## Google Sign in in an Android app

- In your Android project Add internet permission

   uses-permission android:name="android.permission.INTERNET"></uses-permission>
- 2. Go to google developer console.

  <a href="https://console.developers.google.com/apis/dashboard?project=forward-entity-197416&folder&organizationId&duration=PT1H">https://console.developers.google.com/apis/dashboard?project=forward-entity-197416&folder&organizationId&duration=PT1H</a>
- 3. Create a new Project give it same name to your android project (Not mandatory).

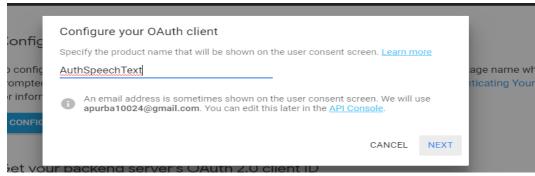


- 4. After creating the project, go to google sign in official documentation. https://developers.google.com/identity/sign-in/android/start-integrating
- 5. Then click on the following button

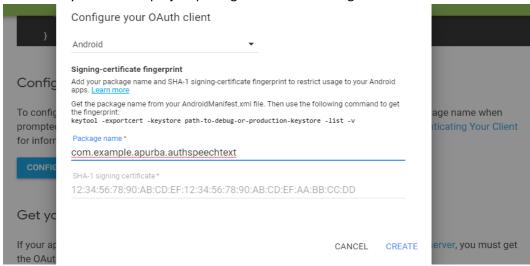


Now select the newly created project in google developer console as follows and click next

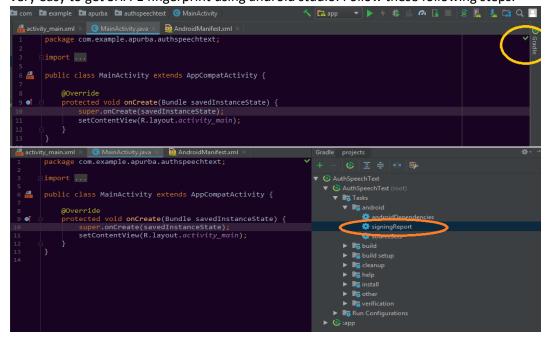


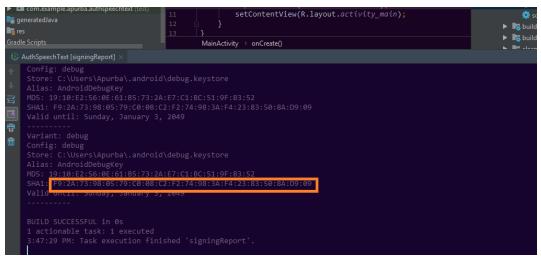


Now Paste your android project package name in following section

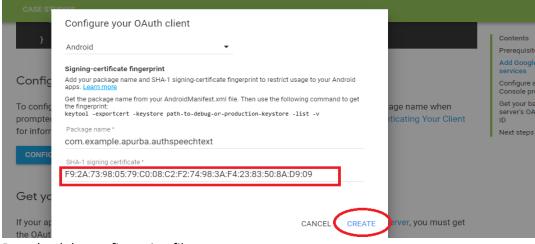


Now you need to create your android project SHA-1 fingerprint certificate. You can get your SHA-1 fingerprint in many different way such as "Key tool", "Android debug" e.t.c. But its very easy to get SHA-1 fingerprint using android studio. Follow these following steps.

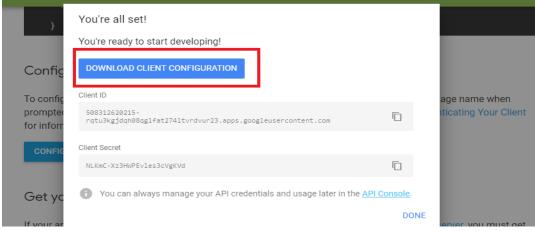




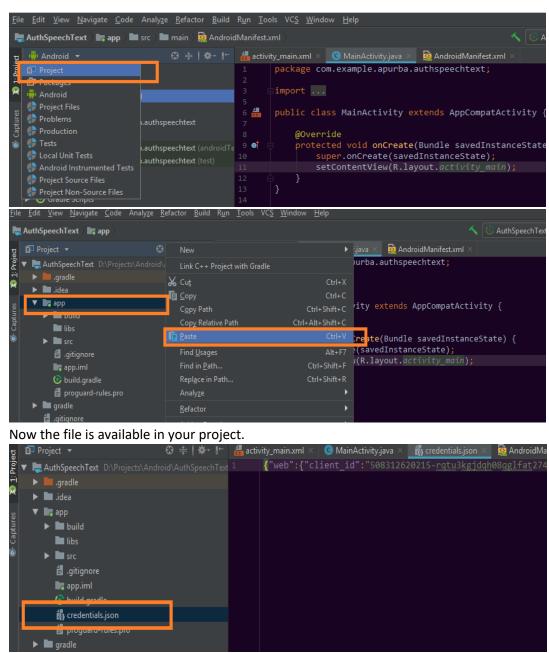
Ok now you got your SHA-1 fingerprint, copy and paste it on that previous section



Download the configuration file



6. After downloading the "XXX.json" fie you need to add it to your android project. Do it as follows.(NOTE: When you add the json file in your project it must be named as "google-services.json").



7. To enable google sign in you need to add some dependencies in your project. First make sure "google play service" is install in your project, to check this follow the step bellow.

uthSpeechText] - AuthSpeechText - Android Studio ze <u>R</u>efactor <u>B</u>uild R<u>u</u>n <u>Tools</u> VC<u>S W</u>indow <u>H</u>elp AVD Manager 👢 SDK Manager vity.java × 🕻 AuthSpeechText × 🕻 app > 🔯 AndroidN বি Layout Inspector ld file where you can add configuration options Firebase Kotlin Do not place your application dependencies her Default Settings ▼ Appearance & Behavior Android SDK Location: Creater Stress

SDK Platform SDK Tools SDK Update Sites

Below are the available SDK developer tools. Once installed, Android Studio will automatically check for updates
Check "show package details" to display available versions of an SDK Tool.

Name Version ► Editor Android Studio Component Installer

Now google play service is installed in your project. Now add some dependencies. Go to <a href="https://developers.google.com/identity/sign-in/android/start-integrating">https://developers.google.com/identity/sign-in/android/start-integrating</a> to see latest instruction in the bellow section.

```
Add Google Play services
                                                                                                               Add Goo
                                                                                                               services
         In your project's top-level build.gradle file, ensure that Google's Maven repository is included:
                                                                                                               Configure
          allprojects {
                                                                                                               Get your
server's (
ID
             repositories {
                 google()
                                                                                                               Next ster
         Then, in your app-level build.gradle file, declare Google Play services as a dependency:
         apply plugin: 'com.android.application'
             dependencies {
                 compile 'com.google.android.gms:play-services-auth:15.0.1'
In your Project level build.gradle file add following line
allprojects {
  repositories {
     google()
     // If you're using a version of Gradle lower than 4.1, you must instead use:
     // maven {
     // url 'https://maven.google.com'
     //}
  }
                               task clean(type: Delete) {
    delete rootProject.buildDi
In your app level build.gradle file add following line
dependencies {
     implementation 'com.google.android.gms:play-services-auth:16.0.1'
  }
```

 Now you are ready to use google paly service. Continue from CS 193A User Login slide Sign-In button (optional) – page 9 (<u>Link</u>)
 Done.