

CS-242/243

Project - #9

Smart Warning System

Readme Document

Course Instructor -

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Installation:

1. Download and Install Android Studio [here](#).
2. For detailed installation instructions refer [this askubuntu thread](#).
3. The whole project folder has previously been sent along with the review and testing documents. Open the "SmartWarningSystem" folder in Android Studio.
4. Select "Clean Build" from "Build" menu.
5. Make sure that the android phone is attached to the computer and USB debugging is turned on in Developer Options in the phone.
6. Run app using the green Play icon in top right area of Android Studio.

App Usage:

1. There are two types of users- Professor and Student for the app.
2. By default, the opening screen is the Login screen if no user is logged in. From the SignUp link below the "LOGIN" button, create a new user preferably start with Professor. (Select user type using the radio buttons)
3. It is recommended to use two phones, one for professor and other(s) for students. In the case that only one device is available, clear app data from phone in Settings before switching user type. This is required since the Notification module for the student runs continuously in background while in an active session.

For Professor user:

1. In the dashboard, create a session by pressing "Create Session" button. Enter a new session name and password in the "Session Details" dialog. Students need both these information to join a session.
2. Press "Class Status" button to see the name, current state and blacklist status of all students who have joined the active session.
3. To see only the blacklisted students (those students who have not responded to at least one alert) tap "Class Review". Tapping each tile (each student name) opens a dialog where the teacher can write and save a review for the student preferably after discussing with the student.
4. Tap "End Session" to end an active session. Note, all joined students will be automatically disconnected.

For Student User:

1. Enter a session by tapping “Join Session” button and use the credentials provided by the professor.
2. Receiving notifications will start in the “Notifications Pane” at regular intervals. Tap on each notification before the corresponding timer ends to avoid being blacklisted.
3. If the app is in background then the device will get system notifications with sound and backlight. Do not force close the app till session ends.
4. If the professor ends the session, then you will be automatically disconnected.

References:

1. At present the whole backend (database, logs) is accessible only to our personal Google accounts. Although, the app can be configured to use Firebase services of another google account by referring [Firebase Documentation](#).
2. Visit [Firebase Console](#) to see the authenticated users, database and cloud function for the app.
3. [Node.js Tutorial](#).
4. [Node Version Manager](#)
5. Quickstart [Firebase Messaging Service](#).