MINI PROJECT

(2022-23)

"Animated Travelling Website"

Project Report



Institute of Engineering & Technology

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Declaration

We hereby declare that the work which is being presented in the Bachelor of technology. Project "Animated Travelling Website", 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 Mrs. 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.

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Certificate

This is to certify that the project entitled "Animated Travelling Website", carried out in MiniProject – I Lab, is a bonafide work by Aryan Gupta, Yash Sharma, Harsh Agarwal, Vutukuri, Amaresh and Javvaji Vinay Venkat Sandeep and is submitted in partial fulfillment of the requirements for the award of the degree - Bachelor of Technology (Computer Science & Engineering).

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She has been helping us since Day 1 in this project. She provided us with the roadmap, the basic guidelines explaining on how to work on the project. She has been conducting regular meeting 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.

We feel thankful to the college staff for giving me such a big opportunity. I believe we will enroll in more such events in the coming future.

Thanking You

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ABSTRACT

This project "Animated Travelling Website" is used to automate all process of the travel and tourism, which deals with creation,

booking and confirmation and user details. The project is designed HTML,CSS,JS and BOOTSTRAP as front end and Fire Base as backend which works in any browsers. Travel system is used to book a tour from anywhere in the world by a single dynamic website which will help the user to know all about the places and tour details in a single website. The admin can add packages to the website from a certain travel agents and hotels by create a tour page. Then the users can sign in and book each project, they can be confirmed by the admin in them manage booking page. The user can see the confirmation in my booking page. It is an easiest platform for all travelers which can be easily booked and know the all details.

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Chapter One

<u>Introduction</u>

1.1 Overview

The "Animated Travelling Website" system is used to book a tour from anywhere in the world by a single dynamic website which will help the user to know all about the places and tour details in a single website. The admin can add packages to the website from a certain travel agents and hotels by create a tour page. Then the users can sign in and book each project, they can be confirmed by the admin in them manage booking page. The user can see the confirmation in my booking page. It is easiest platform for all travelers which can be easily booked and know the all details. Tour Management system is a dynamic website for tourism business. It is dynamic and responsive web design. It is also called travel technology solution for agencies & tour operation. Nearly Everyone goes on a vacation for this 'a Tourism management system' would play a vital role in planning the perfect trip. The tourism management system allows the user of the system access all the details such as location, events, etc. The main purpose is to help Amal Davies et al, International Journal of Computer Science and Mobile Computing, Vol.8 Issue.10, October- 2019, pg. 12-17 © 2019, IJCSMC All Rights Reserved 13 tourism companies to manage customer and hotels etc. The system can also be used for both professional and business trips

1.2 Existing System

In the existing system, each task is carried out manually and processing is also a tedious job. In previous system travelers were maintaining time table details manually in pen and paper, which was time taking and costly. The travelers are not able to achieve its need in time and also the results may not accurate. Because of the manual maintenance there are number of difficulties and drawbacks exist in the system.

Some of them are Drawbacks of the Existing System: -

- Increased transaction leads to increased source document and hence maintenance becomes difficult.
- If any admin, user entry is wrongly made then the maintenance becomes very difficult.

1.3 Project Planning

Project planning is part of project management, which relates to the use of schedules such as Gantt charts to plan and subsequently report progress within the project environment. Initially, the project scope is defined and the appropriate methods for completing the project are determined. Following this step, the durations for the various tasks necessary to complete the work are listed and grouped into a work breakdown structure. The logical dependencies between tasks are defined using an activity network diagram that enables identification of the critical path. Float or slack time in the schedule can be calculated using project management software. Then the necessary resources can be estimated and costs for each activity can be allocated to each resource, giving the total project cost. At this stage, the project plan may be optimized to achieve the appropriate balance between resource usage and project duration to comply with the project objectives. Once established and agreed, the plan becomes what is known as the baseline. Progress will be measured against the baseline throughout the life of the project

1.4 Proposed System

The proposed system is designed to be more efficient than the manual system.

It invokes all base tasks that are now carried out manually, such as the forms transactions and reports which is added advantage. The proposed System is completely computer-based application. Thousands of records can searched and displayed without taking any significant time.

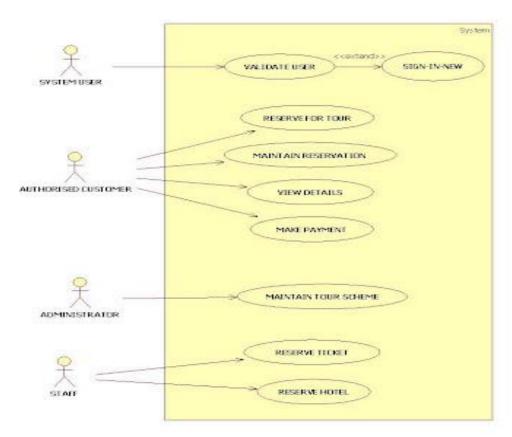
Advantages of the Proposed System:

- Gives accurate information
- Simplifies the manual work
- It minimizes the documentation related work
- Provides up to date information
- Friendly Environment by providing warning messages.
- traveler's details can be provided
- booking confirmation notification.

<u>Chapter -2</u> System Design

2.1 Design

The system is divided into some parts, these are Login System, Search System, Booking System, Payment



Received System, Viewing System side with Firebase database represent the server. System diagram and system database diagram illustrated in figure.

2.2 User Characteristics

Admin The administrator has all the rights to access the system. He is the one who has all rights to view the members and personal details, modify those details. He can also set discount in various occasion. Admin can also view the details of a member.

Users The user can log in to the system by using his specific email and password. User can view their booking details and according to their own needs. He can view his profile and update his details. He can update his personal information by logging into the system. User can find various destination by using search option easily, update his details

2.3 System Information

This system is an animated travelling website. Through the software user can add members, search destinations, update information, edit information, book the tickets in quick time. The systemhas the following advantages:

- User friendly interface
- Fast access to database
- Search facility
- Look and Feel Environment

2.4 System Analysis

System Analysis refers into the process of examining a situation with the intent of improving it through better procedures and methods. System Analysis is the process of planning a new system to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System analysis is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to recommend improvements in the system. System analysis is conducted with the following objectives in mind:

Evaluate the system concept for feasibility.

Perform economic and technical analysis.

Allocate functions to hardware, software people, database and other system elements.

Establish cost and schedule constraints.

Create a system definition that forms the foundation for all the subsequent engineering work.

2.5 Feasibility Analysis

Whatever we think need not be feasible. It is wise to think about the feasibility of any problem we undertake. Feasibility is the study of impact, which happens in the organization by the development of a system. The impact can be either positive or negative. When the positives nominate the negatives, then the system is considered feasible. Here the feasibility study can be performed in two ways such as technical feasibility and Economical Feasibility.

Technical Feasibility

It is technically feasible, since there will not be much difficulty in getting required resources for the development and maintaining the system as well. All the resources needed for the development of the software as well as the maintenance.

Economic Feasibility

Development of this application is highly economically feasible. The organization needed not spend much m one for the development of the system already available. The only thing is to be done is making an environment for the development with an effective supervision. I f we are doing so, we can attain the maximum usability of the corresponding resources. Even after the development, the organization will not be in a condition to invest more in the organization .Therefore, the system is economically feasible.

<u>Chapter 3</u> <u>Hardware And Software Requirements</u>

3.1 Hardware Required

O Processor: Pentium IV or Above

O RAM: 512MB or above

O Hard Disk: 50GB or above

O Input Devices: Keyboard, Mouse

O Output Devices: Monitor

3.2 Software Required

Operating System: Linux, Ubuntu, Mac, Windows XP, 7, 8, 8.1, 10

Frontend: HTML, CSS, Bootstrap, JavaScript

Backend: Firebase

Chapter Four

Implementing Tools for the Project

Tools:-

- > JavaScript
- Firebase
- > HTML
- CSS and Bootstrap

4.1 What is Firebase?

Firebase is a set of hosting services for any type of application (Android, iOS, JavaScript, Node.js, Java, Unity, PHP, C++ ...). It offers NoSQL and real-time hosting of databases, content, social authentication (Google, Facebook, Twitter and GitHub), and notifications, or services, such as a real-time communication server. Firebase evolved from Envolve, a prior startup founded by James Taplin and Andrew Lee in 2011. Envolve provided developers an API that enables the integration of online chat functionality into their websites. After releasing the chat service, Tamplin and Lee found that it was being used to pass application data that were not chat messages. Developers were using Envolve to sync application data such as game state in real time across their users. Tamplin and Lee decided to separate the chat system and the real-time architecture that powered it. They founded Firebase as a separate company in 2011 and it launched to the public in April 2012.

Firebase's first product was the Firebase Realtime Database, an API that synchronizes application data across iOS, Android, and Web devices, and stores it on Firebase's cloud. The product assists software developers in building real-time, collaborative applications.

In May 2012, a month after the beta launch, Firebase raised \$1.1 million in seed funding from venture capitalists Flybridge Capital Partners, Greylock Partners, Founder Collective, and New Enterprise Associates. In June 2013, the company further raised \$5.6 million in Series A funding from Union Square Ventures and Flybridge Capital Partners.

In 2014, Firebase launched two products: Firebase Hosting and Firebase Authentication. This positioned the company as a mobile backend as a service.

In October 2014, Firebase was acquired by Google. A year later, in October 2015, Google acquired Divshot, an HTML5 web-hosting platform, to merge it with the Firebase team.

In May 2016, at Google I/O, the company's annual developer conference, Firebase introduced Firebase Analytics and announced that it was expanding its services to become a unified backend-as-a-service (BaaS) platform for mobile developers. Firebase now integrates with various other Google services, including Google Cloud Platform, AdMob, and Google Ads to offer broader products and scale for developers. Google Cloud Messaging, the Google service to send push notifications to Android devices, was superseded by a Firebase product, Firebase Cloud Messaging, which added the functionality to deliver push notifications to both iOS and web devices.







Build better apps





Hosting

ML Kit





Cloud Firestore



Realtime Database





Improve app quality



Crashlytics



Performance Monitoring



Test Lab



Grow your app



Analytics



Remote Config



Predictions



A/B Testing



Cloud Messaging



Dynamic Links



In-app Messaging

4.2 What's included in Firebase:-

Firebase offers a number of services, including: -

Analytics – Google Analytics for Firebase offers free, unlimited reporting on as many as 500 separate <u>events</u>. Analytics presents data about user behavior in iOS and Android apps, enabling better decision-making about improving performance and app marketing.

Authentication – Firebase Authentication makes it easy for developers to build secure authentication systems and enhances the sign-in and <u>onboarding</u> experience for users. This feature offers a complete identity solution, supporting email and password accounts, phone auth, as well as Google, Facebook, <u>GitHub</u>, Twitter login and more.

Cloud messaging – Firebase Cloud Messaging (<u>FCM</u>) is a cross-platform messaging tool that lets companies reliably receive and deliver messages on iOS, Android and the web at no cost.

Realtime database – the Firebase Realtime Database is a cloud-hosted NoSQL database that enables data to be stored and synced between users in real time. The data is synced across all clients in real time and is still available when an app goes offline.

Catalytic – Firebase Catalytic is a real-time crash reporter that helps developers track, prioritizeand fix stability issues that reduce the quality of their apps. With catalytic, developers spend less time organizing and troubleshooting crashes and more time building features for their apps.

Performance – Firebase Performance Monitoring service gives developers insight into the performance characteristics of their iOS and Android apps to help them determine where and when the performance of their apps can be improved.

Test lab – Firebase Test Lab is a cloud-based app-testing infrastructure. With one operation, developers can test their iOS or Android apps across a variety of devices and device configurations. They can see the results, including videos, screenshots and logs, in the Firebase console.

4.3 HTML

Every webpage you look at is written in a language called HTML. You can think of HTML as the skeleton that gives every webpage structure. In this course, we'll use HTML to add paragraphs, headings, images and links to awebpage.

In the editor to the right, there's a tab called test.html. This is the file we'll type our HTML into. Like any language, it has its own special syntax. A browser's job is to transform the code in test.html into are cognizable webpage. It knows how to lay out the page by following the HTML syntax.

4.4 CSS

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language. [1] Most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications.

CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colors, and fonts.[3] This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting by specifying the relevant CSS in a separate .CSS file, and reduce complexity and repetition in the structural content.

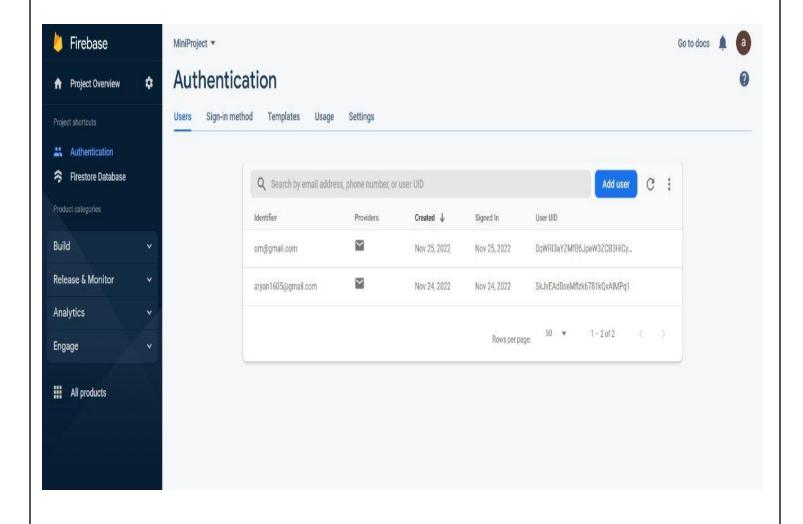
4.5 Bootstrap

Bootstrap is an HTML, CSS and JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. The result is a uniform appearance for prose, tables and form elements across web browsers. In addition, developers can take advantage of CSS classes defined in Bootstrap to further customize the appearance of their contents. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent pull quotes, and text with a highlight



Chapter Five

Project Database Using Firebase



Chapter Seven

Software Testing

Why Software Testing is Needed?

Tool-bars work properly? Are all menu function and pull-down sub function properly listed? Is it possible to invoke each menu function using a logical assumption that if all parts of the system are correct, the goal will be successfully achieved? In adequate testing or non-testing will leads to errors that may appear few months later. Testing represents an interesting anomaly for the software engineer. During earlier software engineering activities, the engineer attempts to build software from an abstract concept to a tangible product. Now comes testing. The engineer creates a series of test cases that are intended to "demolish" the software that has been built. In fact, testing is the one step in the software process that could be viewed (psychologically, at least) as destructive rather than constructive. Testing requires that the developer discard preconceived notions of the "correctness" of software just developed and overcome a conflict of interest that occurs when errors are uncovered.

If testing is conducted successfully (according to the objectives stated previously) it will uncover errors in the software. As a secondary benefit, testing demonstrates that software functions appear to be working according to specification, that behavioral and performance requirements appear to have been met. In addition, data collected as testing is conducted provide a good indication of software reliability and some indication of software quality as a whole. But testing cannot show the absence of errors and defects, it can show only that software errors and defects are present. It is important to keep this (rather gloomy) statement in mind as testing is being conducted.

Testing Strategy

There are types of testing that we implement. They are as follows: -

While deciding on the focus of testing activities, study project priorities. For example, for an online system, pay more attention to response time. Spend more time on the features used frequently. Decide on the effort required for testing based on the usage of the system. If the system is to be used by a large number of users, evaluate the impact on users due to a system failure before deciding on the effort.

This creates two problems: -

- Time delay between the cause and appearance of the problem.
- The effect of the system errors on files and records within the system.

The purpose of the system testing is to consider all the likely variations to which it will be suggested and push the systems to limits. The testing process focuses on the logical intervals of the software ensuring that all statements have been tested and on functional interval is conducting tests to uncover errors and ensure that defined input will produce actual results that agree with the required results. Program level testing, modules level testing integrated and carried out.

There are two major types of testing they are:

- White Box Testing.
- Black Box Testing.

White Box Testing

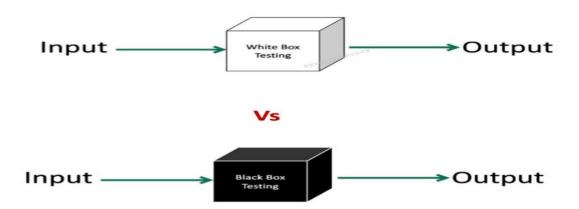
White box sometimes called "Glass box testing" is a test case design uses the control structure of the procedural design to drive test case. Using white box testing methods, the following tests were made on the system.

- All independent paths within a module have been exercised once. In our system, ensuring that case was
 selected and executed checked all case structures. The bugs that were prevailing in some part of the code
 where fixed
- All logical decisions were checked for the truth and falsity of the values.

Black Box Testing

Black box testing focuses on the functional requirements of the software. This is black box testing enables the software engineering to derive a set of input conditions that will fully exercise all functional requirements for a program. Black box testing is not an alternative to white box testing rather it is complementary approach that is likely to uncover a different class of errors that white box methods like.

- Interface errors.
- Performance in data structure.
- o Performance errors.
- o Initializing and termination errors.



Chapter Eight:

Conclusion And Future Scope: -

Tourism is currently recognized as a global industry which is growing at a high rate like any other industry.

Access to relevant and accurate information is at the heart of tourism.

Here, the proposed project on Animated Travelling Website or application tries to bridge the gap by noting what a tourist perceives as relevant. Hence, the aim of this project entails the design and implementation of a platform that will assist tourists in gaining access to travel to various tourist locations.

The project also helped to provide knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future.

It is worth mentioning that this project work is open for further enhancement, with the expectation that it becomes more robust and better enhanced; covering every single tourist sites.

For a modified system, the user needs to just login into the application and can find the routes, costs, hotels, adventure sports, transportations and book immediately and complete the booking process for a successful transaction.

In the aspect of tourism, Internet and web technologies have made more readily available information on tourist locations, accommodations, transportation, shopping, food, festivals, and other attractions, thus, improving the whole tourism experience.

Sample Code:

1) HTML File:

For Full HTML Code:

https://github.com/aryan1605/Mini_Project/blob/main/index.html

2) CSS File:

```
======== */
@import
url("https://fonts.googleapis.com/css2?family=Montserrat:wght@300;400;500;600&display=swap");
/* ======== Browser Reset ======== */
:root {
 /* Color Variables */
 --primary: #ffc400;
  --text-1: #0f2341;
  --text-2: #a9a9a9;
  --white: #fff;
  --shadow-300: 0 5px 5px rgba(0, 0, 0, 0.3);
  --shadow-500: 0 5px 5px rgba(0, 0, 0, 0.5);
  --transition-300: all 300ms ease-in-out;
  --transition-500: all 500ms ease-in-out;
*::after,
*::before {
 margin: 0;
```

```
padding: 0;
box-sizing: inherit;
}

html {
  font-size: 62.5%;
  box-sizing: border-box;
  scroll-behavior: smooth;
}
```

For Full CSS Code:

https://github.com/aryan1605/Mini_Project/blob/main/styles.css

3) JS File:

```
// Navigation Toggle
const hamburger = document.querySelector(".hamburger");
const navList = document.querySelector(".nav-list");
hamburger.addEventListener("click", () => {
 navList.classList.toggle("open");
});
const video = document.querySelector(".video");
const button = document.querySelector(".video-control");
button.addEventListener("click", playpausevideo);
function playpausevideo() {
 if (video.paused) {
    button.innerHTML = "<i class='bx bx-pause' ></i>";
    video.play();
  } else {
    button.innerHTML = "<i class='bx bx-play' ></i>";
    video.pause();
```

For Full JS Code:

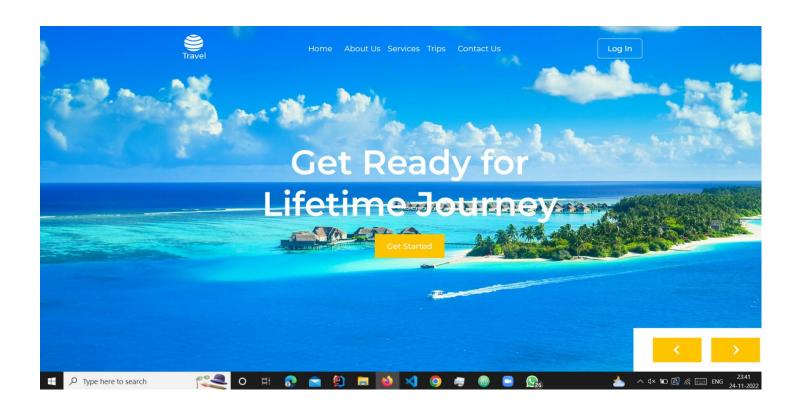
https://github.com/aryan1605/Mini_Project/blob/main/index.js

To see the Complete Code:

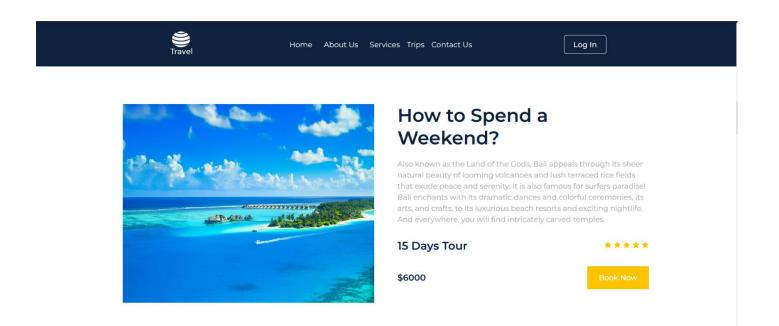
Github-Link: https://github.com/aryan1605/Mini_Project

Glance of our Website

- 1) Home Page:
 - a) Get Ready for Lifetime Journey



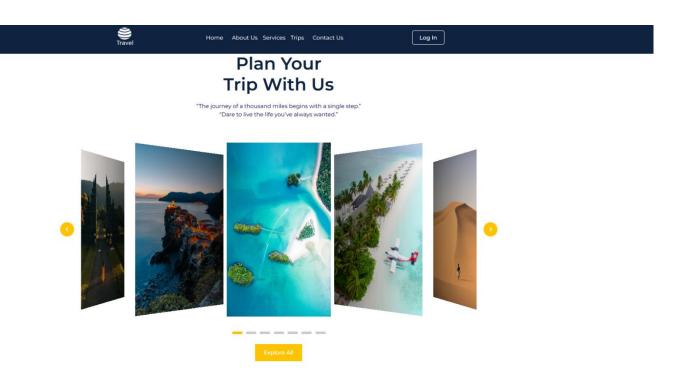
b) How to Spend a Weekend?



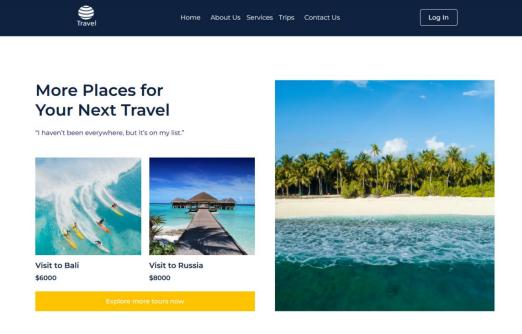
c) Get 15% Off on Tour, Next Travel



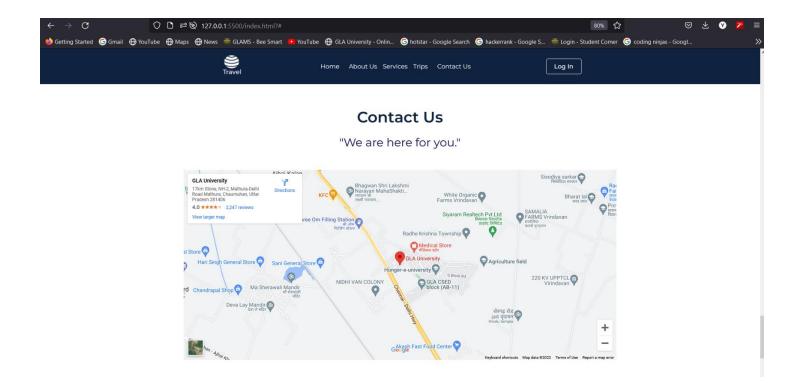
d) Plan your Trip With Us



e) More Places for your Next Travel

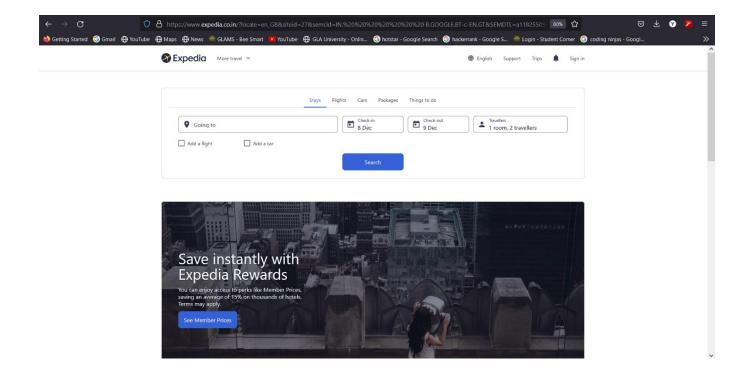


f) Contact Us

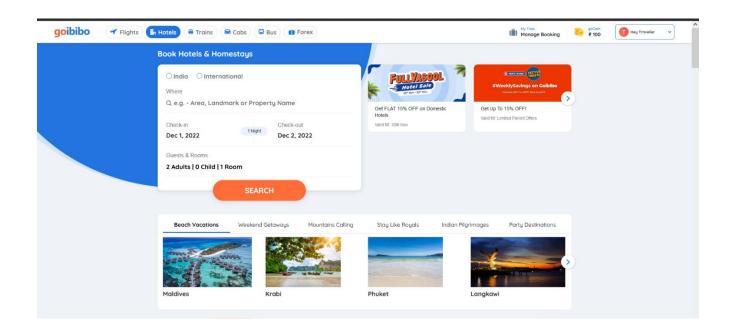


2) Header/Navigation Section:

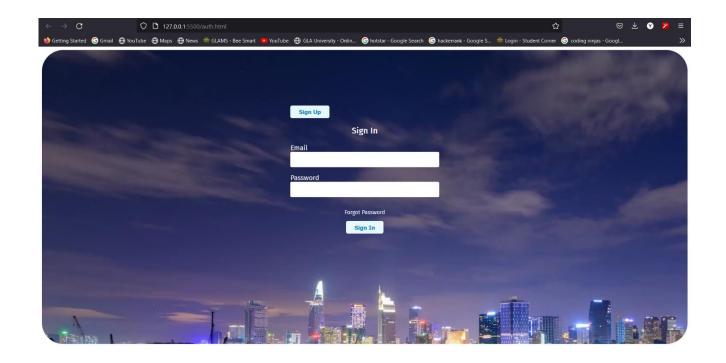
a) On clicking "Get Started"

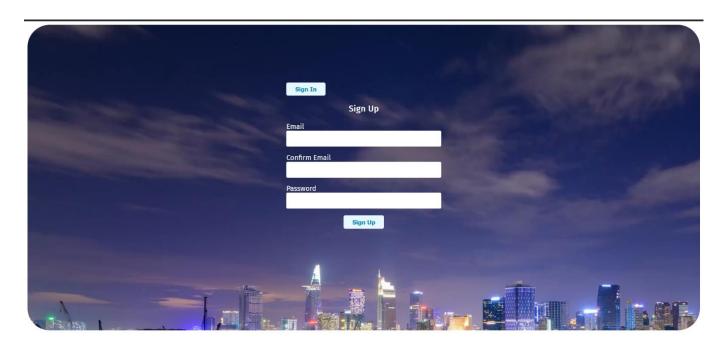


b) On clicking "Services"

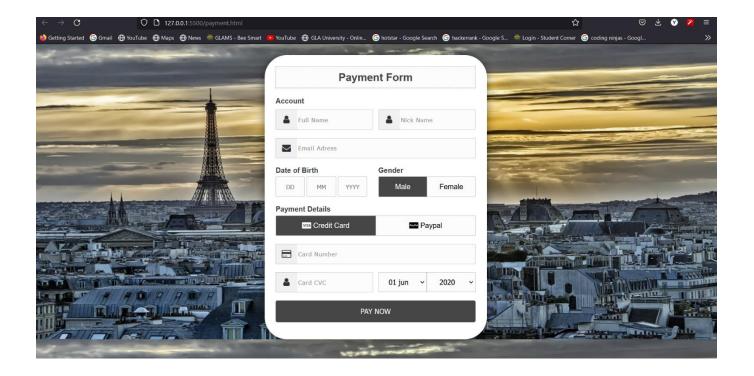


c) Sign-in/Sign-Up Page

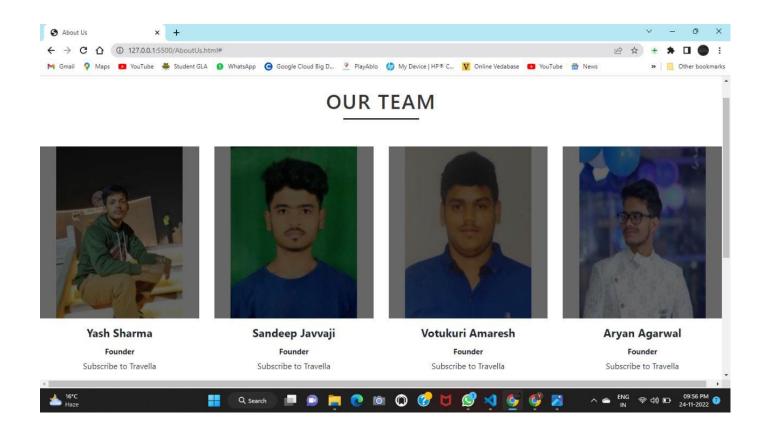




3) Payment Form:



Team Members:





Harsh Agarwal
Founder
Subscribe to Travel and Explore this incredible world to have fun in your life.

Thank You!!