

SMART TOURISM BANGLADESH
Android Application

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

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms. Fahmida Afrin, Lecturer, Department of CSE** at 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.

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ABSTRACT

Nowadays a smartphone user always looks for an android application for his daily need. Android makes it easier for people to use new applications on their device. Now the development of worldwide travel has been more outstanding and perfect. It is very important to offer travelers an outstanding travel platform. This project is to produce a travel guide for the whole of Bangladesh which can efficiently guide the travelers who visit this country. The aim of this project is to explore the requirements of tourists in Bangladesh and developed the solution of android application including some basic guidance for the travelers of the whole of Bangladesh. Every year thousands of tourists from different countries come to Bangladesh for traveling purposes. “Smart Tourism Bangladesh” is also for native tourists who use Android-operated smartphones. This application has some advanced features for tourist to simplify their trip. This application helps a tourist as their guide and it contains lots of tourist spot information with their location, direction, and route. Traveler or tourist can use this app easily in their Android smartphones. This application provides a fast, simple, efficient and high-quality performance to the users.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The main purpose of this project is to develop an android application which will help tourist to find the famous tourist places, nearby restaurants, and shopping malls. The aim to develop this project is to make a tourist guide for the whole of Bangladesh which can efficiently guide the tourist who visits Bangladesh for different purposes. There are many International tourists' from different countries visits every year due to its absolute natural beauty and historical places. The purpose of foreigner's visits to this country is different like political, educational, official and business purposes. Tourists waste on searching for better places like historical and tourist spots, restaurants, markets for their enjoyment in the new country which is totally unknown to them. If they use this application, this hustle will get reduced. The project is about travel guide application how the travelers will get the best use of the application according to their point of interest. In the aspect of tourism, Internet and modern technologies have made more readily available information on tourist locations, accommodations, transportation, shopping, food, festivals, and other attractions, thus improving tourism experience. The tourist could use printed maps and hire a guide but it cannot be fulfilled the tourist needs. By using Smartphone's features such as global positioning system and Internet we can use interactive, proper and reliable maps of the area. The application provides accurate and proper data which helps in decision making. Due to limited portability use laptops or desktop computers is difficult. In place of laptops the application uses Smartphone's for efficiency and portability. The Smart Tourism Bangladesh application is fully free and this application can be run almost all android operating phones so it saves the cost which a traveler spent on hiring a professional guide for their trip.

1.2 Motivation

When someone wants to take a tour of many places in Bangladesh, don't know anything about this country or the historical places or tourist places. So he must need a proper guide to help for exploring the cities, places and knows all the information about those places. The “Smart Tourism Bangladesh” application helps him as a guide. By using this application he or she can find his/her desire tourist places and restaurants, hotels.

1.3 Objectives

The purpose of our objectives is to provide basic information about the tourist spots, restaurants, and shopping malls. This project provides the valuable and reliable pieces of information of popular cities of Bangladesh. It also provides navigating opportunities to the users. The user can check their current location and get the map directly from the current location. They can find their nearby restaurants and shopping mall with the maps. This application covers the whole Bangladesh famous tourist spots and historical places.

1.4 Expected Outcome

The user can easily explore the place on the map with its description, image, and address. We use Google maps API in the app. That's why, user need not to switch Google Maps application for knowing their location or direction from one place to another. The user can navigate their location through the maps. The user can find nearby restaurants, shopping mall, and hotels. They can convert their currency value, check weather and compass. They can also keep their memories on their travel diary. Smart Tourism Bangladesh application helps a tourist as their guide. By using this application tourist can easily gather information about our country's famous places. The tourist can follow the direction and reach their expected destination using this application.

1.5 Report Layout

In this project report, we want to present the full details of our modern technology and Android based application “Smart Tourism Bangladesh”. In the first chapter, the introduction, scopes for this project and challenges of this project is discussed. We have studies on other apps and compare them with this app. We find out the difference and similarity between travels related applications. These are discussed on chapter two. Front-end and Back-end designs are described in chapter three with necessary figures. The database implementation and testing phase is done and described it in chapter five. The test case and entity relationship diagram design are also included there. In the last chapter, future works and discussion are briefed.

CHAPTER 2

BACKGROUND

2.1 Introduction

The number of people interested in the tourism industry is increasing day by day. Statistic says, “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]. People explore tourist spots for different purposes such as traveling. political, religious and business purposes. People always try to get accurate and proper information from unique and suitable sources. In recent years, the Smartphone is more popular than any other devices around the world. That's why travelers need a complete package android application with all of the details of places information and features to simplify their tour.

2.2 Related Works

Many development projects have been carried out relating to travel/tour application around the globe but there is no necessary travel application which is based on our country's location. There are many apps which contain only places information and the address of the places. These apps don't have any navigation option or any direction or any route from one place to other places.

Smart Tourist Guide: It provided the guide layout and implemented the guide as mobile application namely smart travel guide; the Smartphone users can search for tourism related guidance as per their needs. Using this smart travel guide application, tourist can get attractions concise information. It can contain spot's picture, video. This application gives information to the tourist about a location which can be accessed using a map. As they move from one to another place, the application updates the user's current location.

BRouter: This application is provide navigational services. But every time, the application asks to download the map to reload the current location of the user. So, in our project proposal, we try to solve this issue by providing direct access to the map. We also present the features of places direction.

GPS Route Finder: It can find distances between two selected locations and it provided any other services. But it cannot calculate the distances. The Smart Tourism Bangladesh application gives the proper direction of one place to another.

2.3 Comparative Studies

There are so many travel-related apps around us. As the global Smartphone's user increases day by day, they demand mobile apps. Thirty million individuals seek travel information via Smartphone or mobile devices and travel apps each month [2].

Tourists want multipurpose android or mobile device applications that simply their trips and life. Social planning, getting deals, experience localization is closely related to the tourism industry. These are enough to prove that; tourist wants travel apps with this combination.

In Bangladesh, there are few travel guide apps which contains only places information. Those applications are not suitable for any traveler or any tourist. The foreigner who visits Bangladesh they cannot take the proper guide from this application. Our Smart Tourism BD application is the first local app for this purpose in our country.



Figure: 2.1 Statistics of mobile apps users for traveling

2.4 Scopes of this Project

The main scope of our project is mainly for the travelers of Bangladesh. The travelers can use the application for knowing own location and for getting direction from source to destination. The user can also know about the details of spots and nearby restaurant and shopping mall.

This app supports almost 85% android phones and it is user-friendly.

2.5 Challenges

After implementing the full project there are some challenges. These are:

- Users must have to register for using this application.
- The users have to connect the device internet.
- It cannot be run on personal computers and non-android based device.
- We use Google Maps API. And this is not free for all. If the traffic of the application is increased the user calls for the map is too much then the map feature will be terminated for that day. It is a development project, so we use the free feature of this API.

2.6 Project Risk Management

Risk evaluation: Attackers may try to find glitch of this application. Users may register with wrong information for accessing this application. Admin may mistake when monitoring all of users entries. If something happens on internet connection then the user cannot access this application.

Risk Monitoring: How many users provide fake information for registration are the administration monitor user details and their information? This is very important to bring this question for risk monitoring purposes.

Risk Identification: There are some risks when user input the information likes:

- A user may enter wrong information.
- Admin may accept wrong entries.
- Admin may refuse valid entries.
- The attacker may harm this application.
- The hosting problem may destroy the database.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Requirement Collection & Analysis

Requirement collection analysis is the process of determining user expectations for a software or application. The collection of requirement means the functional specifications of a project. This requirement analysis depends on many different items for a product. On our project, we try to complete this entire requirement [3].

Graphical User Interface: GUI represents the front end design of a product or application. A user will easily connect with this application. “Smart Tourism Bangladesh” is a user-friendly application.

Performance: This app runs mostly all of the Android operating systems.

Environment Operators: Android operating system only.

Features:

- Currency Converter
- Compass
- Weather
- Checklist

These are the features of this project. The compass shows the direction of magnetic North and South Pole to the user. This feature can help a tourist to explore freely to the city or the spot. The user can know the local forecast and weather update of his current location. Currency Converter will help the user about the local currency or any currency conversation.

3.1.1 Functional Requirements: Generally there are more requirements like functional or nonfunctional for the user and the admin. Some requirements are briefed here:

1. A user must authenticate him/herself prior to log in this application
2. The users need to upload his/her profile photo.
3. The user can change his/her account password.
4. Only admin has the right to access user's details and reset their passwords.
5. There must be a login process for admin on website based system and authorized users to avoid unauthorized access to this application.
6. The user can log in, view current location, get direction from one location to another location, show weather and compass, use the features of the checklist and convert the currency.
7. Admin can store data from web-based service.
8. Admin can view, add, delete and update the tourist spots information.
9. The user can take note of their previous travel history.
10. Admin can operate the full application system.
11. The user can contact the administrator from the contact menu.
12. The user has to just use the internet connection and turn on the GPS system to their device.

3.1.2 Non Functional Requirements:

Operating System: This application must be run of all updated Android operating system. It can't be run on a low version of android because of its Google Maps API features. We recommend version 22 or higher version to run this application.

Usability: The usability of this software must be easy for any tourist or traveler so that they can use it without any kind of difficulty.

Maintainability: This application should build up away that classification of errors and maintenance of mechanism become easy.

Flexibility: This application must be flexible so that it can easily accept all changes of low cost, time and experience.

Security: The application is more secured because unregistered member cannot access this application. They must have username/email or a valid password.

Some of the others are:

- Fast and easy to use
- Stability
- Scalability
- Maintainability
- Documentation
- Accuracy
- Accessibility
- Capacity, Current and Forecast
- Privacy
- Reliability

3.2 Activity Diagram

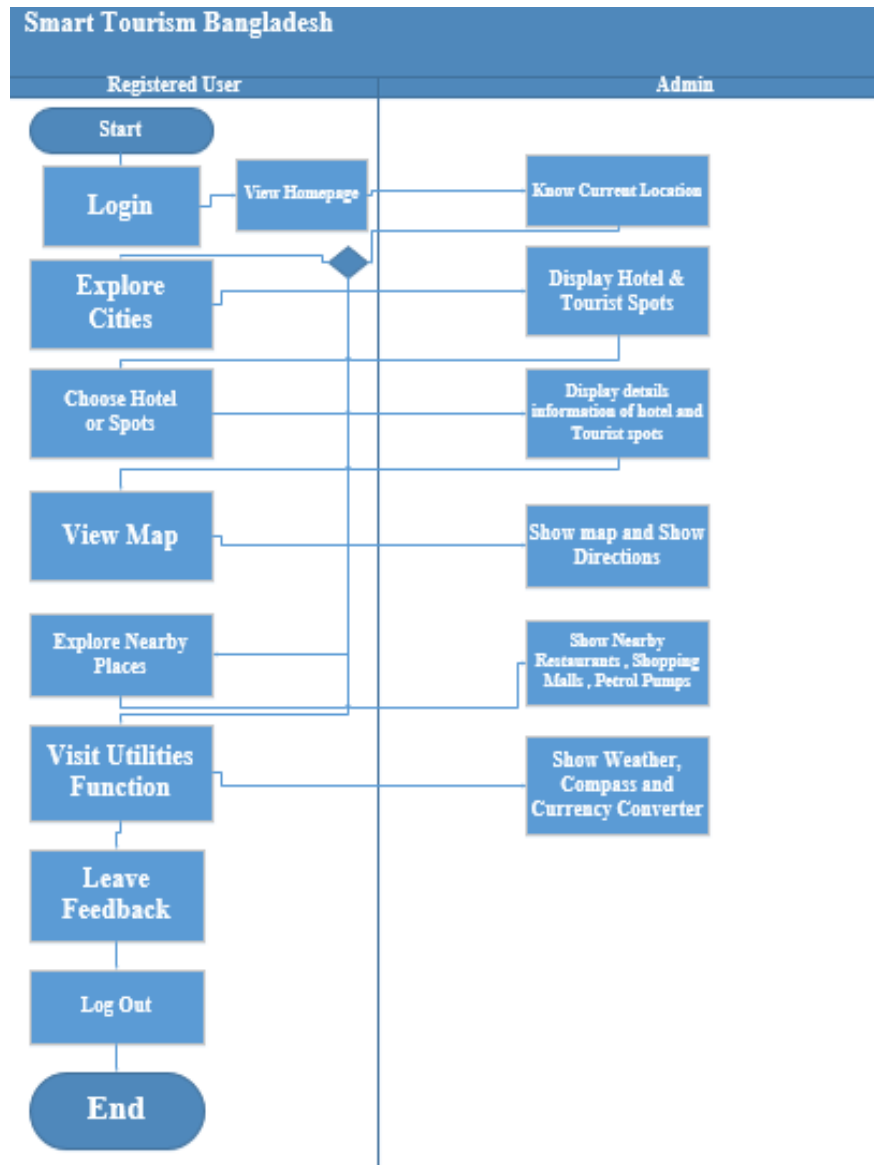


Figure 3.1: Activity diagram for register users

3.3 Use Case Modeling and Description



Figure 3.2: Use Case Modeling

3.3.1 Use Case Modeling Description

A use-case model is a model of the system's intended functions and its surroundings, and serves as a contract between the customer and the developers. Use cases serve as a unifying thread throughout system development. The same use-case model is the result of the Requirements discipline, and is used as input to Analysis & Design and Test disciplines.

Table 1 — Description of a Use Case

Use Case No	01
Use Case Name	Login
Input Actors	User
Output Actors	None
Preconditions	A user has to login for using the features of this application.
Trigger	The user has to press login button after giving proper details
Main Flow	1.1 User has to input proper email address and valid password for login 1.2 The screen will be changed to the application homepage.

Table 3.1: Use case Diagram Description – 01

Table 2 — Description of a Use Case

Use Case No	02
Use Case Name	See Current Location
Input Actors	User
Output Actors	None
Preconditions	A user can know their current location
Trigger	The user has to press location button for knowing their current location
Main Flow	2.1 User has to press location button 2.2 The screen will show the mark of their current location on the map.

Table 3.2: Use case Diagram Description - 02

Table 3 — Description of a Use Case

Use Case No	03
Use Case Name	Nearby Restaurants and Shopping Malls
Input Actors	User
Output Actors	None
Preconditions	The user can select this from the navigation drawer layout.
Trigger	User need to press nearby restaurant button for knowing nearby locations
Main Flow	3.1 User press nearby button 3.2 The display shows hospitals/restaurants and petrol pump on map screen 3.3 User chooses one by one for knowing nearby places.

Table 3.3: Use case Diagram Description - 03

Table 4 — Description of a Use Case

Use Case No	04
Use Case Name	Cities
Input Actors	User
Output Actors	None
Preconditions	A user has to explore cities area
Trigger	The user has to press cities button from navigation drawer.
Main Flow	4.1 When user presses cities it will show the hotel and tourist spot list for that city. 4.2 users choose the spot from the list. 4.3 They can get direction from their current location to spot's location

Table 3.4: Use case Diagram Description - 04

Table 5 — Description of a Use Case

Use Case No	05
Use Case Name	Add cities, hotels and tourist spots
Input Actors	Admin
Output Actors	None
Preconditions	The admin should have added these from web sites.
Trigger	The admin can add the cities, hotels and spot by clicking this option
Main Flow	5.1 Admin can add cities and hotels 5.2 Admin can add tourist spot information.

Table 3.5: Use case Diagram Description - 05

Table 6 — Description of a Use Case

Use Case No	06
Use Case Name	Update cities, hotels and tourist spots
Input Actors	Admin
Output Actors	None
Preconditions	The admin should have updated these from web sites.
Trigger	The admin can updated the cities, hotels and spot by clicking this option
Main Flow	6.1 Admin can update cities 6.2 Admin can update hotels 6.3 Admin can update tourist spot information.

Table 3.6: Use case Diagram Description - 06

Table 7 — Description of a Use Case

Use Case No	07
Use Case Name	Delete cities, hotels and tourist spots
Input Actors	Admin
Output Actors	None
Preconditions	The admin should have deleted these from web sites.
Trigger	The admin can delete the cities, hotels and spot by clicking this option
Main Flow	7.1 Admin can delete cities and hotels 7.2 Admin can delete tourist spot information.

Table 3.7: Use case Diagram Description – 07

3.4 Structure Analysis

3.4.1 Structure Analysis of User:

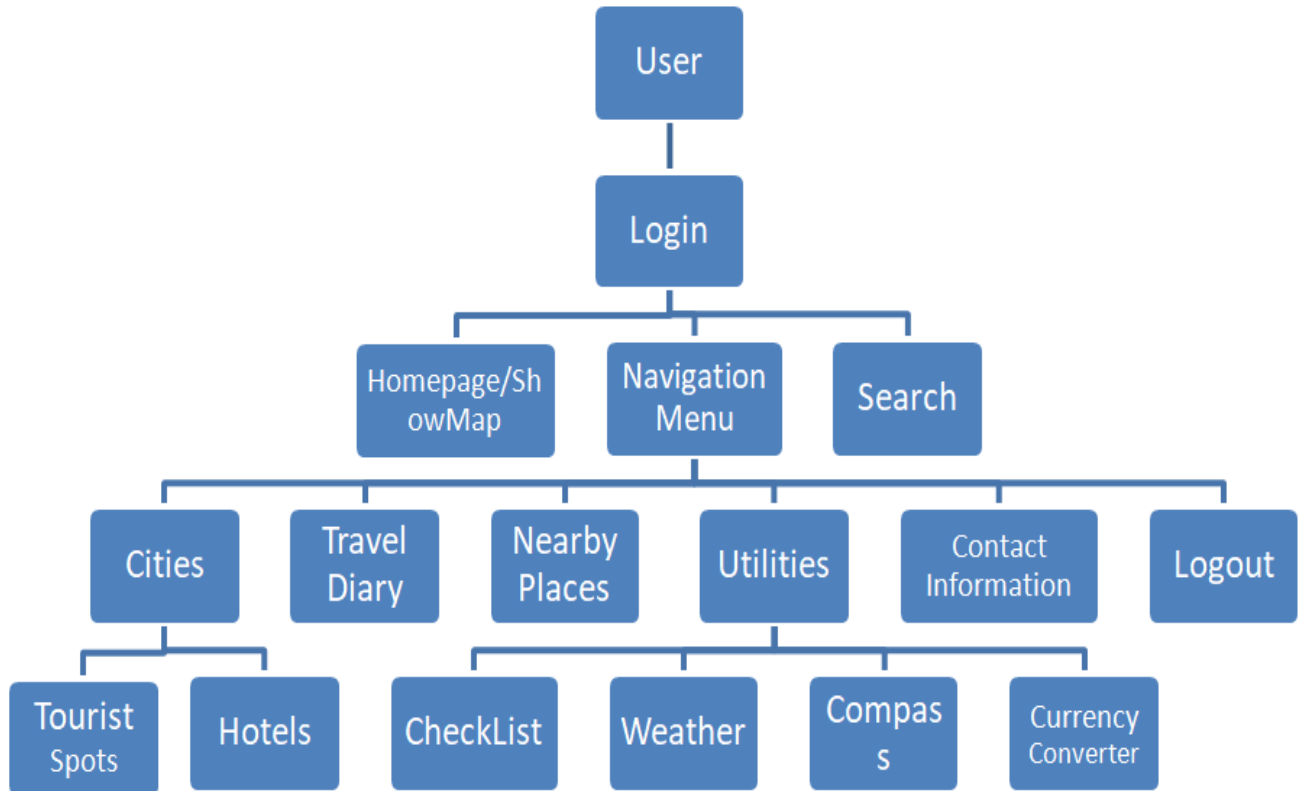


Figure 3.3: Structure Analysis of users

As Figure shows above there are the following models in the user interface:

- User Login Model
- Navigation Menu Model
- Cities Model
- Utilities Model

3.4.2 Structure Analysis of Admin:

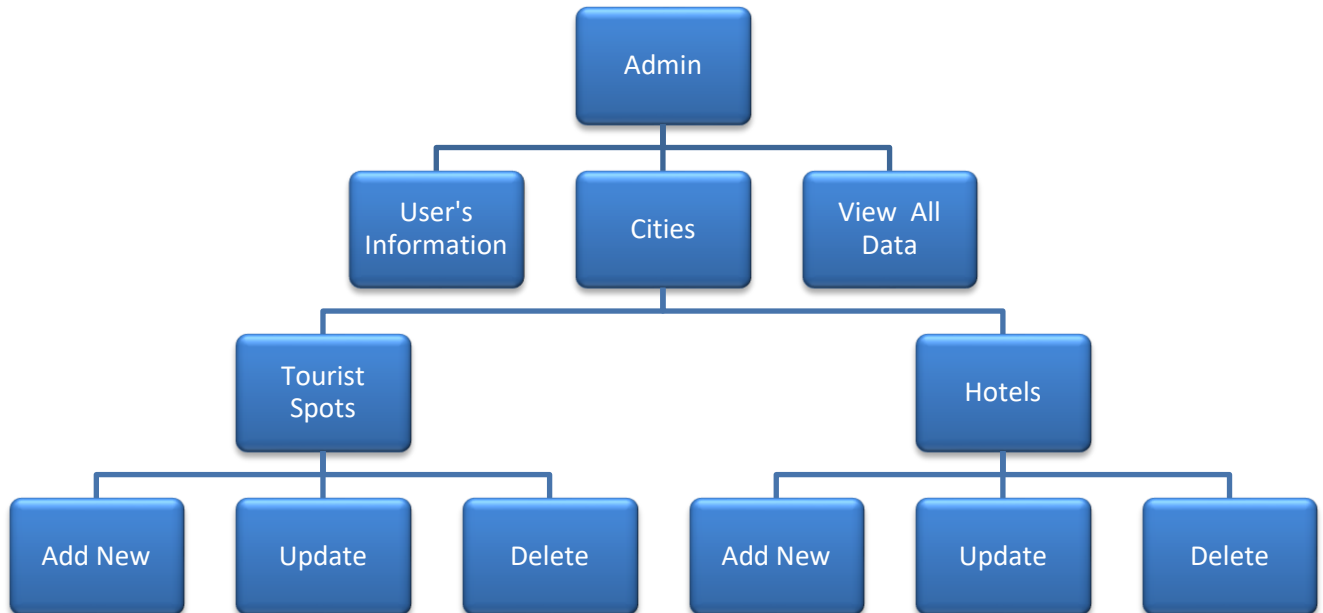


Figure 3.4: Structure Analysis of Admin

As Figure shows above there are the following models in the admin interface:

- Admin Login
- View All Information
- Users Details
- Add, Update and Delete Spots Information
- Add, Update and Delete Hotels Information

3.5 Business Process Model and Notation

Business Process Model and Notation (BPMN) is a graphical representation that provides companies with the ability to understand their internal business procedures more easily and clearly. The graphical representation is made up of different kinds of symbol to signify the business activities that involve in a business process.

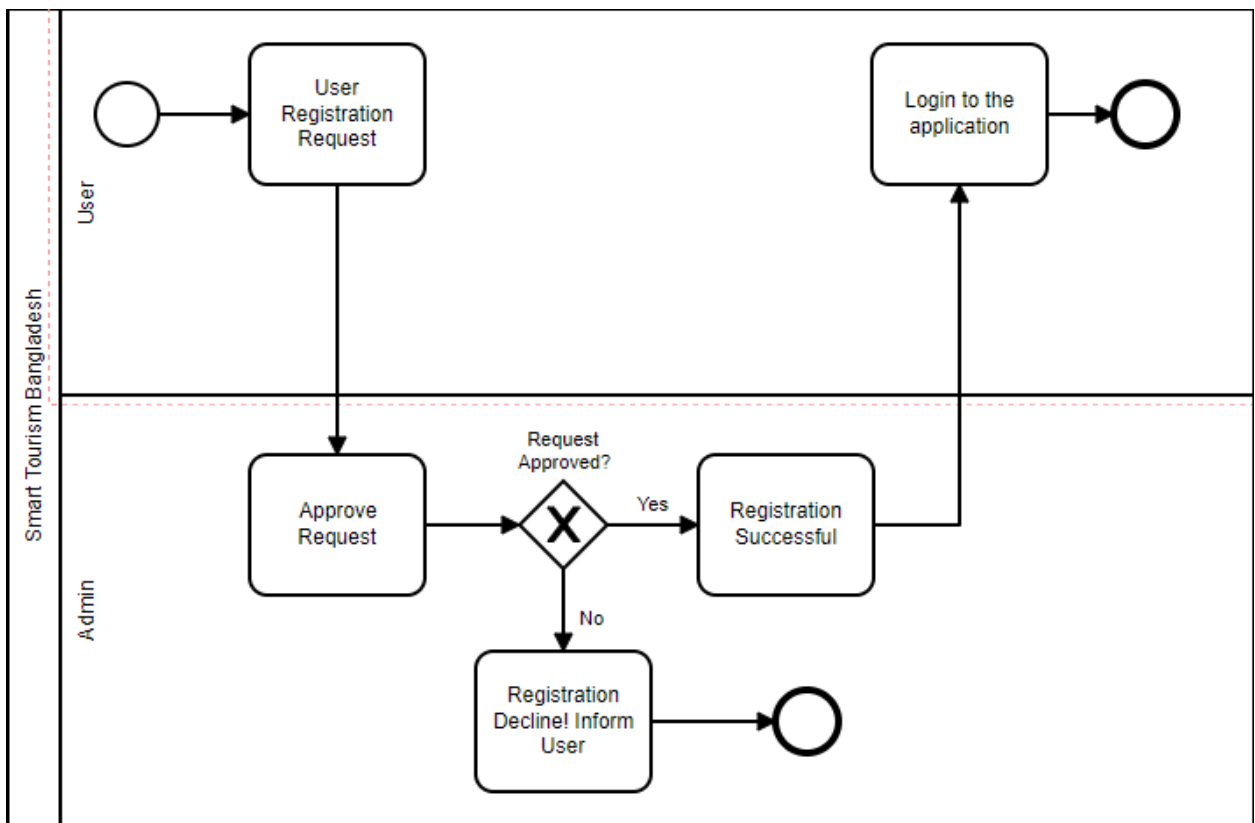


Figure 3.5: Business Process Modeling

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front End Design

Login Screen: User can enter this application with the login feature. The only registered member can view the features and services of this application. There is no option for a guest or a new user. The user can log in with their email and password.



Figure 4.1: Welcome Screen

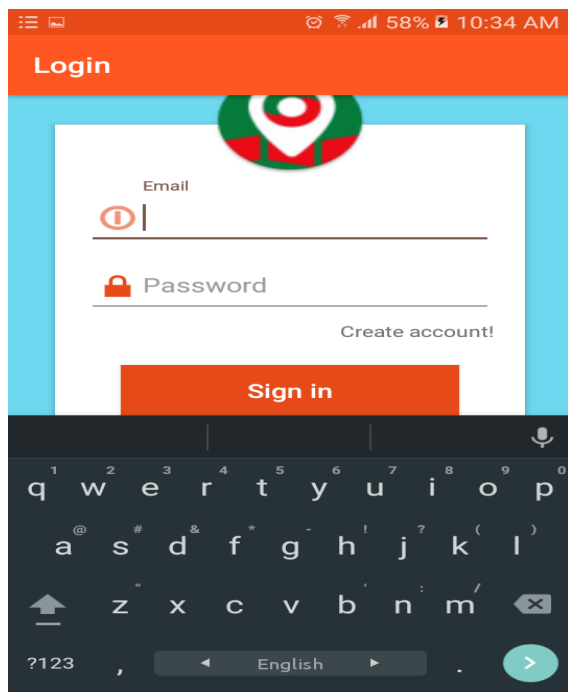


Figure 4.2: Login Page

Homepage: This is the homepage of this application. This map detects the user's current location. For this, the user has to turn on the GPS access or they have to allow this access. After allowing the access request, this map indicates the user location on the screen.

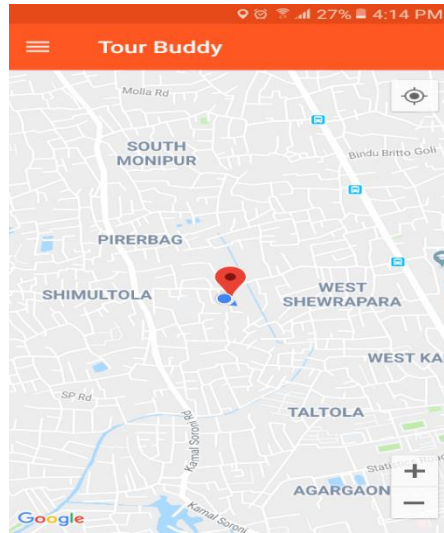


Figure 4.3: Homepage

Navigation Menu: On the left side, this navigation menu contains Cities, Travel Diary, Nearby Places, Utilities, and Contact information.

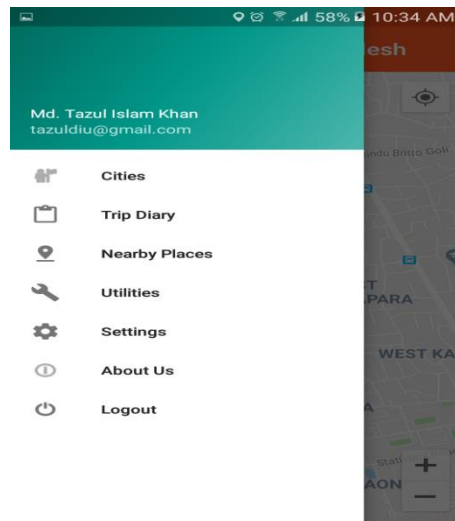


Figure 4.4: Navigation Menu

Cities: In this menu, there is a lot of cities name which contains Tourist spots and Hotels name. When the user clicks a tourist spot then all of the spots names will show on the display. The user can click any spots name and see the details of that places information. In the spot details section, this app carries tourist spots name, some beautiful images and a little description of that place. There are some buttons displayed in this section like direction, restaurant, and shopping malls. The user can find a route to click the direction button from his current location to this spots location. Tourist can easily follow this route to reach his destination. By clicking restaurant, Shopping malls button, they can see nearby restaurant and shopping malls location. This navigation part is the main features of this project. And when the user clicks the hotel button, this application shows the hotel name, contact details, description of the selected city.

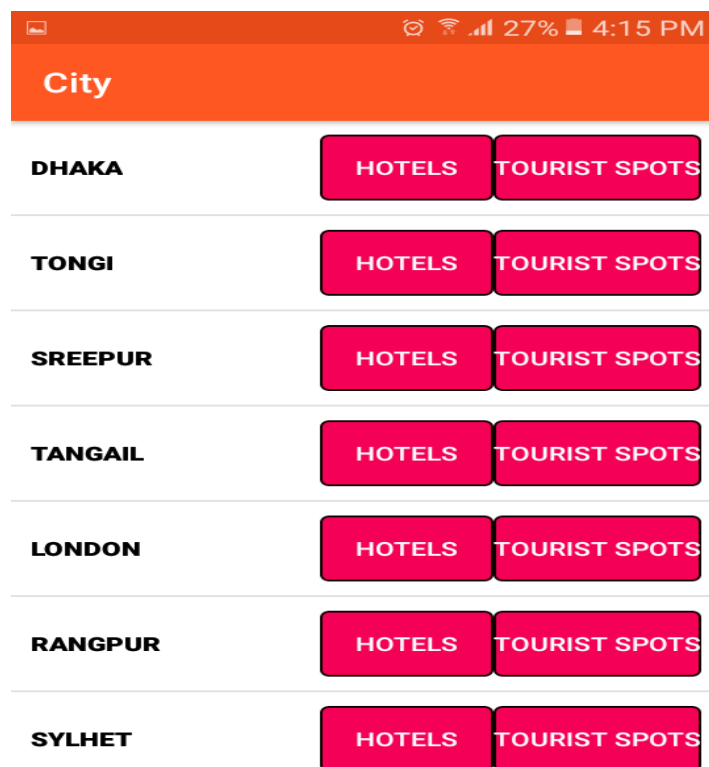


Figure 4.5: City

Travel Diary: Here, tourist or traveler can create a note about their travel history. They are able to keep a short note in this section with date and details.

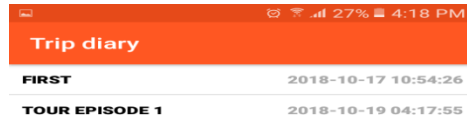


Figure 4.6: Trip Diary

Nearby Places: By clicking this menu, Users are able to see the nearby restaurants, shopping malls, and petrol pumps. They need not find these by asking someone. They can easily find these places to follow the application map interface. It helps users to locate nearby places.

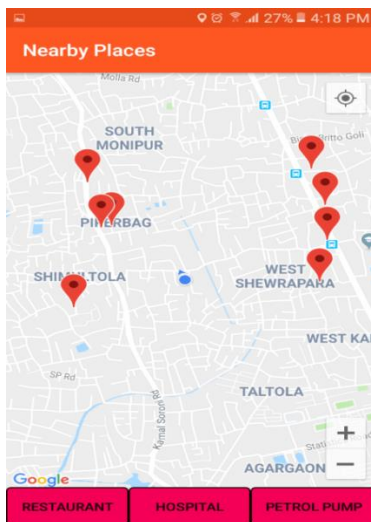


Figure 4.7: Hospital

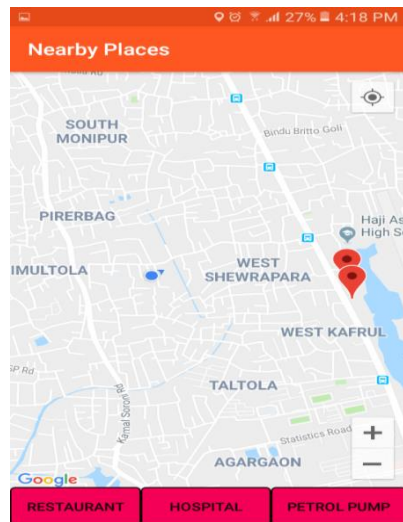


Figure 4.8: Petrol Pump

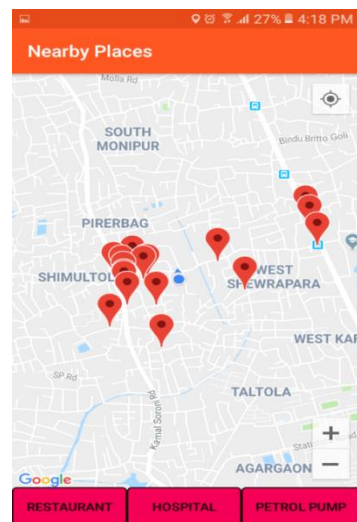


Figure 4.9: Restaurants

Utilities: This menu has four buttons.

Weather: This feature shows the local weather forecast and details. The users can plan their trip by following these features. Tourist is able to know the advanced forecast details using this app. It can show the tourist latest weather updates.

Compass: It is used for navigation and orientation for allowing determining the direction to the travelers. Our application compass detects the North and South Pole and shows it to the user's display. The device must be suitable for allowing this compass feature.

Currency Converter: This currency calculator does the calculations of currency and the users get the update rate of exchange. No currency exchange is ever possible without the best currency converter like this. Things have changed from that they were twenty years back. Travelers are now more conscious and updated and they prefer to calculate their money when they are traveling to other countries as a foreigner. So, they must have to know the present currency rate. The currency converter of this application is very easy, simple, accurate and fast.

Checklist: Checklist option has a list of necessary things which are needed before packing up a trip. A tourist has to need a lot of things before going on a trip. Sometimes we forget to pack up all the important things for the tour. This feature of our application reminds the user to take all of the necessary things.

4.2 Back End Design

Google Map Directions API: The API is a web service that Google provides us to get information about a route and direction. In this app, Google Maps API shows the route from current location to destination path by drawing lines. Google Maps API provides information for transport modes and waypoints. It shows the users current location by using latitude and longitude. This feature requires GPS and device internet enable. By using Google directions API key, this map direction API is enabled in the developer console. The key is to retrieve data from the console.

Array Adapter: In our project development, we want to show a vertical list of scrollable items. We use a ListView which has data populated using an adapter. The simplest adapter to use is called an ArrayAdapter because the adapter converts an ArrayList of objects into View items loaded into the ListView container. The cities are displayed using an array adapter for this application. [4]

Admin Module: Admin can access admin portal from web browser. We implement this admin portal with php. Admin can input the data from there. Admin can add , update and delete data from portal. It is accessed by only the application admin.

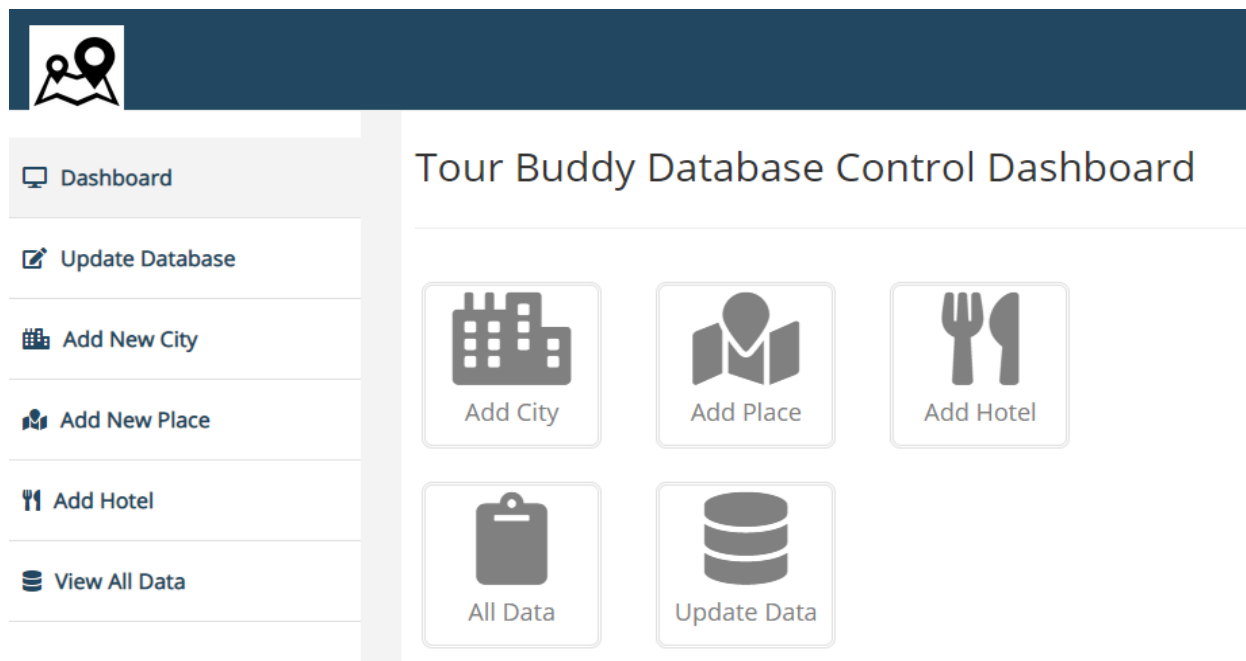


Figure 4.10: Admin Web Portal

4.3 Entity Relationship Diagram Design

An entity-relationship model is an abstract and conceptual representation of data. Entity-relationship modeling is a database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often a relational database, and its requirements in a top-down fashion. Diagrams created by this process are called Entity-Relationship Diagrams [5].

Here, users explore the city table which contains hotel and tspot table. These tables have a primary key. And has a foreign key. Users add travel history to the Diary table. Admin adds city which contains hotel and tspot table.

Entity Relationship Diagram for Smart Tourism Bangladesh

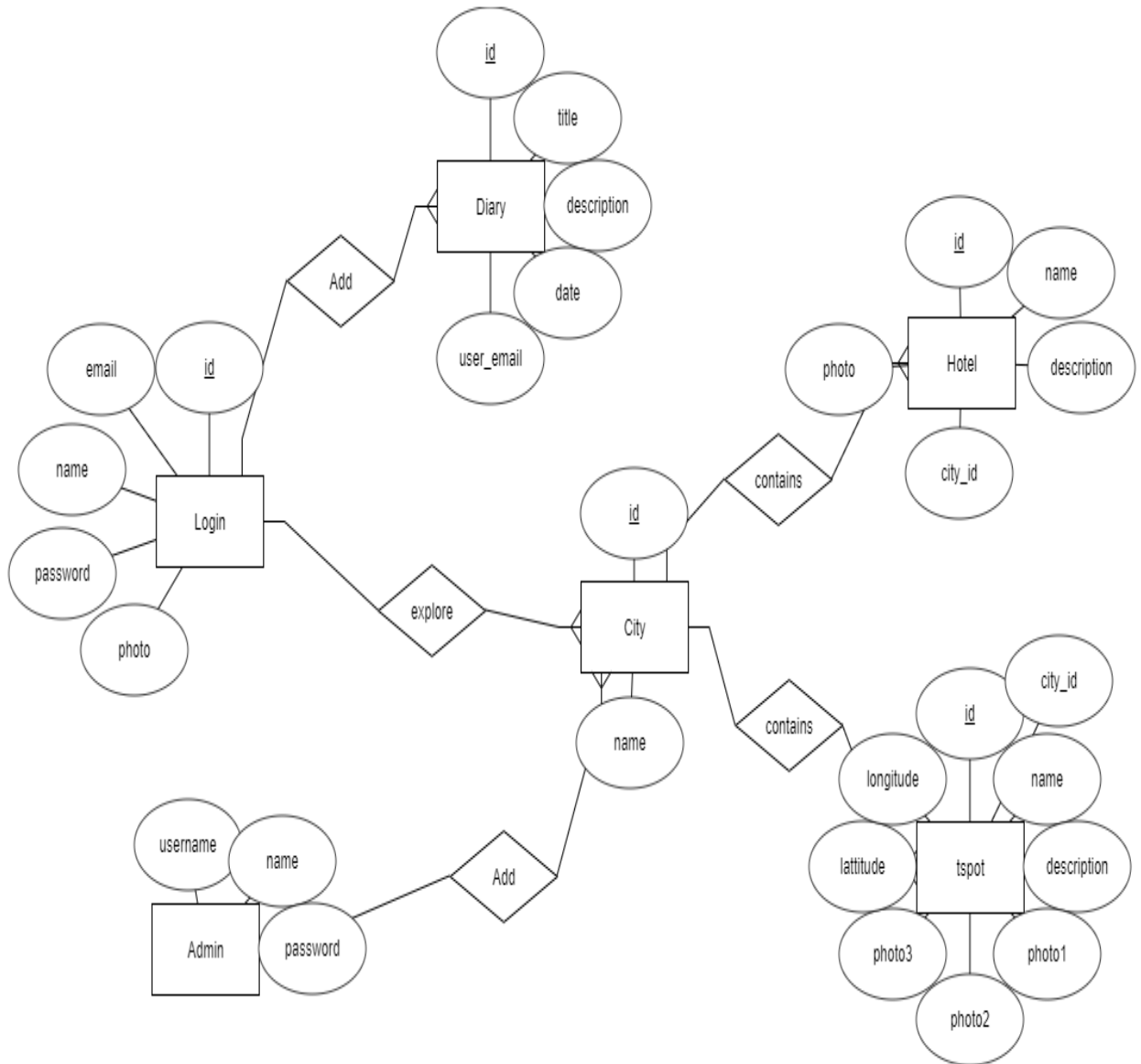


Figure 4.11: ERD System

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

The database of the system is secured because the only registered user can log in to this application. The admin and the user section is fully different. This application is only for the user. Admin can monitor and operate this whole of application with web service. The admin has a different login system in the web browser. Only the admin can access it. So, it is fully secured to the user. The admin can monitor the entire database file with own hosting where the database file is stored. The admin has the right to access the important details. We use MySQL database to store this application important data. We put it on in a hosting site. That's why any user can access this application with the help of internet connection. This system is fully user – friendly. The system is secured too.

5.1.1 Database Design

This is the database table for our project. Here these tables contain all type of informative data which are necessary for the user or the admin. This database can be accessible for the web browser. We have used six tables for storing our application data. This android application pulls the data from database and displays it on the application with the connection of internet. We also use free hosting to store this database.

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> admin	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> city	★ Browse Structure Search Insert Empty Drop	7	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> diary	★ Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> hotel	★ Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 KiB	-
<input type="checkbox"/> login	★ Browse Structure Search Insert Empty Drop	4	InnoDB	latin1_swedish_ci	32 KiB	-
<input type="checkbox"/> tspot	★ Browse Structure Search Insert Empty Drop	1	InnoDB	latin1_swedish_ci	16 KiB	-
6 tables	Sum	18	InnoDB	utf8_unicode_ci	112 KiB	0 B

Check all With selected:

Figure 5.1: Database Table

Admin: The admin table contains the admin username and password. Admin has all the right to control this database and the application.

City: City table is connected with the hotel and tspot table. This table contains the name of cities.

Diary: User can create new travel history on the application. They can also view this anytime from their Android application. Those data are stored in this table.

Hotel: All the hotel name of cities is stored here. It is connected with the cities table. We can keep the hotel name, details and photo.

Login: Login table store user email, password and profile photo. Admin can monitor this from the database and the website.

Tspot: This is the main table for this application. Here, there is tourist spot name are stored. The spot name, description, latitude, longitude and nearby restaurant are kept here. It is also connected with the cities table.

5.2 Implementation of Front End & Back End Design

Development Tools and Technology: These following things are used in development for this project

Front End: To make android apps, the android studio is used the core programming needed is in java but the main front-end language is used in XML.

Back End:

- Admin Web Module
- Programming Language: Java
- Database Server: MySql

Tools:

- Android Studio
- Wamp Server
- MS Visio

5.3 Testing Implementation

Unit Testing: During development, this testing can be performed all of the module and all block of code. Unit testing is for testing the application by individual's part of source code and set of one or more computer program modules together with usage and operating procedures and these are tested to determine whether they are fit for use. This testing phase is properly done by us.

Integration Testing: This testing has been done before, during and after completing this development project. Each individual code model has been tested during this phase. It is very challenging to test each modules effect on the whole program model.

System Testing: After completing the project system testing has been done. Individually we need to verify the entire module. During checking, we got some error but we tried to fix this error at last.

Acceptance Testing: This beta testing is implemented by the active end users.

5.4 Test Results and Report

Test Report is needed to reflect testing results in a formal way, which gives an opportunity to estimate testing results quickly. It is a document that records data obtained from an evaluation experiment in an organized manner, describes the environmental or operating conditions, and shows the comparison of test results with test objectives. [6]

Device Name	Android Version	Ram	Processor	Resolution	Result
Huawei Nova 2i	Android 7.0	4GB	1.7GHz octa Core	1080*2160 pixel	pass
Nokia 2	Android 7.1.1	1GB	1.3GHz Quad core	720*1280 pixel	pass
Xiaomi Redmi 4A	Android 6.0	2GB	1.4GHz quad core	720*1280 pixel	pass
Walton N2	Android 6.0	2GB	1.3GHz quad core	1080*720 pixel	pass
Samsung J7 pro	Android 8.0	3GB	1.6GHz octa Core	1080*1920	pass
One plus 6	Android 8.1	8GB	1.7GHz octa Core	1080*2280	pass

Table 5.1: Device Specification with test result

On these devices, we also try to test some operation. These operations are depending on ours which part we want to test and implemented in testing.

Installing the Application	Passed
Internet connection/ Wi-Fi operation	Passed
Login screen, login option operation	Passed
Minimize/ using multiple app beside	Passed
Using application during calling	Passed
Uninstall and re-install the app	Passed
Minimize app pressing home button	Passed
Sliding/ Scrolling/Swipe works operation	Passed
Location operation (Google Map using GPS)	Passed
Sign up operation	Passed.

Table 5.2: Different Functional Test Result

5.5 Test Cases

Project Name: “Smart Tourism Bangladesh”

Test Case ID: TC 01

Test Case ID	TC 01
Functional Area	Sign In
Test name	Sign In with empty email fields
Objective	The purpose of this phase is to verify that email fields remain empty when a user sign in to his account
Pre-requisite	The application is running and displaying the login in phase.
Steps to perform	1. Submit login with empty email fields 2. Click the sign in button
Expected Result	Error message showing and indicate the empty error fields
Test Results	Pass

Table 5.3: Test Case TC-01

Test Case ID: TC 02

Test Case ID	TC 02
Functional Area	Sign In
Test name	Sign In with empty password fields
Objective	The purpose of this phase is to verify that password fields remain empty when a user sign in to his account
Pre-requisite	The application is running and displaying the login in phase.
Steps to perform	3. Submit login with empty password fields 4. Click the sign in button
Expected Result	Error message showing and indicate the empty error fields
Test Results	Pass

Table 5.4: Test Case TC-02

CHAPTER 6

CONCLUSION AND FUTURE SCOPES

6.1 Discussion and Conclusion

The main purpose of the proposed project is to ensure to save the money and time of travelers. It can give proper guidance and accurate directions and routes to the travelers. The user can easily know their current location using the internet connection; know the direction from their current location to the spot location. By following the routes, the travelers can easily reach their destination. We use the latest maps which can display location, places, restaurants, shopping malls, hotels, and petrol pumps on the basis of latitude and longitude provided by the users.

We have developed our “Smart Tourism Bangladesh” day by day for keeping travelers' need for consideration. This application meets all requirements that are commonly asked by the tourists. Our application is helpful for the foreigners who are visiting Bangladesh. This application helps them as their guide and provides all of the useful information about their targeted tourist spots. Bangladeshi local people also get benefited by using this android travel application.

6.2 Future Works

We now use the free feature of Google Maps API. It has limited maps, routes and direction calls. In the future, we will use the premium feature of the Google map which will increase the user's calls

Now, we have added the main tourist cities and their tourist places. In the future, we will add all of the cities of Bangladesh and add most of the tourist spots of our country.

This travel application shows the location of nearby restaurants, hotels, shopping malls, and petrol maps. We will add more routing and directing feature to this app in future,

The application shows the tourist spots information and images. We will add the Google street view and geographical feature to this app. It can help the traveler to view the spot or places from any angle view.

It is now an online based app. We will make some offline features for this application for the users who do not have access internet facility.

Allow users to find specific spot such as historical places and hotel or restaurants near the current geographic location.

Users will book hotel using this application.

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