Apna Banaras App

****

**DR. B.R. Ambedkar National Institute of Technology, Jalandhar**

**Software Engineering Project**

**Submitted By: Submitted To:**

**Aaditya Singh (18103001) Dr. Kuldeep Kumar**

**Abhishek Singh (18103007) Professor**

**Arif Waqas (18103020) CSE Department**

**CSE 5th Sem (G1)**

**Table of Contents**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Topic** | **Page** |
| 1.1 | Title | 1 |
| 1.2 | Abstract | 1 |
| 1.3 | Keywords | 1 |
| 1.4 | Description of Project | 1-2 |
| 1.5 | Previous works | 2 |
| 1.6 | Project Scope and Contributions | 2 |
| 1.7 | Technical Feasibility | 3 |
| 1.8 | Risk Analysis | 3 |
| 1.9 | Work Plan/Schedule | 3-4 |
| 1.10 | Suggested Deliverables | 4 |
| 1.11 | Any other details | 4 |
| 1.12 | Reference | 4 |

**Document Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Version** | **Date Submitted** | **Remarks** |
| 1. | 1 | 10-9-2020 |  |
| 2. | 2 | 17-9-2020 |  |

**Group Member Details**

**Aaditya Singh** (18103001/ Btech. CSE 5th Sem/ G1)

Acquainted with: C/C++, Java, Android Development, API

Novice at: Dart, Flutter, Firebase

Previous works: Photo Blog[1]

Contribution: User Authentication, and incorporating Google Map API

**Abhishek Singh** (18103007/ Btech. CSE 5th Sem/ G1)

Acquainted with: C/C++, Java, Dart, Flutter, Android Development, Firebase

Novice at: APIs

Previous works: Teentigada app[2]

Contribution: Backend, and Connecting the app with server

**Arif Waqas** (18103020/ Btech. CSE 5th Sem/ G1)

Acquainted with: C/C++, Java, Dart, Flutter, Android Development, Firebase

Novice at: Java, APIs

Contribution: Frontend of the app

**Feasibility Study Report (FSR)**

**1.1 Title**

The name of the app is **Apna Banaras App**

**1.2 Abstract**

The Apna Banaras App aims to create, develop, and maintain a multifunctional tourism app for the city of Varanasi (Banaras), Uttar Pradesh, India.

The Apna Banaras app will have all the information about famous tourist spots in Varanasi and other features like history, opening and closing time, entry charges best visiting time, etc.

It will also contain Google maps features, nearby restaurants, shops, bus, and auto stops. Users can also make their profile on the app for personalization (Saving their favourite visited places, etc.), and can rate and review places.

**1.3 Keywords**

* Tourism
* Connectivity
* Varanasi
* Tourist Booking
* Vacations
* Travel

**1.4 Description of the project**

The process of searching, selecting, grouping, and sequencing destination-related products and services including attractions, accommodations, restaurants, and activities are deemed to be included in the **Apna Banaras app**.

Users can give their valuable reviews, rate the places, restaurants, and activities.

Locals can also request to add any new places/events, after a thorough review of the place/event will be added to the app.

A google-map based API allows users to locate and navigate to the desired location.

Apna Banaras app also includes a built-in calendar that shows all the popular events and festivals on a particular day.

**1.5 Previous Works**

Genuine Android applications are downloaded from Google Play Store. Serving play store as the source, currently, there is no completely perfect application on it. Quantitatively, two applications have been made, one doesn’t work[3]

and, the other does not serve its purpose (i.e. it just has the history of the place and its location on the google maps)[4],

so launching the app with our features will make it the only app on the play store that will help the users in easing their visit to Varanasi.

**1.6 Project Scope and Contributions**

We envision to build a simple and easy to use android application that any tourist can easily use.

The aim behind choosing this project is to build something that will promote tourism in Varanasi[5][6] because **the Tourism** industry is **important** for the benefits it brings and due to its role as a commercial activity that creates demand and growth for many more industries. **Tourism** not only contributes to more economic activities but also generates more employment, revenues, and play a significant role in development.

We contribute in promoting tourism by making an application that will ease the visit of all the tourists visiting Varanasi, and allow local vendors, hotel owners to expand their reach.

**1.7 Technical Feasibility**

We certainly have several obstacles to overcome. Although 2 of the members of the group have had experience in Android Development still a lot of things to be added will be completely new for us. There are new frameworks to learn(Firebase). Art and design need to be planned and executed. This will be our first experience in working with Google Maps API[7].

However, we are confident through our combined previous experience in problem-solving, programming, frontend as well as backend development, UI/UX design, we will be able to swiftly learn the technologies required and overcome the challenges in building this application. Developing android apps using the IDE for such applications, Android Studio, and Adobe Xd for the UI/UX design will accelerate the development process.

With these tools, **we find that the project is technically feasible** and **we are confident that we can build an android application that will help promote tourism**.

**1.8 Risk analysis**

* The application may Lag: Since we are using firebase for the real-time database if the number of users increases more than 100,000, so the application may start to lag when multiple users try to connect to the server at the same time.
* Connectivity: The application will use an internet facility for retrieving data, so it is quite possible that if the user doesn’t have an internet connection he might not be able to use it.
* Delayed Project Submission: Due to some unforeseen reasons we may not be able to complete the project within the specified time limit.

**1.9 Work Plan/Schedule**

|  |  |  |
| --- | --- | --- |
| **S.No** | **Week** | **Work Plan** |
| 1. | 1 | Brainstorming various services to be included in the app |
| 2. | 2 | Deciding appropriate technologies to be employed for app development |
| 3. | 3-4 | Learning new technologies that one or more group members are unaware of. |
| 4. | 5 | Designing the app |
| 5. | 6 | Collecting information about various tourist places |
| 6. | 7-11 | Building the app |
| 7. | 12-14 | Testing the app |
| 8. | 15 | Deploying the app |

**1.10 Suggested deliverables**

* At the end of this project .apk file of the Apna Banaras app will be shared, using which users can install and run the app on their android devices.
* A link to the GitHub repository of the complete project will also be shared to allow the interested programmers to get ideas and motivation for any future related projects.

**1.11 Any other details**

No

**1.12 Reference**

[1] <https://github.com/AadityaSingh360/Photo-Blog>

[2] <https://github.com/Chronoviser/Teentigada-Wallpapers-App>

[3] <https://play.google.com/store/apps/details?id=com.cityguide.varanasi>

[4] <https://play.google.com/store/apps/details?id=com.eduven.cg.varanasi>

[5] <https://www.holidify.com/places/varanasi/sightseeing-and-things-to-do.html>

[6] <https://en.wikipedia.org/wiki/Varanasi>

[7] <https://codelabs.developers.google.com/codelabs/google-maps-in-flutter/#0>