# MINI PROJECT -II (2021-22) PROJECT REPORT

## "PACK & GO"



## **INSTITUTE OF ENGINEERING & TECHNOLOGY**

**SUBMITTED TO: -**

**SUBMITTED BY:** 

Ms. Ruchi Talwar

(Assistant Professor)

Priyansh Mani Tripathi(191500605)

Satish Mishra (191500729)

Priyanshi Jaiswal(191500608)

Satyam Pandey(191500732)

Manshi Raj(191500440)



## **DECLARATION**

I/we hereby declare that the work which is being presented in the Bachelor of technology. Project "PACK & GO", in partial fulfillment of the requirements for the award of the Bachelor of Technology in Computer Science and Engineering and submitted to the Department of Computer Engineering and Applications of GLA University, Mathura, is an authentic record of my/our own work carried under the supervision of Ms.Ruchi Talwar, Technical Trainer, Dept. of CEA, GLA University.

The contents of this project report, in full or in parts, have not been submitted to any other Institute or University for the award of any degree.

#### Name of Candidate:

Priyansh Mani Tripathi

Satish Mishra

Priyanshi Jaiswal

Satyam Pandey

Manshi Raj



## **CERTIFICATE**

This is to certify that the project entitled "PACK & GO", carried out in Mini Project-II is a bonafide work by Priyansh Mani Tripathi, Satish Mishra, Priyanshi Jaiswal, Satyam Pandey, Manshi Raj and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

Name of Supervisor: Ms. Ruchi Talwar

**Date:** 25-05-2022



## **ACKNOWLEDGMENT**

Presenting the ascribed project paper report in this very simple and official form, we would like to place my deep gratitude to GLA University for providing us with the instructor Ms.Ruchi Talwar, our technical trainer and supervisor.

She has been helping us since Day 1 in this project. She provided us with the roadmap, and the basic guidelines explaining how to work on the project. She has been conducting regular meetings to check the progress of the project and providing us with the resources related to the project. Without her help, we wouldn't have been able to complete this project. and last but not least we would like to thank our dear parents for helping us to grab this opportunity to get trained and also my colleagues who helped me find resources during the training.

Thanking You

#### Name of Candidate:

Priyansh Mani Tripathi

Satish Mishra

Priyanshi Jaiswal

Satyam Pandey

Manshi Raj

## **ABSTRACT**

In this project, we are creating a traveling website which we have named PACK & GO. Basically, this travel website manages the details of the Tour, Agent, Hotel, and Facilities. It manages all the information about Traveling Customers, Facilities, and Tours. It provides search facilities based on various factors. Such as hotels, restaurants, Finding places, etc.

It tracks all the information about tours and places where you want to visit. It also manages all the information about the Hotels.

Here users can decide about places they want to visit and make bookings online for travel and accommodation.

The system allows one to easily access the relevant information and make necessary travel arrangements. This integrated software offers one of the best ways of managing all travel-related businesses.

The purpose of this website is to automate the existing manual system with the help of computerized equipment and full-fledged computer software, fulfilling their requirements, so that their valuable data/information can be stored privately. The required software is easily available and easy to work with.

This website can lead to an error-free, secure, reliable, and fast management System. It can assist the user to enjoy their trips rather to concentrate on the record-keeping. Basically, the project describes how to manage for good performance and better services for the clients.

# **CONTENTS**

Cover Page
Declaration
Certificate
Acknowledgment
Abstract
Content
Chapter 1 Introduction
I. Context
II. Motivation
III. Objective
IV. Existing System
Chapter 2 Software Requirement Analysis
I. Problem Statement
II. Hardware and Software Requirements
III. Modules and Functionalities
Chapter 3 Software Design
I. Use Case Diagram
II. Data Flow Diagram
III. Sequence Diagram
Chapter 4 Technology Used
I. HTML
II. CSS
III. JavaScript
IV. Bootstrap

Cha	pter 5 Implementation and User Interface
I.	Implementation
II.	User Interface
Cha	pter 6 Testing
I.	Unit Testing
II.	User Testing
III.	Performance Testing
IV.	Compatibility Testing
Cha	pter 7 Source Code
Cha	pter 8 Conclusion

## **CHAPTER-1**

## **INTRODUCTION**

#### I. CONTEXT

This Web Application "PACK & GO" has been submitted in partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Computer Science and Engineering at GLA University, Mathura.

#### II. MOTIVATION

Travel is like rest and relaxation from routine. However, it did not represent changing their way of life, people just continue to do similar things but in distinct surroundings.

It also indicated that travel can provide for self-exploration, excitement, or social interaction. They are the reasons why people travel around the world. Tourists would not learn all the things through their routines or from television and books. It is better for them to get experiences by themselves, because of unedited by anyone else. Afterward, travel can make a marked difference with routines, and it will provide exciting, uncommon, or strange things to tourists.

The major reasons for travel are freedom and entertainment which can be defined as pleasure travel. Tourist motivations include escape, relaxation, family togetherness, wish and self-fulfillment, shopping, and social interaction.

#### III. OBJECTIVE

The main objective of the project <u>Pack & Go Website</u> is to manage the details of Travel, tours, hotels, Facility. It manages all the information about Travel, Customers, Facility. The purpose of the project is to reduce the manual working for Travel, Tour, and Customer. The user can select a location to see and get all information regarding that place.

#### IV. EXISTING SYSTEM

As we know that all the records are not kept perfectly because all the work is done manually, so keeping up-to-date details of the timings of bookings, seat availability for reservation, and rooms/hotels availability is not done. The amount of the overall trips are kept in documents and the calculations done are manual which made leads to huge mistakes.

Thus, the existing system is very time-consuming and manual work sometimes leads to a great loss as well.

To sort all of these problems we have introduced the <u>PACK & GO</u> <u>Website</u> that is highly automated and makes the traveling activities much easier and more flexible. The user can get the very right information at the very right time. Customers can get the knowledge of the hotels they are going to use on their trip prior to the start of the trip. This will increase the trust of the customer in the travel company as well.

## **CHAPTER -2**

## **SOFTWARE REQUIREMENT ANALYSIS**

#### I. PROBLEM STATEMENT

As we know that all the records are not kept perfectly because all the work is done manually, so keeping up-to-date details of the timings of bookings, seat availability for reservation, and rooms/hotels availability is not done. To sort all of these problems we have introduced the *PACK & GO Website*, so it maintains the customer details of the package and payment receipt and also provides all the package Details. It also manages all the information about the tour.

#### II. HARDWARE AND SOFTWARE REQUIREMENTS

#### **Software Requirement:-**

• Technology Implemented: Full Stack Technology

• Language Used: HTML, CSS, JavaScript, BootStrap

• Database: MongoDB

• User Interface Design: Html, CSS, JavaScript, BootStrap

• Platform Used: VS code

• Web Browser: Chrome/Firefox

#### **Hardware Requirement:-**

• Operating System: Windows 7/8/10/11

• RAM: 4+GB

• Hardware Devices: Computer System

• Hard disk: 64 GB

• Display: 3 nets display with 1280\*720 minimum resolutions.

#### III. MODULES AND FUNCTIONALITIES

- <u>Login Page</u>: This page is for those users who have already registered themselves on the website and have a username and a password. There is also a way on this page for the new users to register themselves which will take them to the registration page.
- Registration Page: This page is solely designed for the new users of the website who are willing to register themselves. This page takes the input of the various details of the user and stores it in the database, later helping the user to login into the account with the credentials they have provided.
- <u>Home/Dashboard Page:</u> This is the page displayed for every user after entering it successfully. It contains the tour page, hotel facility, restaurant service, about, blogs, and contacts. where the user can search facilities to see destination information.

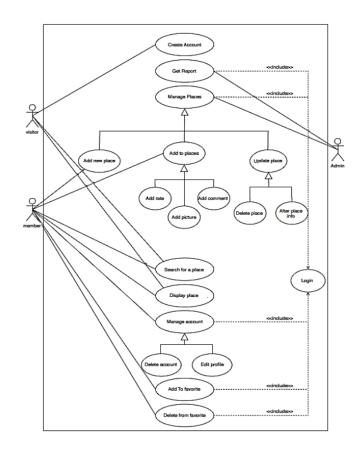
- **Find Tour Service Page:** Here people can easily get information about the places they want to visit. It tracks all the detail about the Hotels, places and their facilities.
- <u>Hotel Facility Page:</u> It provides the option of booking hotels for a trip for customers and also gives the booking sites and hotel recommendations with web links to hotels and booking sites.
- Restaurant Facility Page: It also provides restaurant services and provides all the pieces of information about restaurant availability and places to be viewed on a tour.
- <u>User Information Page:</u> It maintains the customer details of the package and payment receipt and also provides all the package Details. It also manages all the information about the tour.

## **CHAPTER-3**

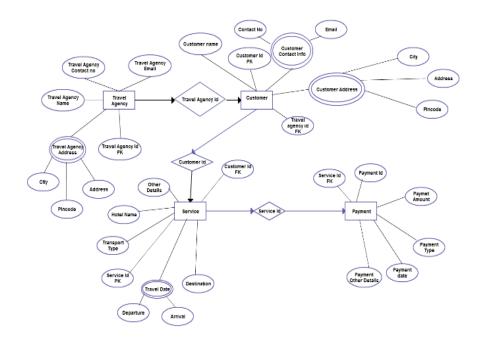
## SOFTWARE DESIGN

#### I. <u>USE-CASE DIAGRAM:</u>

For login users:



## II. DATA FLOW DIAGRAM:





So the above diagram represents the point of view of the new user, the registered user, and the developer, and the arrows to each module show the interactivity of the person.

The New user will first be required to create a new account so will interact with the "sign-up module" and fill up all the details that will be stored in the database.

For the registered user, the user will have the credentials to log in and will interact with the "login module" and then the user will enter into the dashboard where they can search places where they want to visit.

## **CHAPTER-4**

## **TECHNOLOGY USED**

I. <u>HTML</u> The Hypertext Mark-up Language or HTML is the standard mark-up language for documents designed to be displayed

in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes, and other items.

HTML elements are delineated by tags, written using angle brackets. and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML.

#### II. CSS

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

CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file which reduces complexity and repetition in the structural content as well as enables the .css file to be cached to improve.

#### III. Javascript

JavaScript, often abbreviated as JS, is a programming language that conforms to the ECMAScript specification. JavaScript is highlevel, often just-in-time compiled, and multiparadigm. It has dynamic typing, prototype-based object orientation, and first-class functions.

Alongside HTML and CSS, JavaScript is one of the core technologies of the World Wide Web.

Over 97% of websites use it client-side for web page behavior, often incorporating third-party libraries. All major web browsers have a dedicated JavaScript engine to execute the code on the user's device.

#### IV. Bootstrap

Bootstrap is a potent front-end framework used to create modern websites and web apps. It's open-source and free to use, yet features numerous HTML and CSS templates for UI interface elements such as buttons and forms. Bootstrap also supports JavaScript extensions. Bootstrap is available in two forms; as a precompiled version, and as a source code version. The source code version uses the Less CSS preprocessor.

The source code version comes with styles of source code written in Less (or Sass), all the JavaScript, and accompanying documentation. This allows more ambitious designers and developers to change and customize, at their will, all the provided styles, and to build their own version of Bootstrap.

The Bootstrap structure is pretty simple and self-explanatory. It includes precompiled files that enable quick usage in any web project.

## **CHAPTER-5**

## IMPLEMENTATION AND USER INTERFACE

Creating an application concept design with screen sketches and functional flow diagrams is the best way to communicate your vision to the app developer. Making the concept clear to the developer is probably the most important factor in successful application development. Yet it is one of the most common problems or obstacles in development outsourcing projects.

No matter what the marketing and profit goals are or if you are outsourcing an app for your personal use, you need to fully design and document the app concept if you expect a programmer to make your vision a reality. Developers are not minded readers and even descriptions given during conversations can be very fleeting or interpreted differently. Fully documenting your concept, therefore, leaves little to chance. The two most important things to do are: A) make a comprehensive description of how the app works and what it does (functionality) and B) create a comprehensive description of what the user sees and does (look and feel).

## Implementation of the application 'PACK & GO':

Implementation of the Pack & go portal is taking place in various phases. Firstly we build the login interface and the signup interface merged together then make various layouts for the supporting features and connect the app with the Google Firebase to feed the user's info.

#### I. Step to be followed by the user

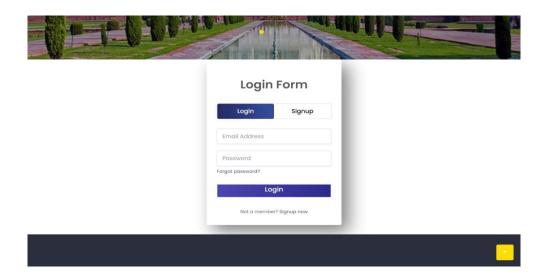
- 1. Firstly, we have built a Dashboard Page to start the application.
- 2. Then, we provides so many facilities like Tour, Travel, Hotel, Restaurant, Contact, Services and About us.

- 3. Then if you want to Login your account, we have provided the Login activity which consists of the following steps for existing Users:
  - Email: User's email address
  - Password: User's password for accessing the website
  - Forgot Password: To reset your password

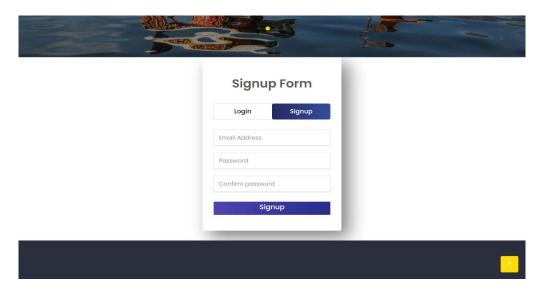
#### For new users:

- Email: User's email address
- Password: User's password for accessing the website
- Confirm Password: For new users
- 3. We authenticate and store the user information from the Firebase authentication.

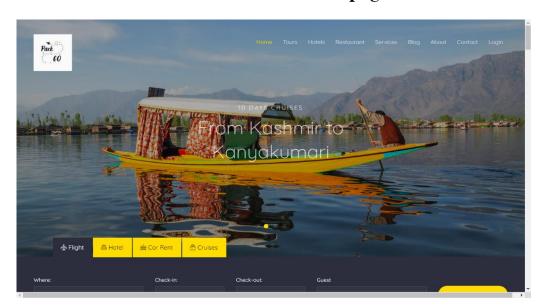
#### 1. Login page



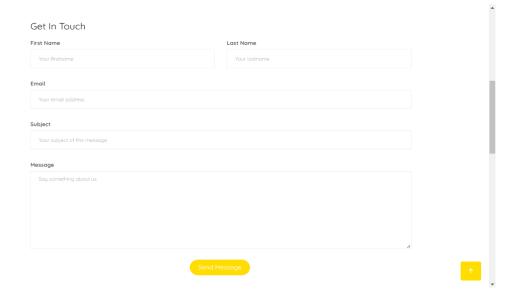
## 2. Registration page



## 3. Dashboard / Home page

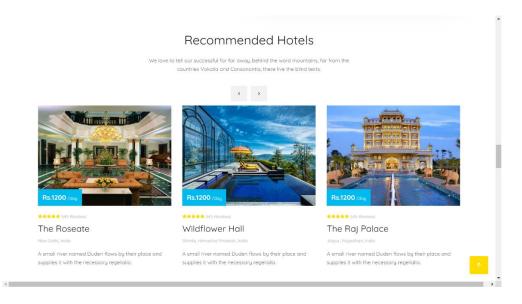


## 4. User Information Page

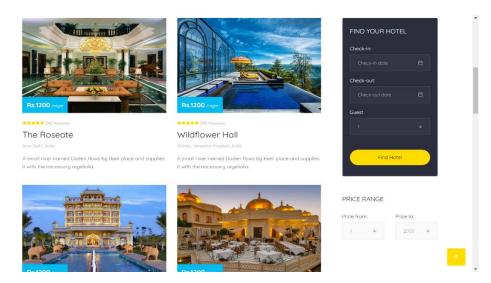


## 5. Hotel Service

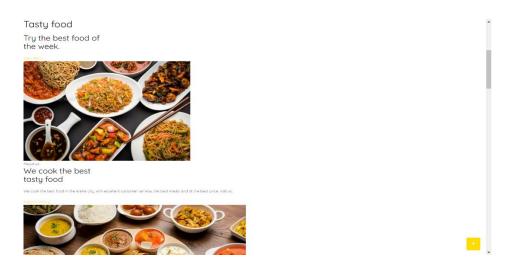
## **Recommended Hotels-**



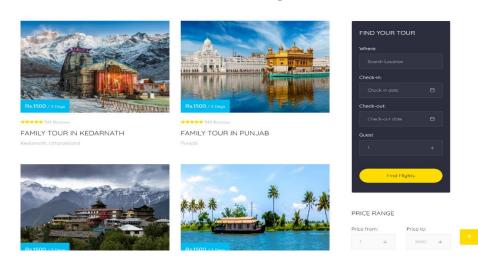
## Find your Hotel-



## **6. Restaurant Services**



## 7. Tour Page



## **CHAPTER - 6**

### **TESTING**

Once source code has been generated, software must be tested to uncover as many errors as possible before delivery. It is very important to work the system successfully and achieve high-quality software. Testing includes designing a series of test cases that have a high likelihood of finding errors by applying software-testing techniques.

System testing makes logical assumptions that if all the parts of the system are correct, the goal will be successfully achieved. The system should be checked logically. Validations and cross-checks should be there. Avoid duplications of records that cause redundancy of data.

In other words, Testing is the process of evaluating a system or its component(s) with the intent to find whether it satisfies the specified requirements or not. It is executing a system in order to identify any gaps, errors, or missing requirements in contrast to the actual requirements.

The Web framework includes an integrated testing framework that helps you test all aspects of your application and the SDK tools include tools for setting up and running test applications. Whether you are working in VS Code with ADT or working from the command line, the SDK tools help you set up and run your tests within an emulator or the device you are targeting.

There are different types of testing some of them are listed below:

#### I. Unit Testing

It focuses on the smallest unit of software design. In this, we test an individual unit or groups of interrelated units. It is often done by programmers by using sample input and observing its corresponding outputs. In this testing technique, we are primarily focused on

- Loop methods and functions are working fine or not.
- Misunderstood or incorrect Arithmetic precedence
- Incorrect Initialization

Test cases	Description	<b>Expected Outcome</b>	Result
1	Start Page – Dashboard Screen	Should dashboard screen with animated text	Pass

2	Register Screen	Should display register activity where you need to fill the required details	Pass
3	Login Screen	Should display a login screen and ask for your credentials.	Pass
4	Forget Password	Should Receive mail to reset the password	Pass

5	Hotel Service	Should provide hotel facility and gives the booking sites and hotel recommendations	Pass
6	Restaurant Service	Should display all the pieces of information about restaurant availability and places to be viewed on a tour	Pass
7	User Information Page	Should display the information that you have entered	Pass
8	Tour Page	Should display search facilities for places, hotels	Pass

9	Search Hotels	Should give the details of the hotels that you have searched	Pass
10	View Description page	Should show the information of the website	Pass
11	Contact Page	Should display the page where you should contact us.	Pass

Table 1: Unit Testing of PACK & GO

## II. User Testing

User testing is the process through which the interface and functions of a website, app, product, or service are tested by real users who perform specific tasks in realistic conditions. The purpose of this process is to evaluate the usability of that website or app and to decide whether the product is ready to be launched for real users.

This app was tested by our teammates and friends who are using different mobile phones (and having different web versions) also tested on different emulators to check its performance and it seems to be working fine and users of this app are satisfied with the facilities and performance of the app and like the way how the app is worked.

#### III. Performance Testing

In this type of testing, we have checked the performances of our application under some peculiar conditions. Those conditions include:

- Low memory in the device.
- The battery is extremely low level.
- Poor/Bad network reception.

Performance is basically tested from 2 ends, the application end, and the application server end. Our app is also performing well in this phase of testing as well. And we are getting positive feedback from users of our app.

## **CHAPTER -7**

## **SOURCE CODE**

https://github.com/Priyanshi-2705/PackandGo

## **CHAPTER -8**

## **CONCLUSION**

Our Website (<u>PACK & GO</u>) satisfies the user requirement. It is easy to understand by the user and operator. Be easy to operate. It also provides a good interface. and delivered on schedule within the budget.

We will provide searching option where people can easily get information about the places they want to visit. Deciding that this would be an interesting, challenging project whose topic we are passionate about, we felt this would be a good choice for our project.