**PROJECT PLAN**

# **1. Deliverables of the Project**

We have identified the following features to be delivered at the end of project submission:

* Website for tourists to select places to visit and provide them with an initial optimal path. Registration and login feature for tourists to save their trip.
* Application for registered users. When user logs in, application provides optimal path and total travelling time for the trip saved on website and provide a list of nearby places that tourist might be interested in visiting besides chosen places.
* Users are able to access nearby basic amenities along the route on the app.
* Tourism based Chatbot to make queries about the travel.

# **2. Process Model which we intend to follow**

This project was selected with learning as one of its main purposes. The scale of the project is fixed, as is the scope. Deliverables are presented every week to be reviewed. Over the development stage the product might need to add new features into its arsenal or remove already existing ones. Scrums need to keep up with these changes while not deviating from their week long sprints.

Taking into account all of the facts, as stated above, we have decided that an Agile Model of development would most suit the project at hand.

# **3. Upstream-Downstream Partners for the Product**

UPSTREAM PARTNERS

* Different scrum groups like android group , website group , chatbot group.

DOWNSTREAM PARTNERS

* Travel Agencies
* Tourism Department of Karnataka
* Google Play Store
* Clubs which offer tourism activity like Mountaineering club.

# **4. Resources Required**

Software :

* APP : Google API services will be an integral part of the project. Especially the Google Maps API and Google Places API. The APIs can be used to enrich the app with high-accuracy location reporting and other location related services. Can search for and retrieve rich information about points of interest
* Android Studio
* DBMS : MySQL RDBMS To store login details of the user
* WEB DESIGNING : CSS and JQuery would help us build user-friendly interfaces.

Hardware :

* Significant amount of computing capability on the end system
* The end device must support GPS functionality

# **5. How are you organizing your team in the project**

The work which will go into our project into three main parts:

* An android application
* A web page
* An interactive Chat Bot in the app

Our team consists of 13 members. We have split ourselves up in such a manner so that work required to furnish our product may proceed parallelly with a sufficient number of people working on each of the domains. The web team and the android team each contain 5 members. These two teams will further divide the work of the frontend and backend among themselves. This leaves 3 of us for the ChatBot group.

The web and android teams will need to work closely together, since there is a lot of similarity in what goes on the webpage and the application. Since the ChatBot will be incorporated only on the app, the team going ahead with the ChatBot will need to be in touch mainly with the android team.

|  |  |
| --- | --- |
| **Android** | |
| **Frontend** | **Backend** |
| Srinivas Akhil | Nagashree A.C |
| Parag Karguppikar | Shreyas G |
|  | P Sai Vishwas |
| Rakshaa S Chetty |
| Lisa Sarah Thomas |
| Sharvel Mithali D’souza |

|  |  |
| --- | --- |
| **Website** | |
| **Frontend** | **Backend** |
| R.Sree Soumya | Raghavendra G |
| Srinivas N Shavi | Nagachandra Upadhya |
| Mohammed Aizaz Ahamed |  |

With these organizations in mind for the project, hoping for a successful and enjoyable project experience.

# **6. Standards, Procedures and Guidelines:**

Standards

Maintaining a high standard can only be achieved with teamwork and proper coordination and communication among the group members. This will be done by having regular scheduled group meetings to keep all the scrum teams updated with the work being carried out in the other teams.

Procedures

Regular scheduled meetings will be held; at least every week for the entire group, twice a week or more within each of the scrum teams. Any change of plans which need to be made while developing our product will be first discussed within the respective teams, and then later on presented to the rest of the group. According to the views and opinions of the rest of the members, the group will come to a conclusion on how to proceed. Difficulties faced can also be discussed. Individuals in one team may help those in another team, if required. If a particular problem proves to be too difficult, then after appropriate discussion, we may choose to head down an alternate path.

Guidelines

Each scrum team will have guidelines as to what is expected from each of the teams within a certain deadline. Check points will be maintained to keep the teams in tune.

# **7. Communication Medium**

Scrum meetings are held on a daily basis.The meetings could be either online or offline, depending on the preference of individual scrums. On-campus meeting would be the most convenient offline meeting where individual scrums allocate 5-10 minutes to plan the task for the current day. A google doc is maintained by each scrum to communicate updates, new tools and even code among the members of the scrum.Group discussions are effectively carried out on Watsapp.

A team meeting is held on a weekly basis,usually at the end of the week to analyse the progress of each scrum. This would keep the entire team aware of the progress of the project. This would also help us evaluate our progress against the schedule. Such an evaluation would be effective in delivering the product on-time.

# **8.Risks**

As mentioned in the feasibility report the key issues that our app can face are

* Requires an always-on data connection. As it’s mobile, users constantly lose coverage(metro/tube stations, inner buildings, car parkings, rural areas). The fact is that as soon as coverage is lost, some apps stop responding.This may affect features like checking live availability, or bookings.
* Assuming high speed network access, many factors can influence the actual speed, such as number of people in the area, architectural structures of nearby buildings, weather conditions, etc. Hence, could slow down user experience.
* Requesting too many permissions
* Memory and power consumption
* Draining memory and battery often leads to negative reviews and lower adoption and acceptance rates.
* In addition to this location-based information which is rendered by the GPS feature of an android phone can easily be manipulated.
* There are chances of server crashing at times

# **9. Quality Criteria**

• Effectiveness & reliability:

The app/website must be accurate and must serve all its purposes without any unpredictable events. Random crashes, bugs and slow performance of the app/website should be taken care of.

• Efficiency:

The project should offer value for money and should aim to use the least costly resources allowed in order to achieve the desired results.

• Aesthetic Interface: A neat, presentable and easy on the eye GUI is very important. The users must not find the app/website convoluted to use. Clear communication is the working premise of good UI design. The interface should be clear, consistent, simple and capable of providing feedback.

# **10. Work packages**

The various subprocesses involved in the product are:

* Android and web backend: The backend highlights the places in the state of Karnataka which can be visited in a district-wise manner. The details of these places, such as the timings and the cost (or the approximate cost of places where the exact cost is not known) is also mentioned. To help visitors during their travel, places such as hospitals, pharmacies and ATM's must also be identified. The back end is also responsible for performing the necessary calculations - providing the optimal path, suggesting the nearest places in case of emergency.
* Android and webpage front end: The front end deals with presenting this information to the user in a friendly and presentable manner.
* ChatBot: To make the android app more interactive, we are incorporating a ChatBot into it which will give recommendations and suggestions to the the users.

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# **11. Budget and Schedule**

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| **Date** | **Deliverable** |
| 12th Jan 2016 | Introduction |
| 17th Jan 2016 | Project Description |
| 20th Jan 2016 | Group Formation(work breakdown w.r.t. Website, App & ChatBot) |
| 23rd Jan 2016 | Project Research |
| 25th Jan 2016 | Generation Of Feasibility Report |
| 02nd Feb 2016 | Data extraction and Visualisation |
| 13th Feb 2016 | Build a Project Plan |
| 21st Feb 2016 | Project Development initiated by all the groups |
| 28th Feb 2016 | Create SRS document. |
| 05th Mar 2016 | Optimal Path Calculation Completion. |
| 15th Mar 2016 | Get indicators for the respective destinations |
| 27th Mar 2016 | Front End Design(Website and App) |
| 02nd April 2016 | Incorporate ChatBot |
| 08th April 2016 | Testing |
| 18th April 2016 | Final Documentation |
| 22nd April 2016 | Project Presentation |

# **12. Delivery means:**

We intend to create a website which provides some of the services of the app. Since anyone with an Internet connection can access our website, the delivery means for the website is simple and easily achieved.

As our app targets tourists, there is an enormous market for it by mobile users. We intend to tap this large potential created by mobile users by releasing the app on Google Play Store. Users who intend to use the services of the app can download it easily from Play Store and avail its services. Thus by releasing the app on Play Store, we intend to deliver the product to the users such that they can access the product in an easy and hassle-free way.