SMART TRIP MANAGER

BY

MD ZAKIR MIA
ID: 191-15-2369
AND

SARWAR HOSSAIN
ID: 191-15-2647

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Mohammad Monirul Islam
Assistant Professor
Department of CSE
Daffodil International University

Co-Supervised By

Al Amin Biswas
Sr. Lecturer
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

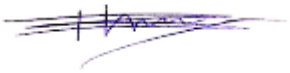
DHAKA, BANGLADESH

JANUARY 2023

APPROVAL

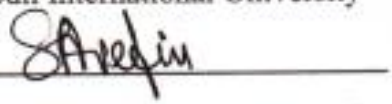
This Project titled **"Smart Trip Manager"**, submitted by Md Zakir Mia, ID No: 191-15-2369 and Sarwar Hossain, ID No: 191-15-2647 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on *30/01/2023*.

BOARD OF EXAMINERS



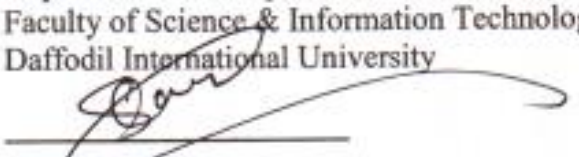
Chairman

Dr. Touhid Bhuiyan
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University



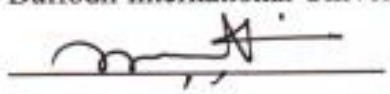
Internal Examiner

Dr. Mohammad Shamsul Arefin
Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University



Internal Examiner

Ms. Sharmin Akter
Lecturer (Senior Scale)
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University



External Examiner

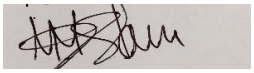
Dr. Mohammad Shorif Uddin
Professor
Department of Computer Science and Engineering
Jahangirnagar University

©Daffodil International University

DECLARATION

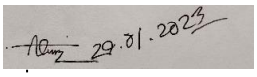
We hereby declare that, this project has been done by us under the supervision of **Mohammad Monirul Islam, Assistant Professor, Department of CSE,** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:



Mohammad Monirul Islam
Assistant Professor
Department of CSE
Daffodil International University

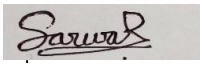
Co-Supervised by:



Al Amin Biswas
Sr. Lecturer
Department of CSE
Daffodil International University

Submitted by:

(Md Zakir Mia)
ID: -191-15-2369
Department of CSE
Daffodil International University



(Sarwar Hossain)
ID: -191-15-2647
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makings us possible to complete the final year project/internship successfully.

We are really grateful and wish our profound indebtedness to **Supervisor Mohammad Monirul Islam**, **Assistant Professor**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of "Mobile Application (Traditional), Data Mining, Machine Learning (ML), Internet of Things (IoT), Android Application, Artificial Intelligence (AI), Mobile Application (Game Development), Database, Desktop Application, Game Development" to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts, and correcting them at all stages have made it possible to complete this project.

We would like to express our heartiest gratitude to **Dr. Touhid Bhuiyan, Professor, and Head, Department of CSE,** for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

This project is on "Smart Trip Manager". Smart Trip Manager is an android based mobile application that supports people in their short time by providing information regarding their desired tour. We've built this android app system to facilitate the development of new kinds of tourism that enhance possibilities for mutual benefit for tourists and locals and increase a better opinion of different cultures, customs, lifestyles, traditional knowledge, and beliefs. The user, Hotel admin, and Application Super admin can use this "Smart Trip Manager" application. By this application users can book the hotel and also tour packages with login. The hotel can see the users booking status and confirm or cancel booking by login this application. And the super admin creates, modifies, updates, and deletes the hotel registration, and also tour packages. The user's travel and booking history is recorded and stored by the application. Travel-related details, such as tourism hotspots, city names, and country locations, are also provided by this system. This application is user friendly. The users and admins can easily use this application. With the help of this system, vacationers may feel safe and secure when visiting their favorite destinations. Cultures from all around the world can benefit from this approach to tourism development by adding depth and breadth to the travel experience. After the app was developed, we put it through its paces with a variety of users and discovered that it performed flawlessly.

TABLE OF CONTENTS

CONTENTS	PAGE
Board of examiners	i
Declaration	ii
Acknowledgment	iii
Abstract	iv
CHAPTER	
CHAPTER 1: INTRODUCTION	**1-3**
1.1 About the project	1
1.2 Motivation	1
1.3 Project Objective	1
1.4 Problem Statement	2
1.5 Target Users	2
1.6 Benefits of the project	2
1.7 Report Layout	3
CHAPTER 2: BACKGROUND STUDIES	**4-8**
2.1 Introduction	4
2.2 Related Works	4
2.3 Comparative Studies	8
CHAPTER 3: REQUIREMENT ANALYSIS	**9-15**
3.1 Introduction	9
3.2 Non functional Requirements	9

3.3 Usability Requirements 9

3.4 Software Requirements 9

3.5 Hardware Requirements 10

3.6 Use Case Diagram 11

3.7 Business Process Model 13

3.8 Activity Diagram 14

CHAPTER 4: DESIGN SPECIFICATION 16-44

4.1 Introduction 16

4.2 Front-end Design 16

4.3 Back-end Design 35

CHAPTER 5: IMPLEMENTATION AND TESTING 41-44

5.1 App Implementation 41

5.2 App Testing 41

5.3 Result of Unit Testing 43

CHAPTER 6: IMPACT ON SOCIETY AND SUSTAINABILITY 45

6.2 Ethical Aspects 45

6.3 Sustainability Plan 45

CHAPTER 7: CONCLUSION AND FUTURE WORKS 46-47

7.1 Introduction 46

7.2 Conclusion 46

7.3 Future Works 46

REFERENCES 48

LIST OF FIGURES

FIGURES	PAGE NO
Figure 2.1: GoZayaan Application	5
Figure 2.2: Travela Application	6
Figure 2.3: ShareTrip Application	7
Figure 3.1: Use Case Diagram of Smart Trip Manager	12
Figure 3.2: Business Process Modeling of Smart Trip Manager	13
Figure 3.3: Users Activity diagram of Smart Trip Manager	14
Figure 3.4: Admin Activity diagram of Smart Trip Manager	15
Figure 4.1: Welcome Screen	17
Figure 4.2: Signup SignIn Page	18
Figure 4.3: Home Page	19
Figure 4.4: Tour Package Page	20
Figure 4.5: Package Details	21
Figure 4.6: Hotel Page	22
Figure 4.7: Hotel Details	23
Figure 4.8: Guide Page	24
Figure 4.9: Profile Page	25
Figure 4.10: Booking Info Page	26
Figure 4.11: Admin Login Page	27
Figure 4.12: Admin Home Page	28
Figure 4.13: Manage User Page	29
Figure 4.14: Hotel Registration	30
Figure 4.15: Hotel List and Hotel Booking History	31
Figure 4.16: Create Tour Package	32
Figure 4.17: Tour Package List and Booking History	33
Figure 4.18: Hotel Admin and Booking History	34

FIGURES	PAGE NO
Figure 4.19: User Database	35
Figure 4.20: Hotel Database	36
Figure 4.21: Tour Package Database	37
Figure 4.22: Tour Booking Database	38
Figure 4.23: Tour Guide Database	39
Figure 4.24: Hotel Booking Database	40

LIST OF TABLES

TABLES	PAGE NO
Table 5.1: Result of User Application Testing	43
Table 5.2: Result of Admin Application Testing	44

CHAPTER 1
INTRODUCTION

1.1 About The Project

Our Bangladesh is rich in history and traditions. Bangladesh is one of the most popular countries for tourists. Travel is a part of our life. Traveling takes you out of the daily routine and exposes you to new environments and new experiences. It regenerates our body and mind. Bangladesh is a significant tourist destination in South Asia. Every year a large number of local and foreign tourists visit in Bangladesh. Its thousand years of rich history and elite culture pulls them like a magnet. In such a situation we are going to develop an android application which can do hotel booking, perfect tour guide with tour location, and also travel with tour packages through this app. The app also can be used by hotel authorities. Hotel authorities can provide their hotel booking schedules. We put out our best effort and did everything we could to achieve victory. It is anticipated that many different kinds of vacation packages including hotel stays will be processed by this application system.

1.2 Motivation

The main motivation for making this android app is the passion and love for travel of Bangladeshi wanderlust and to give people an idea about tourism easily. Our android app creates user-friendly features that helps users to find out different types of tour packages, tour guide and also hotel booking which can be done from anywhere. The main purpose of this app is assisting people in traveling.

1.3 Project Objectives

- ➢ Providing tour packages
- ➢ Providing Hotel booking
- ➢ Provide a proper guide about tourist spot by chatting system
- ➢ Hotel authorities provide their discount hotel booking prices

1.4 Problem Statement

Nowadays, tourists in our country face various problems when they travel by themselves such as transport booking, hotel booking and not having complete knowledge about their tourist spots and also they do not have proper instructions about tourist spots. Because of this they often face many hurdles which are never desirable for a traveler. We need a good app where we can enjoy these facilities.

1.5 Target Users

Successful tour management involves catering to the needs of the traveler in every way. A tour operator's services may include everything from helping you decide where to go on vacation to making hotel and transportation arrangements. The tour manager's services must be to the customer's satisfaction.
Our target users are :

- ➢ Wanderlust people
- ➢ Hotel Authority

1.6 Benefits of the projects

- ➢ A user or customer can book the hotel easily.
- ➢ A travel enthusiast person can easily come up with this tour package with this android application.
- ➢ Through this application user or person can take all the services together.
- ➢ This is an online system android application and it can achieve people by filling in the versatility to maintain relevance.
- ➢ People can get 24/7 service through this application.
- ➢ It is also a user-friendly application that the user can use easily.

1.7 Report Layout

There are seven parts to this report. ‘Introduction’ is the title of the first section. Here We detailed About the project, Motivation, Project Objective, Problem Statement, Target Users, Benefits of the project.

Our second chapter is titled "Background Studies," and it will contain an introduction, a discussion of previous work, and a look at relevant comparative research.

The third chapter, "Requirement Analysis," will cover the following topics: Introduction, Non-functional Requirements, Usability Requirements, Software Requirements, Hardware Requirements, and a Use Case Diagram.

Our application's introduction, front end design, and back end design will be the focus of the next chapter, the fourth "Design Specification," which we will write.

The following chapter, number 5, will be titled "Implementation and Testing". In which App Implementation, App Testing, and Unit Testing Results will be discussed.

After that, in Chapter 6, "Impact of Society, Environment and Sustainability," We will discuss about the Impact on Society, Ethical Aspects and Sustainability.

In my final section, titled "Conclusion and Future Works," We will talk about project's Conclusion and Future Works.

CHAPTER 2
BACKGROUND STUDIES

2.1 Introduction

We focus on the tourism and travel industry. And some people has to need a perfect trip. We've settled on working on this part of the problem in an effort to find a solution and have made some efforts to streamline the process. The best apps, whether they're desktop or mobile, are the ones that provide the widest range of useful features these days. A traveler would much rather use an app that provides them with fresh hotel listings, booking options, and search results. There is a built-in map and data on well-known locations as well.

2.2 Related Works

There have been a few published pieces on the topic of tourism and travel. We've found that most of the applications we've looked at are remarkably similar to one another, with only minor differences here and there. However, our project features some novel elements that we hope will give users a fresh take on the software and make it more intuitive and trustworthy. We'll do our best to showcase some of the Play Store's best offerings here. To help you distinguish our "Smart Trip Manager" Android Mobile Application from the competition, we'll provide you with a detailed breakdown of the key differences. Such examples of software include:
GoZayaan, Travela, ShareTrip

GoZayaan

It's GoZayaan. Facilitate the scheduling of vacations. Make booking trips easy by doing so entirely inside the confines of a single app. Booking flights, hotels, buses, and tours is easy and convenient, no matter where you are. [1]

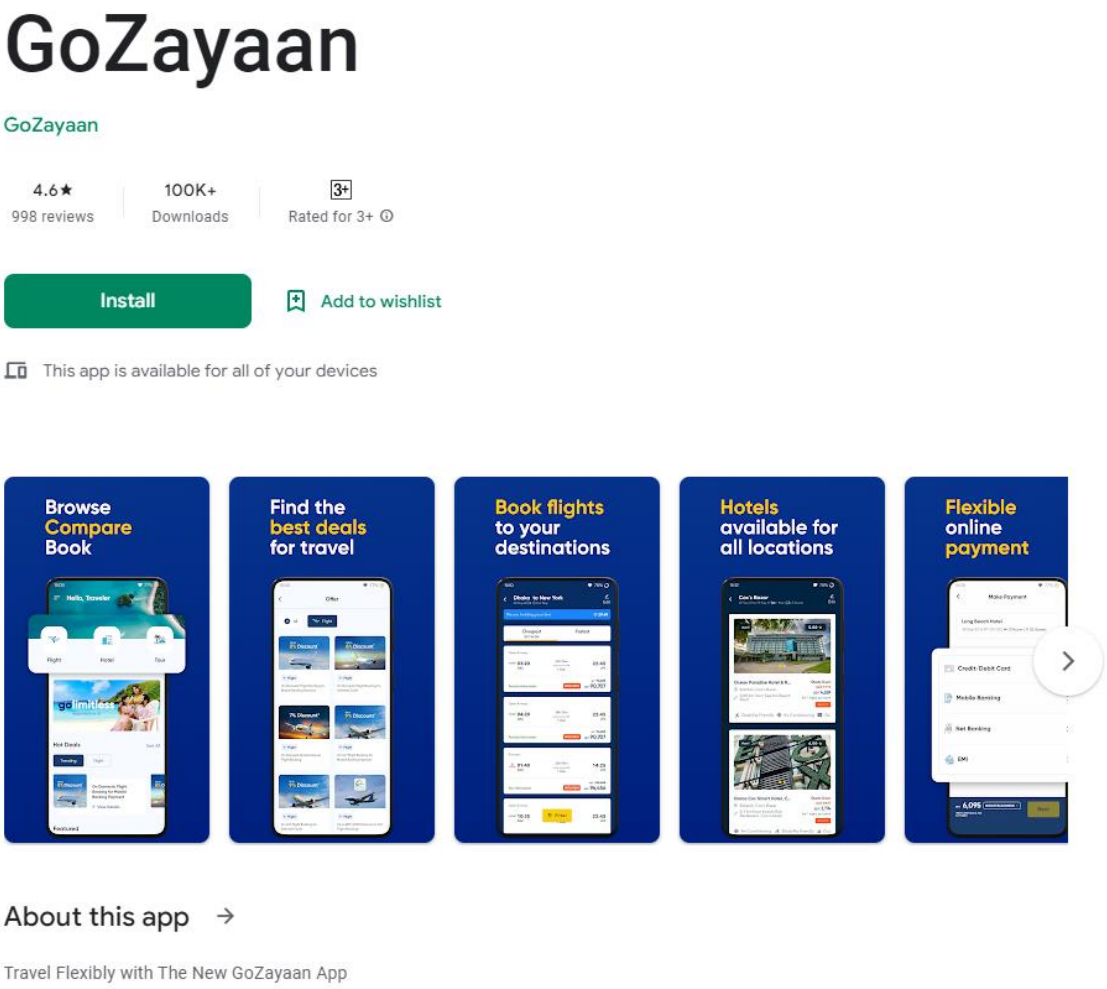


Figure 2.1: GoZayaan Application

Travela

People of all ages can save a lot of money by using Travela to book stays in private houses owned by locals all around the world. Vacations, weekend trips, internships, gap years, business trips, and family vacations are all appropriate uses of Travela. [2]

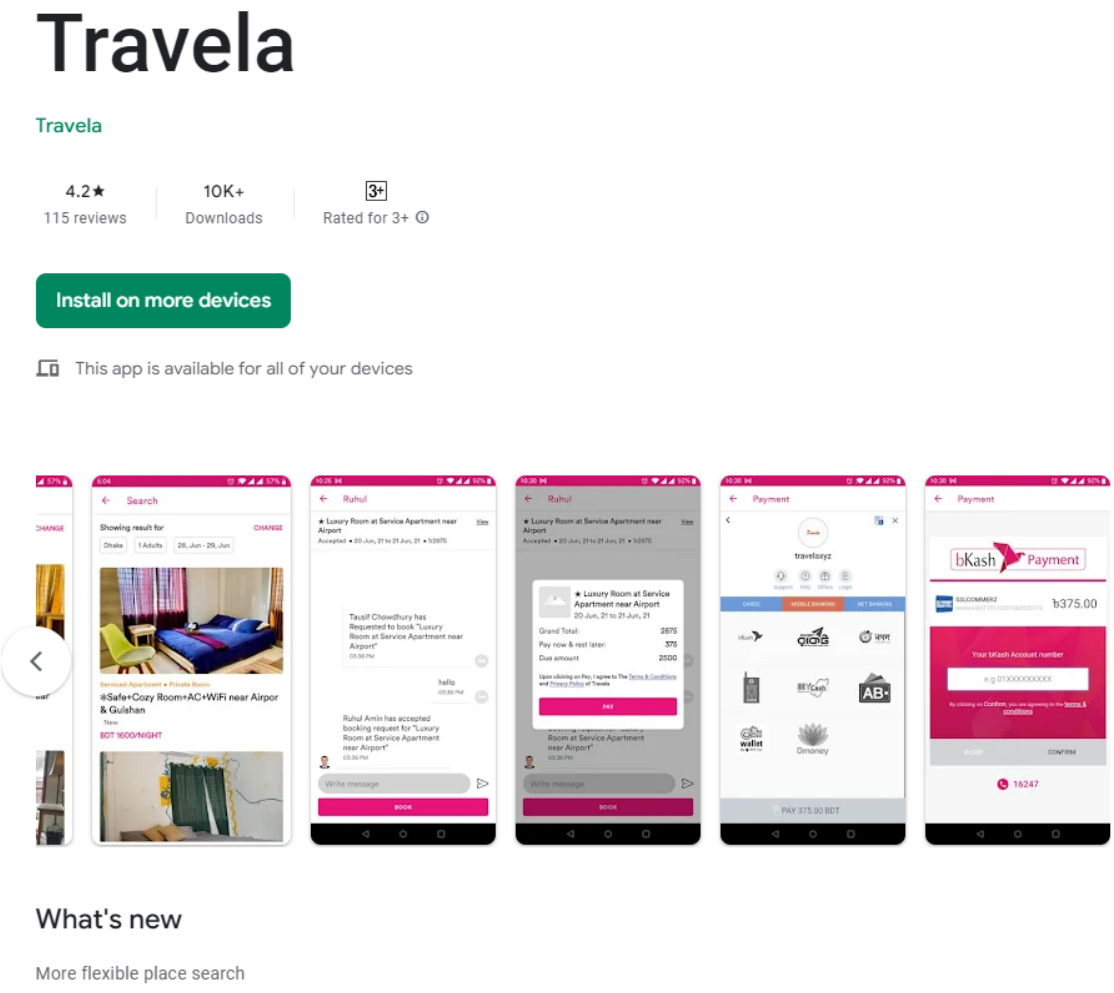


Figure 2.2: Travela Application

ShareTrip

If you're going to be doing any sort of traveling, download this app. The ShareTrip app has made flight reservations a breeze. You may easily organize your upcoming vacation with the help of the ShareTrip app. Learn about the cheapest readily-accessible Flights and easily reserve them. The software also allows you to book hotels, vacation packages, apply for visas, and much more. [3]

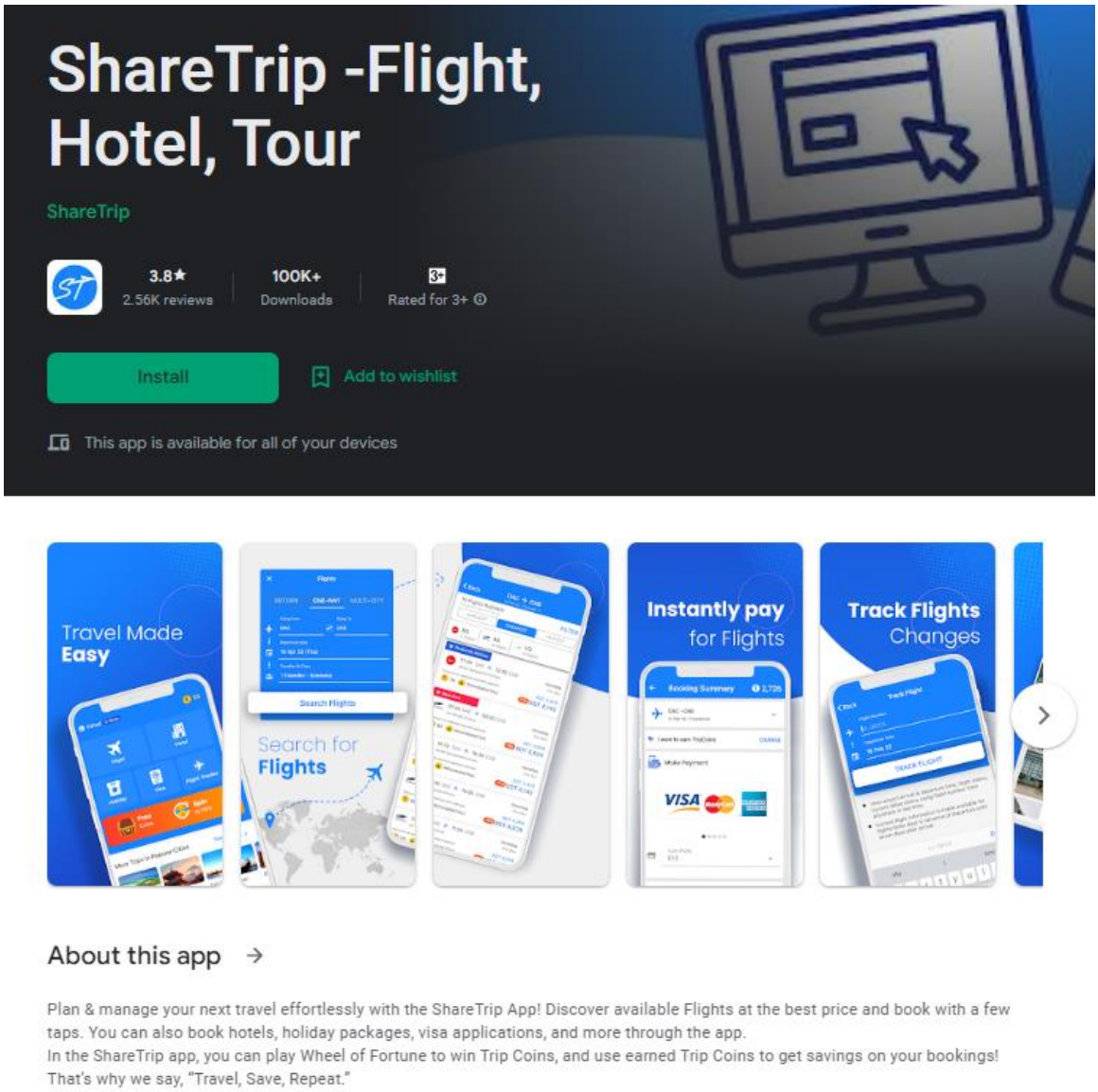


Figure 2.3: ShareTrip Application

2.3 Comparative Studies

Some currently available applications have specific constraints. There is a flaw in the vast majority of the applications. Although there are several apps that can help you plan your trip, none of them are able to do everything, such as book your hotel, bus transportation, and activities, all in one place.

But our application is user friendly. We provide all features by our application. We also provide tour package system. Travel enthusiasts can easily come up with this tour package through this android application. We also provide a proper guide about tourist spot by chatting system

CHAPTER 3
REQUIREMENT ANALYSIS

3.1 Introduction

The topic of this chapter is the selection of an appropriate strategy for this implementation. A use case diagram depicts how the many use cases relate to one another and the user. Almost every use case in this program is thoroughly explained. It has also discussed about non-functional requirements, usability requirements, software requirements and hardware requirements.

3.2 Non functional Requirements

- ➢ The language of the provided help text is English.
- ➢ The steps required to use the program will always be accessible.
- ➢ There is a limitless number of users that can access the website.
- ➢ This program is exclusive to Google's Android operating system.
- ➢ The application data can only be changed by registered users.

3.3 Usability Requirements

- ➢ Device running Android OS (at least Android 5.0) with internet access and built-in GPS.
- ➢ Even those who are colorblind can use this program with ease thanks to its accessible user interface.
- ➢ This program is accessible to anyone who knows English.

3.4 Software Requirements

In-Device-Editor (IDE) Android Studio: Android Studio is Google's official IDE for creating applications for the Android platform. It is based on JetBrains' IntelliJ IDEA and was made with Android development in mind. [4] To build top-tier apps and boost performance, this is one of the best tools available. An intelligent code editor, an emulator, a real-time profiler, and a customizable build system are all included.

Android Virtual Device: The emulator used by Android Studio is called Android Virtual Device (AVD). To test our app, we must add Android Virtual Device to Android Studio. In addition, we can utilize our mobile device by linking it to a computer. The first step is to connect the Android device to the computer via a USB cable while in the Developer mode and with USB debugging enabled.

Firebase Database: Pictures and texts will both need a place in the database. For this, we're using Firebase Realtime Database. Google's Firebase is a platform for developing apps for mobile and web devices. It was created in 2011 as a completely unique and separate entity. [5] The Realtime Database in Firebase is a cloud-hosted NoSQL database that lets you store and sync data amongst your users in real time.

Adobe Photoshop Illustrator: Adobe Illustrator and Photoshop will be used to create all of our graphics, including logos, icons, banners, and more. As a precursor to beginning xml-code implementation of our design, designing individual section pages in Illustrator is a great way to test the waters. As a result, we will follow suit just before putting anything into action.

3.5 Hardware Requirements

Laptop/ Desktop that has

- ➢ A minimum of 4 GB of RAM is required, with 8 GB being optimal.
- ➢ 2 GB of free space required, with 4 GB recommended.
- ➢ Windows 64-bit is the minimum requirement for the Android emulator.

An Android phone that has

- ➢ 2 GB RAM at least
- ➢ 200 MB Hard Disk at least
- ➢ 1.0 GHz Processor at least

3.6 Use Case Diagram

Use case diagrams are visual representations of the various ways in which a user might engage with a technology. In a system's design, a use case diagram is one of many diagram types that may be used to depict the numerous use cases and users the system serves. It's easy to tell which use cases are being depicted by the shapes they take. Actors are frequently depicted as simple stick figures. [6]

Figure 3.1 below depicts the use case design for our application Smart Trip Manager. There are mainly three sectors for use case modeling which are the Super Admin, Users, and Hotel Admin. The Super Admin, Users and Hotel Admin are connected with a login and logout system, update profile, and change password. Moreover The Super Admin who can manage users, hotel registration and also tour packages registration. The Hotel admin who can see booking status and confirm or cancel booking. The users can book the hotel or tour package and manage. And the Users payment with Hotel Admin.

Figure 3.1: Use Case Diagram of Smart Trip Manager

3.7 Business Process Modeling

The action of representing processes of an organization, as part of business process management and systems engineering, is referred to as business process modeling, or BPM for short. This is done so that existing business processes can be evaluated, enhanced, and automated. BPM is often carried out by business analysts, who offer competence in the modeling discipline; by subject matter experts, who have in-depth understanding of the processes that are being modeled; or, more commonly, by a team consisting both business analysts and subject matter experts. Alternatively, utilizing process mining techniques, the process model can be constructed directly from the logs of events. [7] Figure 3.2 below depicts the business process modeling for our application Smart Trip Manager.

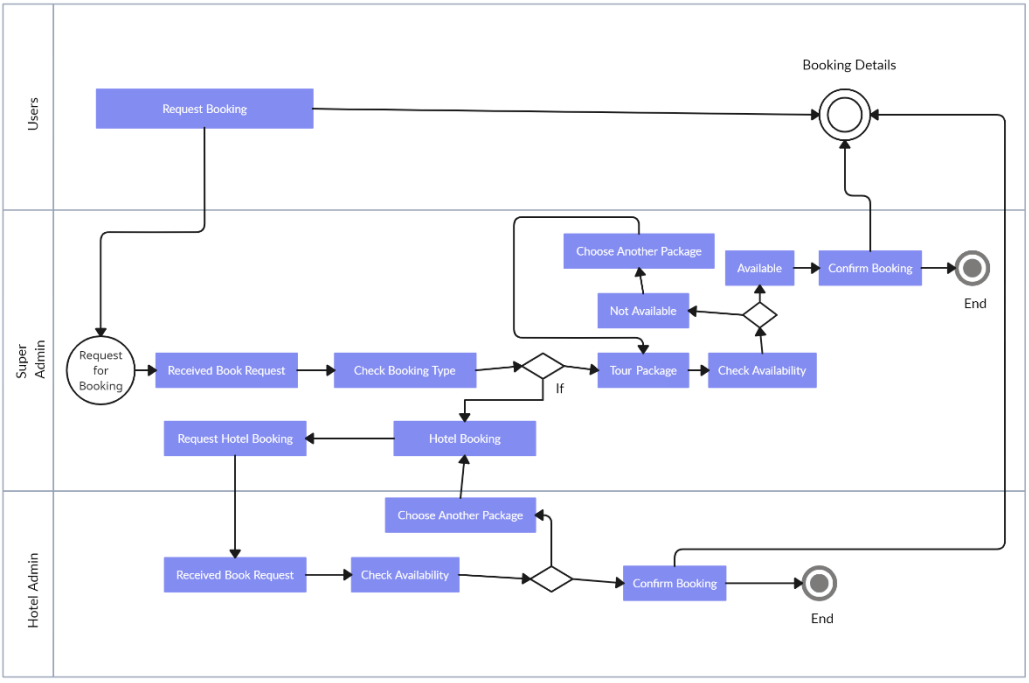


Figure 3.2: Business Process Modeling of Smart Trip Manager

3.8 Activity Diagram

In a manner analogous to that of a flowchart or a data flow diagram, an activity diagram graphically depicts a sequence of operations or the flow of control within a system. In the modeling of business processes, activity diagrams are frequently utilized. They are also able to explain the steps that are included in a use case diagram. The activities that are modeled can either take place sequentially or concurrently. In either scenario, an activity diagram will have a starting point, also known as an initial state, as well as a conclusion (a final state). [8] Figure 3.3 and 3.4 below depicts the activity diagram for our application Smart Trip Manager.

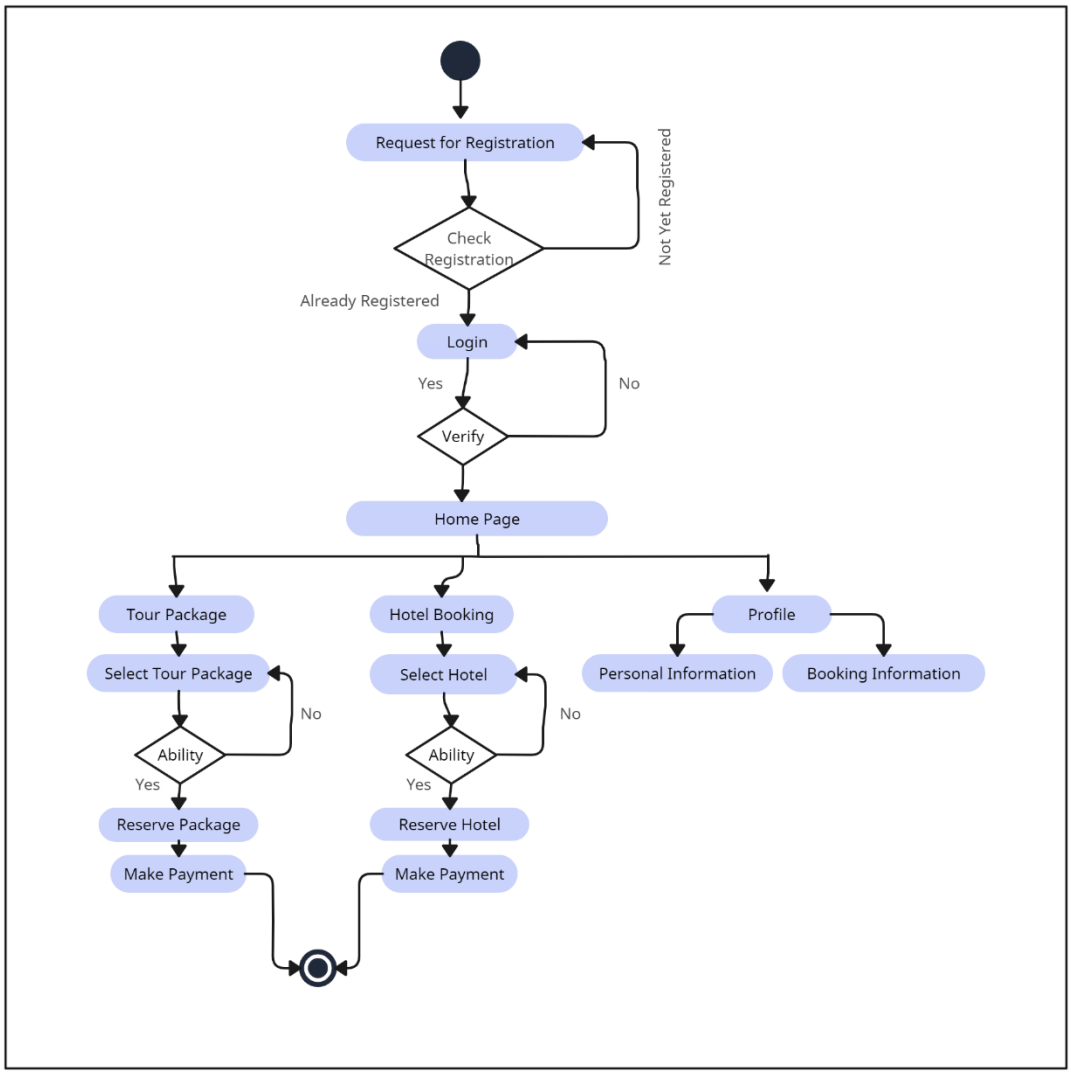


Figure 3.3: Users Activity Diagram of Smart Trip Manager

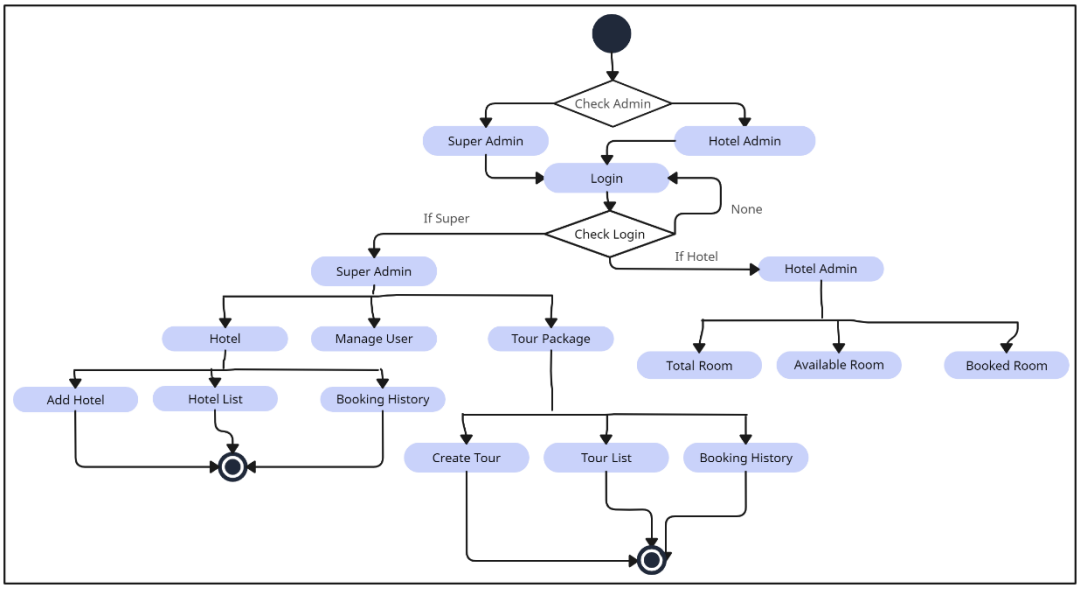


Figure 3.4: Admin Activity Diagram of Smart Trip Manager

CHAPTER 4
DESIGN SPECIFICATION

4.1 Introduction

The focus of this section is on the design of the application. We have covered the topic of what kind of architecture this app uses. Both the front- and back-end designs were covered in this article. Picture explanations cover every single section of the application. Each and every part of the application individually has been discussed with pictures.

4.2 Front-end Design

The visual design of a mobile app is part of its front end, the component of the app that the user sees and uses. The user interface is the front end of a mobile app in another sense. The concept of user experience emerged from these discussions. The front end is the part of the system where the user actually engages.

Welcome Screen

This is our welcome screen.The application will start from this screen.

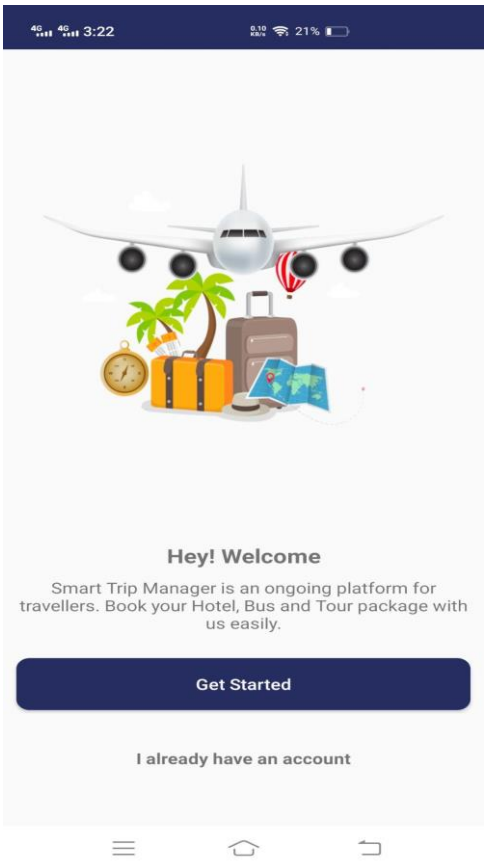


Figure 4.1: Welcome Screen

SignUp SignIn Page

This is our signup and signin page. There should be a fund of recommendations for each user to create a collaborative account for the use of add-ons on this android should realize its actual maintenance. In a valid name, email residence, a phone number, password should be mandatory. After signing up the users can go to the signin page. Then users provide their email and password and go to the home page.

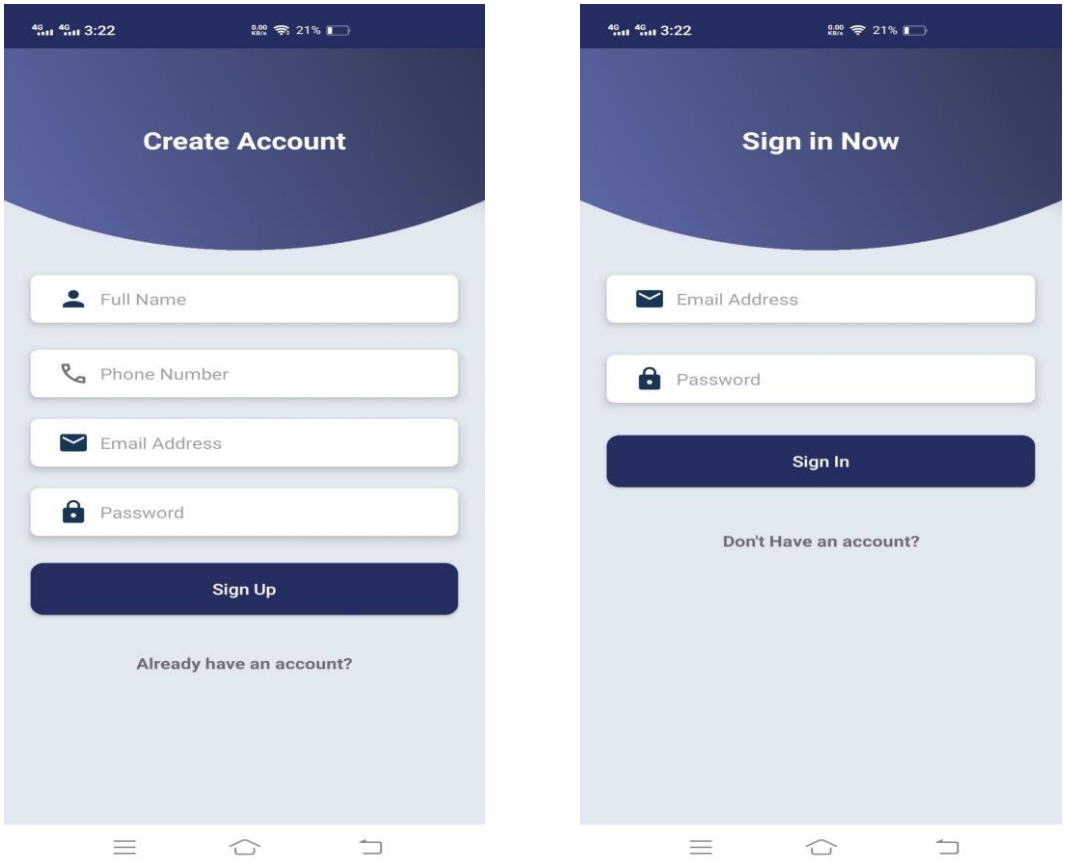


Figure 4.2: Signup SignIn page

Home Screen

Home Screen shows the overall view of the application. The home page has our main features like tour packages, hotel booking, tour guide. The home page also has a bottom navigation button and contains a Tour button, Hotel button, Home button, Guide button and Profile button etc. This page also features a logout button.

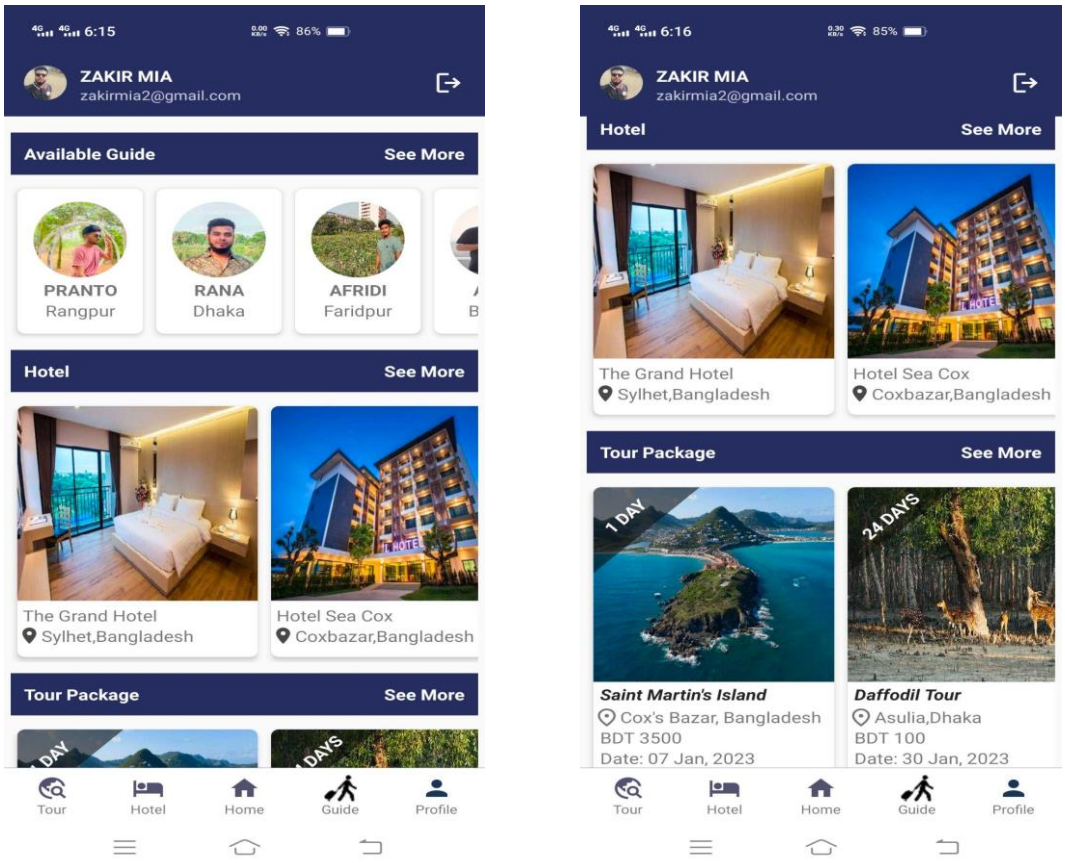


Figure 4.3: Home Page

Tour Package Page

From here travel customers can easily pick their latest travel packages for travel and tourism. And according to that package, they can visit different travel places. Here also contains a search bar where users can search according to the location and package name and they find their favorite packages.

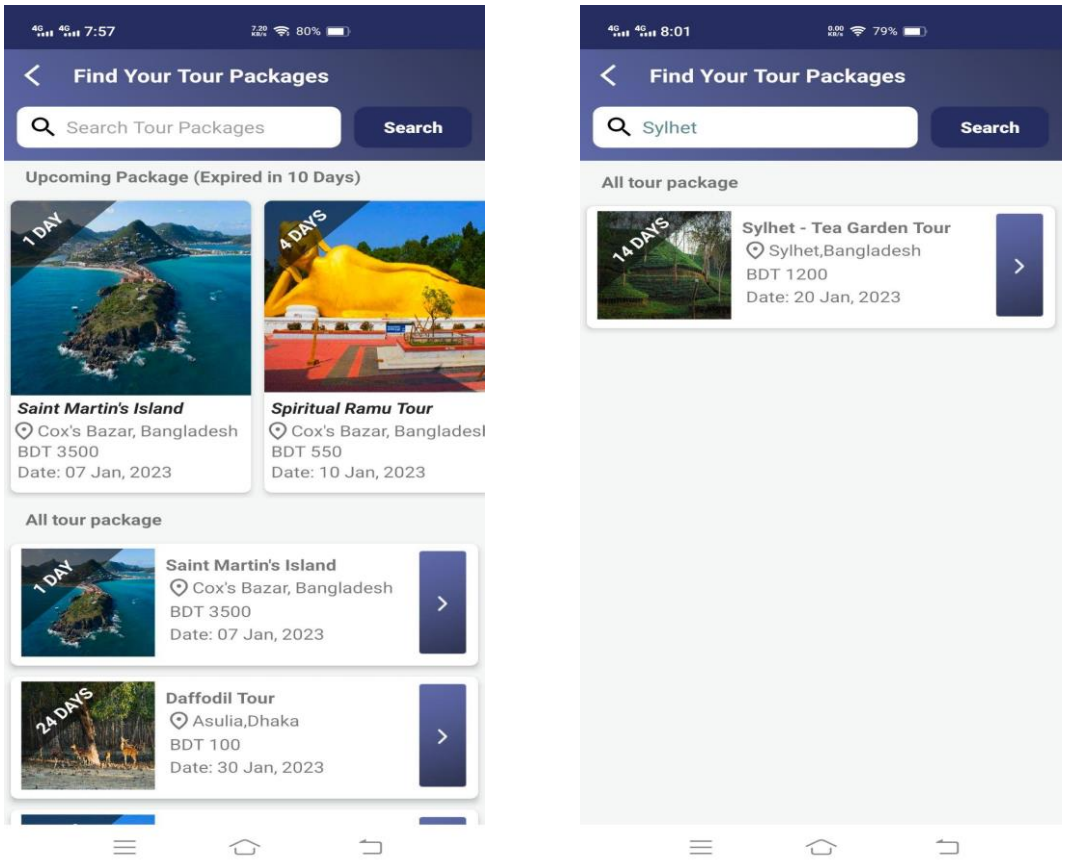


Figure 4.4: Tour Package Page

Package Details

Package details page has overall package information and booking package system. Here the users select the number of travelers and book the package by this application.

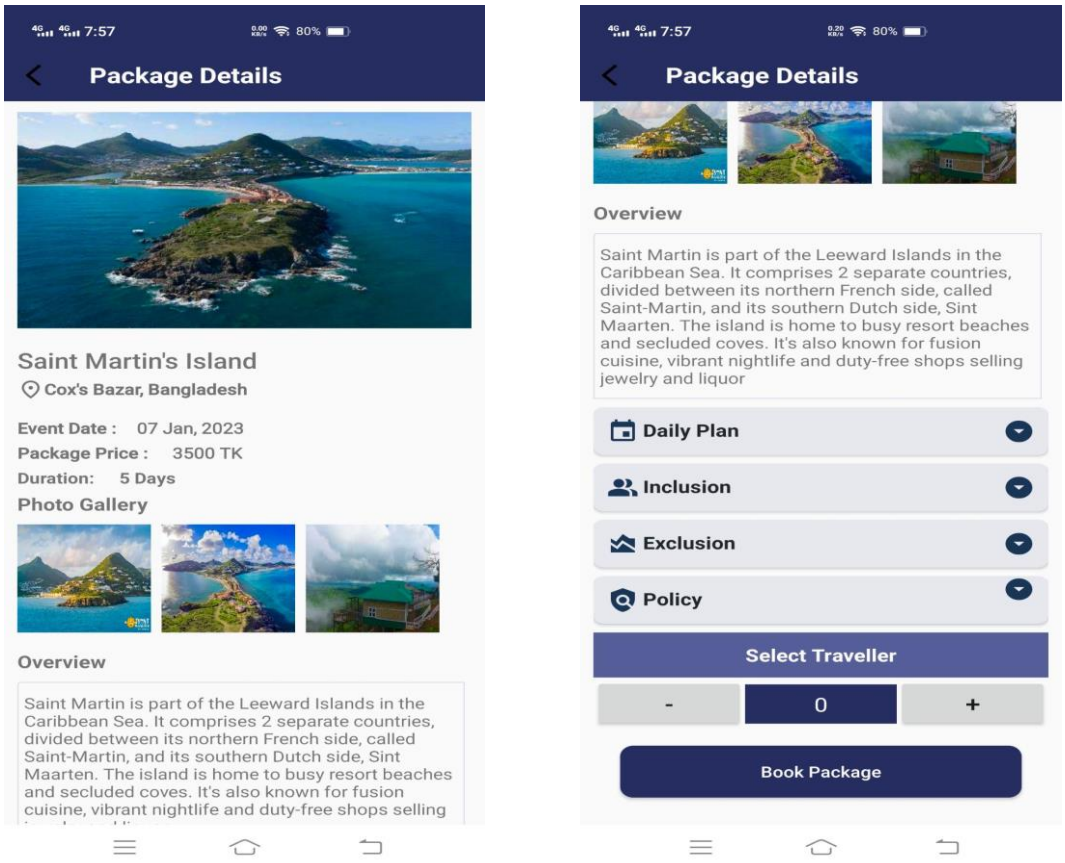


Figure 4.5: Package Details

Hotel Page

From here travel customers can easily pick their tourist spot hotels. Here also contains a search bar where users can search according to the location and hotel name and they find their favorite hotels.

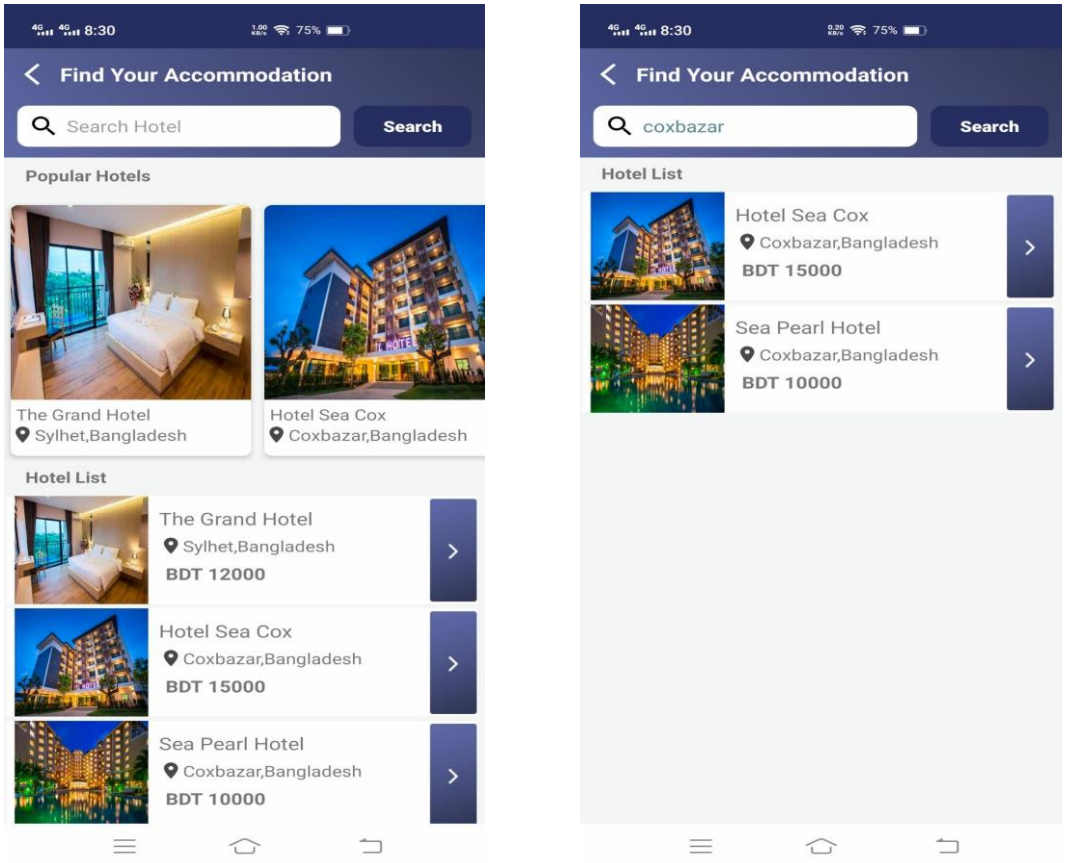


Figure 4.6: Hotel Page

Hotel Details

Hotel details page has overall package information and hotel booking system. Here the users select the number of rooms, check in and check out date and book the hotel by this application.

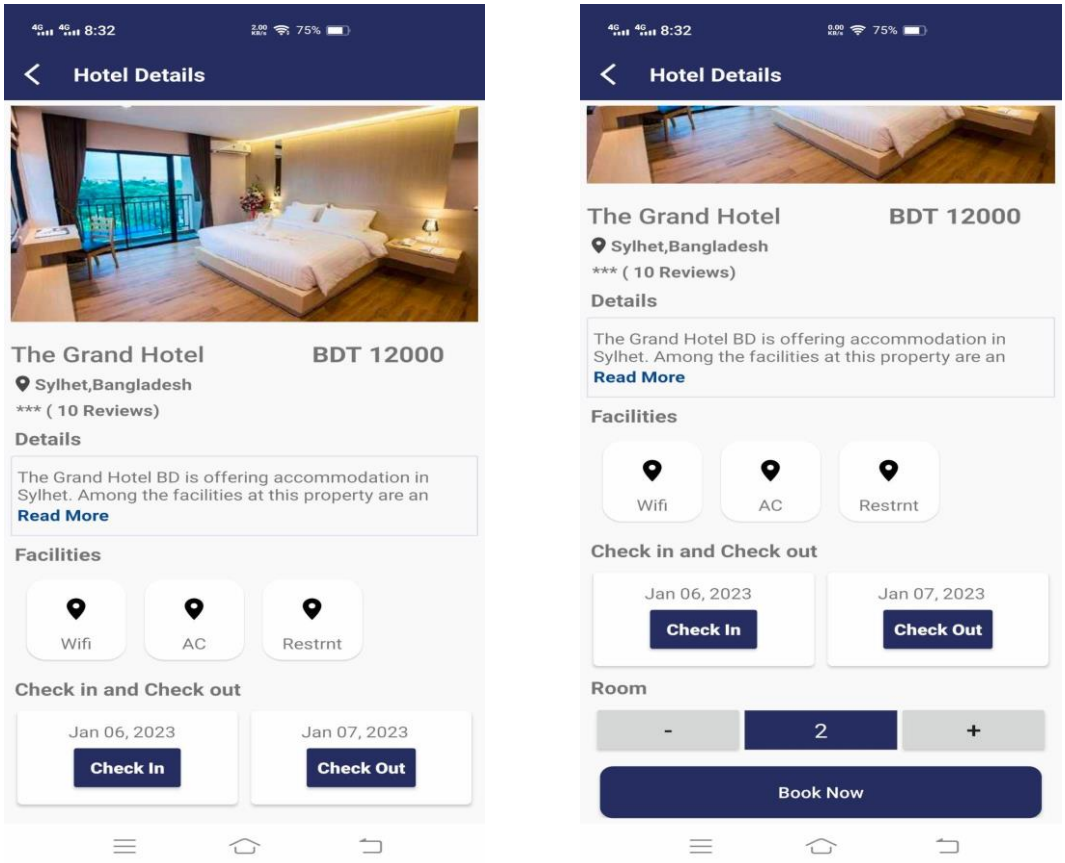


Figure 4.7: Hotel Details

Guide Page

From here travelers find their favorite tourist places guide according to the tourist spot division.

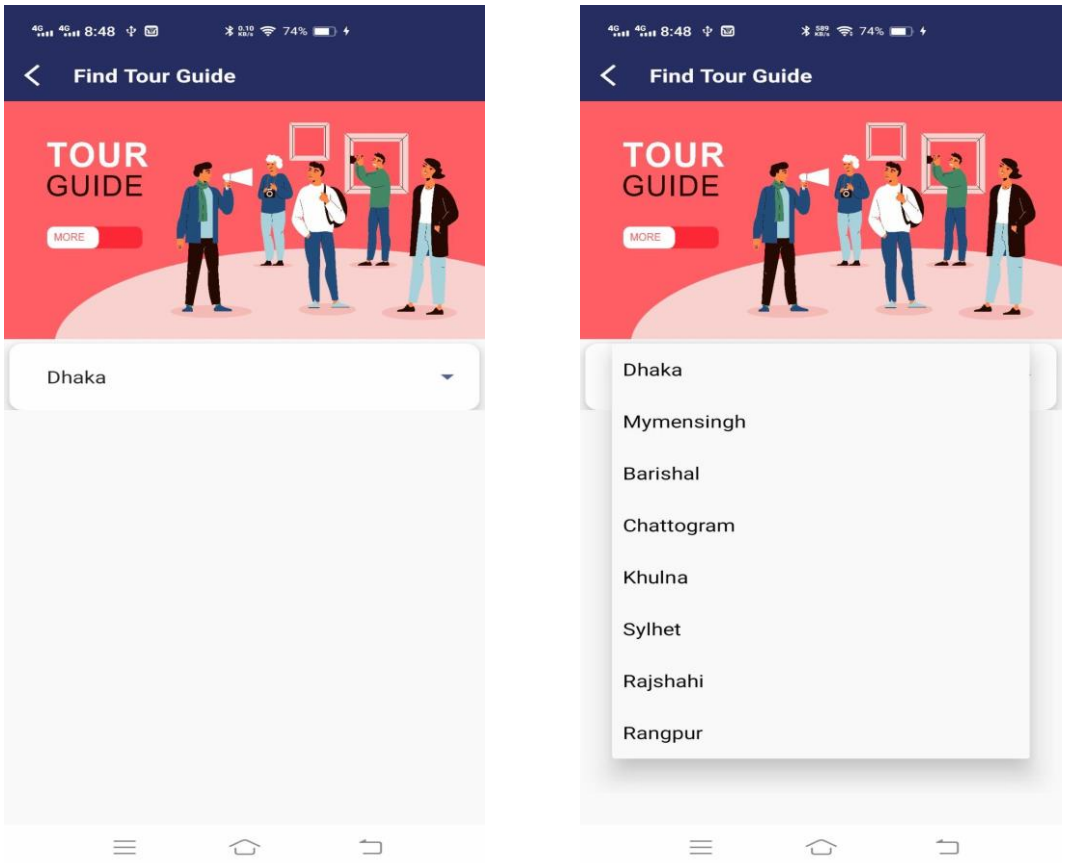


Figure 4.8: Guide Page

Profile Page

That which you see right now is an individual's profile. Here users can see all the information about name, email, mobile number, profile picture and also booking information like tour package booking, hotel booking. And also a user can request to be a tour guide by his personal information.

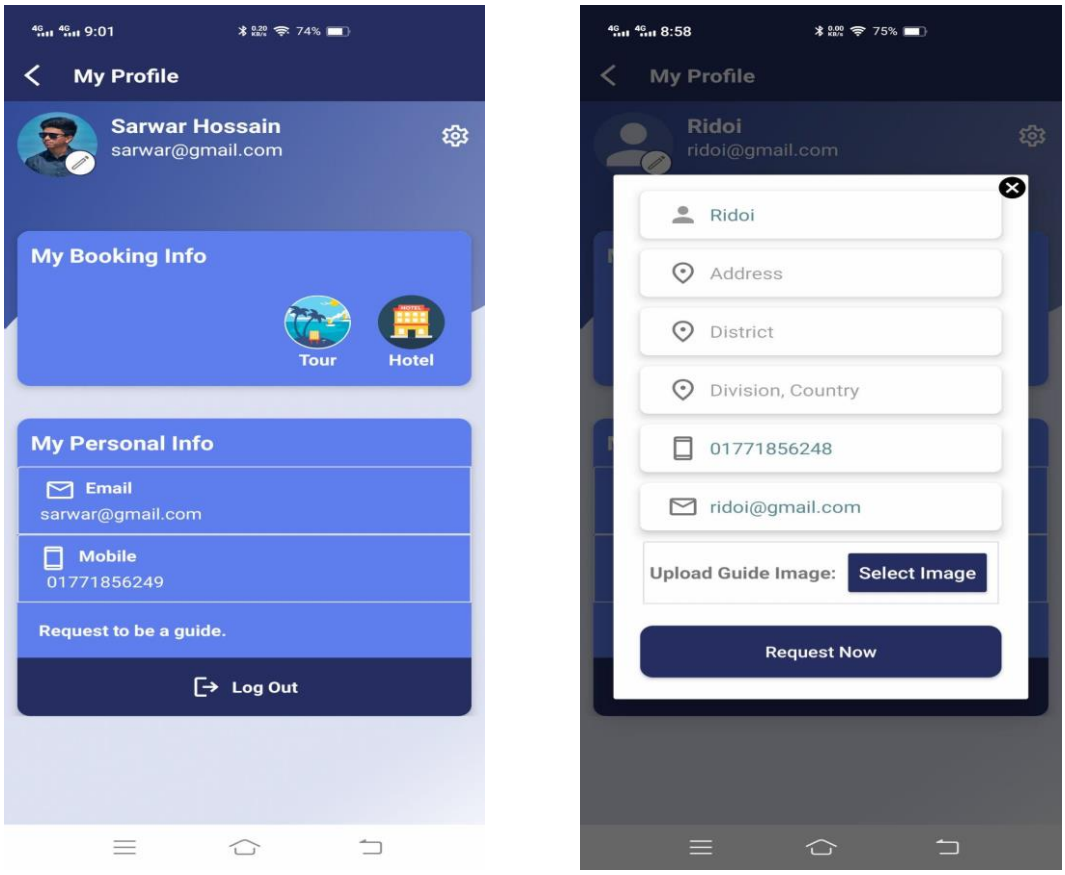


Figure 4.9: Profile Page

Booking Info Page

This is the user booking info page. Here users can see all the information about tour package booking and hotel booking.

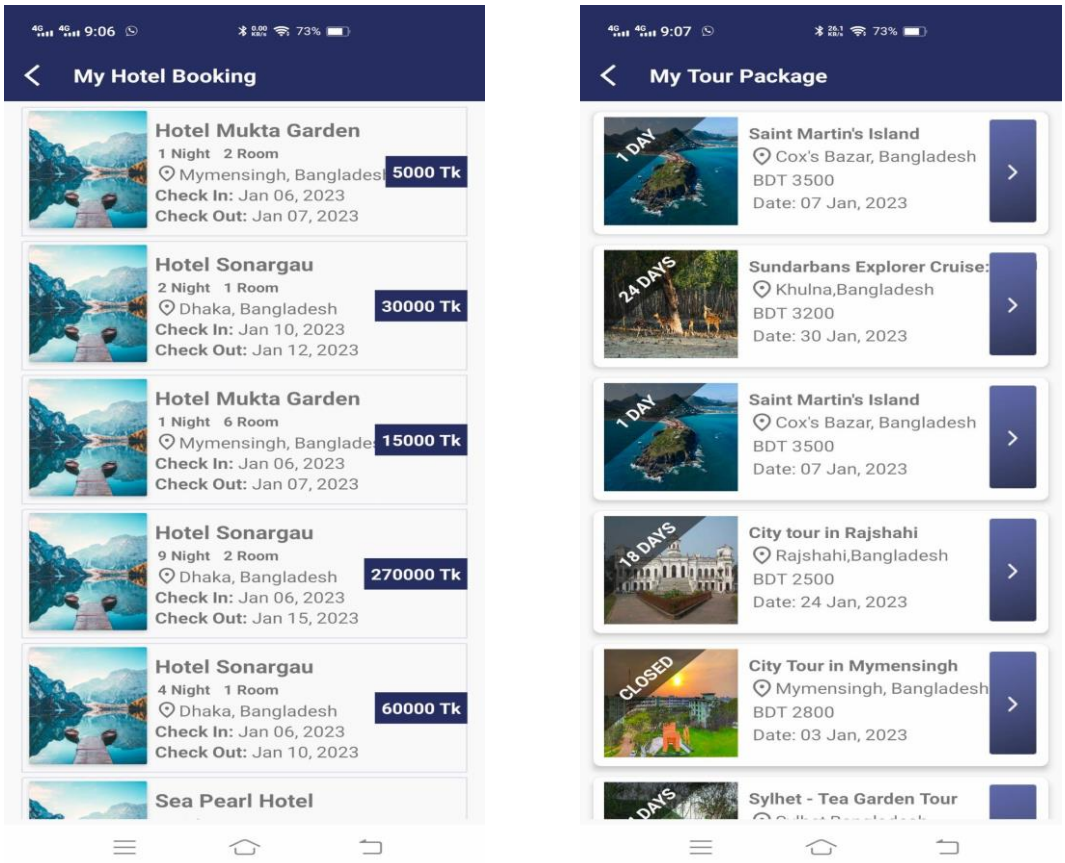


Figure 4.10: Booking Info Page

Admin Login Page

This is our admin welcome screen and admin login page. And also this is another application for controlling our “Smart Trip Manager” application. Here the admins provide their email and password and go to the admin home page.

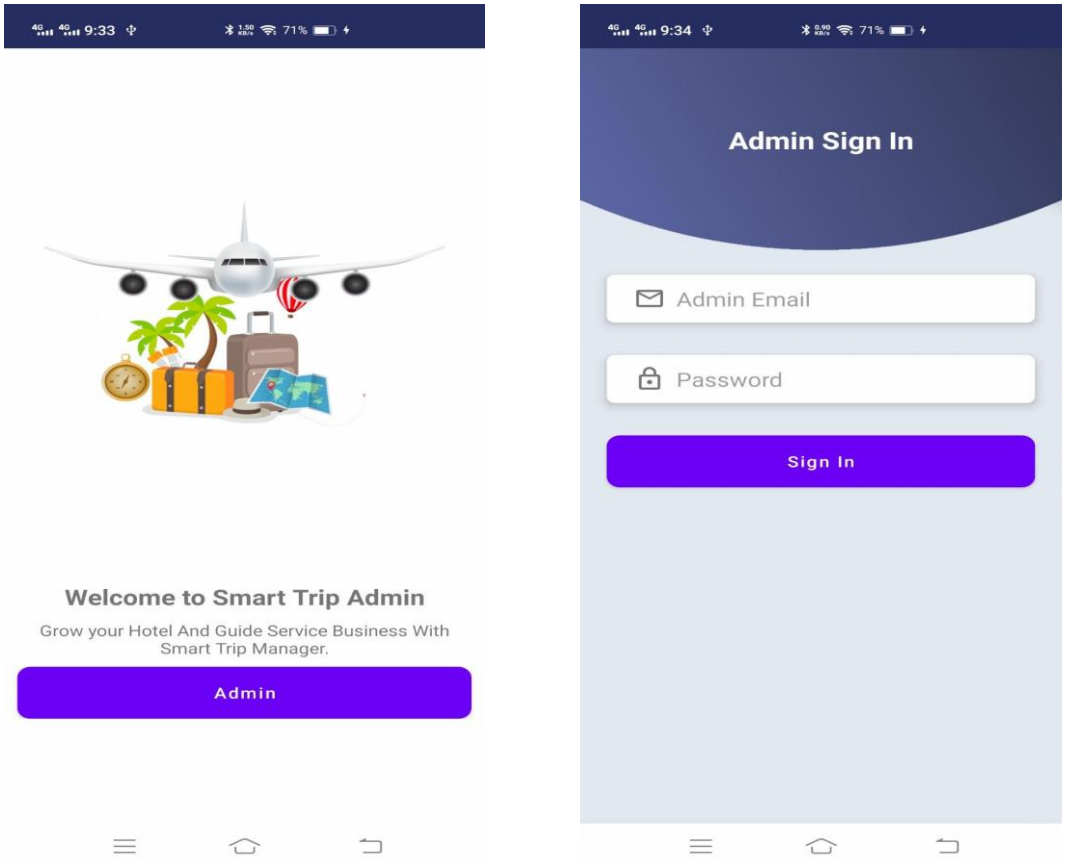


Figure 4.11: Admin Login Page

Admin Home Page

This is our admin home page screen. This page contains a registered hotel list and number, tour package list and number. This page has user login information and here also a toggler view of hotel and tour packages. And admin can logout this page by logout button.

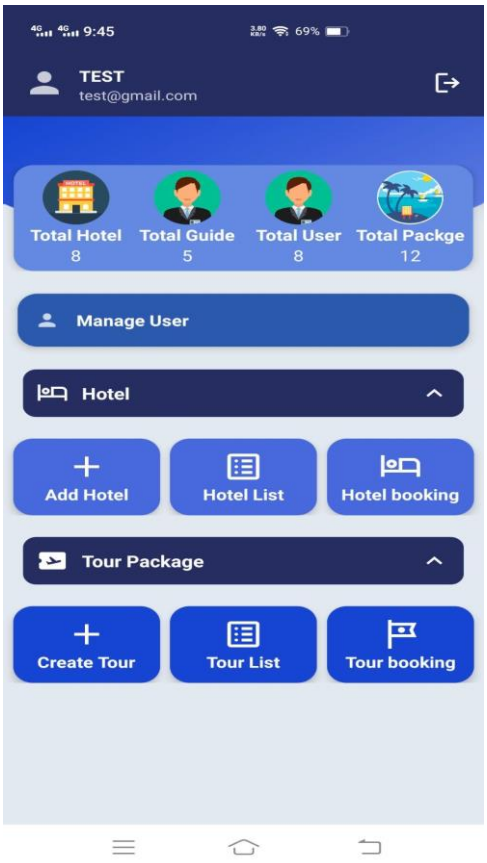


Figure 4.12: Admin Home Page

Manage User Page

This is our “Smart Trip Manager” application users login details.

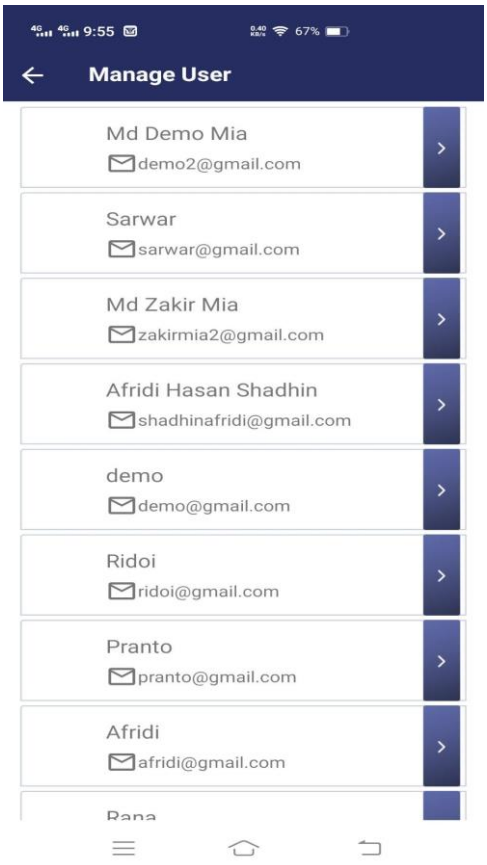


Figure 4.13: Manage User Page

Add Hotel Page

This is the hotel registration page. Here admin can register hotel and hotel related information by filling up this form. Next time hotel admin can login their hotel portal by registered email and password.

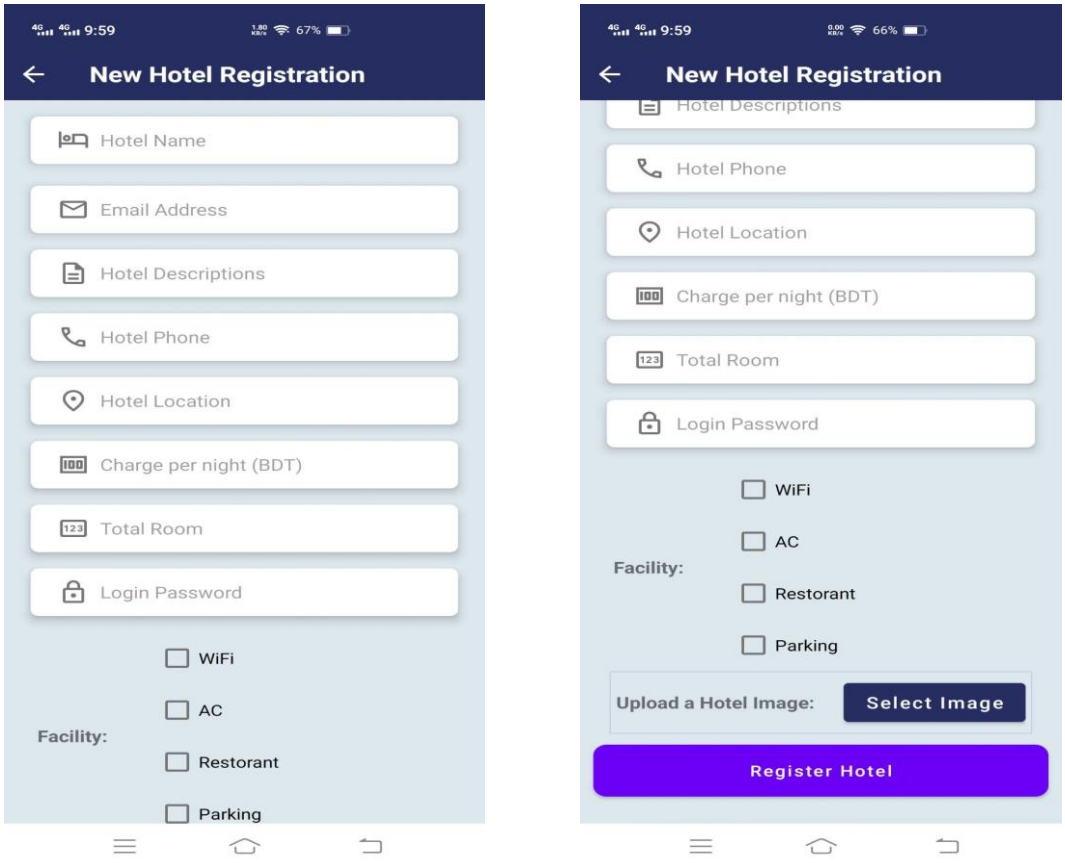


Figure 4.14: Hotel Registration

Hotel List and Hotel Booking History Page

In these page will show all registered hotel information lists and hotel booking history which hotel users have booked.

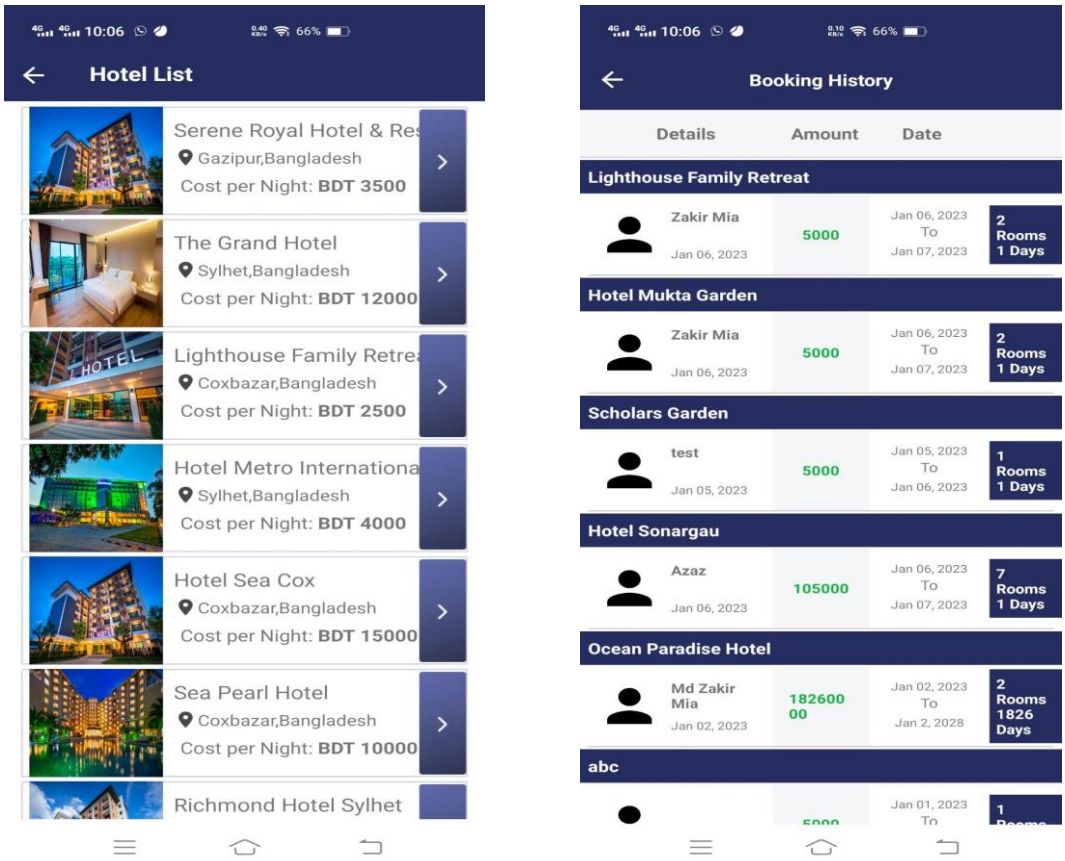


Figure 4.15: Hotel List and Hotel Booking History

Create Tour Package Page

This is the tour package registration page. Here admin can register tour packages and package related information by filling up this form.

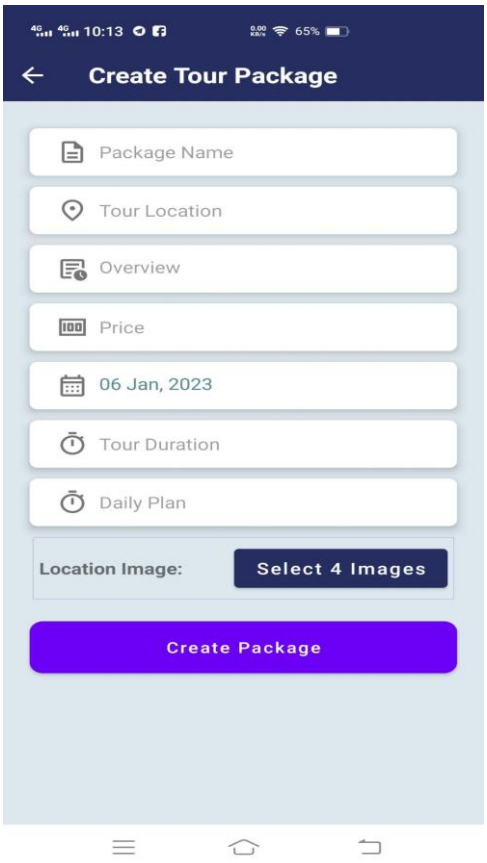


Figure 4.16: Create Tour Package

Tour Package List and Package Booking History Page

In these page will show all created tour packages information lists and packages booking history which package users have booked.

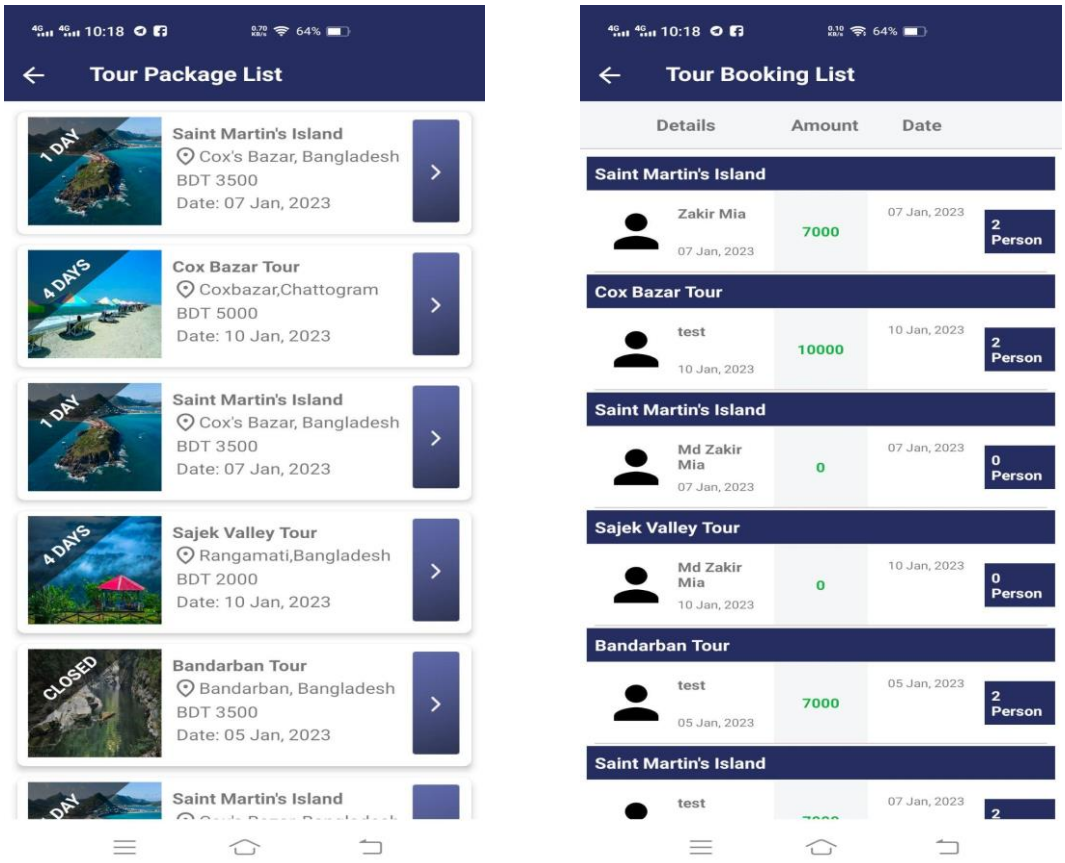


Figure 4.17: Tour Package List and Booking History

Hotel Admin Page and Booking History

This is the hotel admin dashboard. Here the hotel admin can see the available booked and total room of the specific date. Also the admin can see the hotel booking history and status.

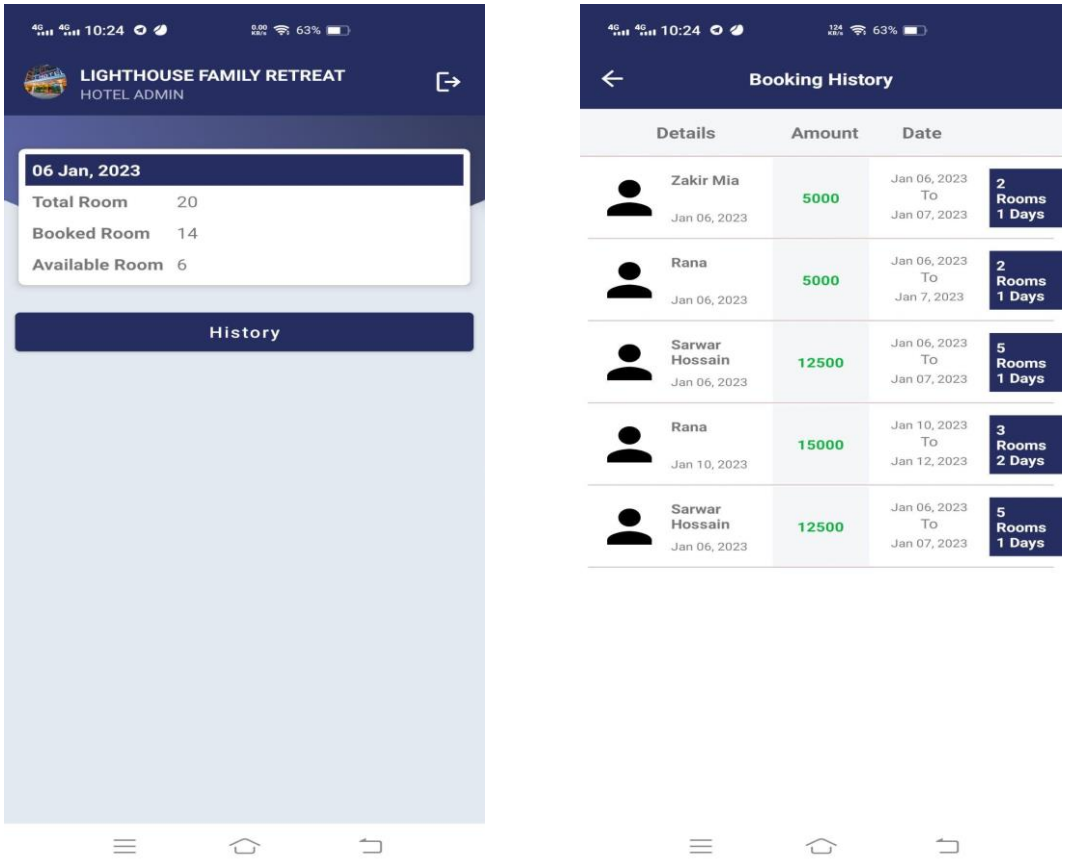


Figure 4.18: Hotel admin and Booking History

4.3 Back-end Design

Developers who work on the back end are concerned with the server. They employ their technical knowledge to build the framework and core features of a site's infrastructure, making the site's front end possible. These experts design and develop a website's backend, user interface, and databases. And this is our application's Back-end design.

This is our user database which stored all application users' information like user name, user email, user id, user phone, user Image, and password.

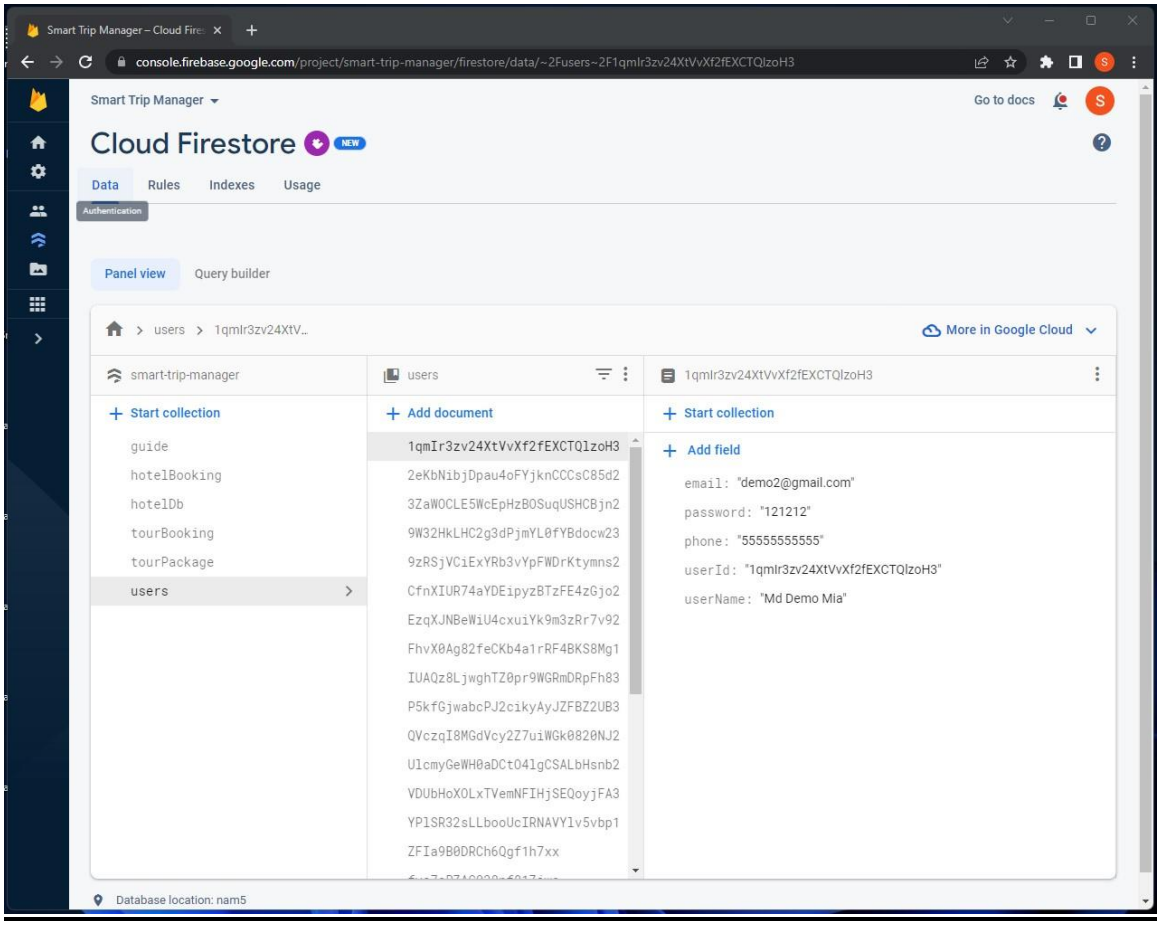


Figure 4.19: Users Database

This is a Hotel information database of this application that stored all hotel-related information assume Hotel Name, Hotel Location, Hotel Facility, Total room number of a hotel, Hotel description, Hotel Image, Email, Cost per night, and others.

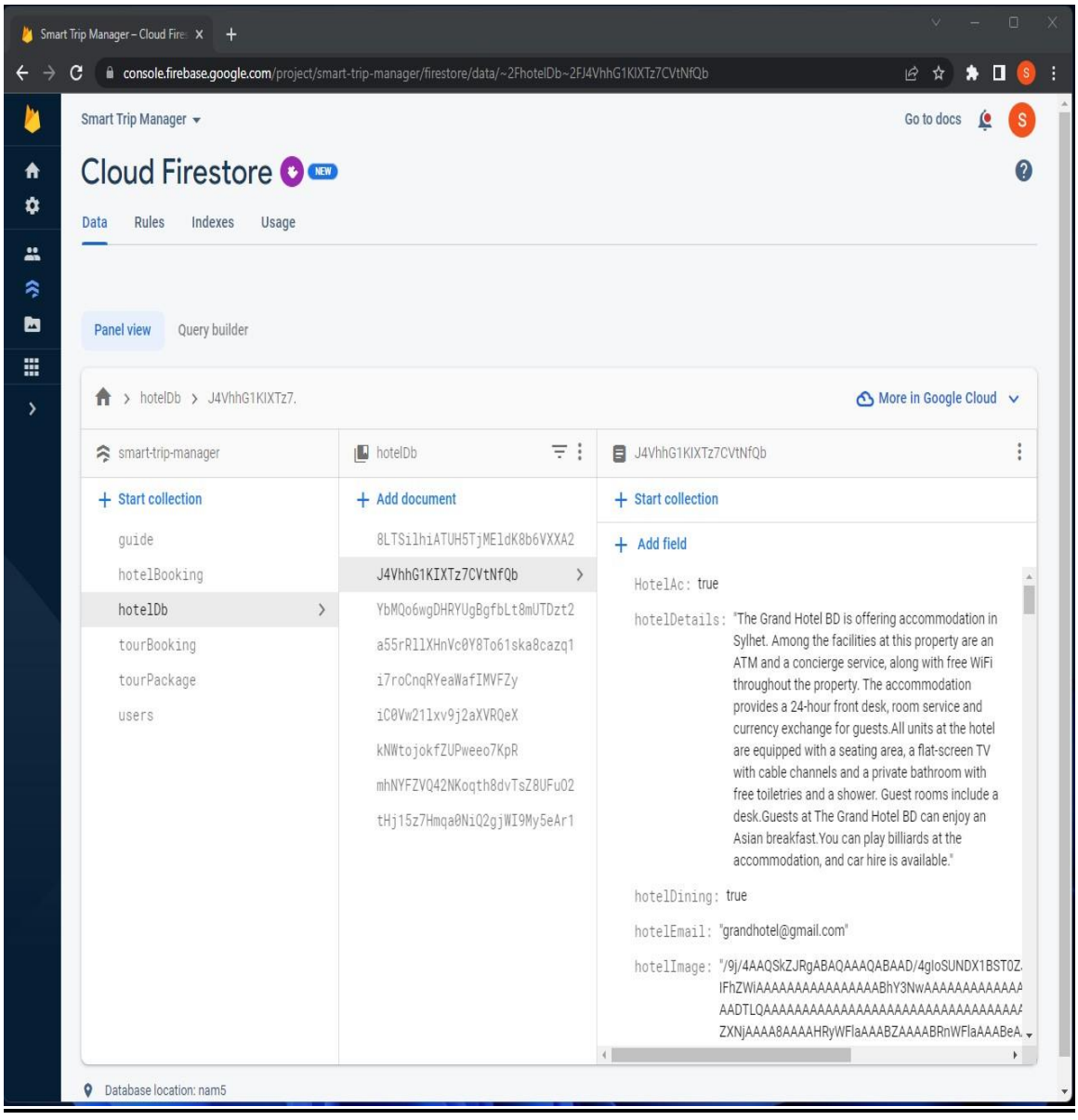


Figure 4.20: Hotel Database

All the details you need to know about our tour packages are stored here in our convenient database. For example here will contain Tour date, Inclusion and exclusion, Daily plan of the event, Tour duration, Package price ,Tour package name, Location name, Details of the tour location, Images of the location and others.

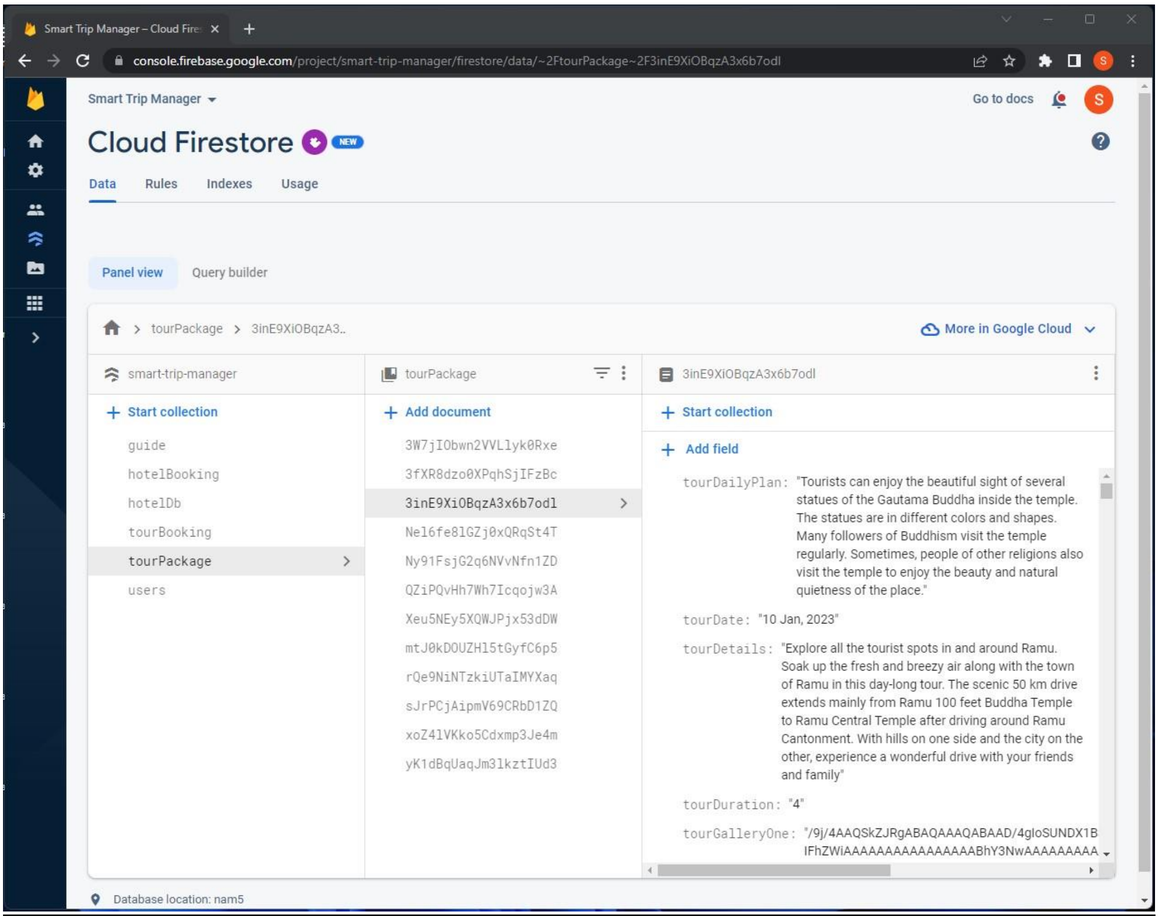


Figure 4.21: Tour Package Database

This is the application's database for storing information on tour bookings, including which users booked which tours, how many people signed up for which tours, how much each person paid for their tours, and so on.

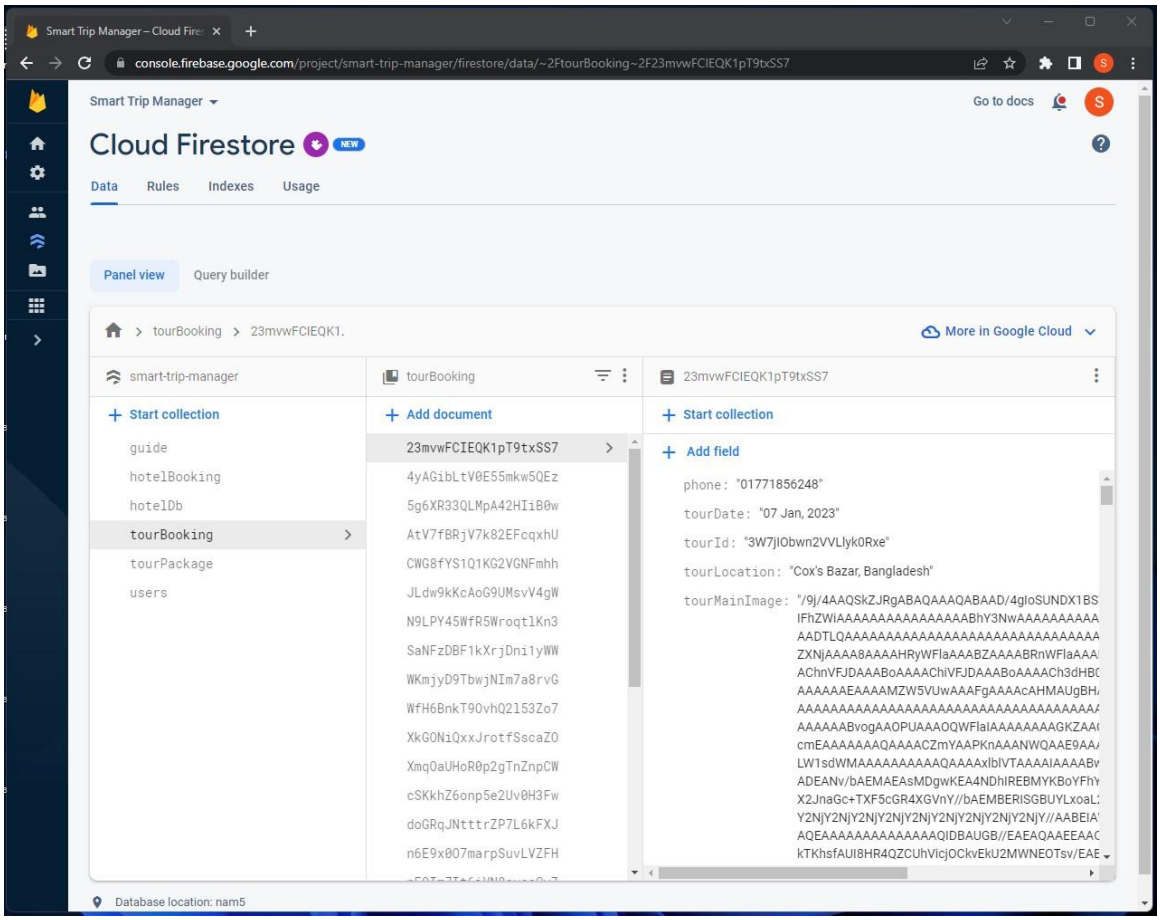


Figure 4.22: Tour Booking Database

This is tour guide database of our application where stored all tour guide related information like Guide name,Email,Phone, Address,Image and others.

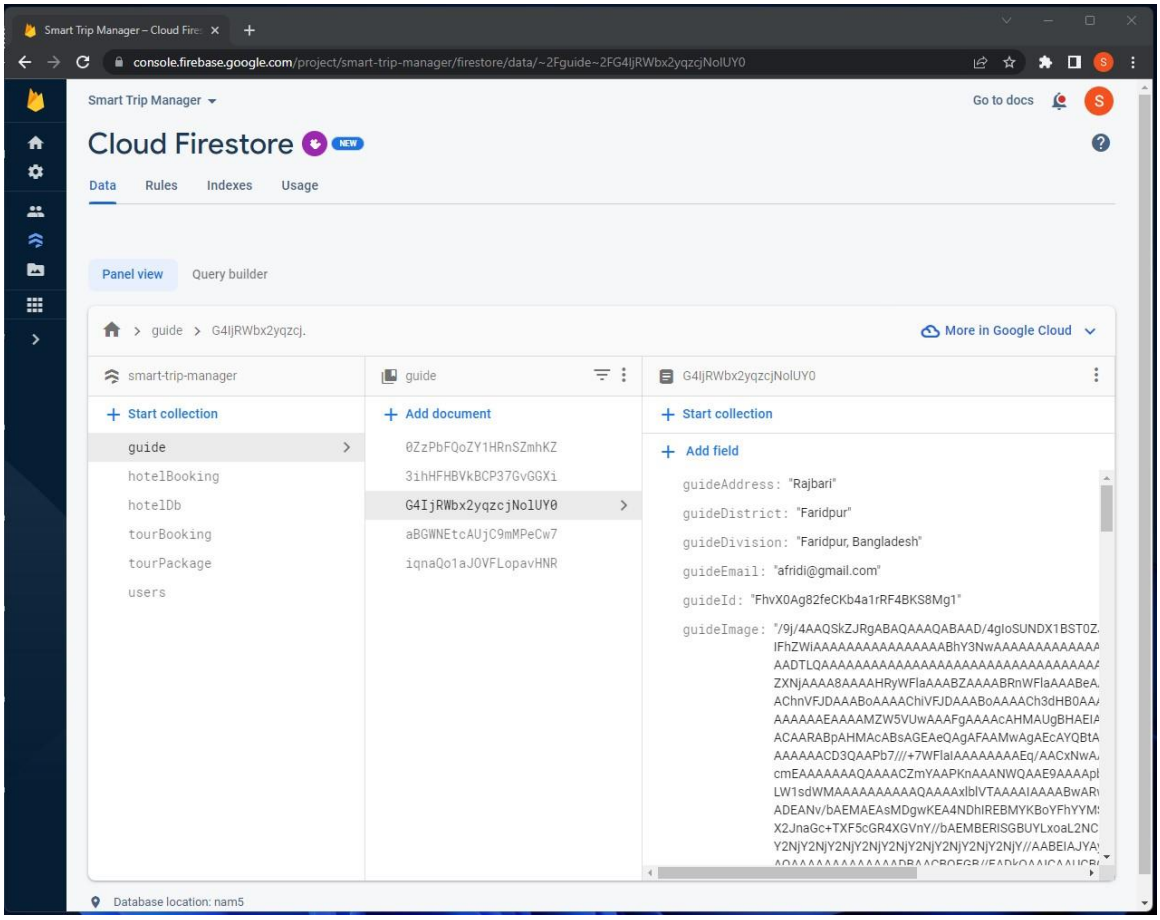


Figure 4.23: Tour Guide Database

This is our hotel booking database, where we keep track of data like who booked the hotel, when they booked it, how many nights they stayed, how many rooms they reserved, how much they paid, and more.

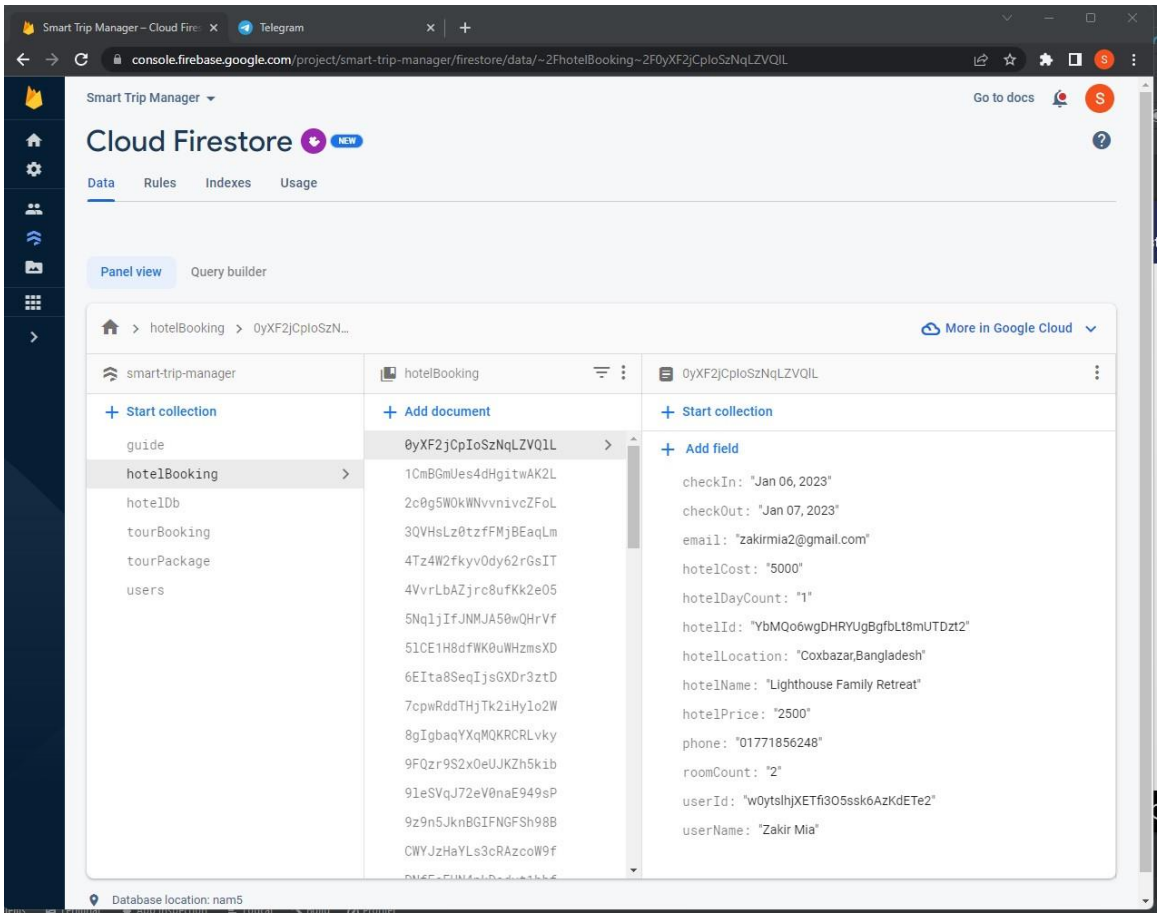


Figure 4.24: Hotel Booking Database

CHAPTER 5
IMPLEMENTATION AND TESTING

5.1 App Implementation

I followed these Steps to Develop the app

- ➢ First of all, we studied related apps and gathered Ideas.
- ➢ Then, we designed the Logos, and all other necessary Designs in Adobe Illustrator.
- ➢ After that we created a Project on Android Studio. And Designed login and signup system.
- ➢ After that, we started to implement the design via XML coding.
- ➢ Then, we designed the Database on Firebase. How it would be, what will be the variable and their type.
- ➢ Then we implemented all Pages, Activities, Model classes, Adapters with JAVA.
- ➢ After finishing the app development we started testing it with test data.

5.2 App Testing

Testing software entails validating and verifying both the software's artifacts and its behavior. The risks associated with implementing software can be better understood by the business if the program has been subjected to testing that provides an unbiased, outside perspective. [9]

So we are using unit testing in this application. Unit testing is a method of software testing in which individual parts of a program are evaluated to see if they are fit for their intended purpose. This includes evaluating program modules, user interface elements, and backend processes. It's a way to make sure everything is working properly by having the developer check each and every standalone component. It's

connected to how well the individual components work. Unit testing is a subset of software testing in which discrete parts of a program are evaluated independently. When creating an app, it is common practice to perform unit testing on individual components. A part might be a single operation or a series of steps. The developer is normally in charge of doing unit tests. [10]

5.3 Result of Unit Testing

Table 5.1: Result of User Application Testing

Case Id	Test Case	Test Data	Expected Result	Actual Result	Result
C-1	Interface visibility	Tested on AVD	Interface are display correctly	Interface are displayed correctly	Pass
C-2	Signup	Tested on AVD	Signup registration complete	Signup complete correctly	Pass
C-3	Login	Tested on AVD	Login should be done	Login done	Pass
C-4	Navigation button Tour	Tested on AVD	Change to new activity Tour Packages	Changes done	Pass
C-5	Package Booking	Tested on AVD	It should be booked	Booking done	Pass
C-6	Navigation button Hotel	Tested on AVD	Change to new activity Hotel booking	Changes done	Pass
C-7	Hotel Booking	Tested on AVD	It should be booked	It should be booked	Pass
C-8	Navigation button Home	Tested on AVD	Should be toast message show	Message shown	Pass
C-9	Navigation button Guide	Tested on AVD	Change to new activity	Changes done	Pass
C-10	Navigation button Profile	Tested on AVD	Change to new activity	Changes done	Pass
C-11	Booking info for Tour	Tested on AVD	Change to new activity and message show	Tour packages show	Pass
C-12	Booking info for Hotel	Tested on AVD	Change to new activity and message show	Hotel booking status show	Pass
C-13	Logout button	Tested on AVD	Logout should be done	Logout done	Pass
C-14	Search Hotel	Tested on AVD	Searching hotels are should be show	Showing searching hotels	Pass
C-15	Search Tour Packages	Tested on AVD	Searching tour packages are should be show	Showing searching tour packages	Pass

Table 5.2: Result of Admin Application Testing

Case Id	Test Case	Test Data	Expected Result	Actual Result	Result
C-1	Interface visibility	Tested on AVD	Interface are display correctly	Interface are displayed correctly	Pass
C-2	Login	Tested on AVD	Login should be done	Login done	Pass
C-3	Manage user	Tested on AVD	Users details should be show	Showing users details	Pass
C-4	Admin Add hotel	Tested on AVD	Hotel registration should be done	Hotel registration done	Pass
C-5	Admin Hotel list check	Tested on AVD	Hotel list should be show	Showing hotel list	Pass
C-6	Admin Add tour packages	Tested on AVD	Tour packages registration should be done	Tour packages registration done	Pass
C-7	Admin Tour Packages list check	Tested on AVD	Tour Packages list should be show	Showing Tour Packages list	Pass
C-8	Hotel Toggler button	Tested on AVD	Toggler list should be show	List shown	Pass
C-9	Tour Package Toggler button	Tested on AVD	Toggler list should be show	List shown	Pass
C-10	Logout button	Tested on AVD	Logout should be done	Logout done	Pass

CHAPTER 6
IMPACT ON SOCIETY, AND SUSTAINABILITY

6.1 Impact on Society

Since our app is accessible to everyone, we think it will make a significant impact on people's lives. Our application will make their travel easier and more enjoyable for the wanderlust people. Distinct regions have different advantages, and tourism's impact on the social and cultural fabric of a given location could seem quite different depending on those advantages. It is also a user-friendly application that the user can use easily. As a result, all people in the society can use our application easily. With the help of our application people can easily book the hotel and tour packages.

6.2 Ethical Aspect

The application's admin will be in charge of and responsible for any data uploads to the application's database. Because of this, neither false information nor privacy concerns will arise. We never want our apps to contain any wrong information or anything else.

6.3 Sustainability Plan

Since we have implemented our application as a hotel booking service, tour package host and tourist spot based service, we are planning to do business with this application. And it is mainly made for business purposes. In the future we are thinking of bringing more features in our application like bus ticket booking service, train ticket booking service, and plane ticket booking service etc. Basically, for the convenience of the users , our initiative is to present the tourism sector to the people in an easy way. We will add required features of our application as per user request.

CHAPTER 7
CONCLUSION AND FUTURE WORKS

7.1 Introduction

The tourism sector is expanding at an astonishing rate. It's also among the most important industries because of the number of people it helps. As a result of digitization, all of this was possible. People in the modern era of smartphones and other devices are always on the lookout for first-rate travel services that improve their trip. The businesses that make up the tourism sector, on the other hand, are giving it their all to ensure that customers receive the best possible service. We worked hard to ensure that our application was simple to use. We worked hard to keep the app's size down so that it would function properly on most Android gadgets. We believe this app could be incredibly useful for every colony if more features were added in the future.

7.2 Conclusion

The "Smart Trip Manager" app, available for Android devices, helps travelers plan the perfect vacation despite limited time. Travel customers can make hotel bookings easily through smart trip manager apps. If they want to know about different travel places, they can know through the app using a tour guide. Travel customers can easily pick their travel packages using the smart trip manager mobile app for travel and tourism. And according to that package, they can visit different travel places.

7.3 Future Work

The current version of the Smart Trip Manager app is limited to the territory of Bangladesh, but we plan to update it in the near future so that it can serve travelers from anywhere in the world. Our app is currently only available in English, but we plan to add a language option in the near future so that users can customise the app's language to their native tongue. In future other transport bookings like trains, flights and launches

can be used by customers. Also in future online payment system can be used by customers.

REFERENCES

[1] GoZayaan, available at <<https://play.google.com/store/apps/details?id=com.gozayaan.app>>, last accessed on 03-01-2023 at 10:00 PM.

[2] Travela, available at <<https://play.google.com/store/apps/details?id=com.travela.xyz>>, last accessed on 03-01-2023 at 10:30 PM.

[3] ShareTrip, available at <<https://play.google.com/store/apps/details?id=net.sharetrip>>, last accessed on 03-01-2023 at 11:00 PM.

[4] Android Studio, available at << https://en.wikipedia.org/wiki/Android_Studio>>, last accessed on 02-01-2023 at 08:00 PM.

[5] Firebase, available at << https://en.wikipedia.org/wiki/Firebase>>, last accessed on 04-01-2023 at 07:00 PM.

[6] Use Case Diagram, available at <<https://en.wikipedia.org/wiki/Use_case_diagram>>, last accessed on 04-01-2023 at 12:00 PM.

[7] Business Process Modeling, available at <<https://en.wikipedia.org/wiki/Business_process_modeling>>, last accessed on 04-01-2023 at 12:00 PM.

[8] Activity Diagram, available at <<https://www.smartdraw.com/activity-diagram/>>, last accessed on 04-01-2023 at 12:30 PM.

[9] Software Testing, available at <<https://en.wikipedia.org/wiki/Software_testing>>, last accessed on 04-01-2023 at 05:30 PM.

[10] Unit Testing, available at <<https://www.geeksforgeeks.org/unit-testing-software-testing/>>, last accessed on 04-01-2023 at 06:30 PM.

Smart Trip Manager

ORIGINALITY REPORT

23%	20%	1%	19%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	dspace.daffodilvarsity.edu.bd:8080 Internet Source	8%
2	Submitted to Daffodil International University Student Paper	6%
3	Submitted to Morgan Park High School Student Paper	3%
4	Submitted to Asia Pacific International College Student Paper	1%
5	Submitted to Coventry University Student Paper	1%
6	Submitted to Mercer University Student Paper	<1%
7	Submitted to University of Colombo Student Paper	<1%
8	www.coursehero.com Internet Source	<1%
9	Submitted to The University of the West of Scotland Student Paper	<1%

10	Submitted to Majan College Student Paper	<1 %
11	Submitted to Manchester Metropolitan University Student Paper	<1 %
12	Submitted to University of Stirling Student Paper	<1 %
13	Submitted to Kuala Lumpur Infrastructure University College Student Paper	<1 %
14	www.travelthrive.com Internet Source	<1 %
15	dkintepartners.com Internet Source	<1 %
16	Submitted to National University of Ireland, Galway Student Paper	<1 %
17	hdl.handle.net Internet Source	<1 %

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	On		