

Indian Institute of Information Technology, Vadodara

Software Engineering (CS301)

Group 8

SOFTWARE ENGINEERING PROJECT PROPOSAL

Group-8, Computer Science, IIIT Vadodara

ABSTRACT

Today we stand in a privileged era of extreme software advancement, researchers and developers around the world are leaving no stones untured to make our lives more easier with each passing day, in the similar context as mentioned we are building a personalised application that provides location based special and custom features to a specific community of mobile users.

CONTEXT AND USER SEGMENT:

This project is intended for users who generally need to change their mobile settings multiple times a day or people who travel at multiple locations frequently and want to set automatic location based reminders and people who want to use location based custom services

OBJECTIVES:

- To provide an easy to use application that automatically changes the mobile settings required by the user based on her location.
- To upgrade the users from traditional time based reminders and provide a more specialised location based reminder
- To utilize the location details of the users and provide personalised services like location sharing.
- Provide an Android phone Application Interface

VALUE PROPOSITION:

- This Application caters the need of having a tool that provides custom and personalised services to

the user community based on a very important and easy to get factor, that is the location of the end user

- The user of this application will not be burdened of changing the profile setting each time she gets to work
- The user would be able to get instant reminders if she has to dispose of a work at a specific location she is crossing and does not actually remembers about it
- The user wont have to call each of her friends and explain her location if a meeting is scheduled on a non regular place
- The unavailability of such an important application in the market puts this service in a unique position.

APPLICATION FEATURES AND DESCRIPTION:

1. Application requires the user to sign in and access the service via a mobile application, the user has an option to enter different locations like her work place/home/club etc and select custom settings for each of these location, settings include:

- Sound Profile: (General/
Silent/Outdoor/Meeting)
- Wallpaper
- Ringtone

- 2) If the user intends to complete a specific task at a specific location the application will offer a feature where the user will be able to feed locaion preferences associated with the task and whenever in future the user crosses the vincyty of that location the application will pop up a notification that will remind the user of the task

- 3) The application provides a very unique and special feature of location sharing to the end user, This would enable the user to effectively share her location without hassle based on her preferences, that is:
 - Personal Sharing (One to One)
 - Group Sharing (Between a specific Group of People) Public Sharing
- 4) In order to get location of the user, the Application uses Google Maps for precise results, To use this service the user is required to be connected to the internet to get better results, The settings preference of the user is saved on a central server such that the user may be able to use or review it at a later point of time, this information will be in sync with the unique email Id of the user such that the entire settings could be synced if user switches to other device .
- 5) The Application will undergo a cloud based Testing, we will distribute the beta version of the Application to a specific group of users and host the application on cloud , we will constantly take the user feedback to optimize the Application

TECHNICAL TOOLS:

The following Technical Tools would be used to develop the Application:

- Android Application Development(Android Studio)
- Python
- Java
- XML
- Flask/Django for Server side Scripting
- Trello(For Project Management)
- Telegram(For Intra Group Communication)
- Google Maps API
- Cloud Based Application Testing

PROJECT IMPLEMENTATION

The Development Process of the Project is divided into 4 different phases:

- **PHASE 1 DEVELOPMENT**
13th August 2016 - 31st August 2016
 - 1.This phase of the project will include the team building process, knowing the strengths and weaknesses of the team members, expertise area, interests etc.
 - 2.We will decide the working tools and platforms and the entire team will learn the basic tools the technical tools that are required.
 3. An Overview of the entire project will be prepared and Development process will Start.
- **PHASE 2 DEVELOPMENT**
The following Application Version will be released

at the end of this Development phase **Version 1.0.0 (Organisation Version 1)**

This Version will include the Location Based mobile Setting feature and the the location based reminder feature

- **PHASE 3 DEVELOPMENT**
13th August 2016 - 31st August 2016

The following Application Version will be released at the end of this Development phase **Version 2.0.0 (Organisation Version 2)**

This Version will be released after removing the notable bugs in the version

Version 1.0.0 (Organisation Version 1)

We will integrate our odd on Location Sharing Special Feature on this version

- **PHASE 4 DEVELOPMENT**
20th October 2016 - 10th November 2016
The following Application Version will be released at the end of this Development phase

Version 2.0.2 (Beta)

This Version will be released after removing the notable bugs in the version

Version 2.0.0 (Organisation Version 2)

The **Version 2.0.1 (Beta)** will be released in the first week of this phase and will be put of for cloud testing for the next 2 weeks.

We will constantly take user feedback during this phase and will keep optimizing the application.

MANAGEMENT AND PERSONNAL:

The Team will have frequent meetings to discuss the progress and challenges in the Application development, the entire work progress will be monitored through Trello Application where each progress will be mentioned, each team member will maintain a logbook to monitor personal progress.

CHALLENGES:

1.We intend to make the application very user friendly and easy to use but the entire application is internet based , therefore the user requires good internet connection to use the Google Maps Location service effectively that is the top priority requirement for this Application.

2. Our Application uses notifications to pop up reminders to the user, the challenge here is that the user should only get important and required notification at any point of time, the Application should not flood the user with useless notifications, we also intend to take regular

customer feedback to make the user experience as smooth as possible.