

Final Year Project Report

A thesis submitted in the partial fulfillment of degree of BSE

Tour Guide-A Trip Planner



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DECLARATION

Certified that this project report “Tour Guide-A Trip Planner” is the bonafide work of “Muhammad Talha & Asif Raza” who carried out the project work under my supervision.

A handwritten signature in black ink, appearing to read 'Iqra', is positioned above a solid horizontal line.

Engr. Iqra Basharat

CERTIFICATE

To be provided by the University.

ACKNOWLEDGMENT

Thanks to Allah Almighty for giving us strength and ability to understand, learn, and complete this project.

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Thanks to all faculty members of the Software Engineering department for their encouragement!

ABSTRACT

Tourism plays an essential role in the economy of a country. Many countries like Italy, Maldives are getting most of their income from tourism. Similarly, tourism in Pakistan has undoubtedly immense potential given our diverse culture, heritage and natural endowment. Our project will assist travelers in getting familiar with the places that will help in promoting tourism. Tour guide-A trip planner, will be an android application where people can easily find the tour guides according to their preference. Traveler can plan and book their trips in an easiest way by getting advice from travel expert. Traveler can contact a tour guide through a message and discuss their trip itinerary. They can get information regarding different tour packages provided by the tour guide. Travelers do not have to visit the tour guide's offices, and they can hire a tour guide by just a few clicks. This can save a lot of traveler's time by cutting off the time that a traveler spends in the agent's office. Users can also search for available flights. This application also provides the hotel booking, flight search and budget calculation features to the travelers. In order to facilitate exposure for our application, we have also developed a website for our project with an overview and features of Trip Planner application.

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CHAPTER – 1
INTRODUCTION

CHAPTER – 1: INTRODUCTION

1.1 Motivation:

Tour guides play a vital role in promoting the tourism of a country. A tourist satisfaction after visiting a country or region/state creates a positive impact on the tourism industry. The direct interaction of a guide with the tourists creates a connection between them and hence projecting the correct image of the country/region. We have seen many tour agencies here that seem ok if we look at their offices but if we look into the services and their quality of services which are quite low.

Over the last few years, tourism is growing fast in Pakistan. However, still, there are some problems such as the difficulty of finding our tour guide and many other problems while booking a travel package is still present, and these problems are needed to be addressed. Therefore, for this purpose, there is a need for an application that will break the communication gap between tourists and guide and easing the process of booking an itinerary travel package for tourists.

1.2 Problem Statement

Planning a trip with a limited budget and time is crucial activity when there are a lot of beautiful attractions to visit and you are a newbie and most important things on your mind are what to see, where to stay, where to eat and so on. Coordinating travel plans with expert travelers online using mobile applications and through real time chat can save your money and time. To plan flexible trips with a clean interface and getting suggestions from locals in real time is troublesome.

To make this process easy and allow travel users to collaborate in real time to create an enjoyable, yet flexible itinerary we are going to propose this trip planner application.

1.3 Goals /Objectives

The main objectives of our project "Tour guide-A trip planner" are:

- To help people finding tour guides near to their location or from a preferred location.
- Real-time chatting with tour guides.
- Giving feedback on tour experience with a respective tour guide.
- To provide a facility for booking of hotels, apartments, and rooms according to desired preference.

1.4 Main Contributions

Considering travelers requirements and popularity of android device and App, we have come up with the idea of making a mobile app for the foreigners and newcomers in one of the most attractive and tourist cities in Pakistan which is named tour guide. Our chosen mobile platform is Android which is open source, developed and distributed by Google. While, in our application, many tour guides and tour agencies can sign up, which will result in mutual benefit and promoting tourism. Our App is not for a specific group or an agency but all the local guides and travel agencies. Since there is a need for much work to do in the sector of tourism and our application will specifically helpful in promoting tourism in Pakistan.

1.5 Thesis Organization

The thesis is based on six chapters. Each chapter clearly demonstrates the details of our project in a different way. Following are the chapters included in thesis:

1. Introduction.
2. Background/ literature review.
3. System requirements.
4. System design.
5. System implementation.
6. System testing

Each chapter explains its part to make it useful for the readers and users to understand the Application.

CHAPTER – 2

Background/Literature

CHAPTER – 2: BACKGROUND/ LITERATURE REVIEW

2.1 Overview of travelers in Pakistan

The number of people interested in tourism is increasing day by day. They travel to Pakistan for different purposes such as visiting, religion, job, business, and so on. Statistics indicate, “Tourism is the strongest and largest industry in the global economy world, generating an estimated 11% of the global gross domestic product (GDP) and employing 200 million people and serving 700 million tourists worldwide-a figure which is expected to double by the year 2020” [1].

2.2 Past researches

Many types of research have been conducted in the field of tourism, and they actually contributed to the growth of tourism. Mobile dynamic trip planner, In this paper, the authors presented a balanced orienteering problem to solve the planning aspect of tour planning [2]. Even though the orienteering problem has been addressed and implemented several times during the last decade, it is still not widely used in the tourism industry [3]. They also implemented a recommender system to suggest places to visit and to rank those places through the mining of the Flickr database. Additionally, they built a mobile application with a scheduler to make the system more adaptive to the changes that the user may go through. Although their system did not get a high prediction score, it provided better results than the standard algorithm [2].

2.3 Existing systems

There are many existing tourism based websites and applications that provide services to its customers in making a trip. These applications have features that are in common and similarly some of them they have features that others don't have. Let us take a look at those existing systems. “Booking.com” is an online travel agency for lodging reservations [1]. It is one of the most used travels related application. In this App, the owners of the home provide listing information for their properties, which subsequently show up in Booking.com's catalogue of available rooms [4]. The site also promotes hotels through search engine listings. Booking.com then takes a commission based on each booking made through the site [4]. This App doesn't include the local guides or local travel agencies which is a negative point of this application. Local guides and local agencies are excluded

from this App. Another example of a tourism-based application is “Tripadvisor.com”. This App offers features like hotel booking, flight search and travel packages but these travel packages are mostly from foreign cities like New York, Macao city and Paris. There are negligible travel packages that are offered by local tour guides and local tour agencies. All these applications have left these major bodies alone, and the popularity of the local guides is becoming less day by day. So, there is a need for a platform for these local guides and local travel agencies to keep them alive as they contribute a lot in promoting tourism. Moreover, all these big platforms are mostly made in the US or UK. Therefore, there is a need for such application that is Made in Pakistan and mainly for the local guides and tour agencies of Pakistan.

CHAPTER – 3
System Requirements

CHAPTER – 3: SYSTEM REQUIREMENTS

3.1 Interface Requirements:

All of the Tour Guide application interfaces are made simple and easy to understand. Meaningful buttons and fields are used to understand the functionality without any need for manual easily. Any user who has little knowledge of using apps can easily use this application.

3.1.1 User Interface:

3.1.1.1 Login:

When the user opens the tour guide app, a login page is displayed. When user/admin clicks on the login button by entering the login credentials, the main page of the App will be open. And the user uses the functionality of the application. The user can log in as a guide or log in as a traveler.

3.1.1.2 Signup:

If users haven't registered with the App. He will be registered by signing up as a guide or traveler. Once entered the correct credentials the user successfully created his account

3.1.1.3 View Guide Profile:

The traveler can view the guide profile by clicking this button and can get to know about his blogs and packages offered.

3.1.1.4 Send Message:

Traveler can send a direct message to the respective guide by visiting the guiders profile and clicking the send message button.

3.1.1.5 Upload Travel package:

The guide can upload different travel packages which he is offering to get visitors on the profile by clicking on this button.

3.1.1.6 Calculate budget:

Travelers can calculate the budget by entering their preferences for the trip by clicking this button. Through this, travelers can get to know the places within the budget.

3.1.1.7: Book Hotels/Rooms:

Travelers can search for available rooms in various hotels according to their preferences and budget and can book them by clicking this button. He can get an estimate of the prices of hotel rooms available.

3.1.1.8 Currency Exchange Rates:

Foreign travelers can be able to know the currency rate in which they are going to travel within the same platform. By clicking this button.

3.1.1.9 Search Flight:

Users can search available flights by clicking this button and can get to know about the flight schedule and can plan their plan accordingly.

3.1.1.10 Read Travel Blogs:

Travelers can read the blogs uploaded by guiders by clicking this button.

3.2 Functional Requirements

3.2.1 Functional Requirement #1: login

The login screen allows registered users to log in to the site to access all of the features that their account gives them access to. If they type in their username and password and click submit, the user's credentials are validated, and if correct, they are logged in. Users have the option of whether they want to login as a guide or traveler

3.2.2 Functional Requirement #2: Signup:

If users haven't registered with the App. He will become a member by signing up. The user may signup as a traveler or a guide. Once they enter details, the user successfully created his account.

3.2.3 Functional Requirement #3: View Guide Profile:

Traveler can be able to view guide profile and can get to know about his blogs and packages offered.

3.2.4 Functional Requirement #4: Send Message:

Traveler can send a direct message to the respective guide by visiting the guiders profile and can set up a meeting or can discuss rates and traveling plans the guiders have.

3.2.5 Functional Requirement #5: Upload Travel package:

The guide can upload different travel packages which he is offering to get visitors on his profile, and the travelers can easily select a guide by seeing the package offered by a guide.

3.2.6 Functional Requirement #6: Calculate budget:

Travelers can calculate the budget by entering their preferences from this traveler can get to know the places within the budget by knowing the total expenditures he may for a particular destination.

3.2.7 Functional Requirement #7: Currency Exchange Rates:

Foreign travelers can be able to know the currency rate in which they are going to travel within the same platform. They have to enter the amount and to which currency they want to exchange and get to know the currency rates going on.

3.2.8 Functional Requirement #8: Search Flight:

Users can search available flights and can get to know about flight schedules and can plan their plans accordingly. Our platform will provide only available flight users can book them accordingly.

3.2.9 Functional Requirement #9: Read Travel Blogs:

Travelers can read the blogs uploaded by guiders, and guides have the option to upload blogs.

3.2.10 Functional Requirement #10: 10 Give Feedback to Travel Guide

Travelers can also be able to give feedback to the guide they have traveled with, and the other users searching for a good guide can read this feedbacks, thus making quick assumptions for a respective guide.

3.3 Use Case diagram of Tour guide-A trip planner

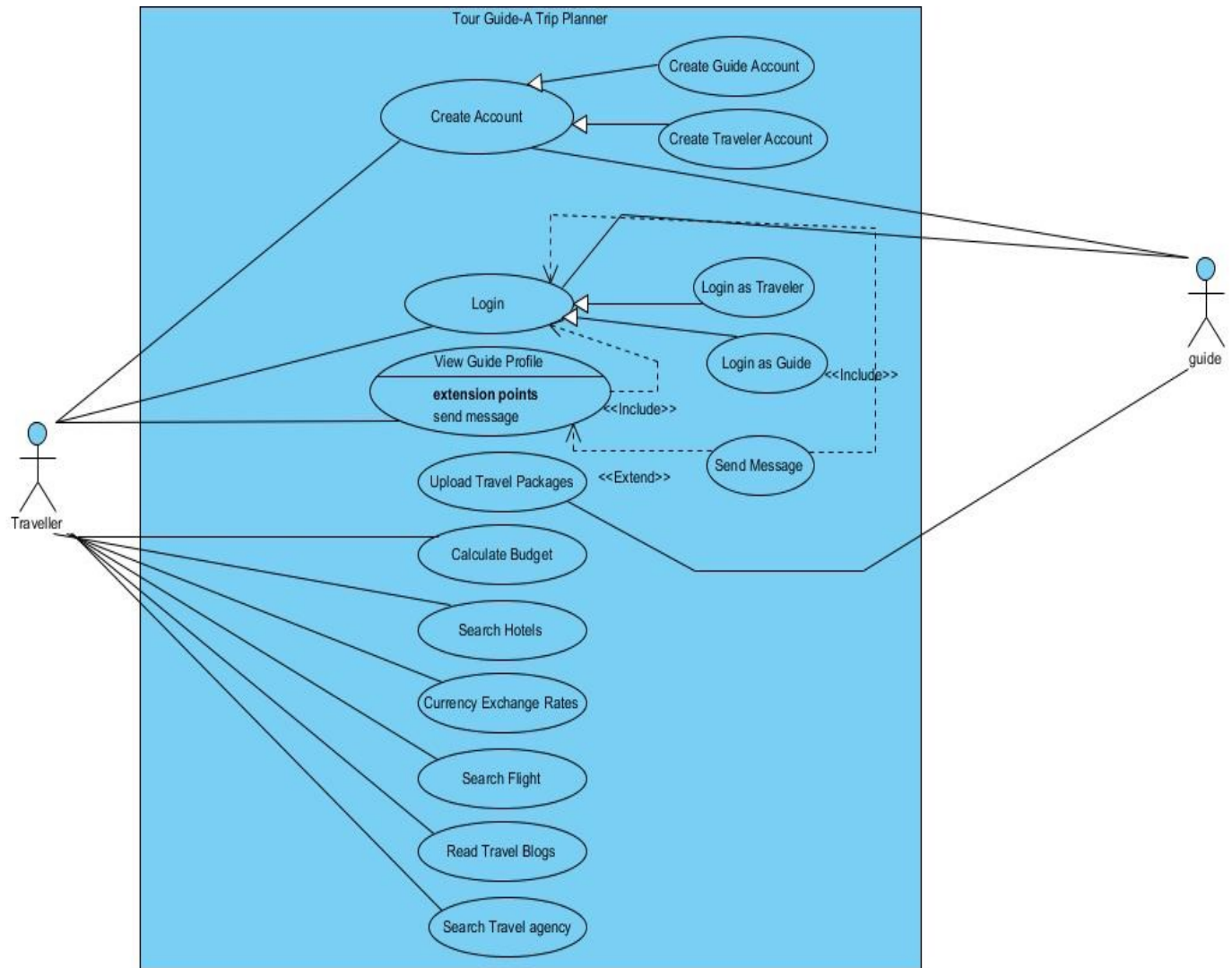


Figure 3. 1 Use Case

3.3.1 Use Case: Create guide account

Primary Actor: Guide

Scope: Tour Guide-A Trip planner

Goal Level: Guide

Success End Condition: Guide Successfully creates an account

Precondition: Email, Password and User name

Trigger: User click on Sign Up

Main Success Scenario:

1. User enters the User Name, Email Id, Password, phone number
2. User Clicks on Sign Up button
3. System creates new account and User will be successfully Signed Up.

Alternative:

1a. Email is already used

1a1. System reports User Name, Email is already used.

2a. Password do not match

2a1. System reports to the user password do not match

3.3.2 Use Case: Create traveler account

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler Goal

Success End Condition: Traveler Successfully creates an account

Precondition: Email, Password

Trigger: User click on Sign Up

Main Success Scenario:

1. Traveler enters the User Name, Email Id, Password.
2. Traveler Clicks on Sign Up button
3. System creates new account and User will be successfully Signed Up.

Alternative:

- 1a. User Name, Email or Phone number is already used
 - 1a1. System reports User Name, Email, and Phone number is already used.
- 2a. Password do not match
 - 2a1. System reports to the user password do not match

3.3.3 Use Case: Login as Guide

Primary Actor: Guide

Scope: Tour Guide-A Trip planner

Goal Level: Guide

Success End Condition: Guide Successfully Login

Precondition: Correct Email and correct Password.

Trigger: Guide click on Login.

Main Success Scenario:

1. Guide enters the User Name/Email Id/Phone number and Password.
2. Guide Clicks on Login button
3. System verifies the credentials and Guide successfully login.

Alternative:

1a.Incorrect Email

1a1. System reports Email is not correct.

2a. Password do not match

2a1. System reports to the user password do not match

3.3.4 Use Case: Login as Traveler

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler Successfully Login to website

Precondition: Correct Email and correct Password.

Trigger: Traveler click on Login.

Main Success Scenario:

1. Traveler enters the Email Id and Password.
2. Traveler Clicks on Login button
3. System verifies the credentials and Traveler successfully login.

Alternative:

1a.Incorrect Email

1a1. System reports Email is not correct.

2a. Password do not match

2a1. System reports to the user password do not match

3.3.5 Use Case: View Guide Profile

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler views the guide profile

Precondition: Login as Traveler .

Trigger: Traveler click on Guide's Profile.

Main Success Scenario:

1. Traveler successfully Login in.
2. Traveler Clicks on Guide's Profile.
3. System shows the guide's profile to traveler successfully.

Alternative: correction

1a.Incorrect Email .

1a1. System reports Email is not correct.

2a. Password do not match

2a1. System reports to the user password do not match

3.3.6 Use Case: Send Message

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler sends message to Guide

Precondition: 1. Login as Traveler.

Trigger: Traveler clicks on Send message .

Main Success Scenario:

1. Traveler successfully Login in.
2. Traveler Clicks on Guide's ID.
3. System shows the guide's id to traveler.
4. Traveler types the message and clicks on send message.

3.3.7 Use Case: Upload Travel package

Primary Actor: Guide

Scope: Tour Guide-A Trip planner

Goal Level: Guide

Success End Condition: Guide Successfully Uploads Travel Packages

Precondition: Login as Guide.

Trigger: Guide click on Upload Travel Package .

Main Success Scenario:

1. Guide successfully Login in.
2. Guide Clicks on Upload Travel Package button.
3. Successfully uploads travel package.

3.3.8 Use Case: Calculate budget

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: User can calculate his/her budget

Precondition: None.

Trigger: User clicks on Calculate budget button.

Main Success Scenario:

1. User comes to website.
2. Traveler Clicks on Calculate Budget.
3. System shows UI for calculating Budget to traveler.
4. Traveler gives inputs and successfully calculates the budget.

Alternative:

1a.Incorrect input values

- 1a1. System reports that input values are not correct.

3.3.9 Use Case: Search Hotels

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler can Search Hotels.

Precondition: 1. Login as Traveler.

Trigger: Traveler clicks on Search hotel button.

Main Success Scenario:

1. Traveler successfully Login in.
2. Traveler Clicks on Search Hotels Button.
3. System shows UI for searching available rooms to traveler.

Alternative:

1a.Incorrect input details

- 1a1. System will not display any incorrect results.

3.3.10 Use Case: Currency Exchange Rates

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler can exchange currency rates

Precondition: None.

Trigger: User clicks on Calculate budget button.

Main Success Scenario:

1. Traveler login.
2. User clicks on Currency Exchange Rates.
3. System shows UI for calculating Currency Exchange Rates.
4. Traveler gives inputs and successfully calculates Currency Exchange Rates.

Alternative:

1a. Incorrect input values

- 1a1. System reports that input values are not correct.

3.3.11 Use Case: Search Flight

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler can see available flights.

Precondition: None.

Trigger: User clicks on search flight button.

Main Success Scenario:

1. Traveler login.
2. User clicks on Search flight button.
3. System shows UI for searching available flights.
4. Traveler gives inputs and successfully views available Flights.

Alternative:

1a. Incorrect input values

1a1. System reports that input values are not correct.

3.3.12 Use Case: Read Travel Blogs

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler can Read Travel Blogs.

Precondition: None.

Trigger: User clicks on Read Travel blogs button.

Main Success Scenario:

- 1.Traveler login.
2. User clicks on Guide profile.
3. User successfully reads available Read Travel blogs.

3.3.13 Use Case: Search Travel agency

Primary Actor: Traveler

Scope: Tour Guide-A Trip planner

Goal Level: Traveler

Success End Condition: Traveler can Search Travel agency.

Precondition: 1. Login as Traveler.

Trigger: Traveler clicks on Search Travel agency button.

Main Success Scenario:

1. Traveler successfully Login in.
2. Traveler Clicks on Search Travel agency Button.
3. System shows UI for searching available agencies to traveler.

Alternative:

1a.Incorrect input details

1a1. System will not display any incorrect results.

3.4 Non-Functional Requirements

3.4.1 Performance

24/7 availability of the system. Overall, system performance should be efficient.

3.4.2 Reliability

The system should be reliable in every aspect.

3.4.3 Security

The system should be secure, which ensures the confidentiality of the user's data.

3.4.4 Consistency

The system should not perform any functionality if the user does not sign in to the respective traveler or guide profile.

3.5 Resource Requirements

Resource requirements are the type of resources required for the activities to be performed successfully. As the funds should be getting from different platforms, different guider profiles having various tour plans.

3.6 Database Requirements

Firestore database is used in our project and is usually managed by the admin having credentials. For accessing it, the user should be connected to the Internet. The application won't work without the Internet.

3.7 Project Feasibility

A feasibility study is an evaluation of the potential impact of a proposed project or program. Any feasibility study aims to assist decision-makers in determining whether or not to implement a particular plan or schedule. This project is feasible as it minimizes the risk involved in the traveling and also increases the profit of the guider within the minimum effort as of the regular guides

3.7.1 Technical Feasibility

As this project costs very low to build and gives maximum benefits to the users, as the user interface is easy to use, no such training of the users to use the website, so the cost of training also minimized.

3.7.2 Operational Feasibility

Operational feasibility is the measure of how well a proposed system solves the problems. This software solves the travelers' issues and provides benefit to guides by easily connecting both traveler and guide.

3.7.3 Legal & Ethical Feasibility

Ethical feasibility is a test to determine if the project is ethical or even legal. This application is legally and ethically feasible as there is no use of wrong things in the development of this project. Traveling is a passion of many people, and this project would help this society in a very confidential and legal way.

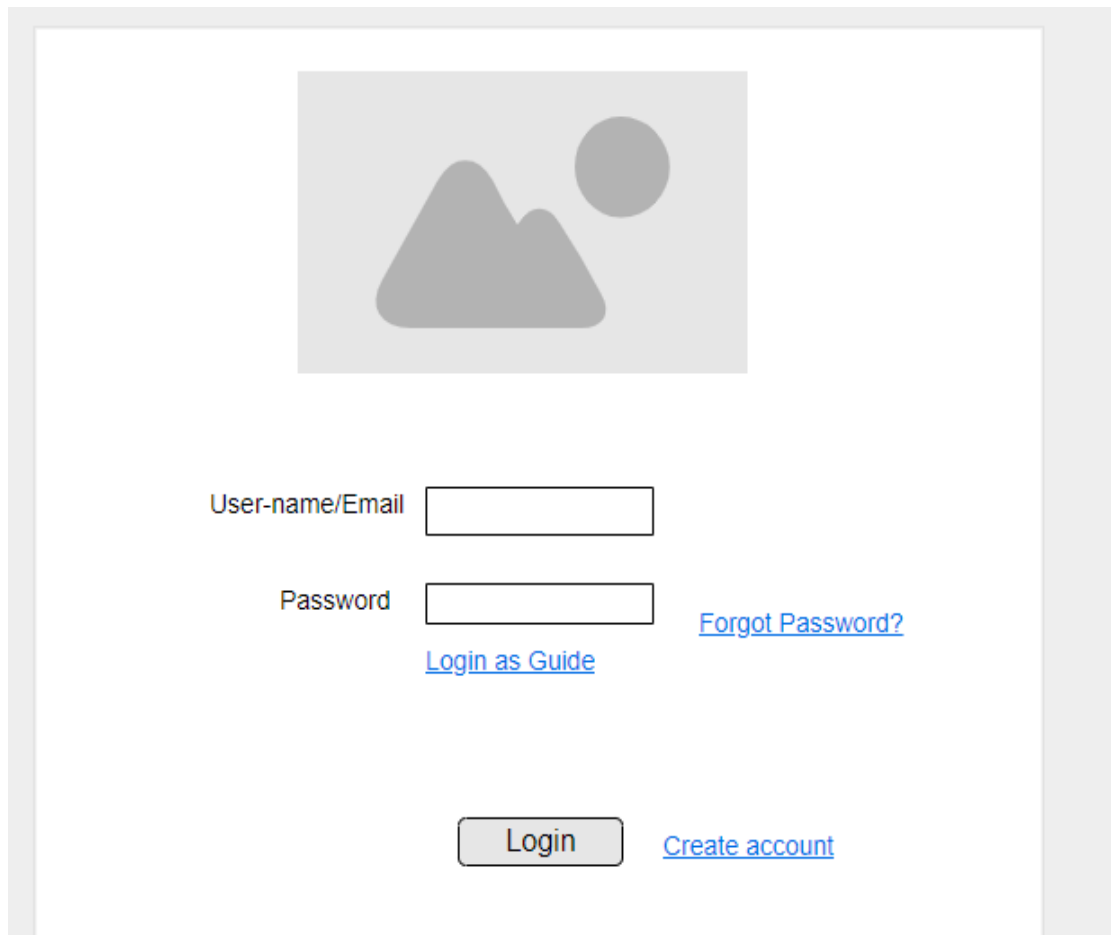
CHAPTER – 4:
SYSTEM DESIGN

4.1 Design Approach

The approach we have used to make this app is easy to understand and we used MVC. There are two actors in our application i.e. Traveler and Guide. All of them have their completely different roles. Each actor has his own functionality all roles related to actor are considered as sub roles. Completing sub roles will complete a role of specific actor. In this way all actors performing their roles separately and making this app a functional application.

4.2 Interface Design

4.2.1 Low Fidelity Prototype



The image shows a low-fidelity prototype of a login interface. At the top center is a placeholder image of a landscape with mountains and a sun. Below the image, there are two input fields: 'User-name/Email' and 'Password'. To the right of the 'Password' field is a link labeled 'Forgot Password?'. Below the 'User-name/Email' field is a link labeled 'Login as Guide'. At the bottom center is a button labeled 'Login', and to its right is a link labeled 'Create account'.

Figure 4. 1 Login

4.2.1.2 Traveler Homepage

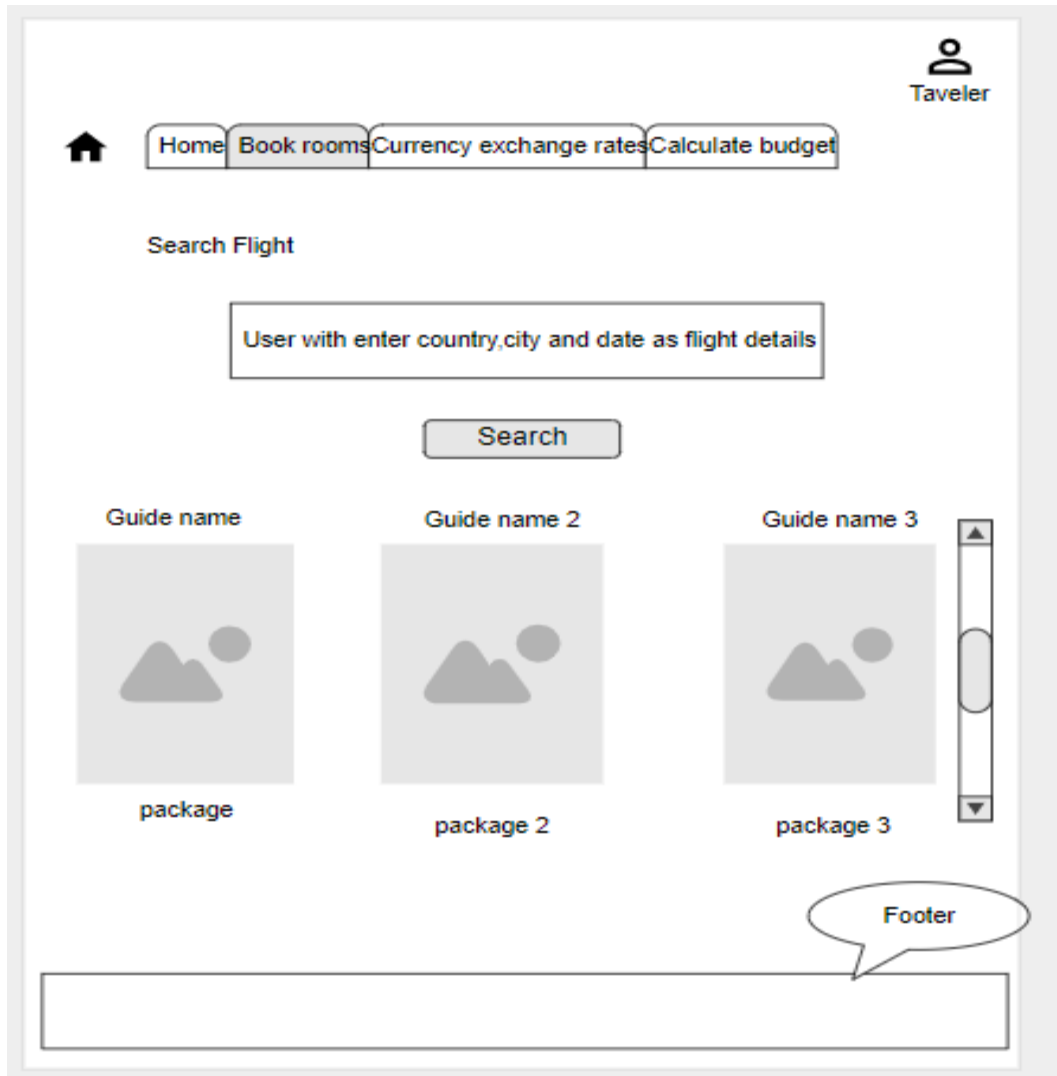


Figure 4. 2 Traveler Homepage

4.2.1.3 Guide Homepage

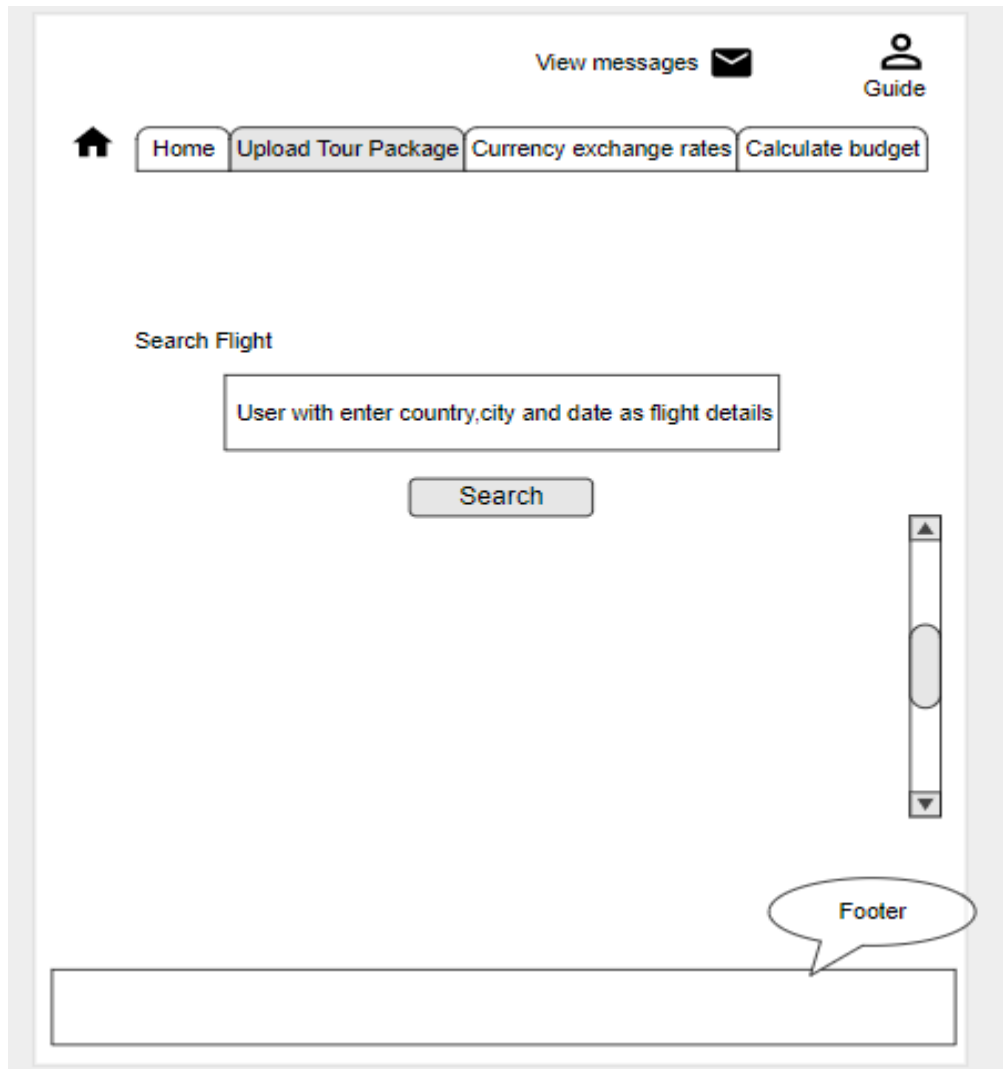


Figure 4. 3 Guide Homepage

4.2.2 High Fidelity Prototype

Sign up page

This is the Sign up page for user where he will be registered as a Traveler or a Guide. He have to enter the required details to get registered with the App.

2:59 71%

TourApplication

Travel & Tours

Login Sign Up

Talha

talha112@yahoo.com

123456789

●●●●●●

Travler Agency

Connect

Figure 4.3. 1 Sign up page

Login page

This is the Login page where the user will enter the credentials to Login with Application to access the features of the App.

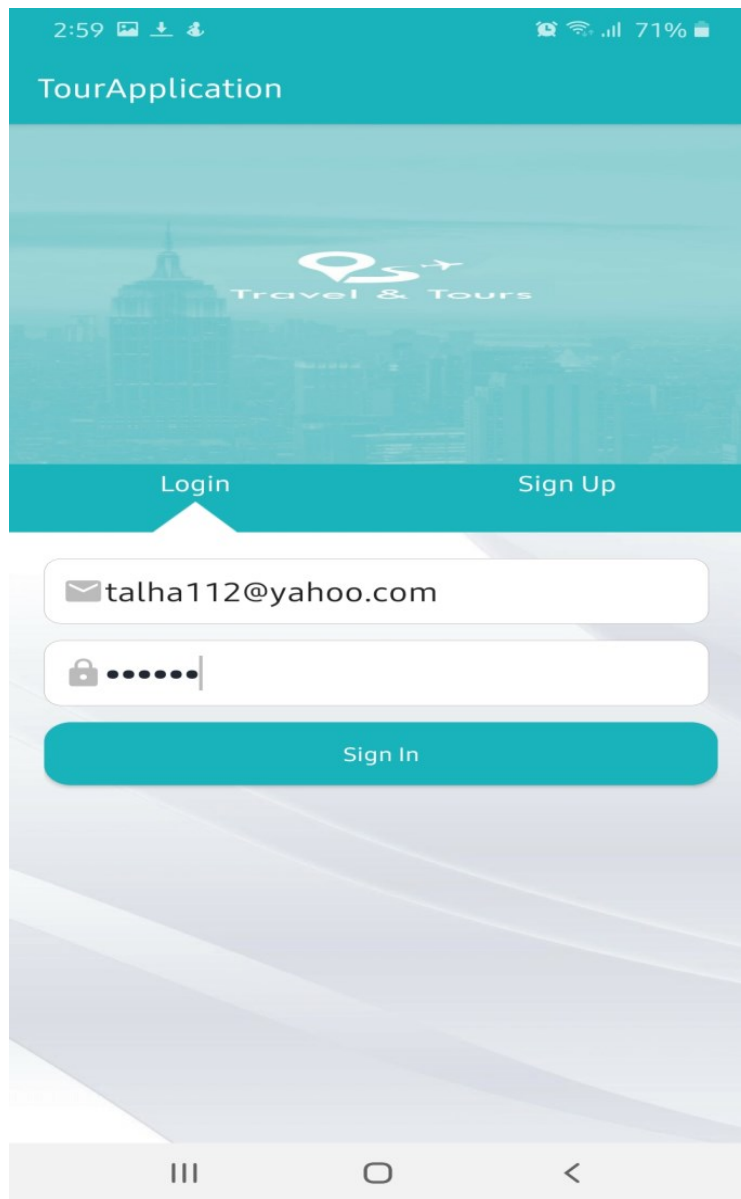


Figure 4.3. 2 Login page

Traveler main menu

When the Traveler will Login using his credentials, the following page will be viewed by the traveler .Here he can access different features such as calculate budget, Search Flight etc.

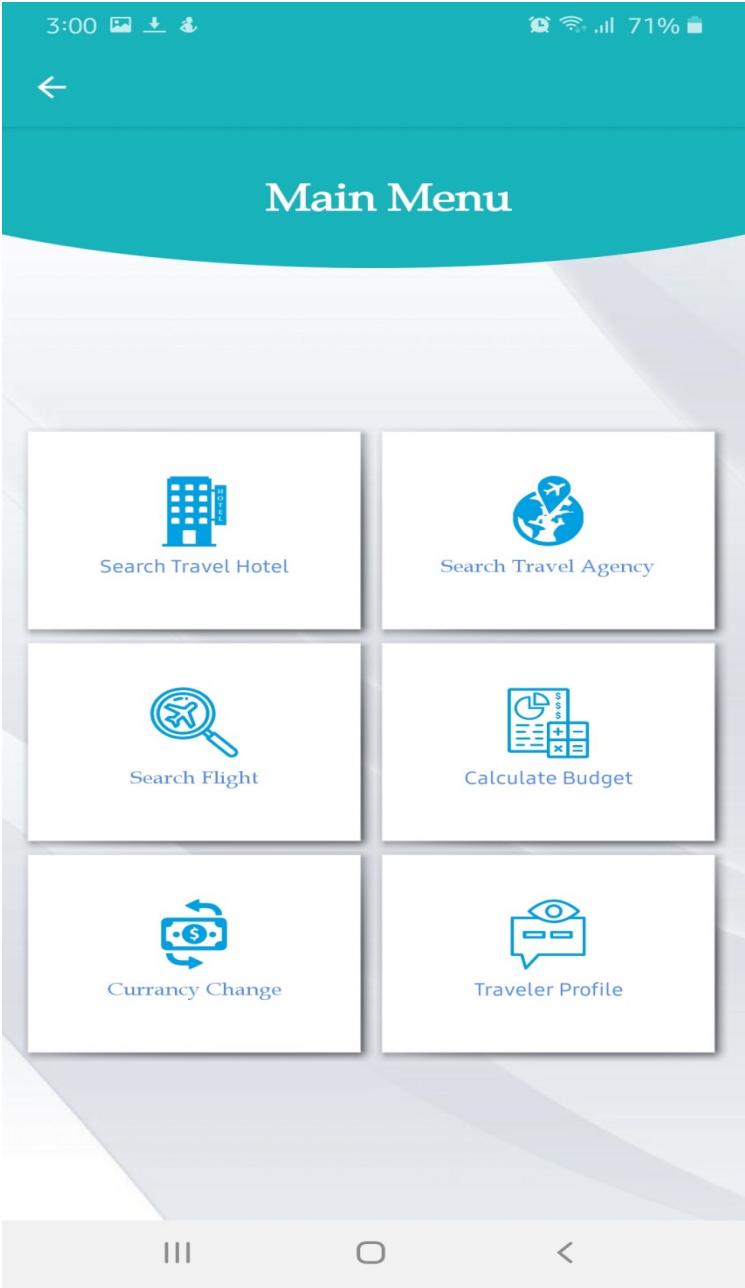


Figure 4.3. 3 Traveler main menu

Hotel search

Traveler can also search hotels nearby.

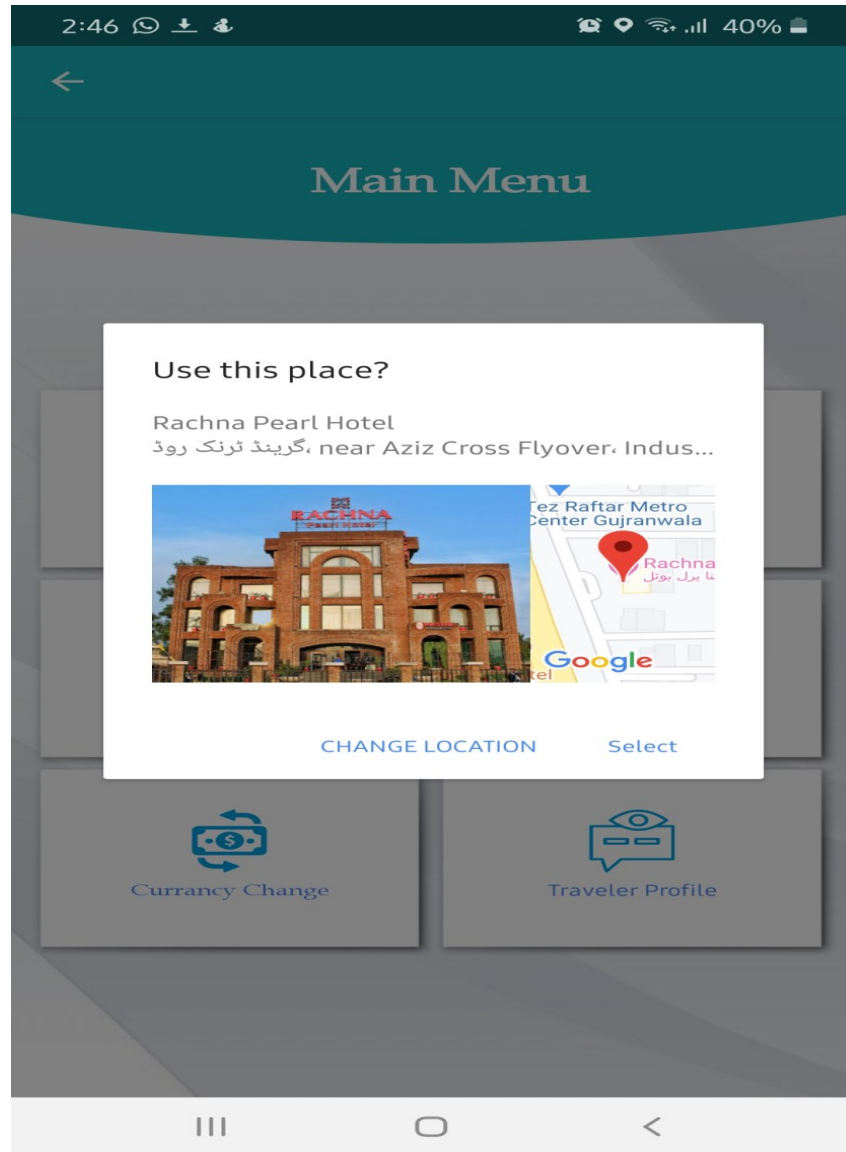


Figure 4.3. 4 Hotel search

Flight search

Traveler can also search Flights to various cities using our Flight search feature.

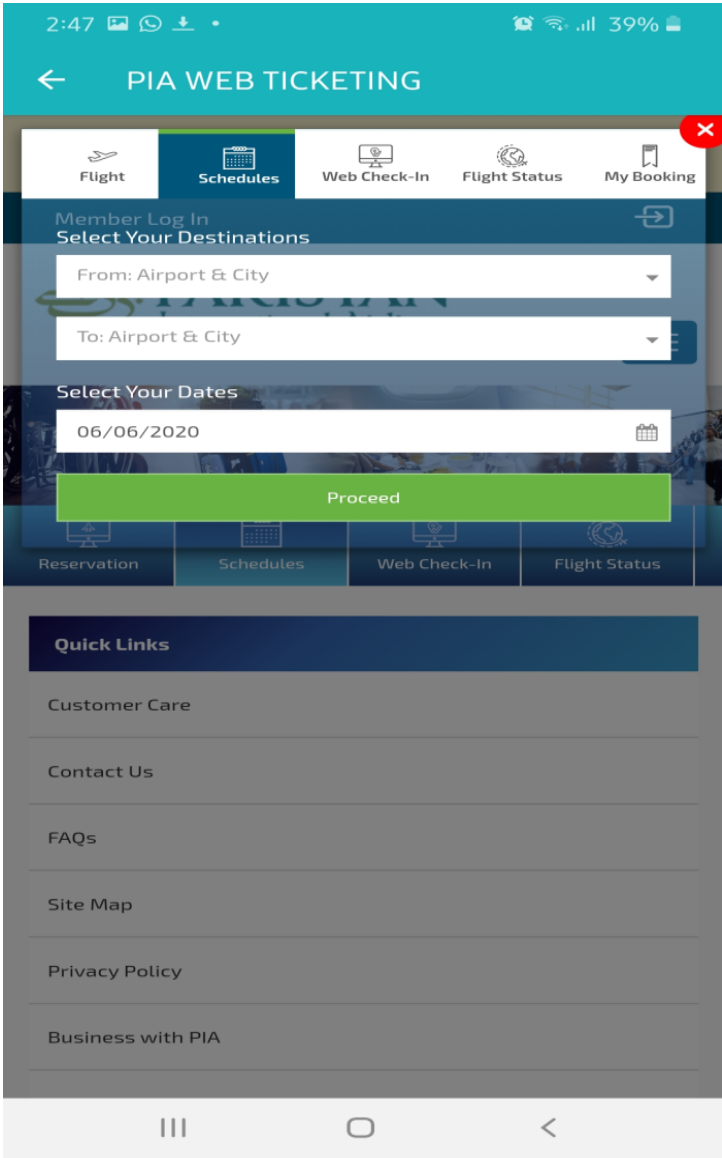


Figure 4.3. 5 Flight search

Currency Exchange rates

This is Currency exchange page where traveler will do currency conversion.

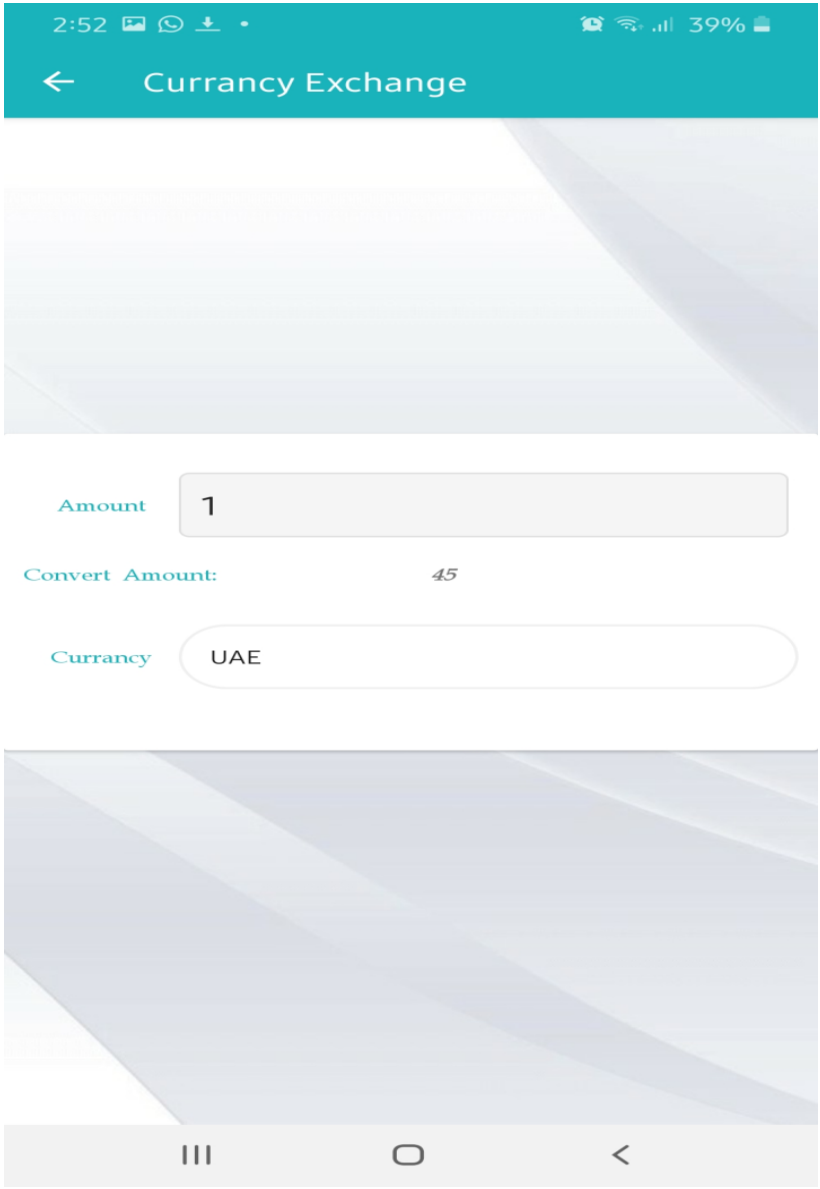


Figure 4.3. 6 Currency Exchange rates

Traveler Profile

This is the traveler's profile, here he can view his name and phone number . He can also view available guides and can send messages to guide.

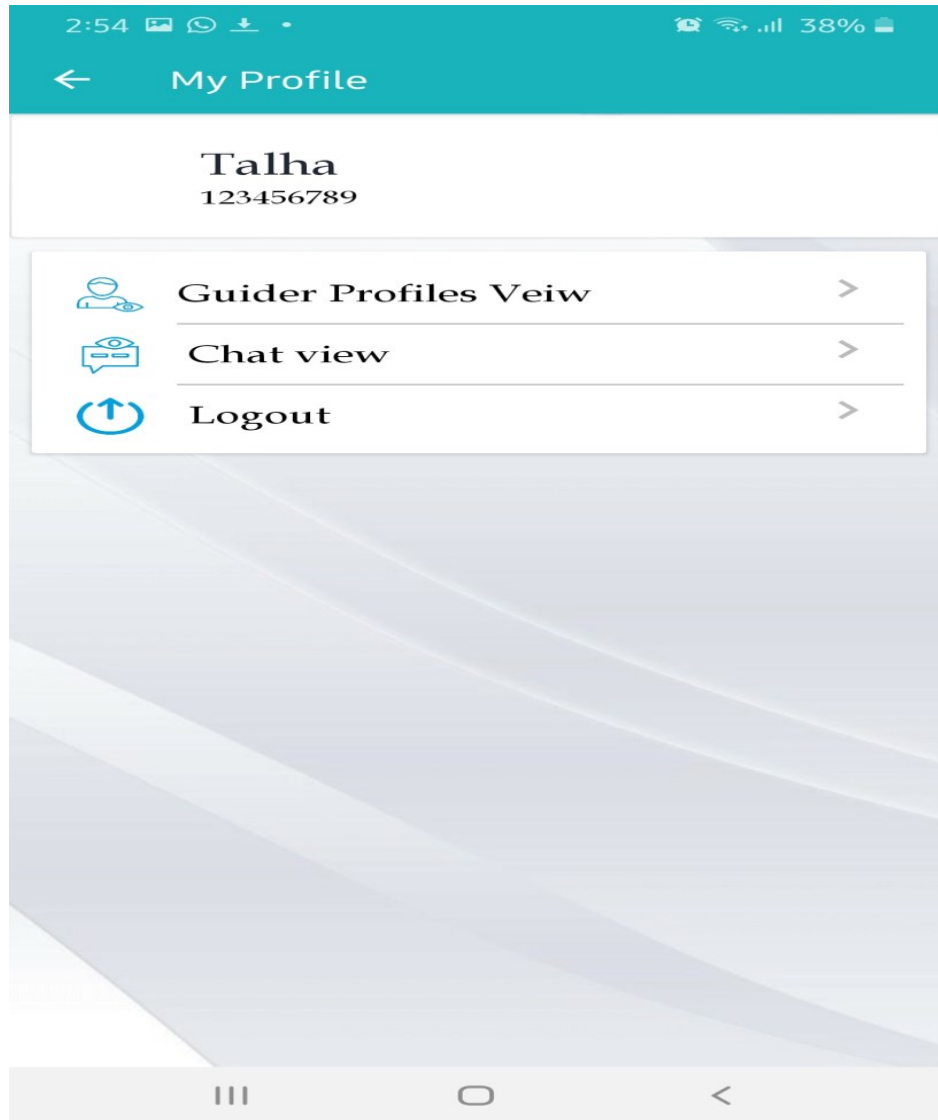


Figure 4.3. 7 Traveler Profile

Registered Guides

Traveler can view the guides that are available on our Application. Here he can views the blogs and packages uploaded by each guide.

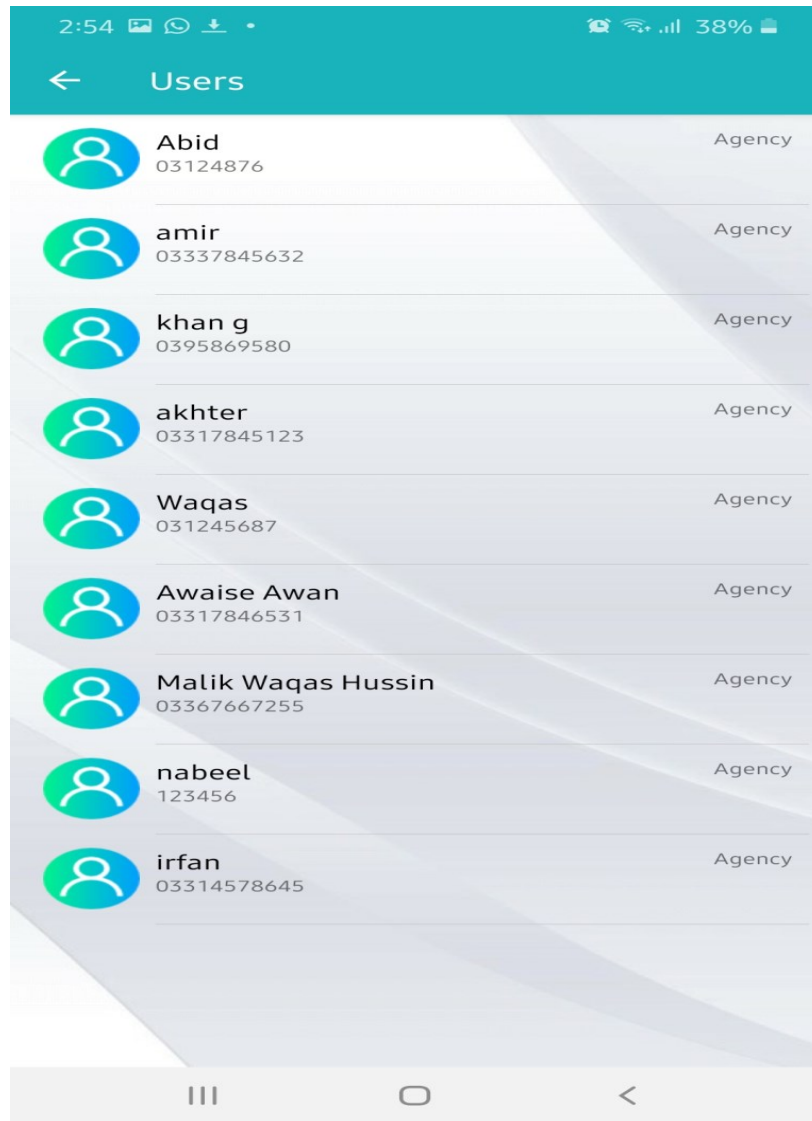


Figure 4.3. 8 Registered Guides

Blogs and packages uploaded by Guide

This page shows the blogs and packages that are uploaded by one of the guide.

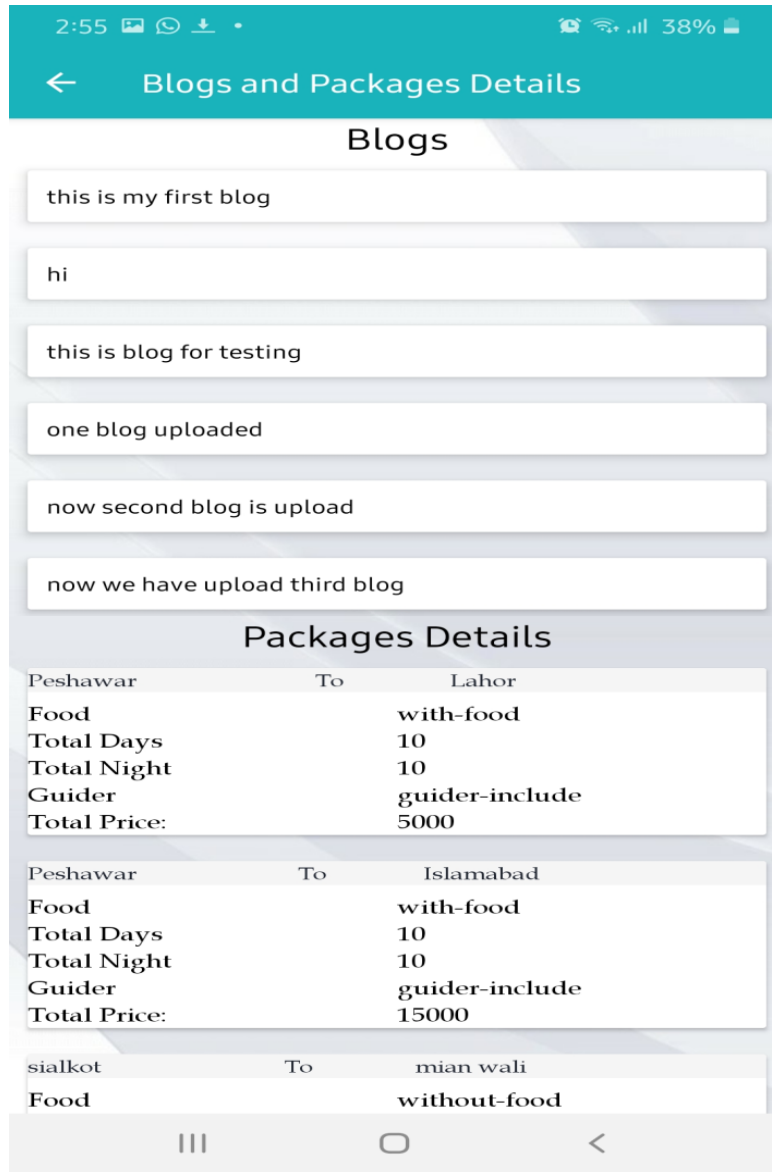


Figure 4.3. 9 Blogs and packages uploaded by Guide

Guide profile

When the guide will login use his credentials, this page will be showed to him. Here he will have options to add package, add blog and send message.

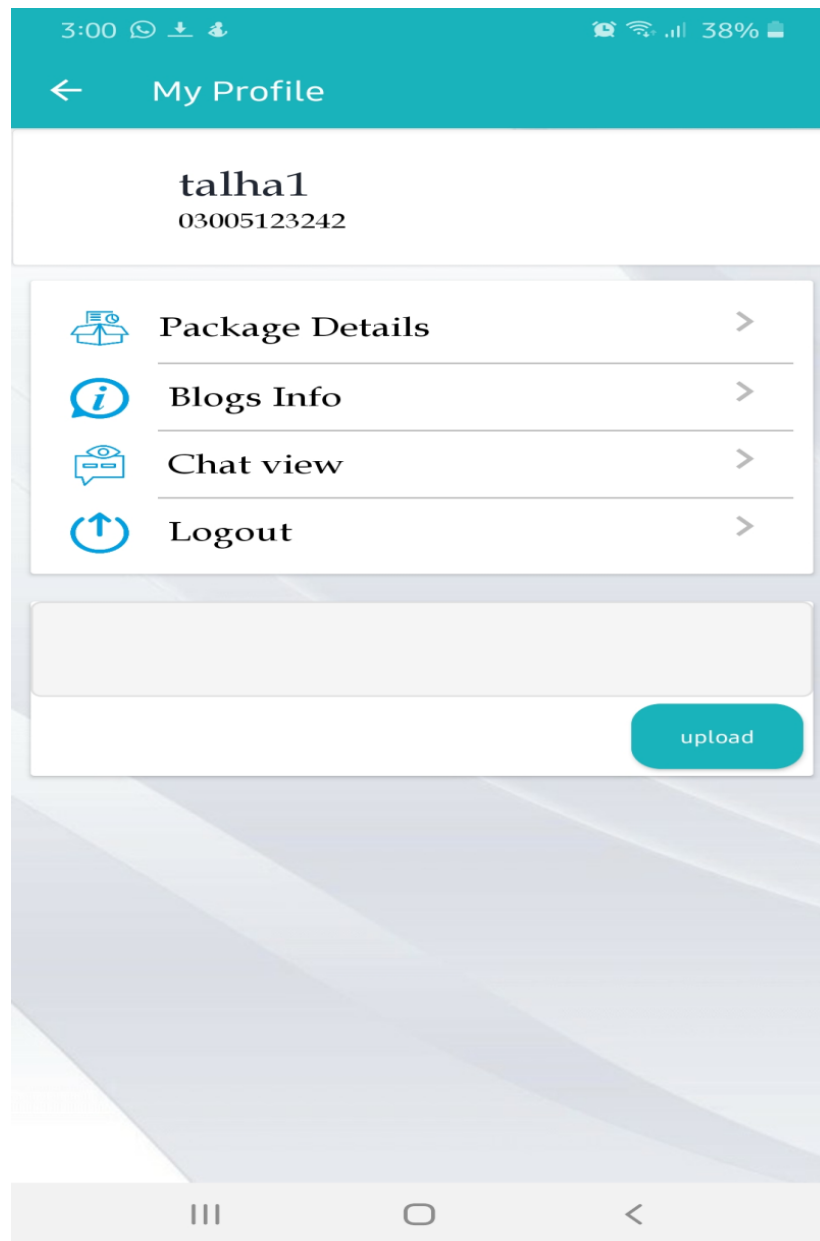


Figure 4.3. 10 Guide profile

Guide Package upload

This page will be shown to guide if he wants to add a travel package for travelers. He will add details for a travel package and then upload it.

The screenshot shows a mobile application interface for adding a travel package. The title bar is teal and contains a back arrow and the text "Guider Package". The status bar at the top shows the time 3:02, signal strength, Wi-Fi, and 37% battery. The form consists of several input fields and radio buttons:

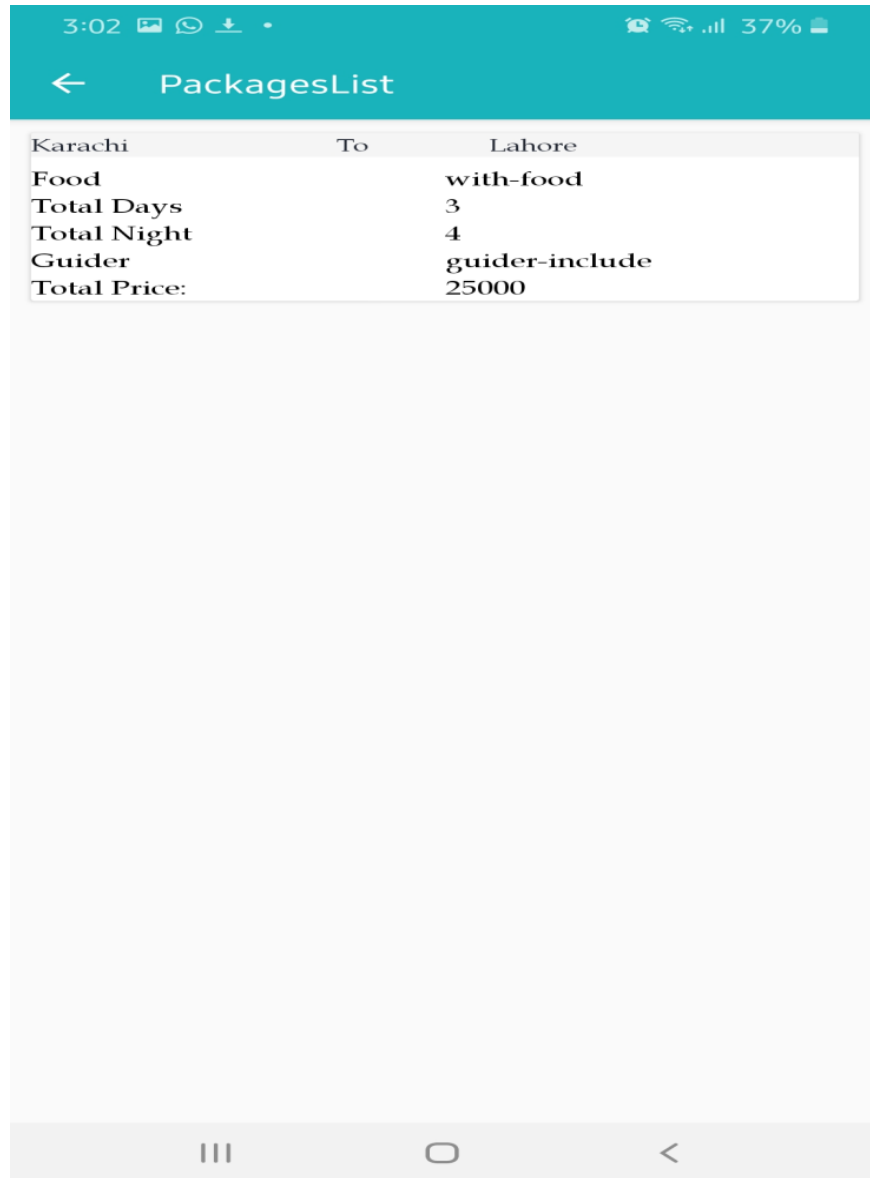
- To**: A text input field.
- From**: A text input field.
- Food**: Two radio buttons, one labeled "food" and one labeled "without".
- Day**: A text input field containing "total days".
- Night**: A text input field containing "total Night".
- Guider**: Two radio buttons, one labeled "Guider" and one labeled "without".
- Price**: A text input field containing "Price".

At the bottom of the form, there are two buttons: a green "SAVE" button and a white "SHOW" button with a black border. The bottom of the screen shows the standard Android navigation bar with three icons: a square, a circle, and a triangle.

Figure 4.3. 11 Guide Package upload

Packages uploaded by Guide

This is the package that is uploaded by one the guide.



The screenshot shows a mobile application interface with a teal header bar containing a back arrow and the text "PackagesList". Below the header is a table with the following data:

Karachi	To	Lahore
Food		with-food
Total Days		3
Total Night		4
Guider		guider-include
Total Price:		25000

The bottom of the screen shows a standard Android navigation bar with three icons: a square, a circle, and a triangle.

Figure 4.3. 12 Packages uploaded by Guide

Calculate Budget

If the traveler wants to calculate budget for any city. He have to select availed options and cities and then click calculate. The total budget will be shown on screen.

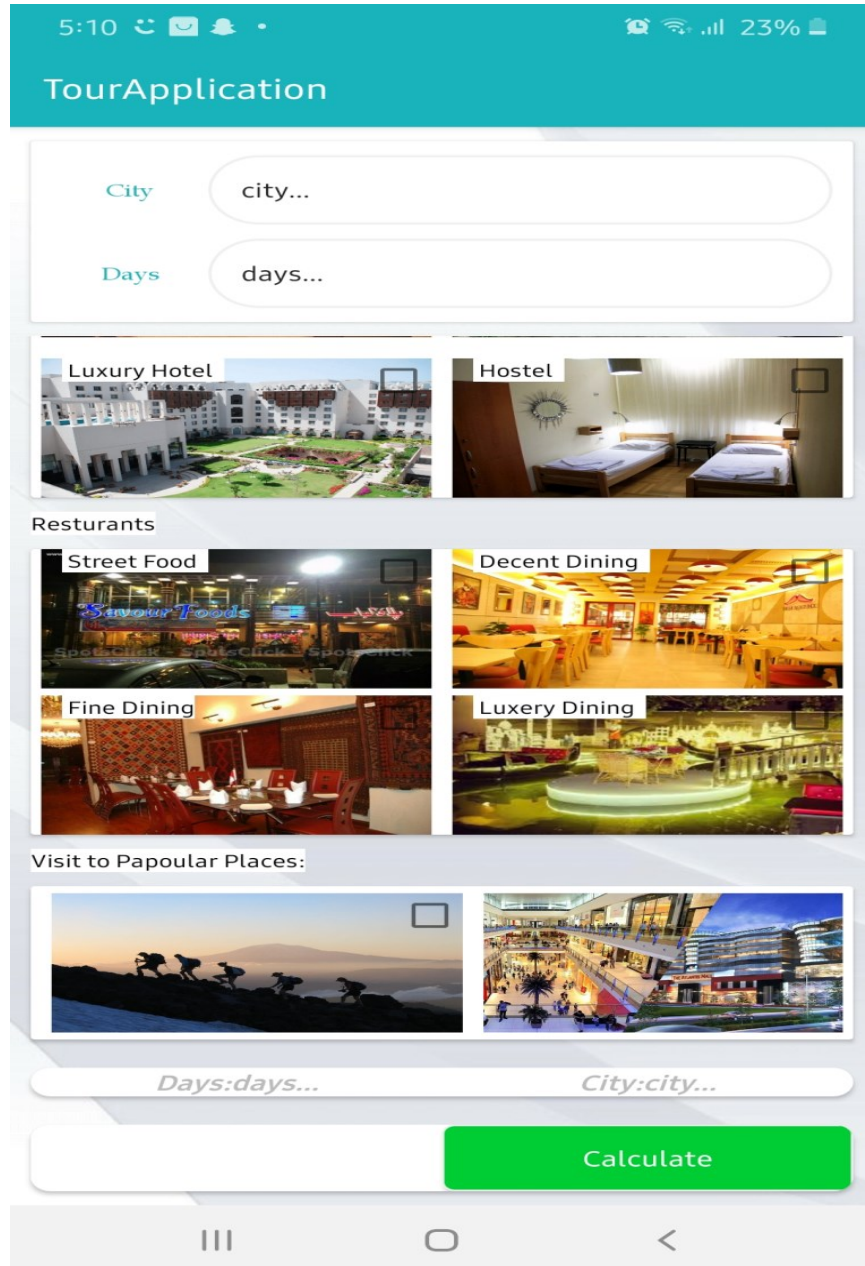


Figure 4.3. 13 Calculate Budget

Chat between traveler and guide

This is live chat between a traveler and a guide. Here iqrab is a traveler. You can see the conversation between a traveler and a guide.

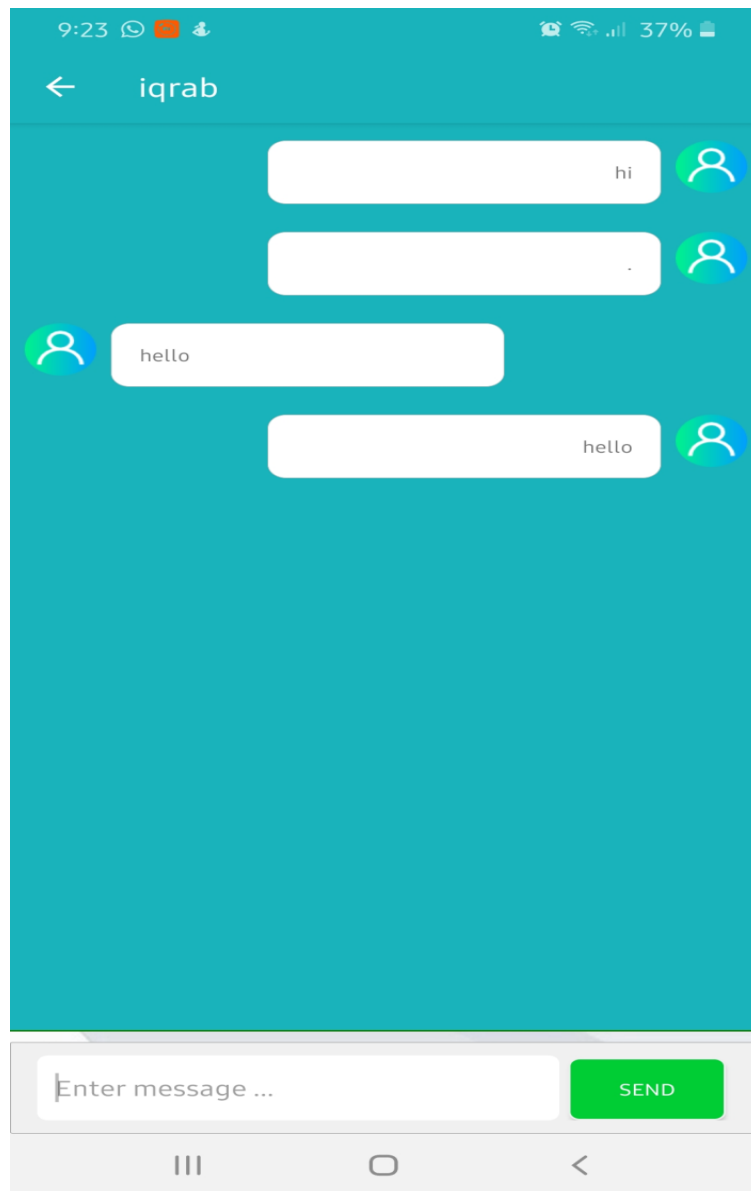


Figure 4.3. 14 Chat between traveler and guide

Website:

Tourbea.com

A website is also created which is shown below. This website will help user to get familiar with the App.

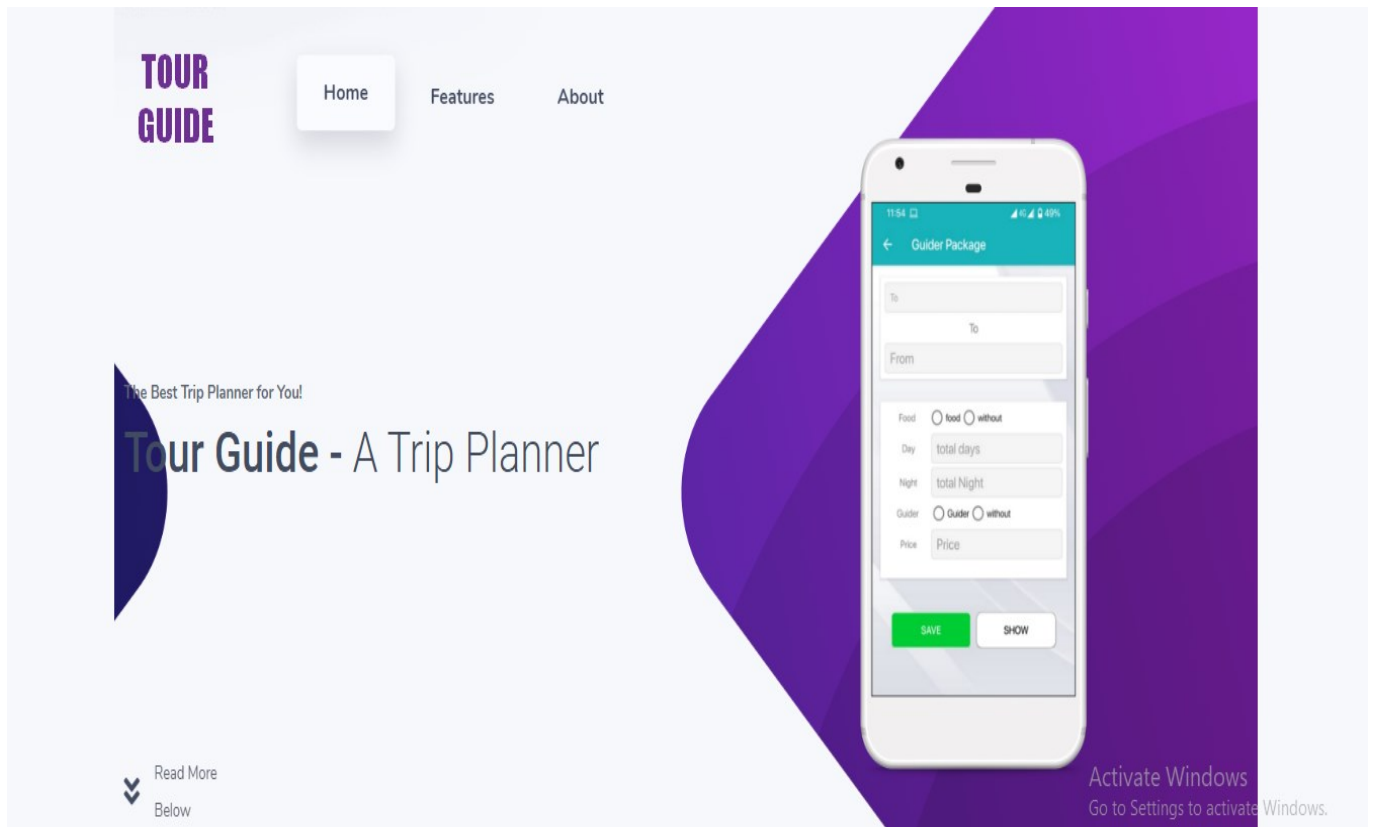


Figure 4.3. 15 Tourbea.com

4.3 Data Flow Diagrams (DFD)

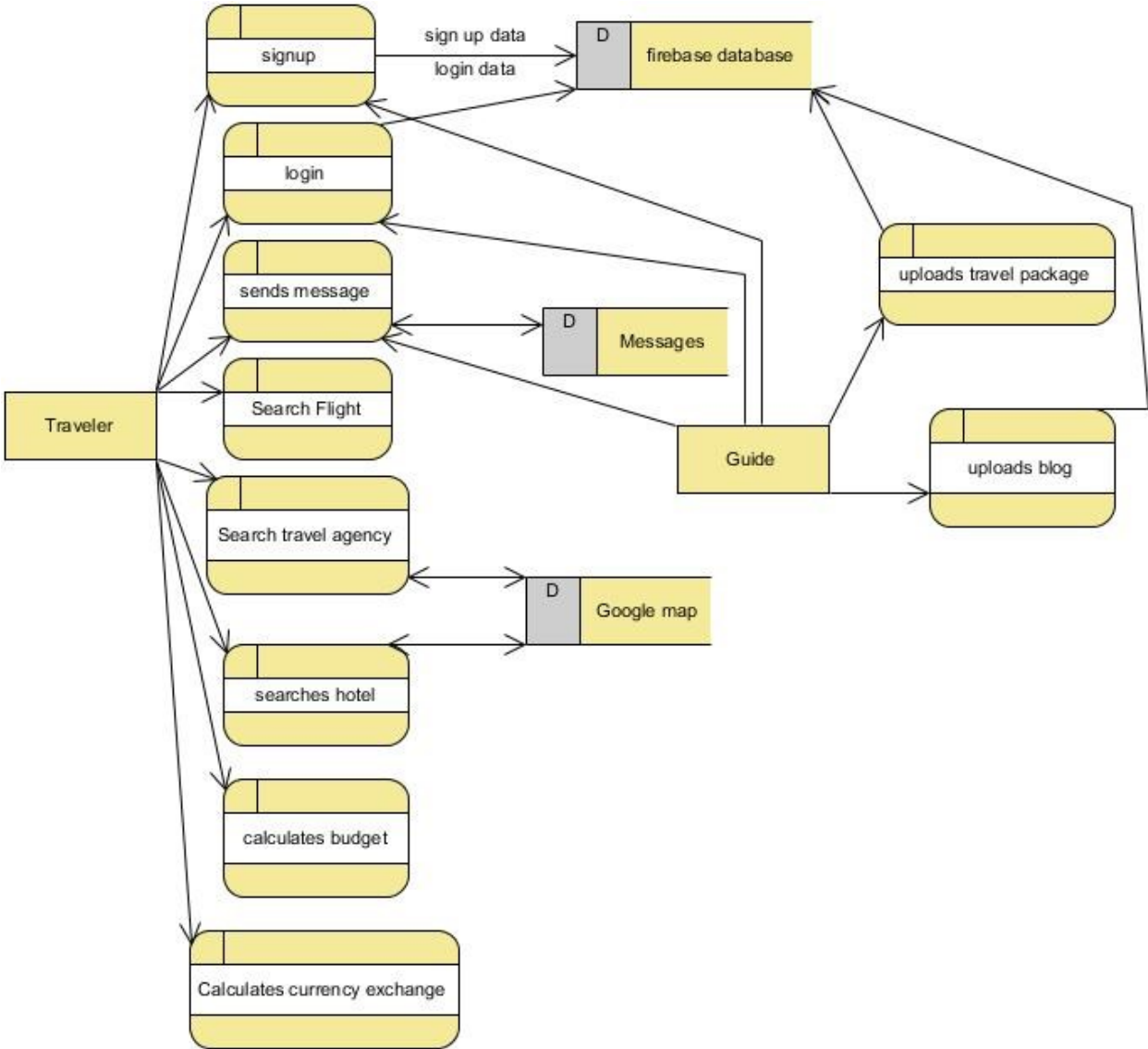


Figure 4. 4 Data Flow Diagrams (DFD)

4.4 Design Approach

The approach we have used to make this app is easy to understand and we used MVC. There are the actors in our application i.e. Traveler and Guide. All of them have their completely different roles. Each actor has his own functionality all roles related to actor are considered as sub roles. Completing sub roles will complete a role of specific actor. In this way all actors performing their roles separately and making this app a functional application.

4.5 Sequence Diagram

4.5.1 Login

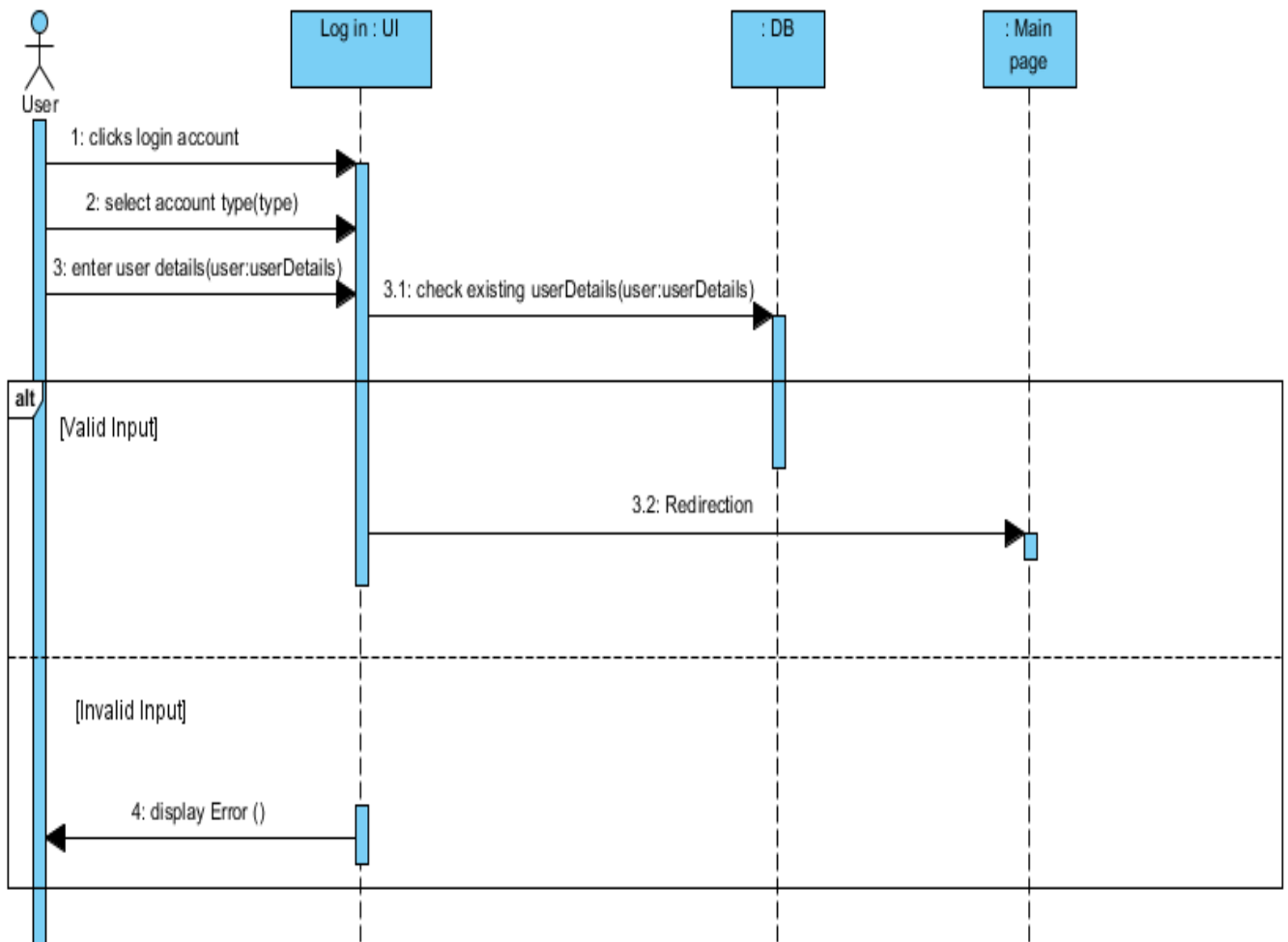


Figure 4. 5 Sequence Diagram Login

4.5.2 View Guide Profile and Send Message

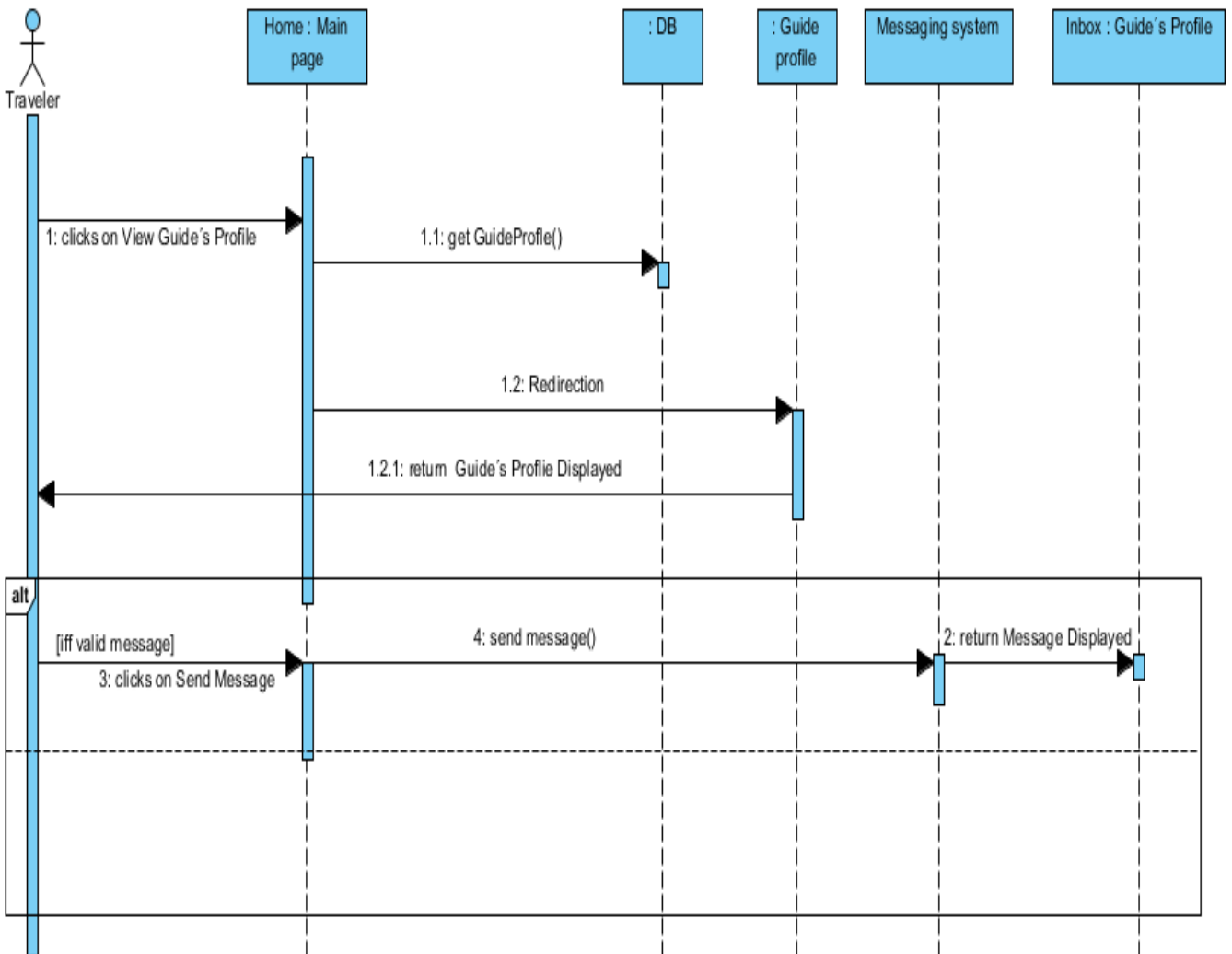


Figure 4. 6 View Guide Profile and Send Message

4.5.3 Search Hotels/rooms

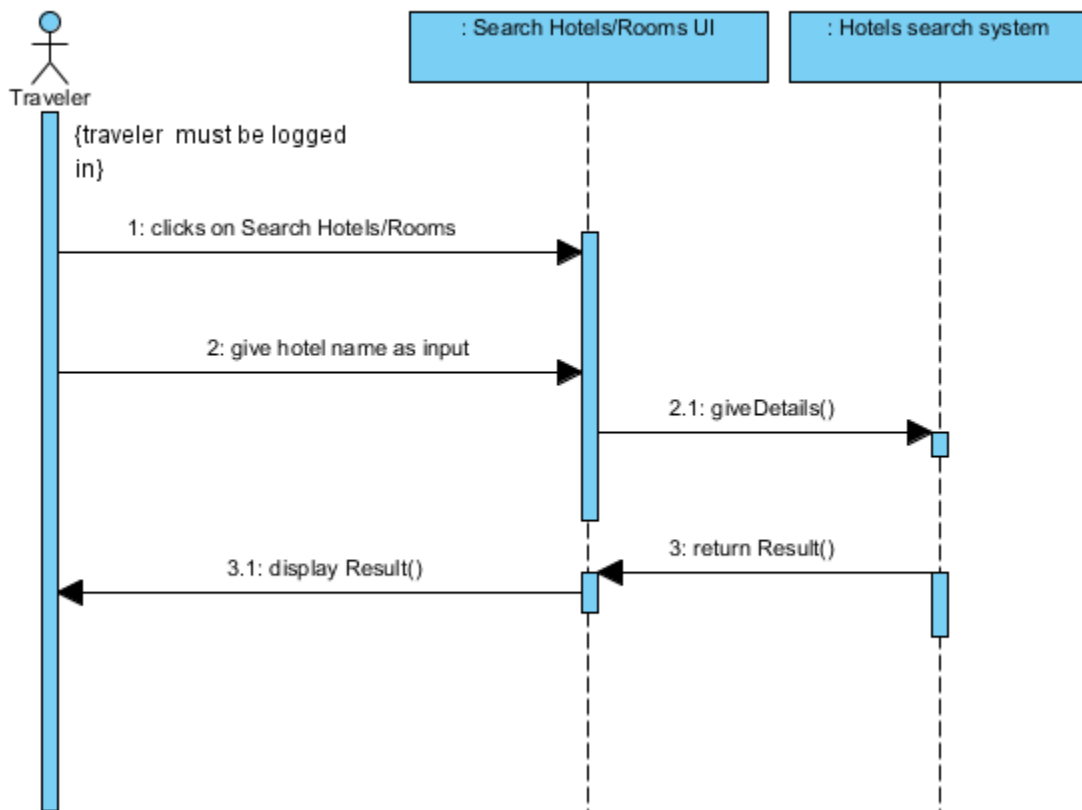


Figure 4. 7 Search Hotels/rooms

4.5.4 Read Travel Blogs

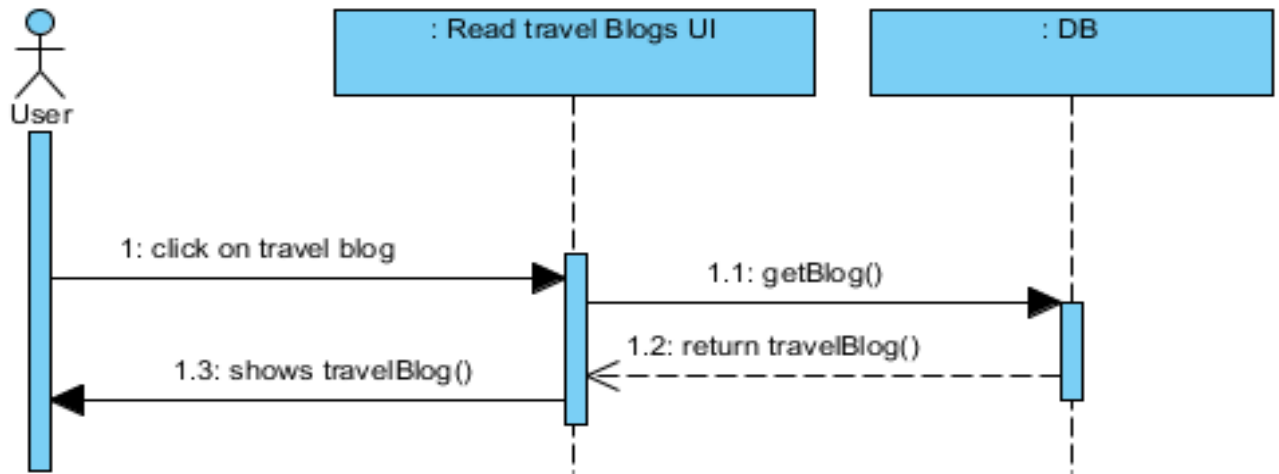


Figure 4. 8 Read Travel Blogs

4.5.5 Search Flight

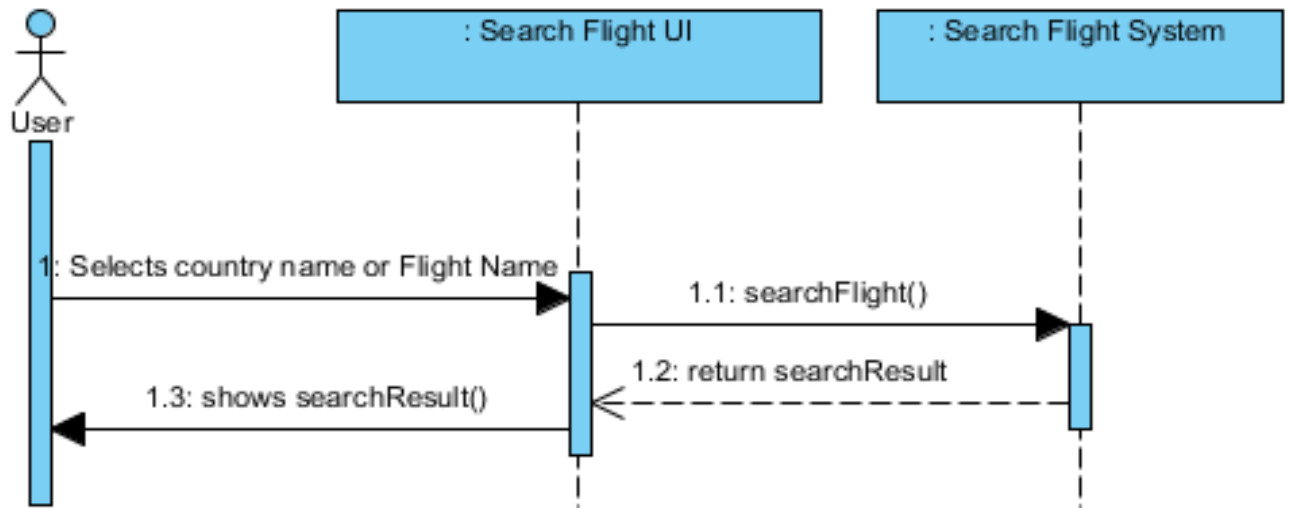


Figure 4. 9 Search Flight

4.5.6 Currency Exchanges Rates

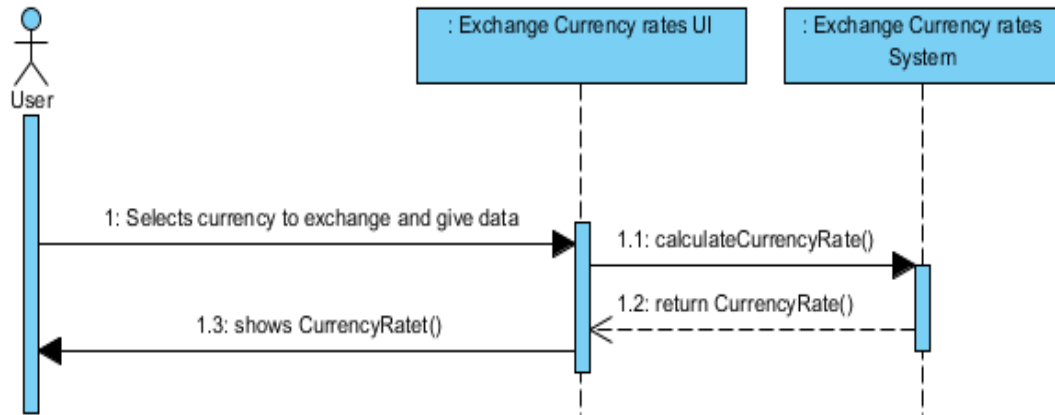


Figure 4. 10 Currency Exchanges Rates

4.5.7 Calculate Budget

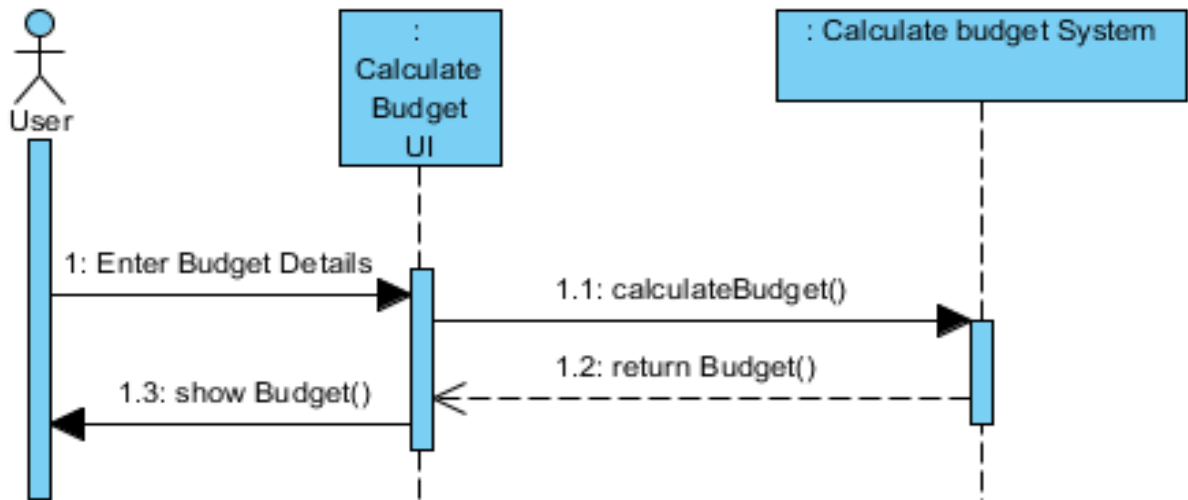


Figure 4. 11 Calculate Budget

4.5.8 Upload Travel Packages

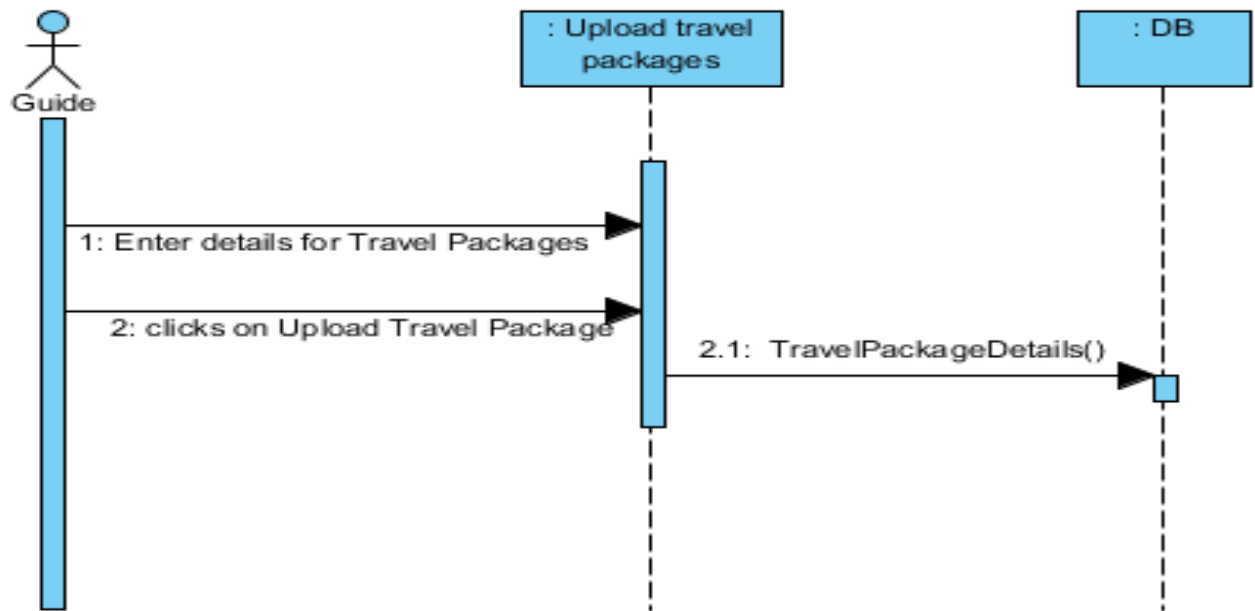


Figure 4. 12 Upload Travel Packages

4.6 Class Diagram

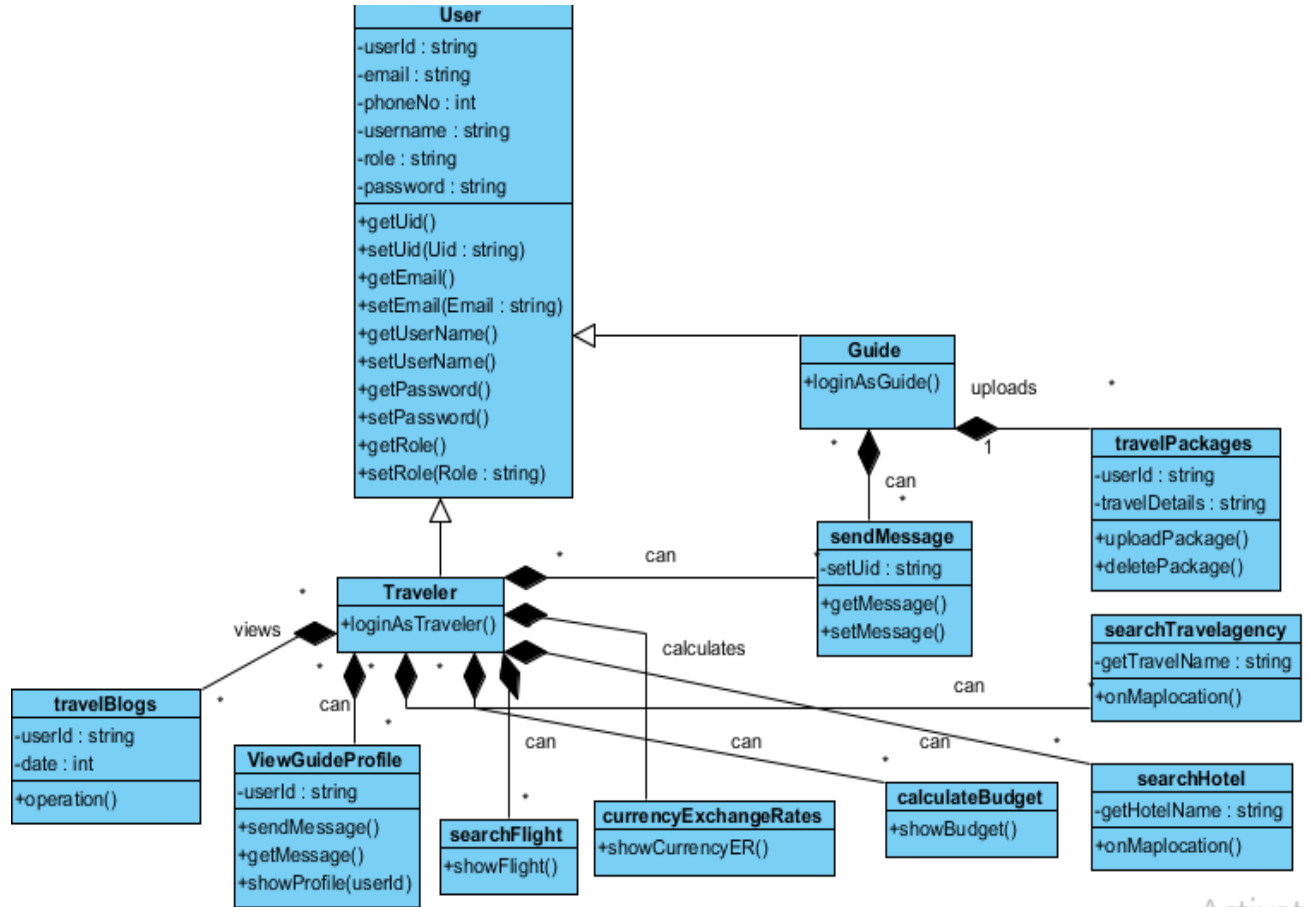


Figure 4. 13 Class Diagram

4.7 Logical Data Models And Functional Flows

4.7.1 Functional Flow

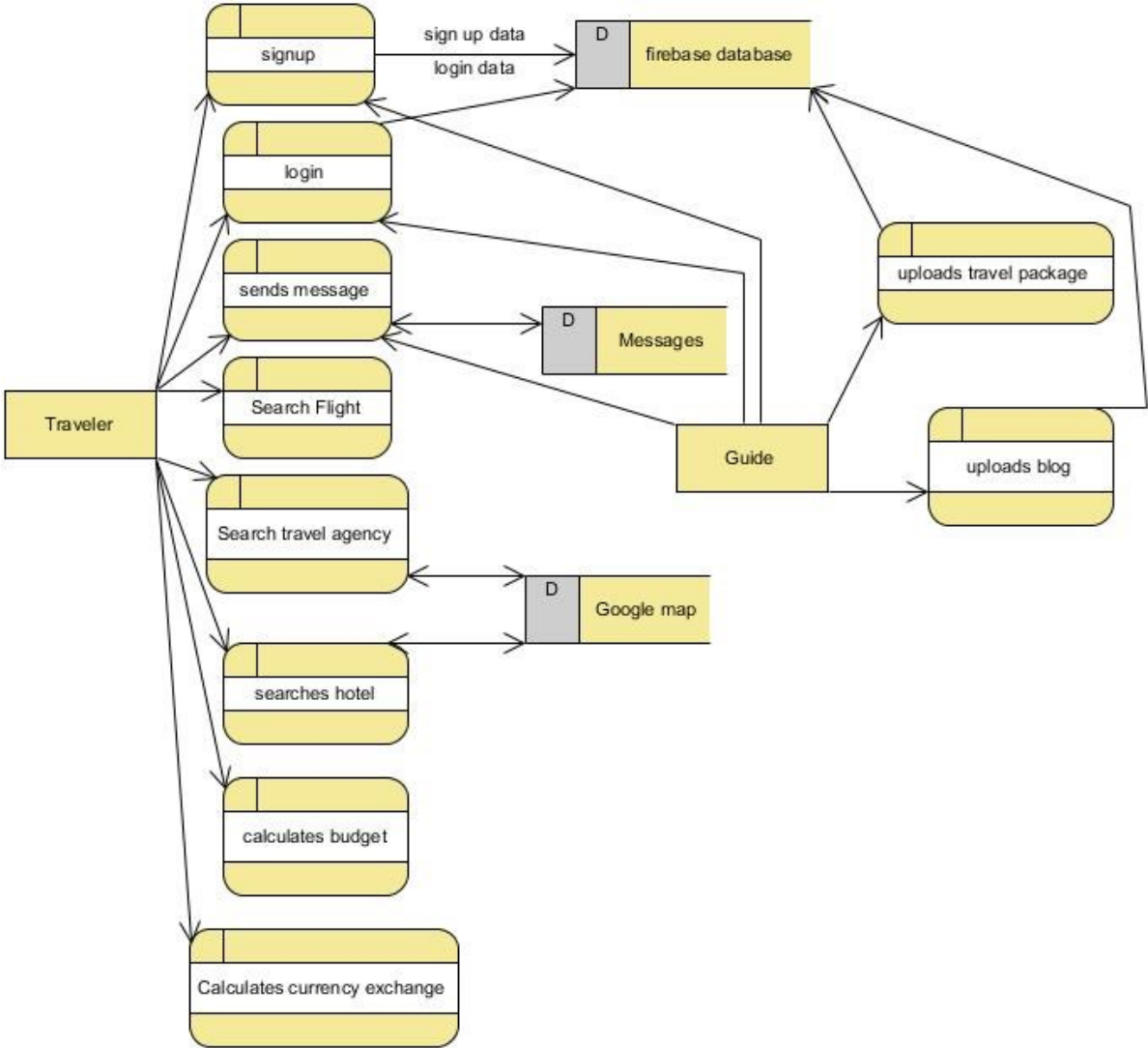
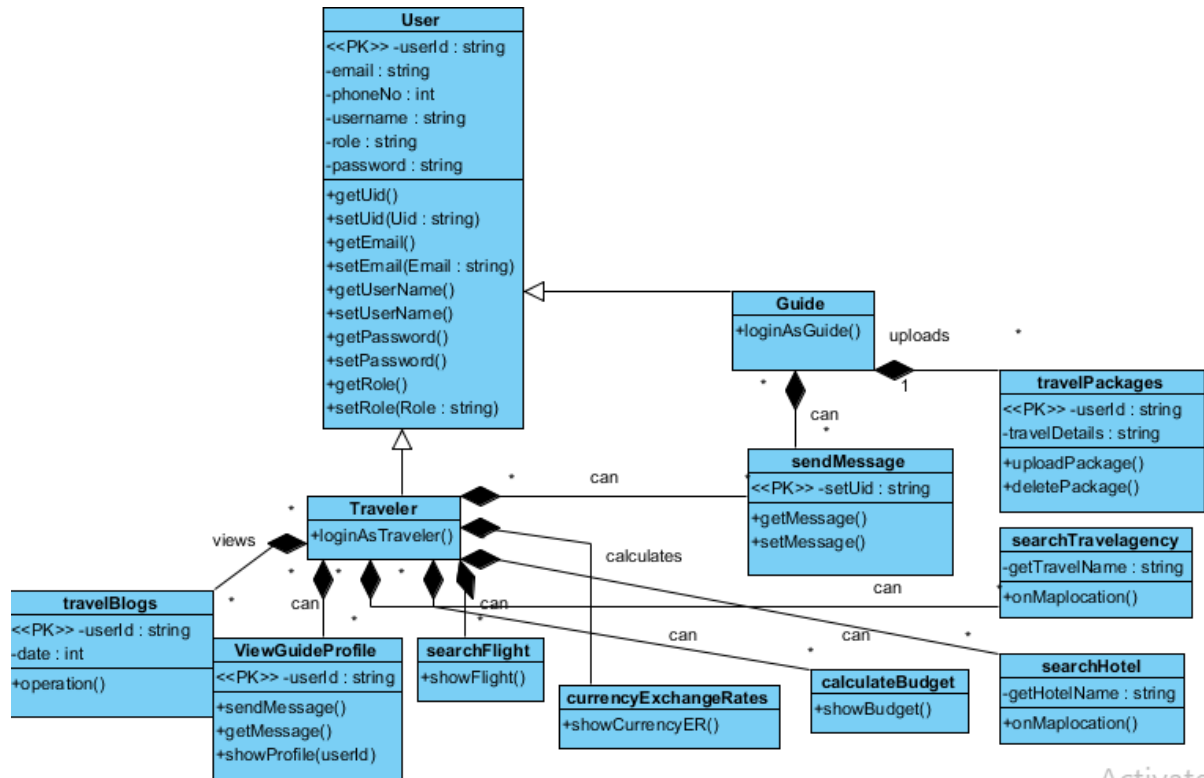


Figure 4. 14 Functional Flow

4.7.2 Logical Data Model



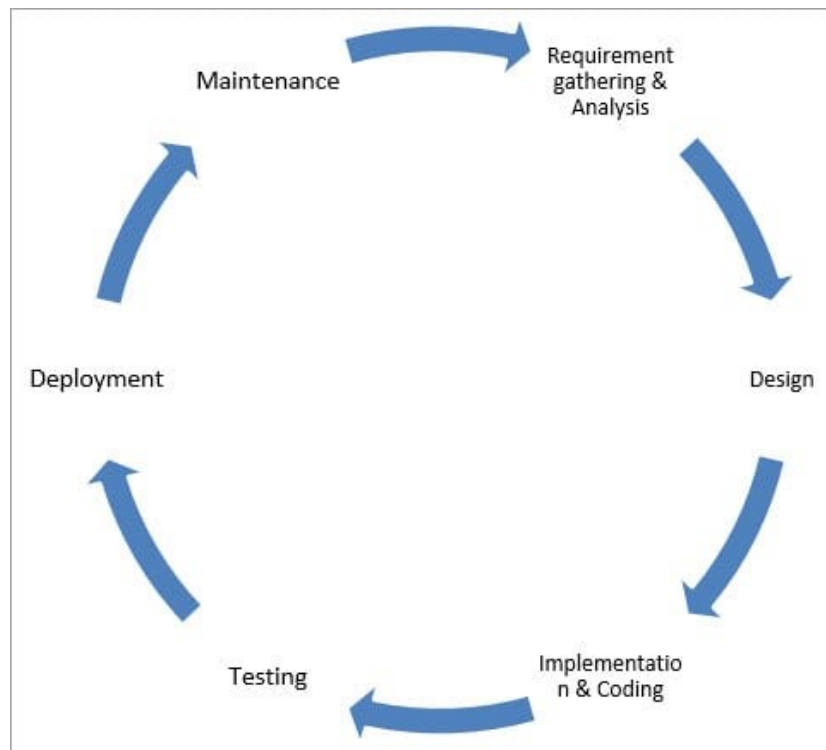
Activate Wi

Figure 4. 15 Logical Data Model

CHAPTER – 5:
SYSTEM IMPLEMENTATION

5.1 Strategy

The strategy that we will use for doing our project is the divide and conquer technique. Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop, and test high-quality software. The SDLC aims to produce a high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates. Similarly, we followed SDLC.



5.2 Tools Used

Android Application

- ▶ Android studio (Java)
- ▶ Firebase Database

Website

- ▶ Word press

5.3 Methodologies

Different methods and functions are used for making the system successfully— widgets used for making UI of the system interactive and easily understandable by every user. Budget calculators use different methods to calculate the budget and plan trips accordingly. Traveler and guide have different profiles can chat and plan a trip. The flight schedule provides the info about available flights only. Travelers have to search for hotel rooms in nearby vicinities and can book accordingly.

5.4 System Architecture

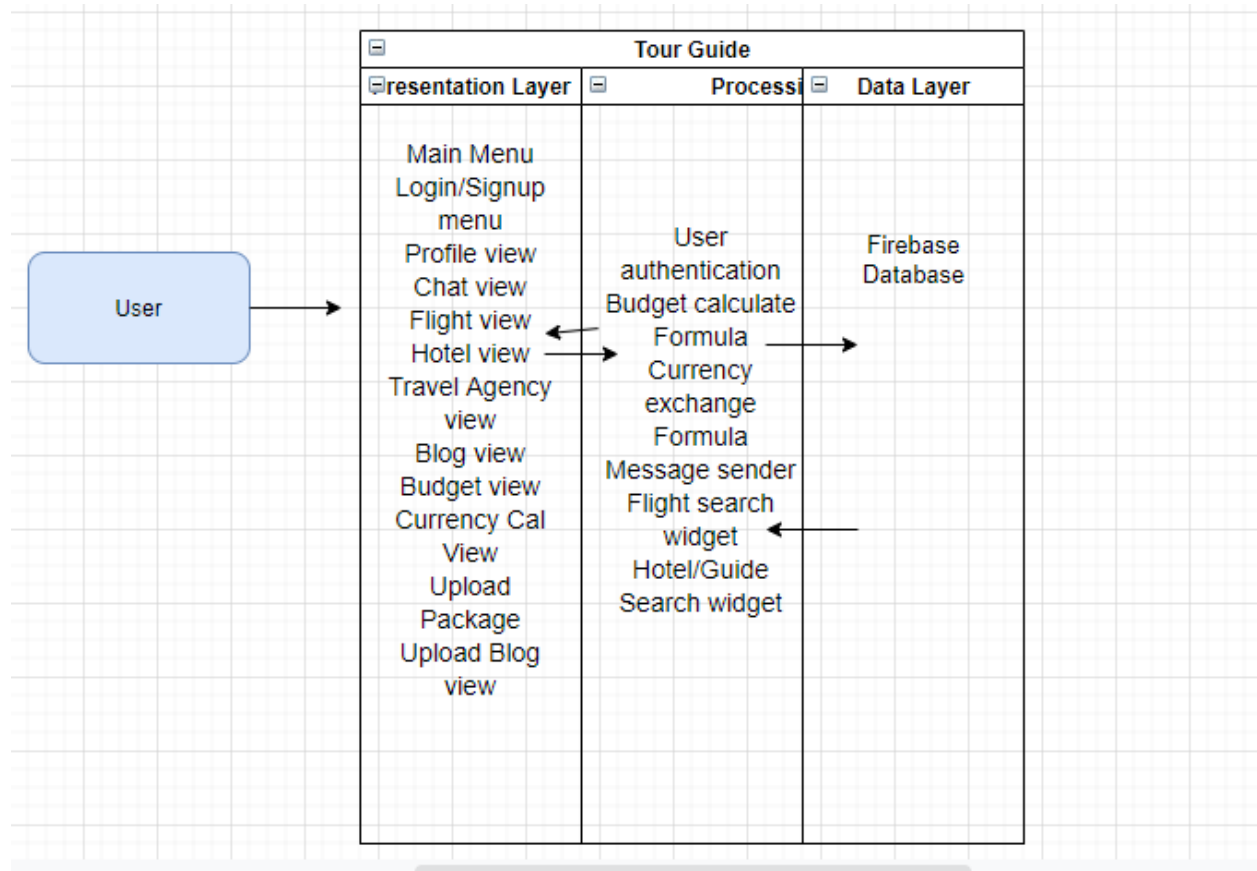


Figure 5. 1 System Architecture

5.4.1 Data Layer

The most common way to define the data layer is through the use of what is sometimes referred to as a Universal Data Object (UDO), which is written in the JavaScript programming language. The types of data contained in a data layer can be numerous and varied, consisting of things like e-commerce transaction information, web behavioral data, and mobile application usage.

5.4.2 Processing Layer

The process layer is part of the application level and is responsible for orchestrating component and service calls. It manages the building blocks in the mediation layer (if they cannot act autonomously). This supports and simplifies the implementation of complex integration processes.

5.4.3 Representation Layer

The presentation layer Translates, encrypts, and compresses data.

CHAPTER – 6:
SYSTEM TESTING

6.1 Test Strategy

A test strategy is an outline that describes the testing approach of the software development cycle as we do our project in different modules. We divide the whole project into smaller modules and one by one doing each module. Once all modules have been built, we integrate all of them. Testing is done on the individual modules first then test the system as a whole.

6.1.1 Component Testing

Component testing is defined as a software testing type, in which the testing is performed on each individual component separately without integrating with other components. As we do our project in modules, so each and every component of the system was tested before integration

6.1.2 Unit Testing

Unit testing is a level of software testing where individual units/ components of the software are tested. The purpose is to validate that each unit of the software performs as designed. Whenever an individual module is built, we make testing of the separate modules instead of waiting for the entire project to complete.

6.1.3 Integrated Testing

Integration testing is a level of software testing where individual units are combined and tested as a group. The purpose of this level of testing is to expose faults in the interaction between integrated units. Once all modules have built and tested separately, we are going to merge them and integrated them as a whole unit. Now the testing should be done as a whole system instead of an individual module.

6.1.4 System Testing

System testing is testing the system as a whole once unit testing has done. We go forward for the system testing, now test the modules that the system works properly according to the requirement document or not.

6.2 Test Cases

6.2.1 Test Case#1 LOGIN

Test Case ID	1	Test Case Description	Test the signupFunctionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not)	Pass
S #	Prerequisites:	S #	Test Data		
1	Access to internet	1	Userid = mg12345		
2		2	Pass = df12@434c		
3		3	phone= 090078601		
4		4	name=user1		
<u>Test Scenario</u>	Verify on entering valid userid and password, the customer can login				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	Click Submit	USER is logged in	As Expected	Pass	
4					

Figure 6. 1 Test Case#1 LOGIN

6.2.2 Test Case#2 signup

Test Case ID	2	Test Case Description	Test the signup Functionality in TOUR GUIDE APP		
Created By	TALHA	Reviewed By	ASIF	Version	1.1
Tester's Name	talha	Date Tested	10-Jun-19	Test Case (Pass/Fail/Not Executed)	Pass
S #	Prerequisites:		S #	Test Data	
1	Access to Chrome Browser		1	email = user@gmail.com	
2			2	Pass = 12345	
3			3	Phone = 122334555	
4			4	Name = user1	
Test Scenar	On entering valid data the customer should successfully signup.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	OPEN FRONT VIEW	APP should open	As Expected	Pass	
2	Click on the not register yet option	Signup page is open	As Expected	Pass	
3	Enter Credentials	Form filled	As Expected	Pass	
4	Click on the submit button	User sucessfully signup	As epected	Pass	

Figure 6. 2 Test Case#2 signup

6.2.3 Test Case # 3 View Guide Profile

Test Case ID	3	Test Case Description	view guiders profile after login as a traveller		
Created By	Asif	Reviewed By	Talha	Version	1
Tester's Name	Asif	Date Tested	10-Jun-20	Test Case (Pass/Fail/Not Executed)	Pass
S #	Prerequisites:		S #	Test Data	
1	Access to internet		1		
2	User successful login to the system		2		
3			3		
4			4		
Test Scenario	By enter credential user can login to the system and can be able to view guiders profile option.				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Opens the app	App should open	As Expected	Pass	
2	Successfully login	Credential can be entered	As Expected	Pass	
3	Click view guide profile	Guide profile is displayed	As Expected	Pass	

Figure 6. 3 Test Case # 3 View Guide Profile

6.2.4 Test Case # 4 Send Message

Test Case ID	1	Test Case Description	Test the Send Message Functionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not	Pass
S #	Prerequisites:	S #	Test Data		
1	Access to internet	1	Userid = mg12345		
2		2	Pass = df12@434c		
3		3	phone= 090078601		
4		4	name=user1		
<u>Test Scenario</u>	Verify the chat by sending messages				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	visit guider profile	guider profile	As Expected	Pass	
4	click on chat button	chat box is opened	as Expected	pass	
5	type message and click send message	message sent	as Expected	pass	

Figure 6. 4 Test Case # 4 Send Message

6.2.5 Test Case # 5 Upload Travel package

Test Case ID	5	Test Case Description	Test the upload travel package Functionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not)	Pass
S #	Prerequisites:		S #	Test Data	
1	Access to internet		1	Userid = mg12345	
2	login as guide		2	Pass = df12@434c	
3			3	phone= 090078601	
4			4	name=user1	
<u>Test Scenario</u> Verify the upload travel package functionality for guider profile					
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	upload travel package	upload travel package	As Expected	Pass	
4	click on upload button	package is uploaded	as Expected	pass	
5					

Figure 6. 5 Test Case # 5 Upload Travel package

6.2.6 Test Case # 6 Calculate budget

Test Case ID	6	Test Case Description	Test the calculate budget Functionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not	Pass
S #	Prerequisites:	S #	Test Data		
1	Access to internet	1	Userid = mg12345		
2	login as traveller	2	Pass = df12@434c		
3		3	phone= 090078601		
4		4	name=user1		
<u>Test Scenario</u>	Verify that the budget calculator is working properly functionality for traveller				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	open budget calc	budget calc window open	As Expected	Pass	
4	click on calculate budget	budget calculated	as Expected	pass	
5					

Figure 6. 6 Test Case # 6 Calculate budget

6.2.7 Test Case # 7 Book Hotels/Rooms

Test Case ID	8	Test Case Description	Test the book hotel/rooms Functionality in TOUR GUIDE APP			
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0	
<u>QA Tester's Log</u>						
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not	Pass	
S #	Prerequisites:		S #	Test Data		
1	Access to internet		1	Userid = mg12345		
2	login as traveller		2	Pass = df12@434c		
3			3	phone= 090078601		
4			4	name=user1		
<u>Test Scenario</u>	Verify that the hotel/room finder is working properly functionality for traveller					
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended		
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass		
2	Enter Userid & Password	Credential can be entered	As Expected	Pass		
3	open book hotel rooms	hotel rooms window open	As Expected	Pass		
4	click on find nearby rooms	nearby hotel rooms found	as Expected	pass		
5						

Figure 6. 7 Test Case # 7 Book Hotels/Rooms

6.2.8 Test Case # 8 Currency Exchange Rates

Test Case ID	9	Test Case Description	Test the currency exchange rates Functionality in TOUR GUIDE APP			
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0	
<u>QA Tester's Log</u>						
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not)	Pass	
S #	Prerequisites:	S #	Test Data			
1	Access to internet	1	userid = mg12345			
2	login as traveller	2	Pass = df12@434c			
3		3	phone= 090078601			
4		4	name=user1			
<u>Test Scenario</u> Verify that the currency exchange rates is working properly for traveller						
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended		
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass		
2	Enter Userid & Password	Credential can be entered	As Expected	Pass		
3	open currency exchange	currency exchange opened	As Expected	Pass		
4	click on required currency	currency exchanged	as Expected	pass		
5						

Figure 6. 8 Test Case # 8 Currency Exchange Rates

6.2.9 Test Case # 9 Search Flight

Test Case ID	10	Test Case Description	Test the search flight schedule Functionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not)	Pass
S #	Prerequisites:		S #	Test Data	
1	Access to internet		1	Userid = mg12345	
2	login as traveller		2	Pass = df12@434c	
3			3	phone= 090078601	
4			4	name=user1	
<u>Test Scenario</u>	Verify that the currency exchange rates is working properly for traveller				
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	open search flight	search flight opened	As Expected	Pass	
4	click on search flight	available flights viewd	as Expected	pass	
5					

Figure 6. 9 Test Case # 9 Search Flight

6.2.10 Test Case # 10 Read Travel Blogs

Test Case ID	11	Test Case Description	Test the read travel blog Functionality in TOUR GUIDE APP		
Created By	ASIF RAZA	Reviewed By	TALHA	Version	1.0
<u>QA Tester's Log</u>					
Tester's Name	ASIF	Date Tested	1-JUNE-2020	Test Case (Pass/Fail/Not	Pass
S #	Prerequisites:		S #	Test Data	
1	Access to internet		1	Userid = mg12345	
2	login as traveller		2	Pass = df12@434c	
3			3	phone= 090078601	
4			4	name=user1	
<u>Test Scenario</u> Verify that the traveller is able to read guider travel blogs.					
Step #	Step Details	Expected Results	Actual Results	Pass / Fail / Not executed / Suspended	
1	Navigate to TOUR GUIDE APP	app should open	As Expected	Pass	
2	Enter Userid & Password	Credential can be entered	As Expected	Pass	
3	visit guider profile	guider profile opened	As Expected	Pass	
4	click on view blogs	available blogs viewd	as Expected	pass	
5					

Figure 6. 10 Test Case # 10 Read Travel Blogs

CHAPTER – 7:
CONCLUSION

Conclusion:

The travel industry assumes a significant job in the economy of a nation. In Pakistan, the travel industry assumes a significant job in the pay of nation. Our project will help the explorers in getting acquainted with the spots that will help in advancing the travel industry. Local area expert will register in application to connect with travelers, in the android application, where individuals can without much of a stretch, discover the local escorts as per their preference. Traveler will contact with local area expert through a message which will eliminate the barrier between a traveler and a guide. They will get data in regards to various visit packages gave by local area expert. Voyagers don't need to visit local area expert's workplaces and they can recruit a local guide by only some clicks. This can spare a ton of explorer's time by removing the time that a traveler spend in tour agency office. Traveler will likewise search for accessible flights. User can calculate their travel budget and can decide that how much he has to spend without going out of budget. Traveler can book hotels/rooms and can calculate currency exchange rates in different currencies. Similarly, a website will assist user in getting familiar with the application.

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