# CSE 535 Project Proposal

## Phase I

Project Members

1. Dhiraj Gurkhe (1209305002)
2. RKR (1207685475)
3. Sriram Vellangallor Subramanian (1209270383

## Project Idea

We are planning to build an Intelligent Voice Recording Note Taker application on Android. The application will enable users to annotate the audio while recording, on the fly. The app will provide 2 functional modes- the recording and playback. While recording an audio, the user can view the waveform of the recording real time, and we will implement a user interface through which he can insert a hook at different time frames to insert textual annotations. These annotations can be input by keyboard, voice recognition (via Google Speech Recognition API) or by scribbling a graphic on screen. In the playback mode, user can view the waveform of the recorded audio as a timeline. Annotations would appear in sequence while the audio is being played. The user can organize his notes based on location fetched from the GPS, tags, time of recording or his own preferences.

1. Plan to use external sensors

For the scope of this project, we do not require any external sensors.

1. Type of platform being used

The app should work on Android phones with Android API Level 19 + (KitKat and above)

1. Development Setup

IDE: Android Studio 1.3

Testing: Emulator (AVD), Personal Cell Phones.

1. Specification of context aware behavior
2. We plan to use the GPS to get the current location to enable user to organize his notes
3. According to the time of the day when the user recorded an audio, the app will change UI/Background



1. 15 tasks for the project (with the category – acquisition, delivery and reception, action)
2. Current Weather by Location – A cquisition: If the user enters a location in the search bar provided in the home page, the available locations are pulled from the Weather API instantaneously. The user selects a location, and the weather data for that location is  retrieved using the Weather API and displayed on the home screen.
3. Location using GPS – A cquisition: The current location is obtained using GPS and the weather data for the location is displayed.
4. Weather Forecast - A cquisition: Along with the current weather details, a weather forecast is given for the next 7 days.
5. Changing Background According to Weather – A ction: Based on the current weather conditions (C ontext change) , the UI/Background of the application is changed (A ction) .
6. Weather Notification – A ction: Using the GPS to track the current location, the current  weather details are monitored in the background. If there is change in weather conditions (C ontext change) or if the weather conditions are rough (C ontext change) , n o t i f i c a t i o n s a r e g i v e n t o t h e u s e r ( A c t i o n ) .
7. Location History – D elivery and Reception: The user's recent locations are stored in SQLite database and displayed in a history page. The user can select one of those locations and view current weather data for that location.
8. My Locations - D elivery and Reception: The user can store frequently visited locations for easier access. The locations are stored in SQLite database. The user can select one of those locations and view current weather data for that location.
9. Share on FB, Twitter – D elivery and Reception: The user can share the weather data for the selected location on Facebook or Twitter.
10. Location on Map – A cquisition: A map is provided on which the user can select a location and retrieve the weather data for the same. Google Maps API can be used to display the map.
11. Sunrise/Sunset – A cquisition: Sunrise/sunset information can be retrieved from the API and added along with other weather data (Temperature, humidity).
12. Additional Idea: We intend to provide the user relevant links based on the context of his textual annotations, in a particular time frame.