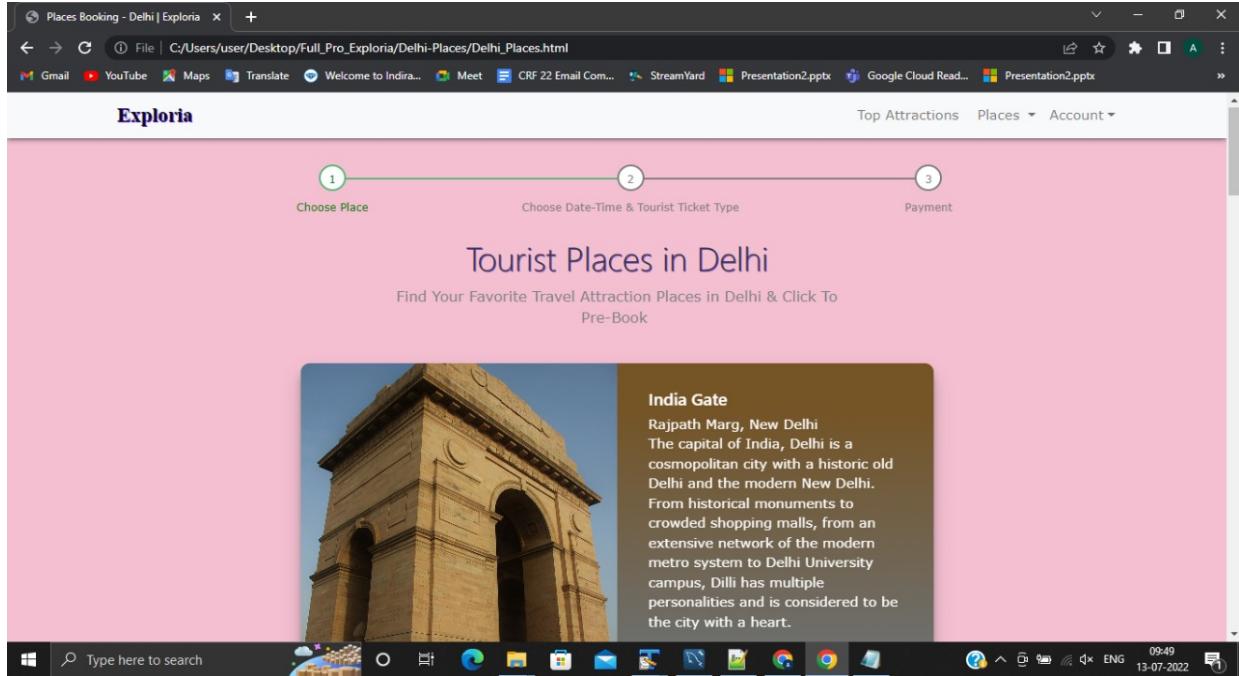


Mumbai Tourist Attractions –

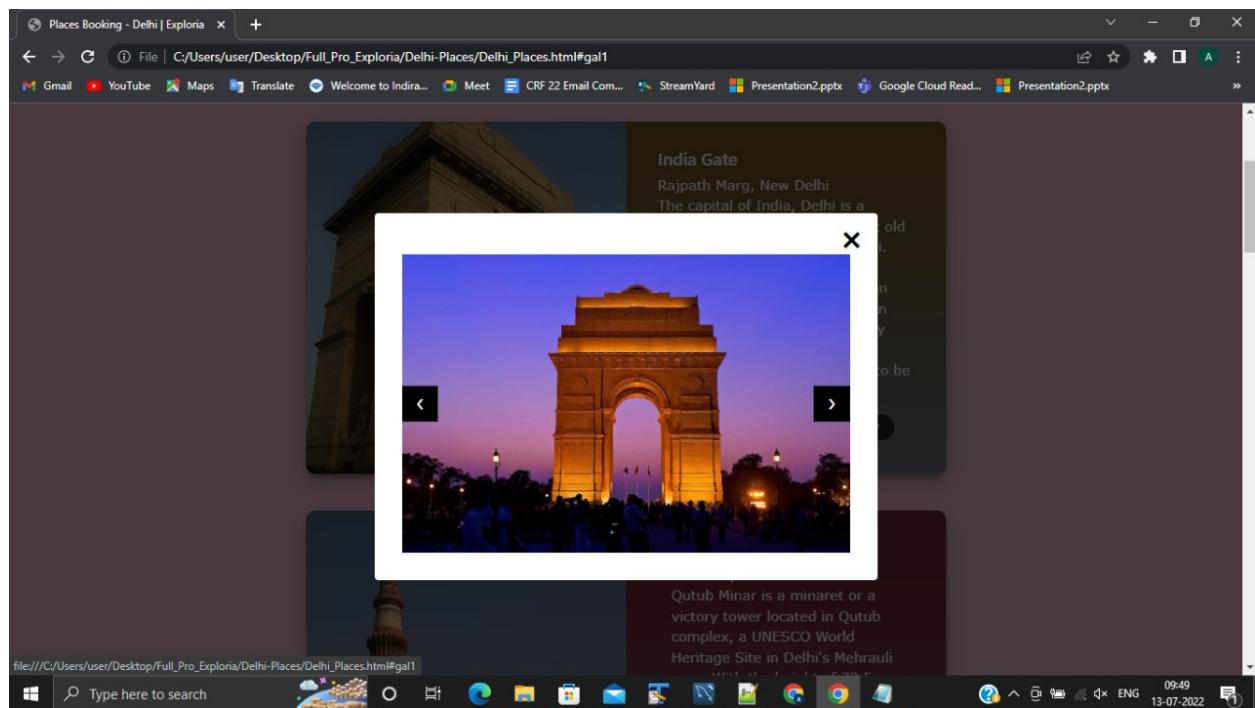


24.

Delhi –

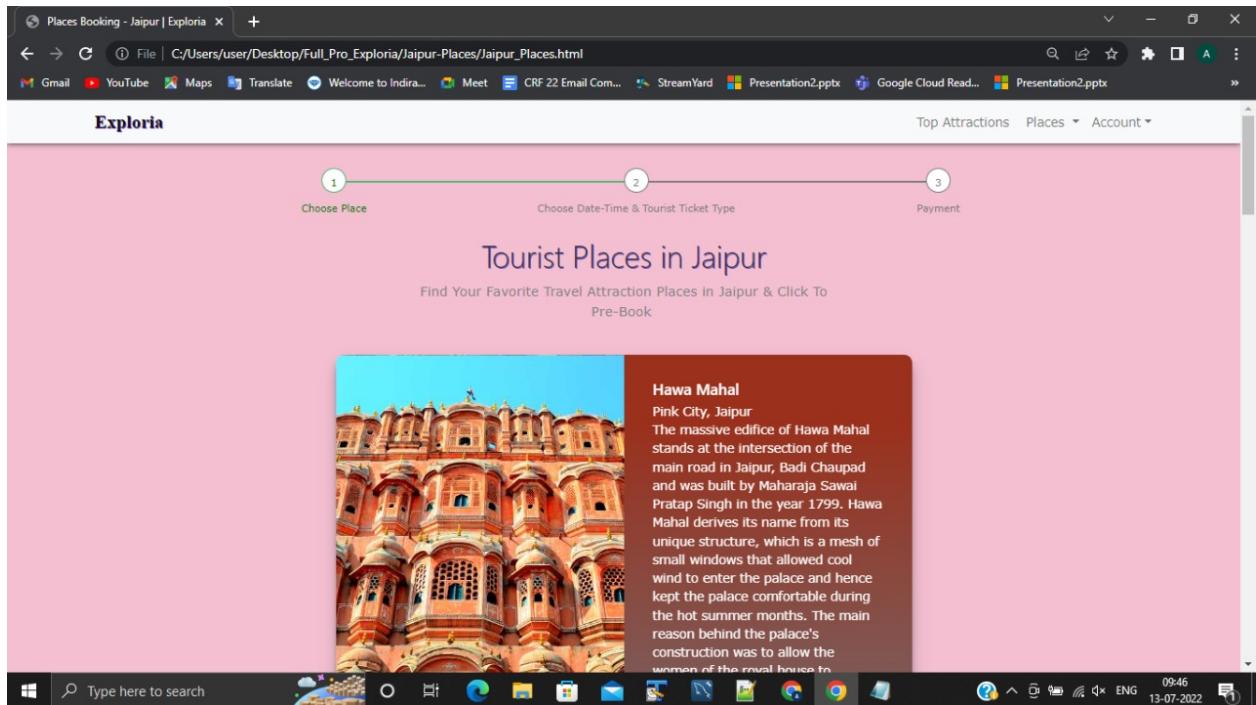


Delhi Tourist Attraction –

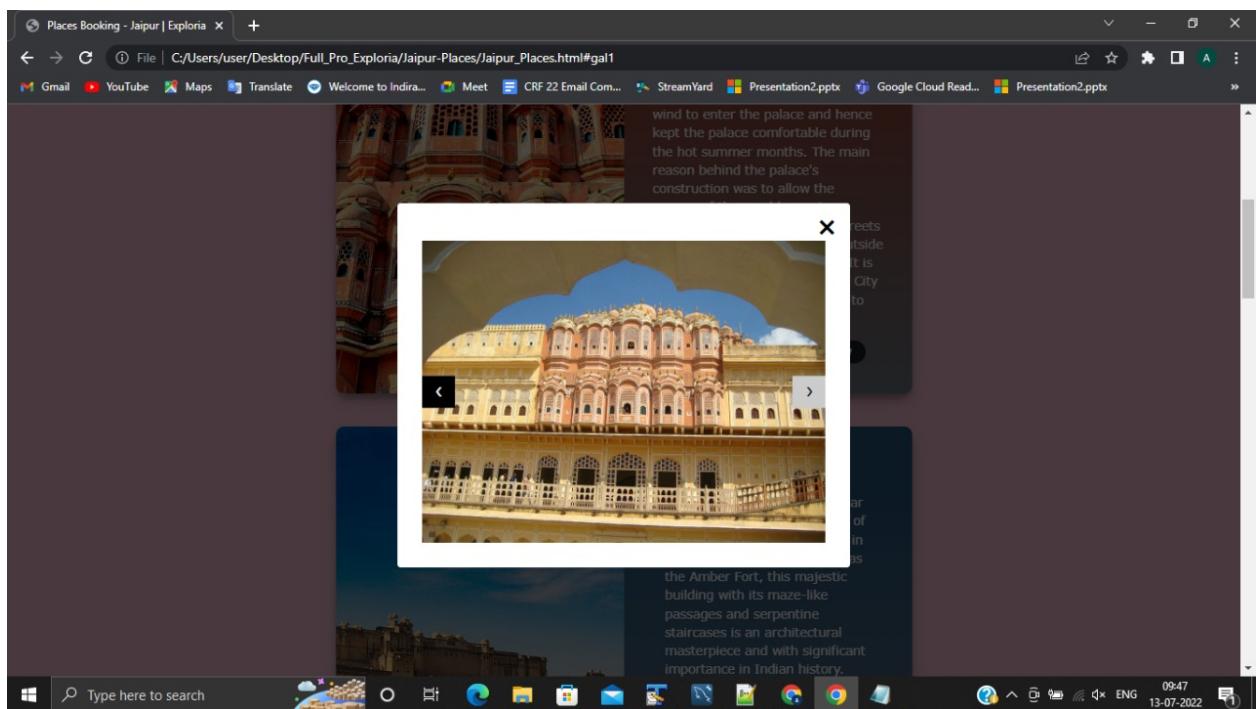


25.

Jaipur –

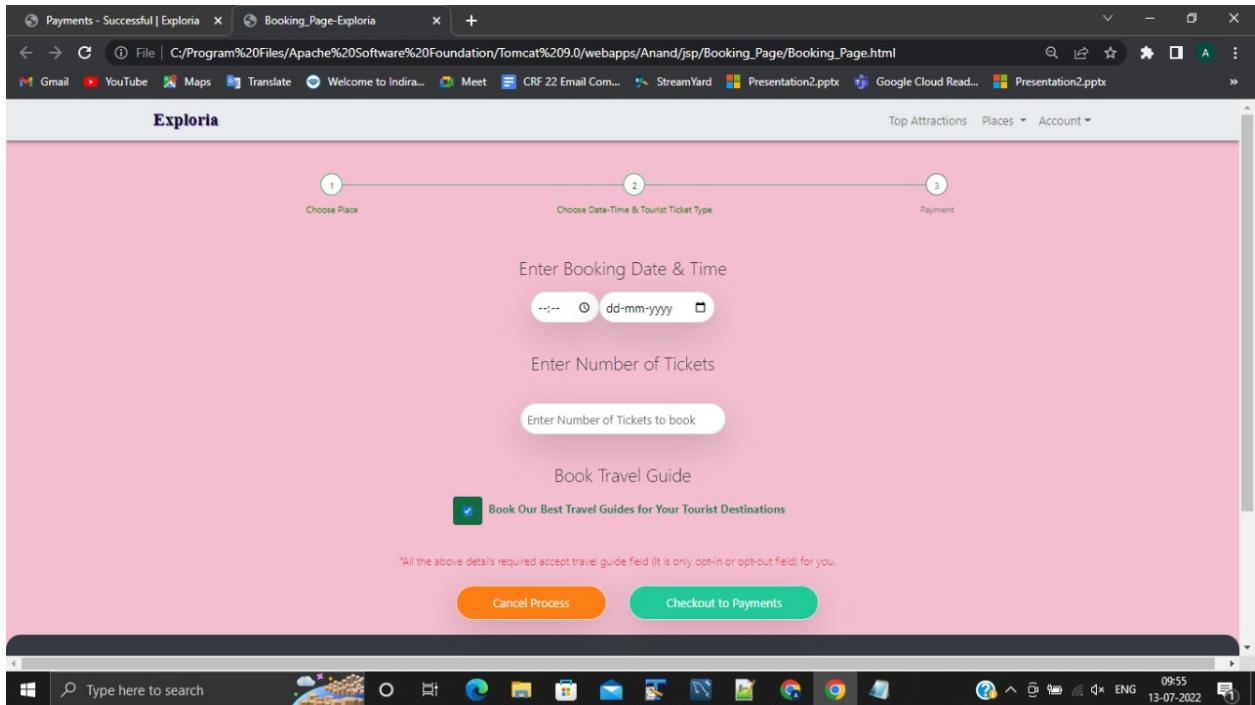


Jaipur Tourist Attraction –

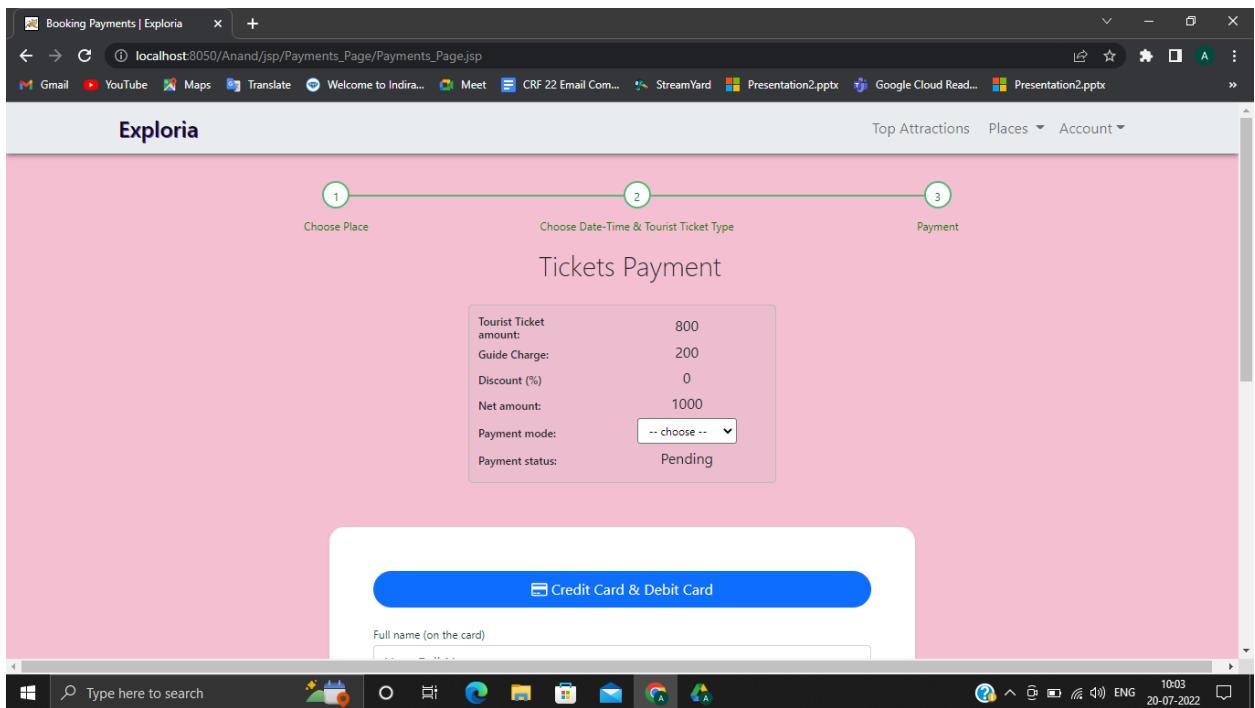


26.

Booking Page –



Payment Page –



27.

Payment Success Page –

The screenshot shows a web browser window titled "Payments - Successful | Exploria". The URL is "localhost:8050/Anand/jsp/Payments_Successful_Page/Payment_Successful_Page.jsp". The page header includes the Exploria logo and navigation links for "Top Attractions", "Places", and "Account". The main content features a large green checkmark icon with the word "Success" below it. A message says "Wow, You have booked successfully...!". Below this, a section titled "Tickets Payment" displays payment details:

Tourist Ticket amount:	800
Guide Charge:	200
Discount (%)	0
Net amount:	1000
Payment mode:	UPI
Payment status:	Successful

At the bottom are two buttons: "Print Invoice" (red) and "Goto Back Home" (green).

The taskbar at the bottom of the screen also displays the Exploria logo and other pinned icons.

Customer Profile Details –

The screenshot shows a web browser window titled "Booking_User-Profile-Page-Exploria". The URL is "localhost:8050/Anand/jsp/Booking_User-Profile-Page/User_Profile_Page.jsp". The page header includes the Exploria logo and navigation links for "Top Attractions", "Places", and "Account". The main content is titled "Your Profile Details". It features a profile card for "Anand" (Traveller, Customer UID : 17) with a placeholder user icon. To the right, there is a table of profile information:

Full Name	Anand
Email	anand@gmail.com
Phone	54646436
Age	20

A "Goto Back Home" button is located at the bottom of the profile card.

The taskbar at the bottom of the screen also displays the Exploria logo and other pinned icons.

28.

Payments Booking Details -

The screenshot shows a web browser window titled "Booking_Payment Billing Details" with the URL "localhost:8050/Anand/jsp/Payment-Billing-Details/Payment_Billing_Details.jsp". The page displays "Latest Tickets Payment Details" with the following information:

Tourist Ticket amount:	800
Guide Charge:	200
Discount (%)	0
Net amount:	1000
Payment mode:	UPI
Payment status:	Successful

Below the table are two buttons: "Print Invoice" (red) and "Go to Back Home" (green). The browser's address bar shows "localhost:8050/Anand/jsp/Payment-Billing-Details/Payment_Billing_Details.jsp". The taskbar at the bottom includes icons for File Explorer, Microsoft Edge, File, Mail, Google Photos, Google Sheets, Google Slides, Google Drive, and Task View, along with system status icons like battery level, signal strength, and date/time (20-07-2022, 10:08).

5. IMPLEMENTATION DETAILS:

The customer needs to enter his or her information required in the signup page. The page allows the customer to enter the home page of the website. This is done using jsp. The usage of HTML, CSS to work register these data collected. To avoid the redundancy of the data MYSQL can be used. This allows more faster and simple access of their data.

HTML is used to design the site aesthetics and simplicity of the site using CSS. MySQL is used as a database to the data stored in the site, JSP is linked between the front and the back end.

Hardware is an essential requirement in the development of the system in order to build the system. To do so a moderately good system is required. And software like MySQL, etc., to create this site.

❖ SOFTWARE AND HARDWARE REQUIREMENTS -

Software Requirement	
Operating System	Microsoft Windows
Software: -	
Front - End Software	Java (JSP)
Back – End Software	MySQL
Hardware Requirements	
Processor:	Intel core i3 2.00GHz
RAM:	4GB or more
Monitor:	LCD Monitor
Keyboard:	Normal Keyboard
Mouse:	Compatible mouse

6. OUTPUT AND REPORT TESTING:

6.1 TEST PLAN:

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. Testing presents an interesting anomaly for the software engineer.

1. Testing is process of executing a program with the intent of finding an error.
2. A good test case design is one that has a probability of finding an as yet undiscovered error.
3. A successful test is one that uncovers an as yet undiscovered error.

These above objectives imply a dramatic change in view port.

Testing cannot show the absence of defects, it can only show that software errors are present.

Sr.no.	Test case	Input tag	Description	output
1	Name	Textbox	Only characters are accepted.	If only characters are there then correct otherwise incorrect.
2	Gender	Combo Box	Select your gender	Correct
3	Phone Number	Textbox	Only 10-digit numbers are accepted.	If only digits (0 to 9) are there then correct otherwise incorrect.
4	Email	Textbox	This accepts characters in upper as well as in lower case, digits and special symbols also.	Correct
5	Age	Textbox	Enter your Age	Correct

7. CONCLUSION AND RECOMMENDATION:

Maximum work goes manually in the present ticket booking system which makes it take time. This includes the main problems of timely availability of tickets. Also, finding a good guide is a cumbersome job which makes the ticket buying process very difficult.

In the proposed system, all of these problems become automated. The registration of the customer for ticket booking, booking tickets, arranging for guides etc. is all met. The employee accesses the information.

8.FUTURE SCOPE:

Though our project is itself matured enough but still betterment is always an open door. In this case also we can add some features to this software to make it more reliable.

These are as follows:

- ✓ Firstly, a notification should be sent to the customer when a booking is made, modify the booking.
- ✓ Secondly, 360 degree angle sphere image view of every travel attraction places to enhance the customer virtual experience.
- ✓ Thirdly, customers should be able to contact the guide.

9. BIBLIOGRAPHY AND REFERENCES:

1. <https://www.slideshare.net>
2. <https://youtu.be>
3. www.wikipedia.com
4. www.htmlcodetutorial.com/
5. www.tutorialspoint.com
6. www.w3schools.com