

“FLYWAY – TOURIST GUIDE” AN ANDROID APPLICATION

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This Report Present in partial Fulfilment of the Requirements for the Degree
of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project titled Flyway-Tourist Guide, submitted by Mahedi Hasan and Sadia Afrin Mollika 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 (BSc) and approved as to its style and contents. The presentation has been held on *5/1/2022*.

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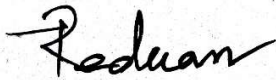
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DECLARATION

We hereby declare that, this project is entitled “Flyway-Tourist Guide” submitted to the Daffodil international University is unique and has been done by us under the supervision of **Md. Abbas Ali Khan, Sr. Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere forward of any degree or diploma.

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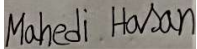
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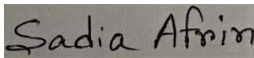


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Finally, we must acknowledge with due respect the constant support and patients of my parent, without them any of my work would not happen.

ABSTRACT

Travelers's guiding has a significant and complex job in contemporary the tourism. A protected and quality experience offered by a guided tour involves the guide, travelers and the environment, and is satisfied when every one of the three parts collaborate at a similar point in space and time. The job of guides in the travel industry framework separates itself by its capability to oversee and coordinate vacationer encounters, upgrade location picture and execute the objectives of dependable the travel industry. What guides introduce and interpret produces results in transit in which their clients experience a place or fascination, comprehend nearby culture, participate in local activities and how they act on the spot. As forefront experts, data providers and translators, the aides go about as objective's agents and "diplomats" according to vacationers. Tourist guiding is one of the significant variables of fruitful show of objections in contemporary the travel industry, influencing the subsequent monetary and social advantages.

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CHAPTER 1

Introduction

1.1 Introduction

Bangladesh, a country with natural beauty and historical places, is visited by foreigners from various country. Our country has many people who are very fond of traveling. The reason for foreigners' visits to this country is diverse. The most dominant motive is the tourism. The nation was recorded by Lonely Planet in 2011 as the "best value destination"[1]. There are some different motivations to venture to every part of the country, for example, political, business, official, and educational purpose, etc. Notwithstanding, being outsiders in Bangladesh, they face a few difficulties during dwelling in the country, for example, absence of getting language and transport data. So for foreigners and Bangladeshi's need to guide to go their desire place with safety. If a person wants to travel an unknown place they need many information like place details, hotel, food etc. for their desire places. So for this purpose they need a total guide for details with hotel and food and our travel guide apps will help them with lots of information. So, we create an android application for tourists so that they can find information for their desire place.

1.2 Motivation

This data assists the travelers with tracking down the desired location to visit. Well, it comprises of entire details of those areas or how to arrive at the places. This project is mainly advantageous for the tourists having no clue about the spots they need to visit. By giving a geographic based data framework the travelers and individuals moving to new urban communities can improve direction of the spots they need to visit. The apps give the essential subtleties that will be required, for example, a picture of that spot alongside fundamental subtleties like the location, contact no and so many information.

1.3 Objectives

The main objectives of developing the Flyway-Tourist Guide are given below:

- To provide best travelling services to the tourists.
- To provide a search platform where a tourist can find their tour places according to their choices.
- To promote responsible and interesting tourism so that people can enjoy their holidays at their favorable places.
- To develop tourism with different cultures so that they enrich the tourism experience and build pride.
- To make strong relationship with our users so that they can enjoy the trip [1].

1.4 Expected Outcome

- This application will reduce the problems of a tourist.
- This information of the apps will help the tourists to find the desired locations to visit.
- Simply they got any details about their place.

1.5 Report Layout

Chapter (1): we described about our project, motivation of our project.

Chapter (2): In chapter 2, we described the background the project.

Chapter (3): In chapter 3, we described the necessary Requirement such as use case model, BPM model and design requirement.

Chapter (4): In chapter 4, we show the front and backend design and implementation requirement.

Chapter (5): In chapter 5, we described the Implementation of testing code and database.

Chapter (6): Finally, in chapter 6 we described conclusion of this project and scope of future development.

I include the appropriate reference at the end of the report to ensure that the information in the report is accurate.

CHAPTER 2

Background

2.1 Introduction

Traveling is all about exploring new places, cultures, cuisines, rituals and styles of living. In the age of technology, the world has become smaller and reachable. In this era, the fact of the journey itself is no longer such a big deal. Any place we want to visit, any hotel to stay, any food to taste, is just in the distance of a few taps on our smartphone. The motivation to develop our apps to help the tourists with lots of information about their desire place.

2.2 Related Works

For our country there are many websites and apps developed by various designers who are already known to some users. There has some website like <https://vromonguide.com/> [1]. We get a lot of information from here. By our site the user can search about all information of different places of BD.

2.3 Travelers' Requirements

In spite of the fact that individuals can get some broad data in regards to going over the web, it is here and there dangerous for the rookies in a spot to get to know the new climate. Fundamentally, they face challenges in imparting and seeing as appropriate directing data and related expenses for particular courses.

2.4 Scope of the Problem

- The scope of our project is mainly for the travelers of Bangladesh.

- The android mobile user will not be able to insert or view details if the server goes down. Thus, there is disadvantage of single point failure [1].

2.5 Introduction to Proposed System

Considering travelers' prerequisites and prevalence of android device and application, we have thought of making a versatile mobile application for the tourists and novices in the most alluring and traveler urban areas of Bangladesh [1]. In our apps we include many tourists' places including 8 divisions and 65 districts of Bangladesh.

CHAPTER 3

Requirement Specification

3.1 project sequence Diagram:

A sequence diagram is a Unified Modeling Language (UML) diagram that represents the sequence of messages between objects in a cooperation. An arrangement outline shows the succession of messages passed between objects. Sequence diagram can likewise show the control structures between objects.

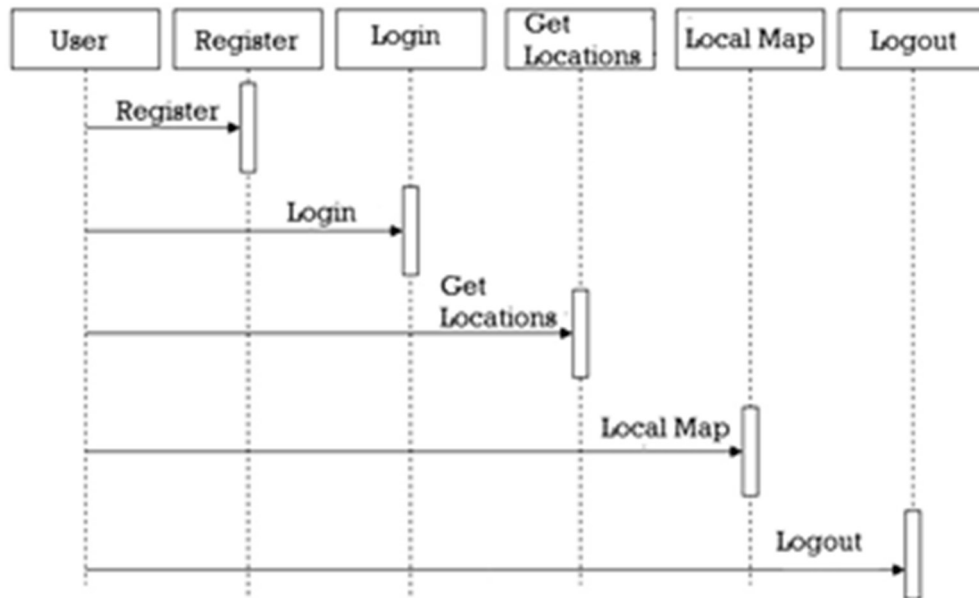


Figure 3.1.1: project sequence Diagram

3.2 Use Case Modeling and Description:

A case for use is a compilation of scenarios that characterize a user-system interaction. A use case diagram illustrates the relationship between actors and cases of use. Use cases and actors are the two principal components of a use case diagram. [2]

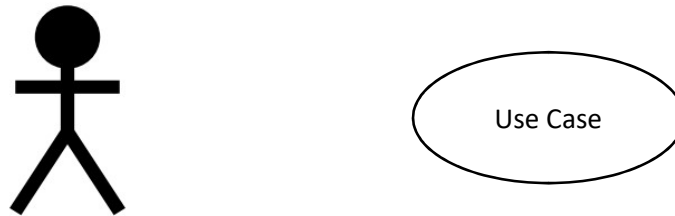


Figure 3.2.1: Use case symbol

An actor is a user or another device that interacts with the modeling system that you are modelling. A use case is an external machine view that reflects any action that must be done by the user in order to complete a mission.

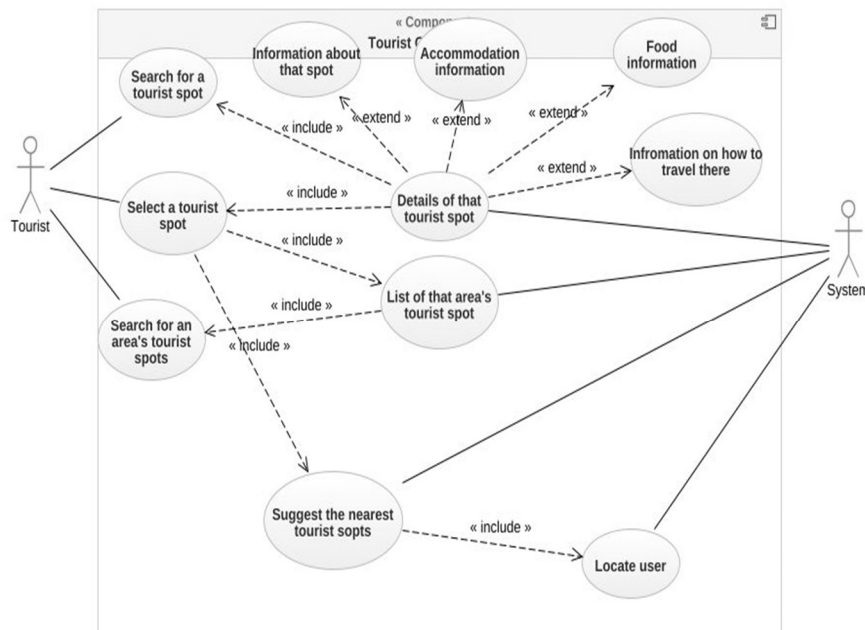


Figure 3.2.2: Use case Diagram

3.3 Activity Diagram

A conceptual data diagram offers a graphical view of an information system's structure and lets you evaluate, through entities and relationships, the structure of your data system [3].

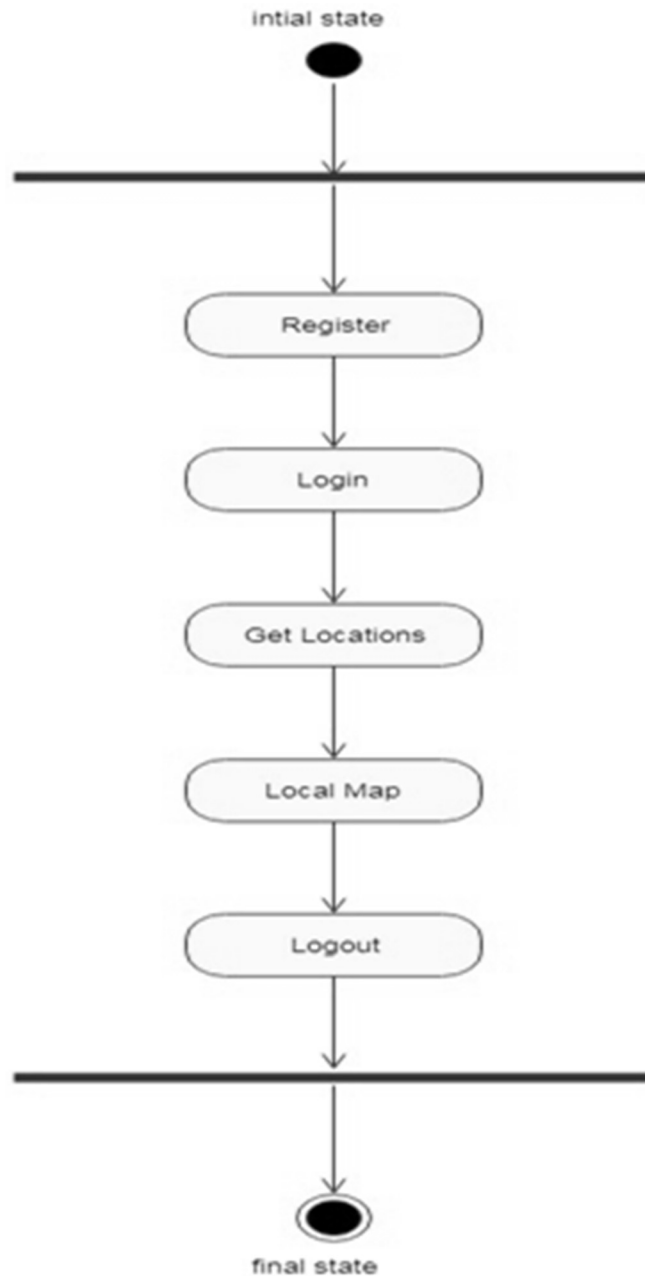


Figure 3.3.1: Activity Diagram

CHAPTER 4

Design Specification

4.1 Design of the apps

We use XML to design this application “Flyway-Tourist Guide”. XML stands for extensible markup language. A markup language is a set of codes, or tags that describes the text in a digital document.

Splash screen

At the opening of the apps there is a Flash screen. Splash Screen is the first screen visible to the user when the application’s launched. A Splash Screen is a screen that seems when you open an application on your mobile phone. Sometimes again it's alluded to as a dispatch screen or startup screen and shows up when our application is stacking after we've quite recently opened it.

Intro Slider

We add 3 sliders in our application. After the Splash screen the 3-slide visible in a row for users. There are 2 buttons in those pages. Next and skip page. User can ignore those sliders by using skip button.

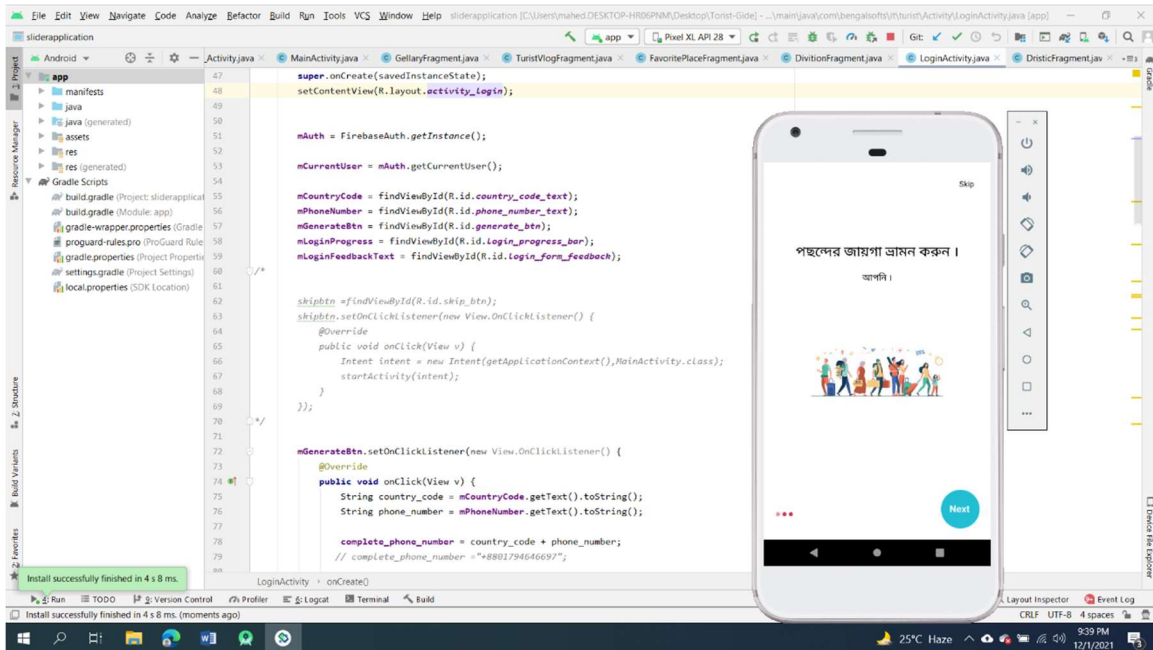


Figure 4.1.1: Intro slider

Login page

For login this application we need to verify our number with an OTP number. This is the first step for a user to login in the application.

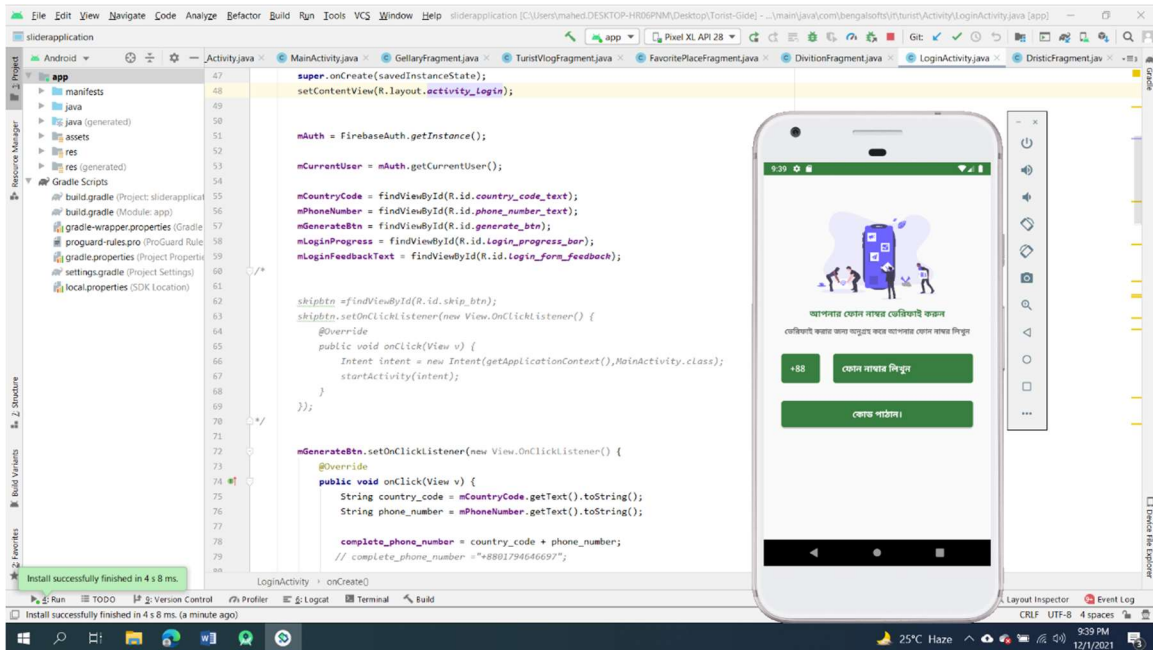


Figure 4.1.2: Login page

OTP verification page

When we get the OTP number via message, we input it the empty box and press verify OTP to go to the next page.

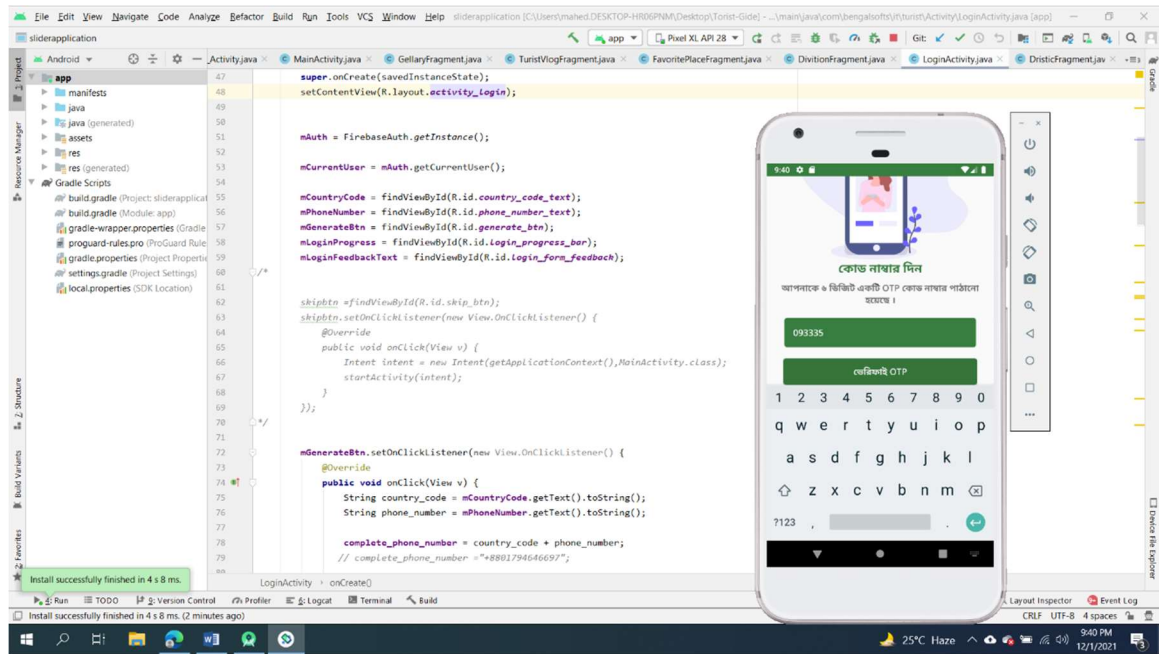


Figure 4.1.3: OTP verified

Registration page

Registration for use the application. Put the information in those empty box a then tap in the Registration button.

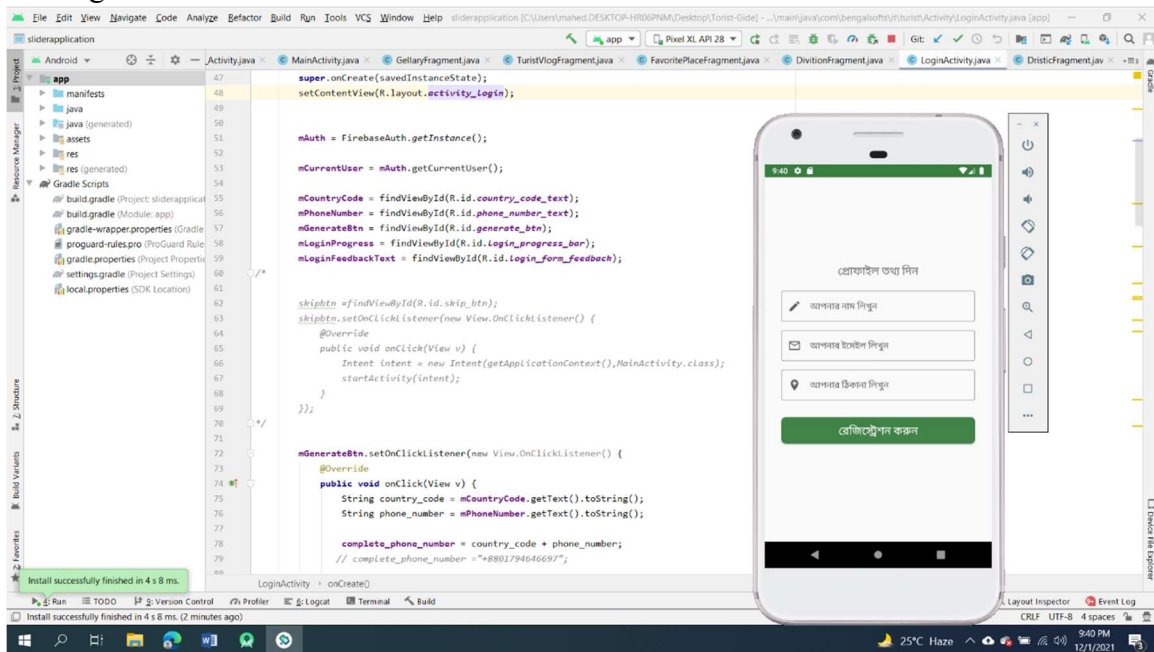


Figure 4.1.4: Registration page

After putting the information of a user

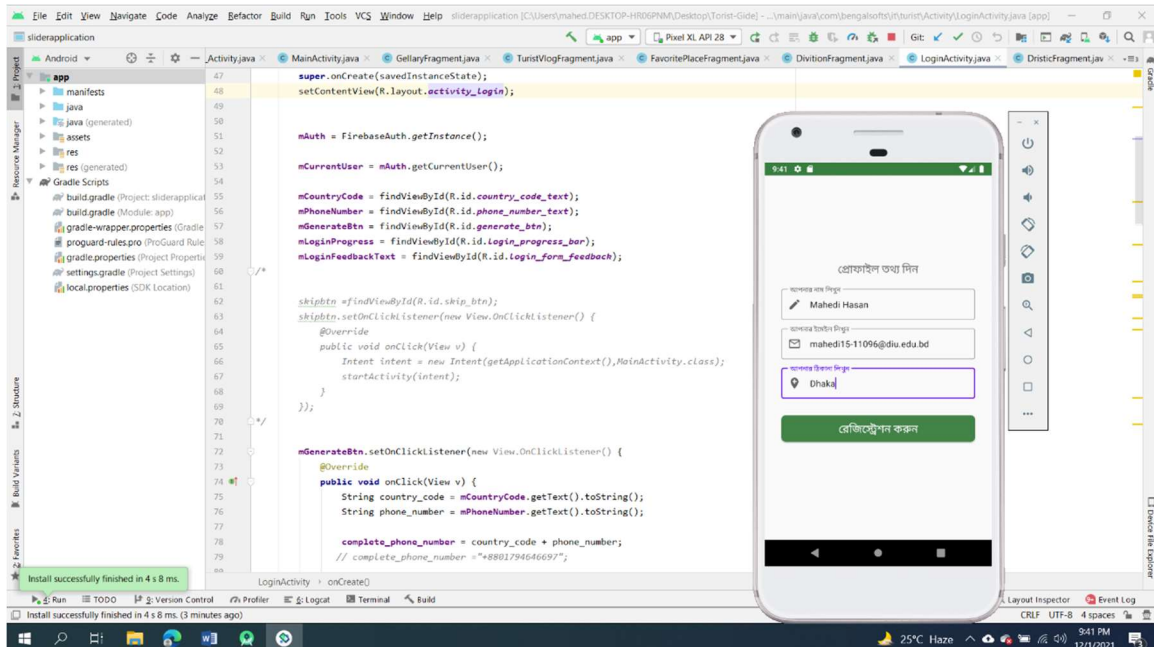


Figure: 4.1.5 Registration page

Home page

After login and registration page there is the home page. In this homepage there are Image slider in the top of the page, Navigation drawer left of the page and Bottom Navigation below of the page.

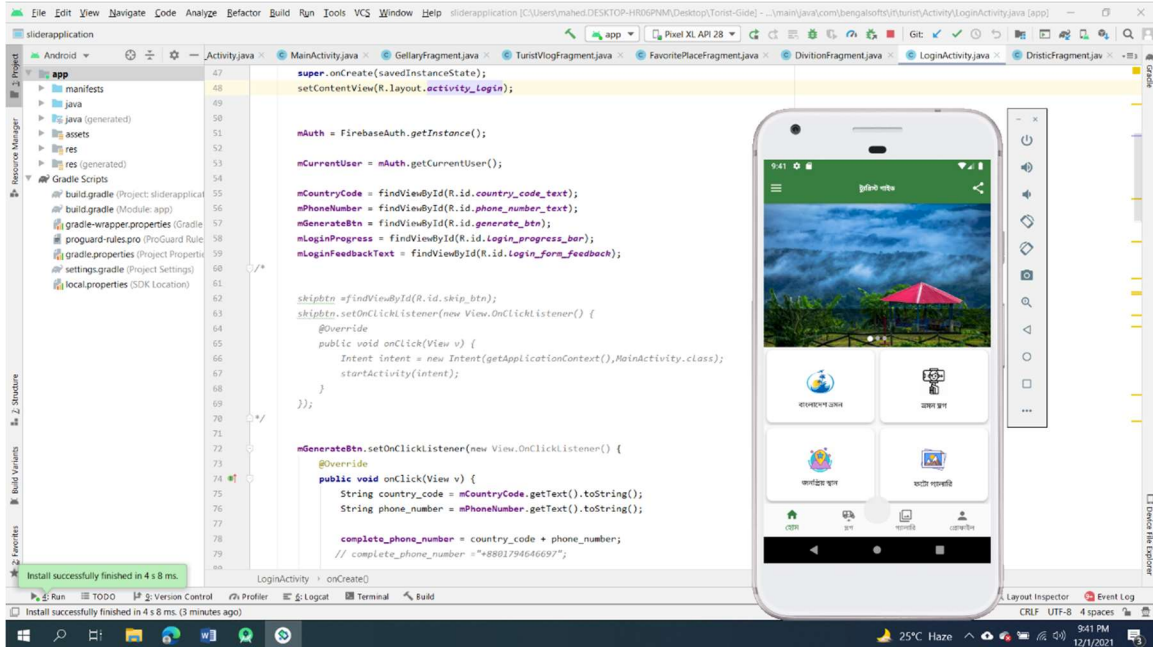


Figure 4.1.6: Home page

Navigation Drawer Design

Navigation drawer is in the most left of the Homepage.

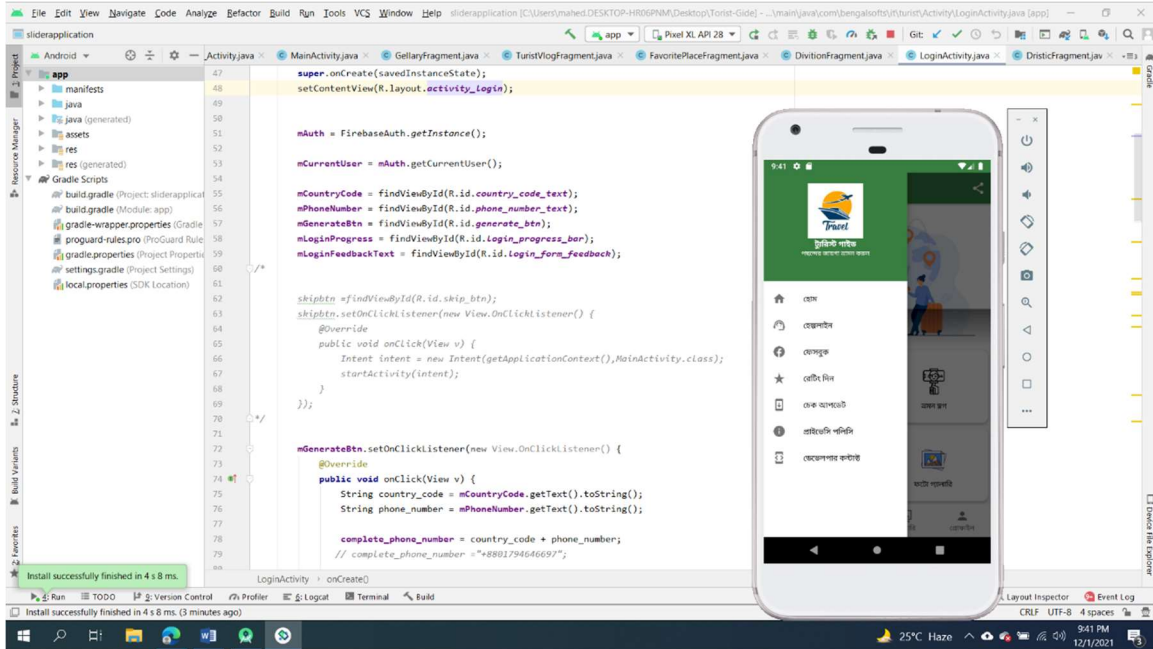


Figure 4.1.7: Navigation drawer

When we press the “বাংলাদেশ ভ্রমণ” we see there are 8 buttons of 8 division of Bangladesh

Home Page

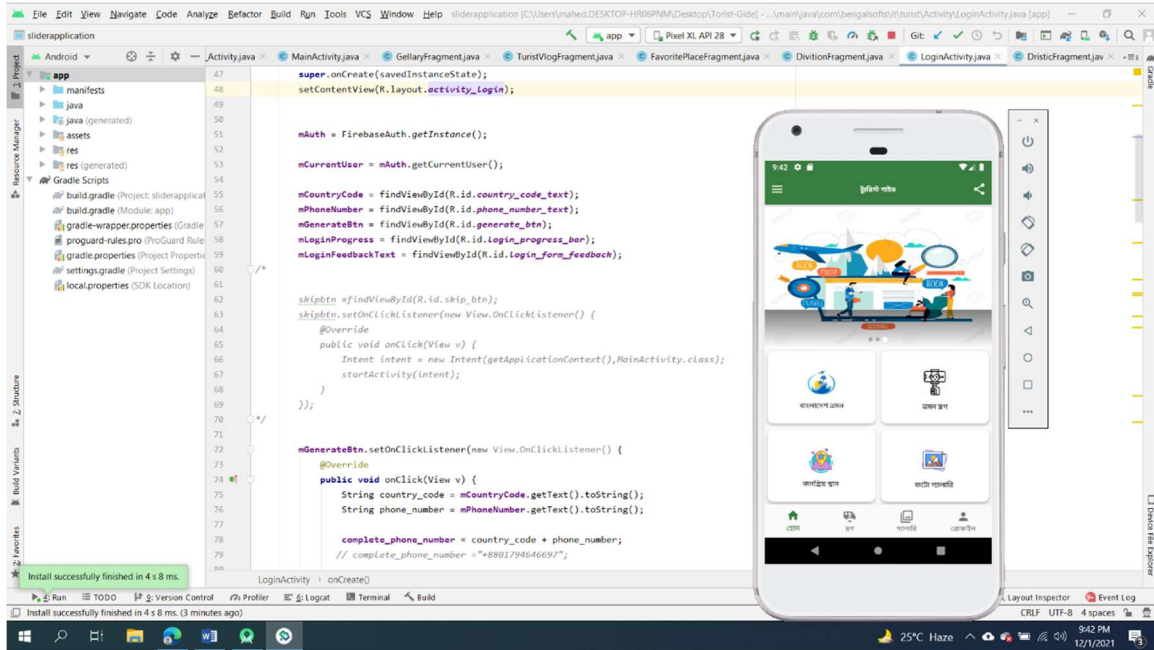


Figure 4.1.8: Home Page

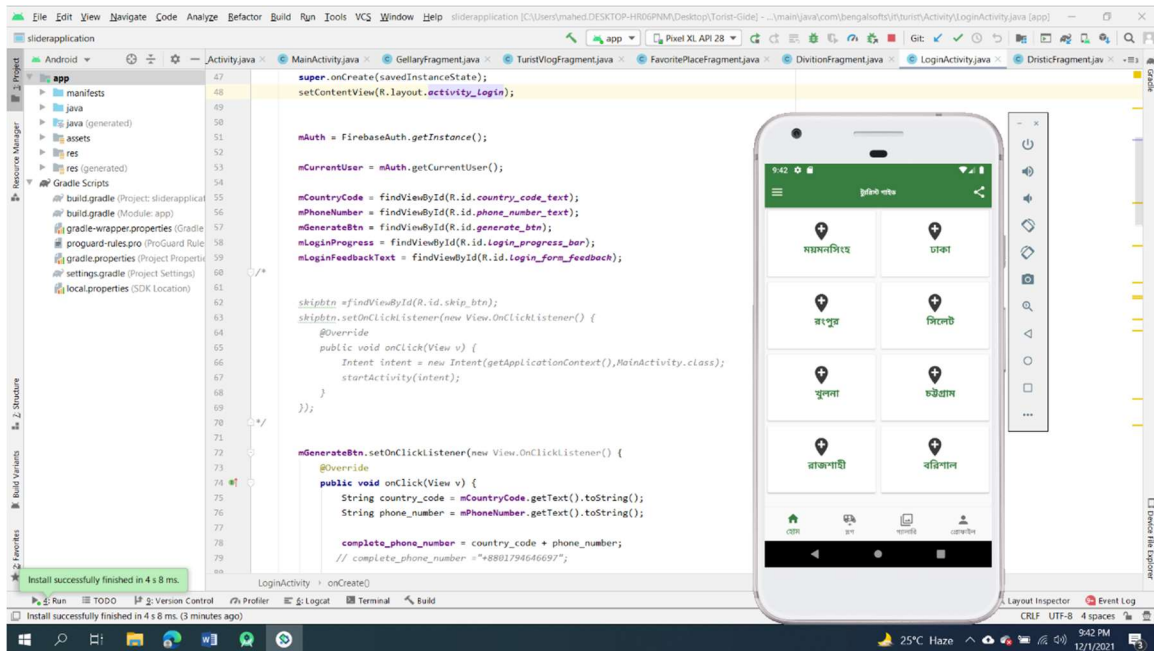


Figure 4.1.9: List of Districts

If we want to explore Dhaka then press Dhaka button..... Then we can see the tourist spot situated in Dhaka and details of the spots, how to go there and many information.

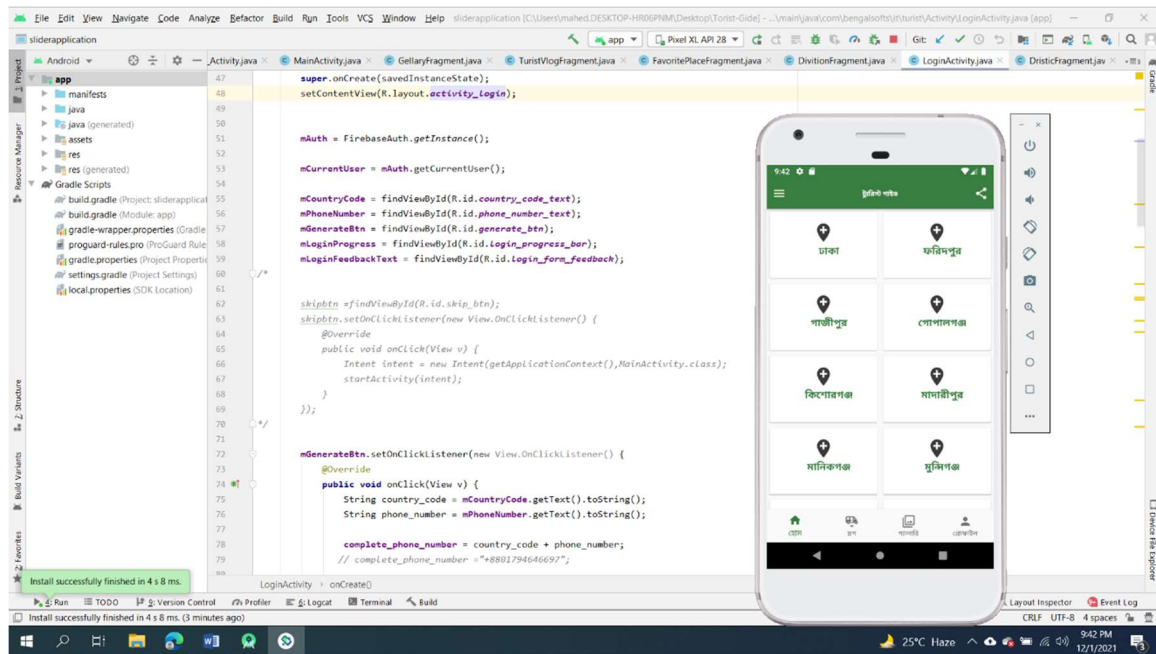


Figure 4.1.10: Division Details

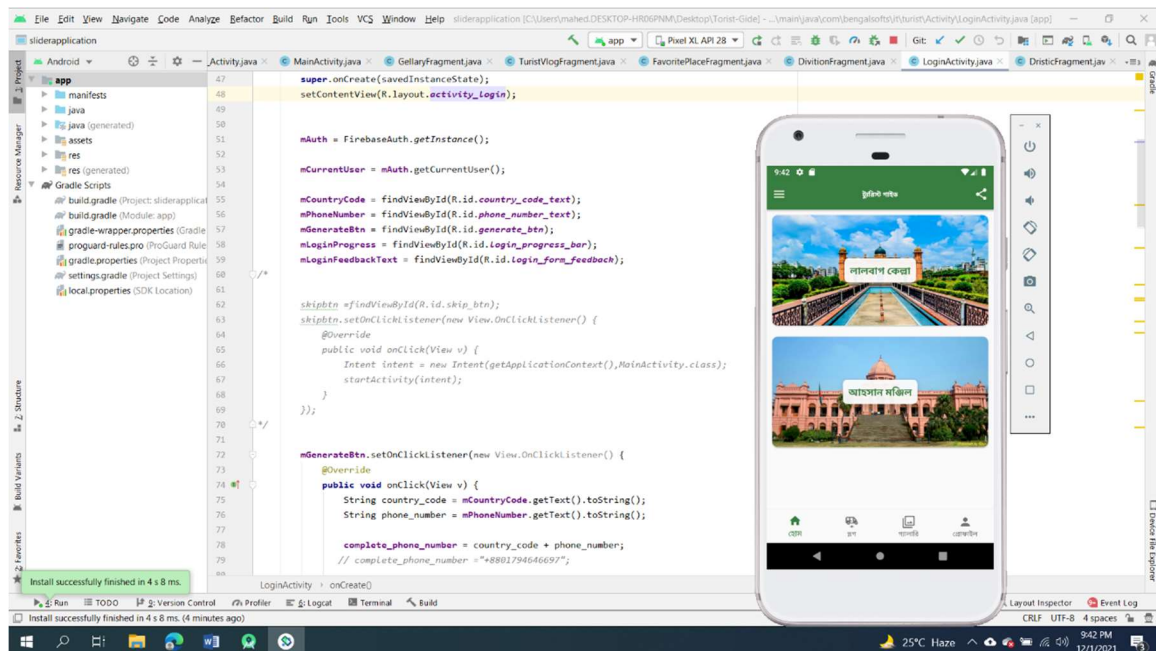


Figure 4.1.11: List of place

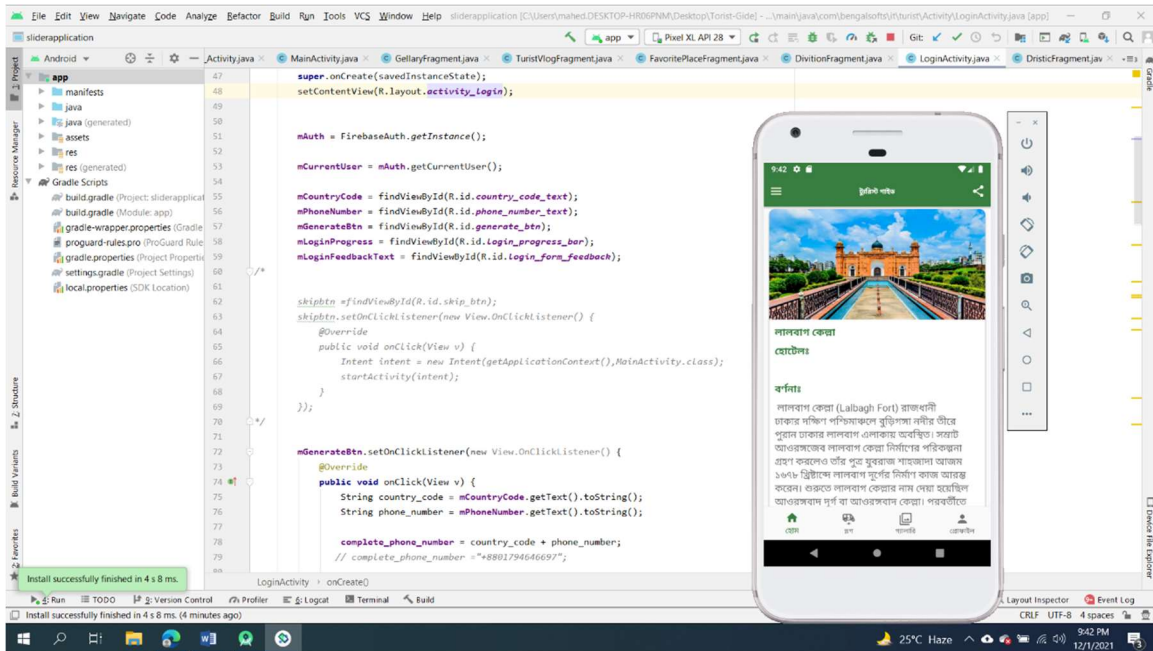


Figure 4.1.12: Details of place

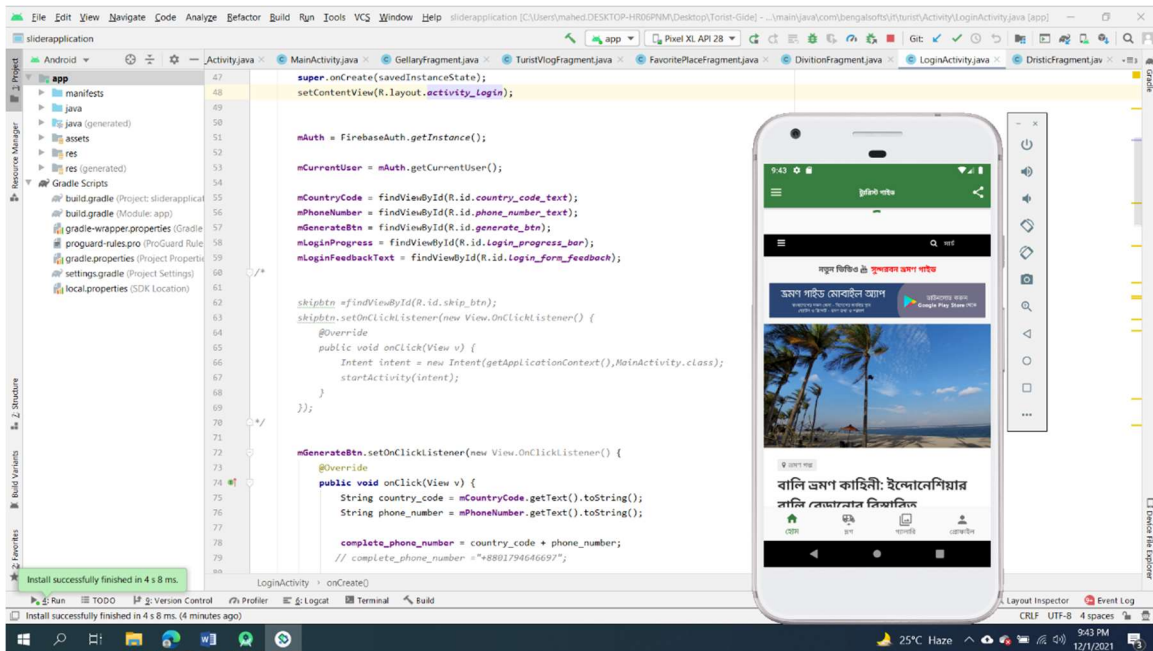


Figure 4.1.13: Travel blog

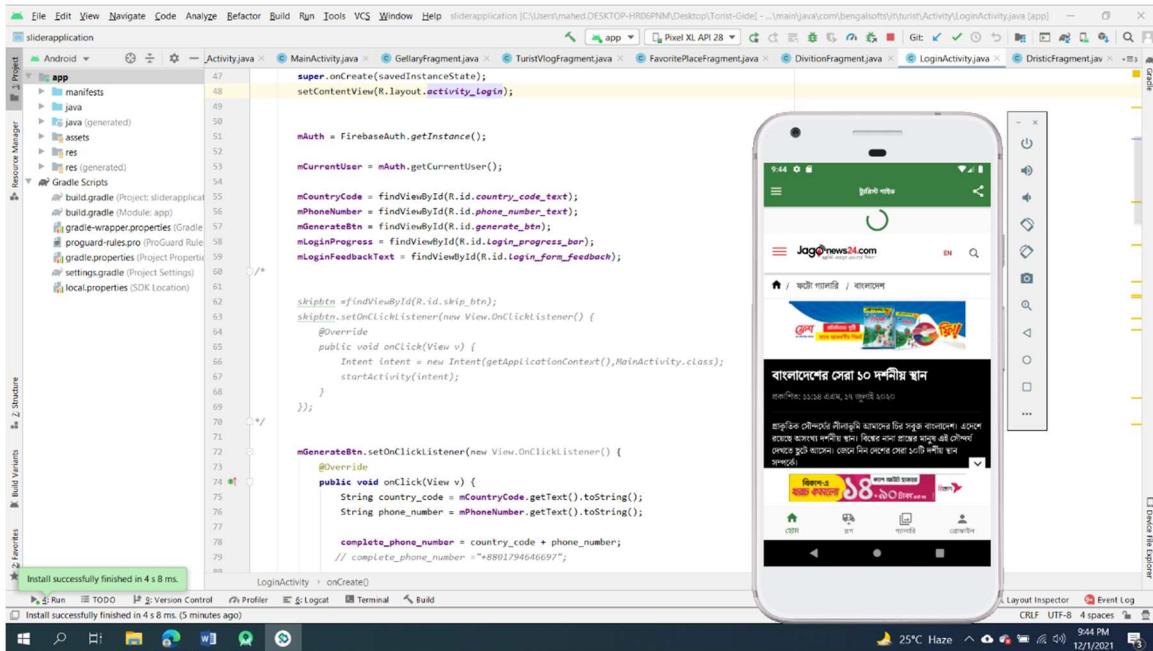


Figure 4.1.14: Most Travelling place

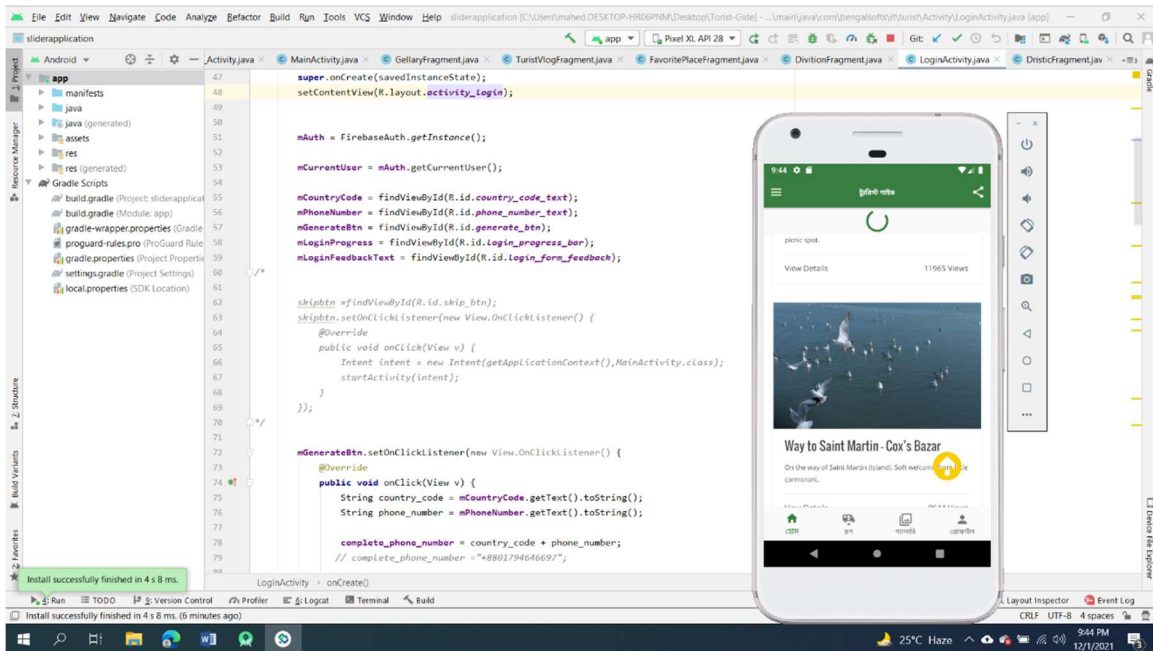


Figure 4.1.15: Photo Gallery

4.2 Implementation Requirements:

In our system we just use some technology to develop. Those are:

- Markup language: HTML
- Design: XML
- Programming/Scripting language: JAVA
- Database: Firebase Server
- Framework for design: Android Studio
- Icons are collected from: Font awesome

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

We use Firebase database to develop our application. All information of the application putted in the Firebase.

Realtime Database

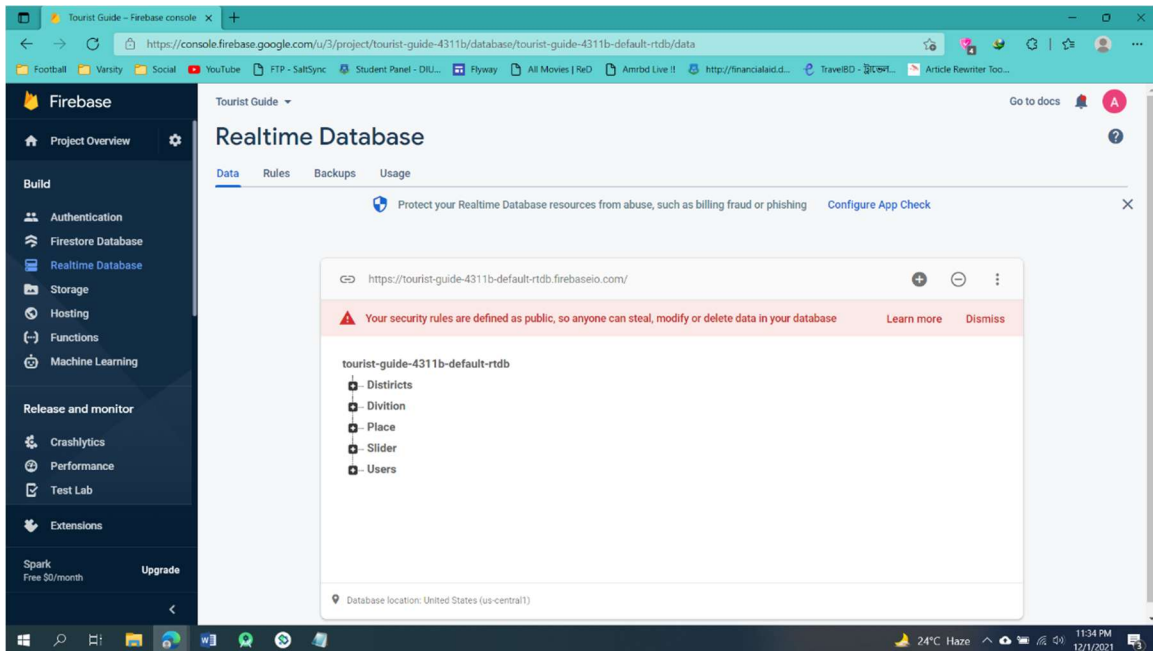


Table 5.1.1: Realtime database

Districts Database

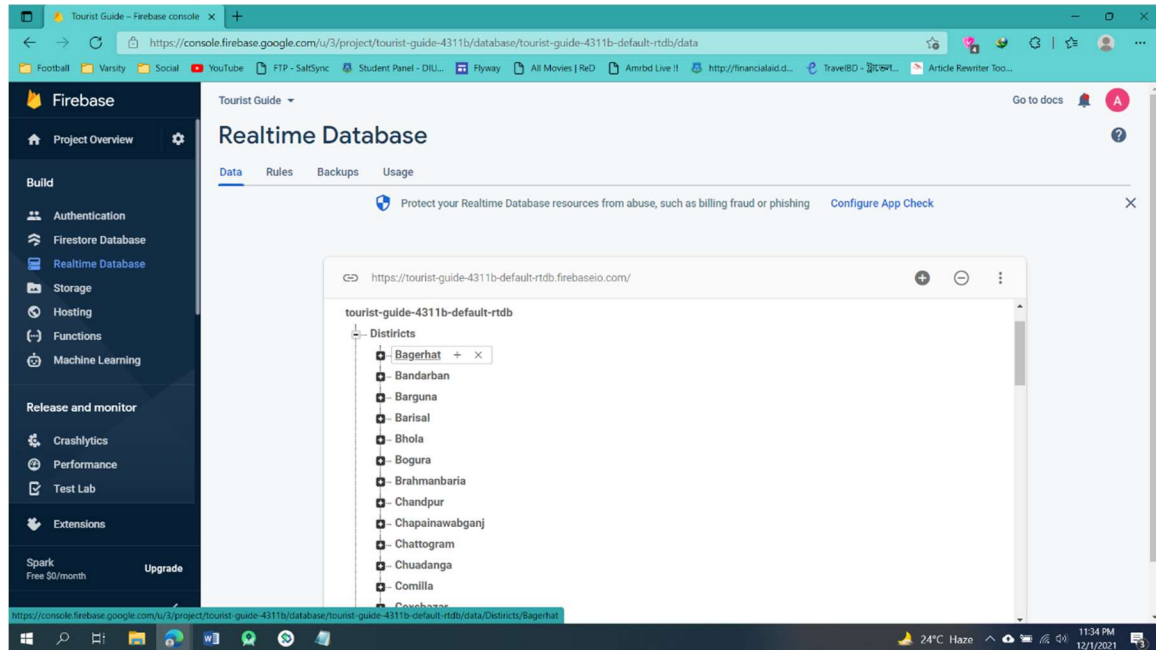


Table 5.1.2: Districts Database

Information of District in The Database

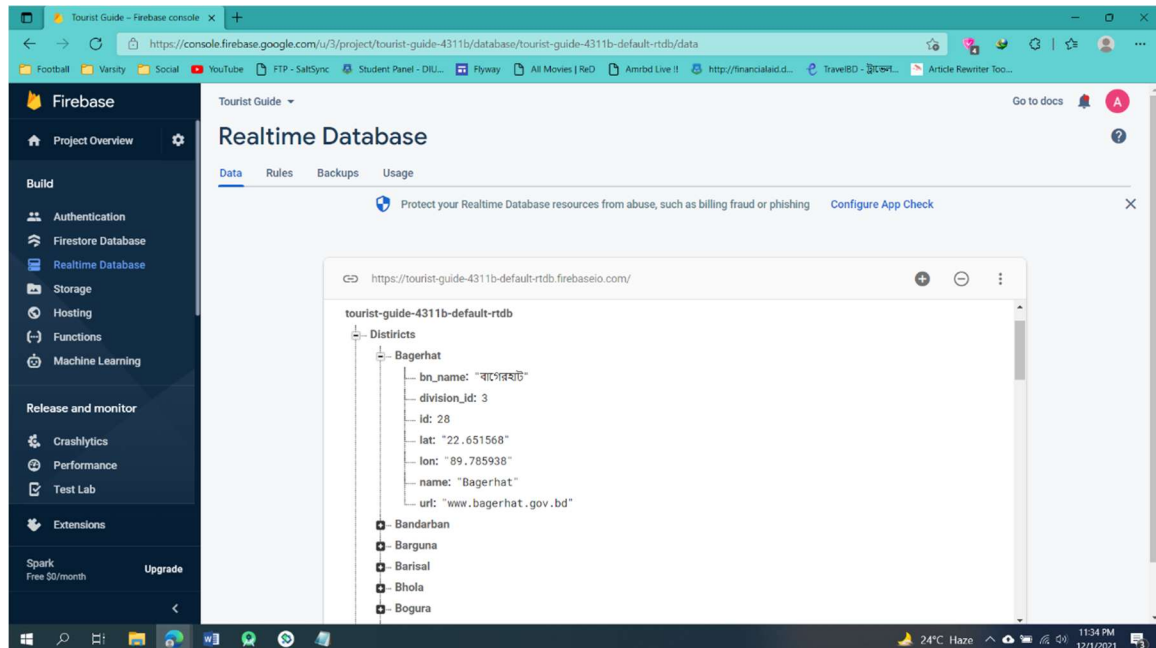


Table 5.1.3: Districts Database

Division Database

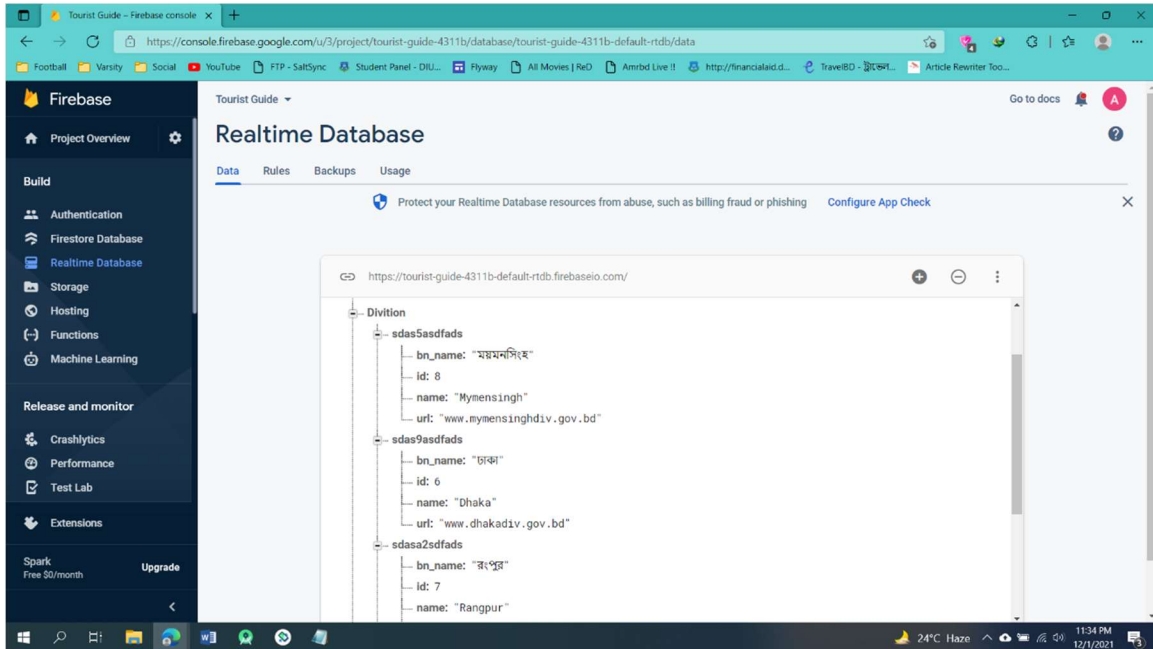


Table 5.1.4: Division Database

Place database

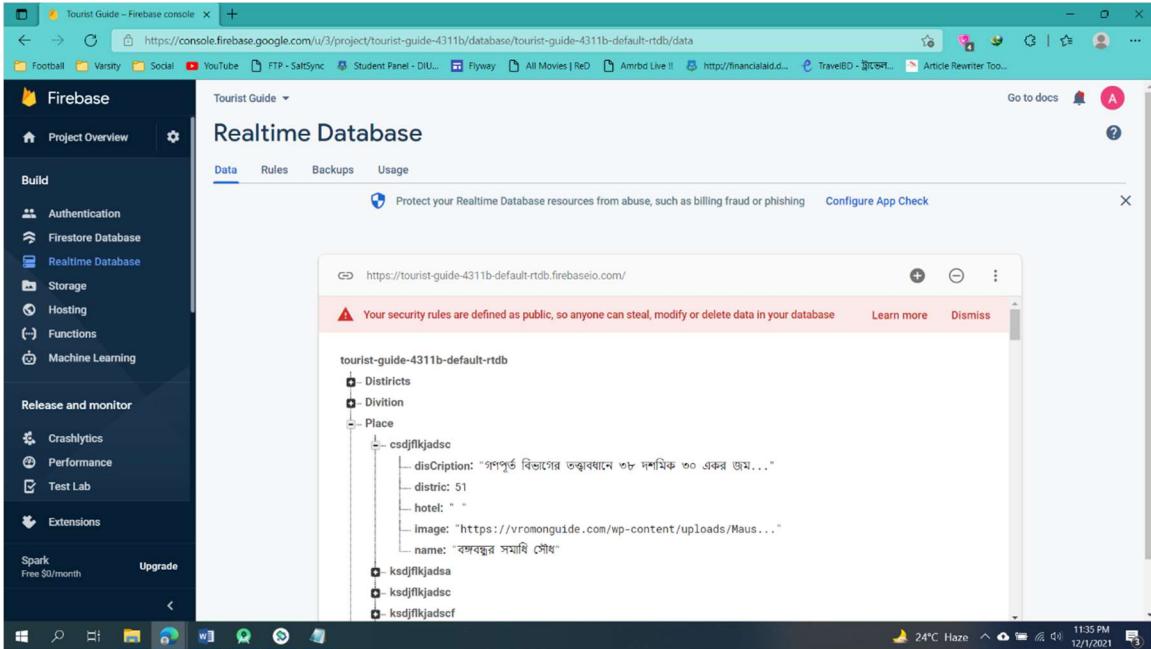


Table 5.1.5: Districts Database

Slider Database

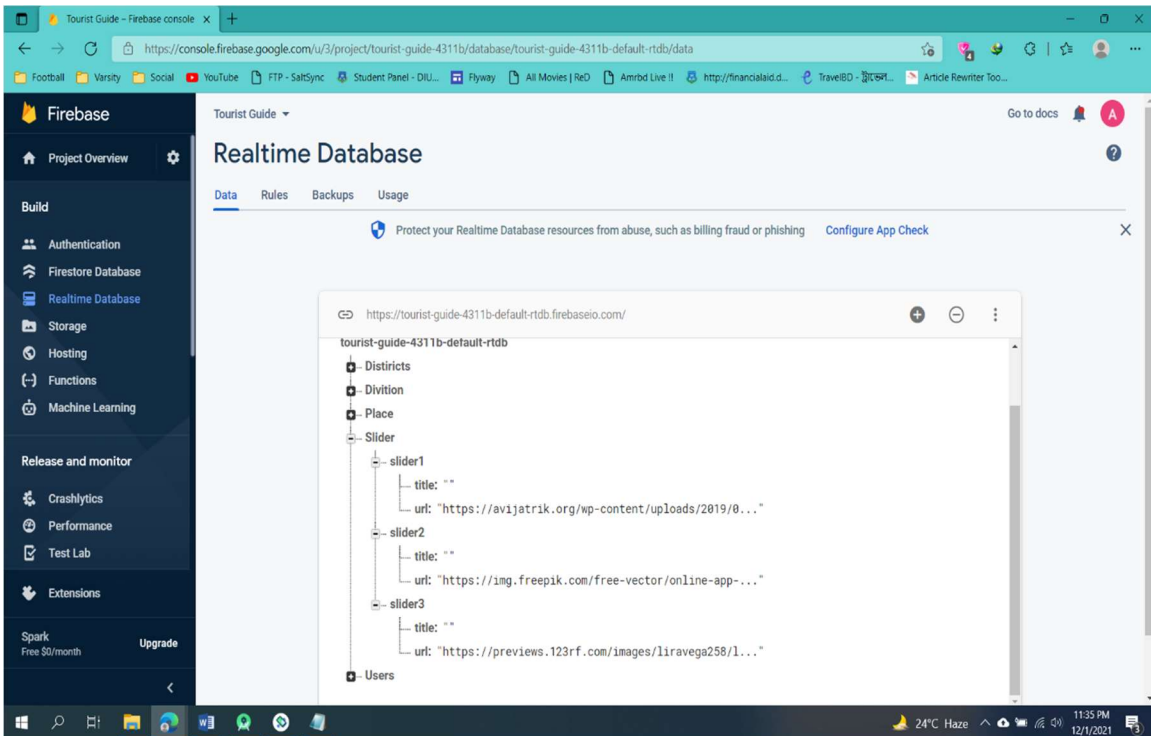


Table 5.1.6: Real-time Database

Users Database

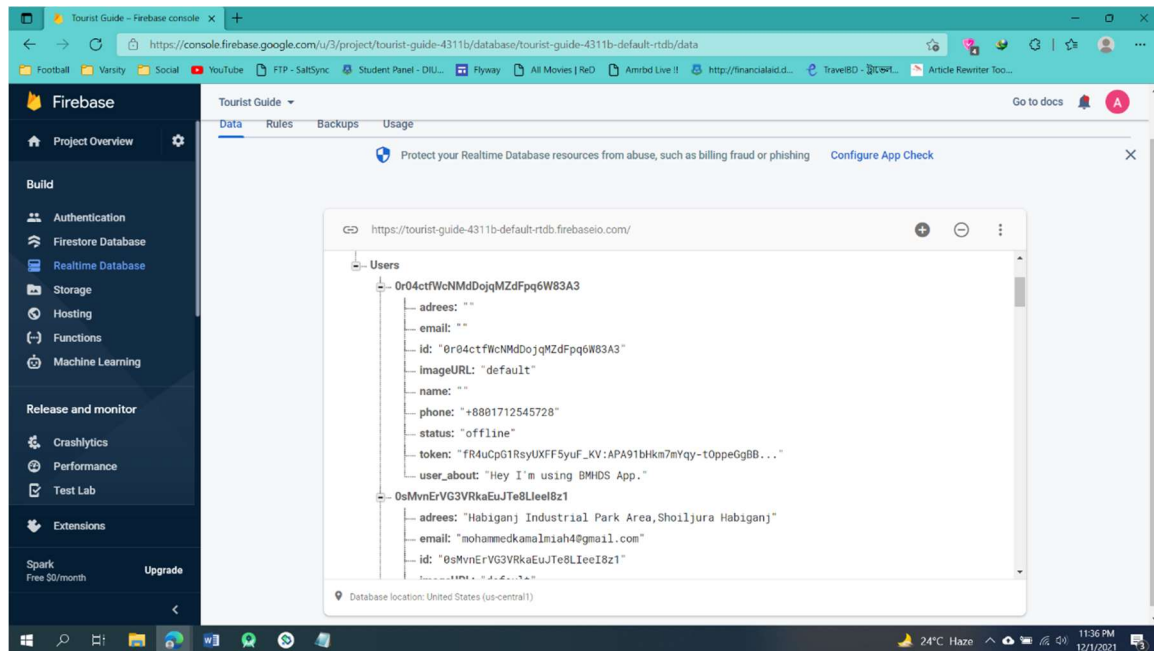


Table 5.1.7: User Database

5.2 Implementation of Front-end Design

Since there are so many programs accessible on the lookout, so the arrangement should be portrayed in on time including key piece of the system. It's extremely difficult to develop a dazzling front-end plan. Since, for developing a plan for all gadgets like shrewd portable, tablets, work area, PC and 4k work area and so on in intelligent plan, we actually endeavor to be clear in UI plan and we attempt to make the application excellent with some material plan. However, the most difficult piece is to make our application, gadget autonomous, in light of the fact that there are many kinds of cell phone that help android, among them some gadget has very week headwear part, in little strain those gadgets act like unusual. Past various gadget can be distinctive in form. So, we need to plan a framework which can uphold every one of the gadgets and we need to guarantee that, the framework that help the vast majority of the android adaptation from fresher to more established and doesn't make any additional tension on the gadgets. We make our site touchy so clients with a peripheral size of the site can visit from different gadgets and associate without any problem. With the help of HTML, CSS, JAVA we render the interface correlative and ordinary.

5.3 Implementation of Interactions

We have introduced a sensitive UI for improved user experience to make our framework (Flyway-Tourist Guide) here. In those cases, the icon, text connection, and button make it simple. The system design of our web application is user –friendly. Our application is implemented successfully and our application’s engagement with the users is very impressive.

5.4 Testing Implementation

Application testing refers to the process of testing any software application using scripts, tools, or any test automation frameworks in order to identify errors. Application testing is carried out in two phases – Frontend or User Interface testing and Backend testing that verifies the database behavior.

5.5 Testing

There are many testing’s using this application... [4]

- Functionality Test
- Regression Testing
- Security Test
- Performance Test
- Scalability Test
- Usability
- System interoperability Localization
- Disaster recovery Installation

CHAPTER 6

Conclusion and Future Scope

6.1 Discussion and Conclusion:

Finally, we have finished to our Flyway-Tourist Guide application. After all, by the grace of Allah we just make it. Using this application people can get information to travel their desire places. It is helpful for all tourists for travelling.

We have heard a lot about the tasks of having and creating an application when we are designing a scheme like this. It has been a fantastic learning experience and, in the future, we will continue to create other application and that is why we have selected the project. We always kept in mind to make the project user friendly. Our focus was to make the system acceptable to any user.

6.2. Scope for Further Developments:

Using google map and GPS tracking

- Allow users to find specific places such as hotels, restaurants, book stores near their current geographic location [1]
- More details of routing information nearby areas in the city can be provided to the user.
- Login the portal via Facebook and Google.
- Verify National identification number.
- Registration form printing facilities.

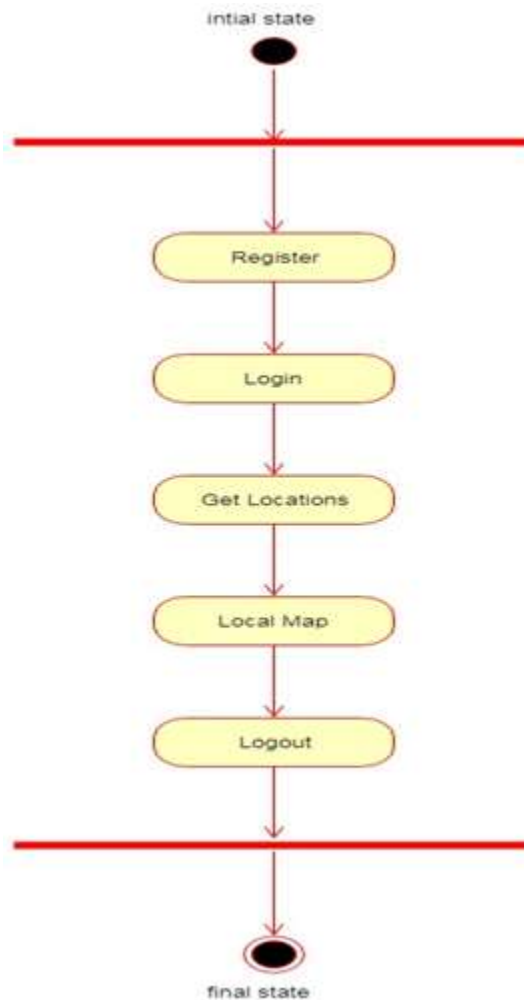
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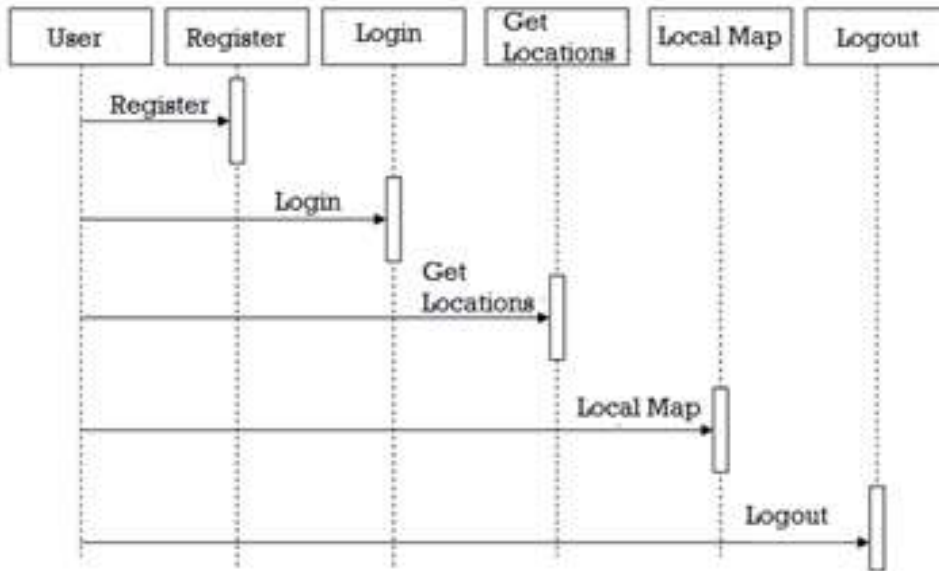
Appendix A: Project Reflection

This appendix is intended to include an introduction to project reflection. We considered this project very challenging and enjoyable. We enjoy developing it. We understand many things during the developing period. We were actively forming and refining each other's opinions. Just how effective our community meetings were was interesting. The time seemed to be speeding and yet we still did a lot and managed to assist another citizen along the way to the endpoint of a substantive strategy. Here, a survey from of this application "Online Driving License Management System."

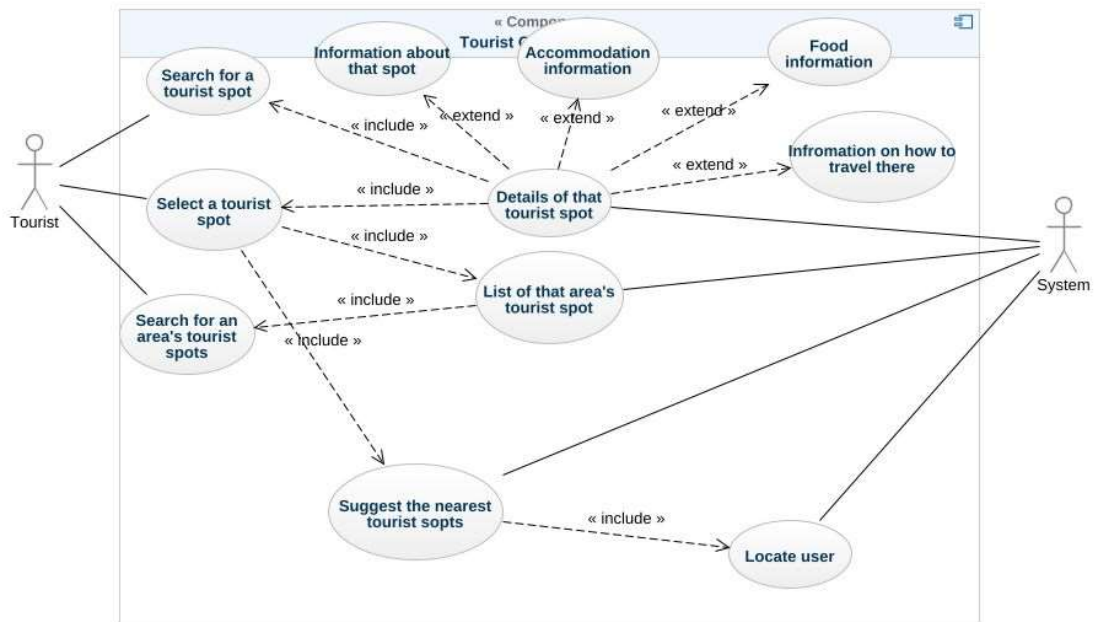
Appendix B: Diagram: Activity diagram:



Project sequence diagram:



Use Case Diagram:



"FLYWAY – TOURIST GUIDE" AN ANDROID APPLICATION

ORIGINALITY REPORT

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