UNIVERSITY OF MISSOURI-KANSAS CITY

Programming Web/Cloud/Mobile

 # Lab Assignment 3

Team Members:

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LAB Assignment-3

Introduction:

This Lab assignment deals with the basic web technologies HTML, CSS, JavaScript with responsive web design (RWD), AngularJS, Express JS and D3 JS and also developed an android app with Facebook login. In this lab assignment it primarily focuses on the basic topics of Web Programming and android app development.

Objectives:

To code for the 2 questions by implementing the below concepts**.**

- HTML CSS, JavaScript
- AngularJS, Express JS
- Responsive web design
- Twitter API
- D3
- Android SDK
- Social Login -Facebook

Approaches /Methods:

Using HTM5, CSS3, Bootstrap, JavaScript, AngularJS, Express JS, D3 JS, Twitter API and WebStorm, Android Studio, Social Login -Facebook

Workflow &Datasets/Parameters and Evaluation:

The below each question will follow different approaches to solve. Coding is done to perform the evaluation of each individual snippet to build a web app that populates the Twitter Friend List by using the visualization with D3 and the android app is developed to enable the social login to the app.

Question 1:

Task1: Twitter friends visualization

a. Get the twitter friends list using Twitter API (https://developer.twitter.com/en/docs/accounts-and-users/follow-search-get-users/overview)
b. Visualize them through D3.JS (use appropriate visualization e.g., bubble chart)

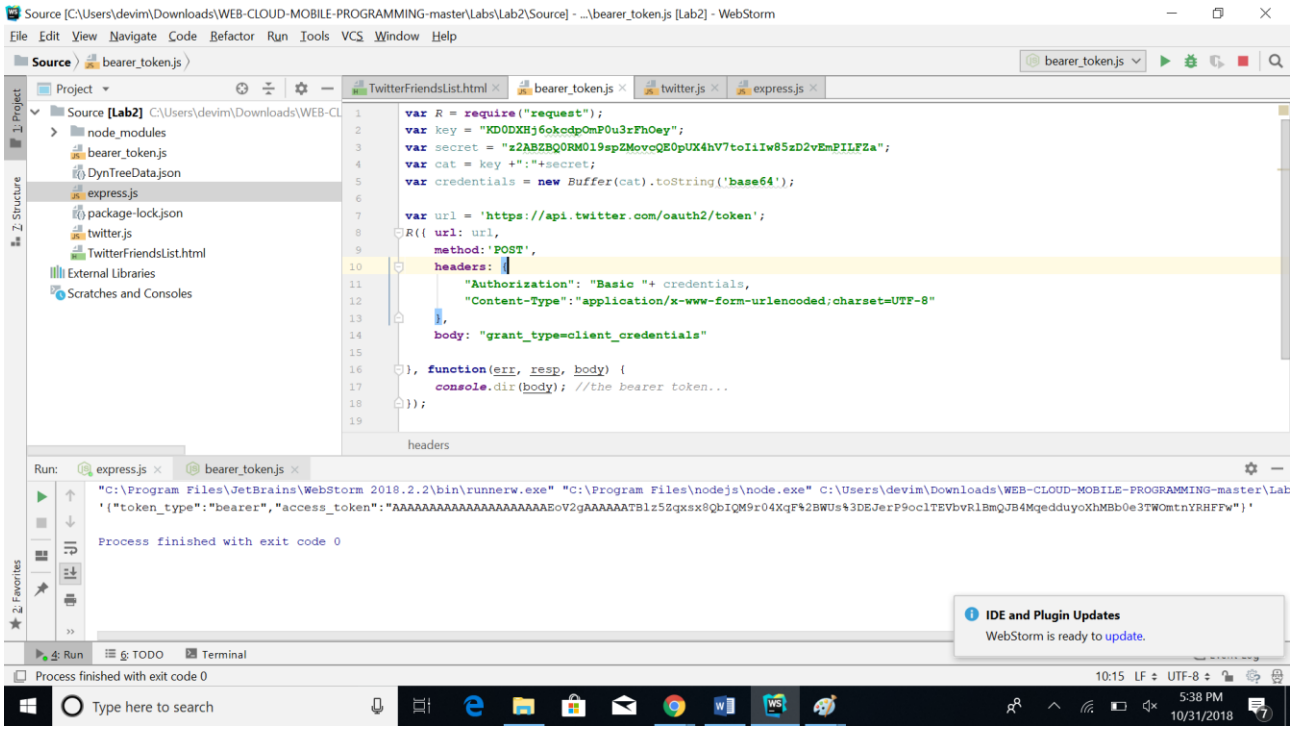
You can use any API, need not to be Twitter.

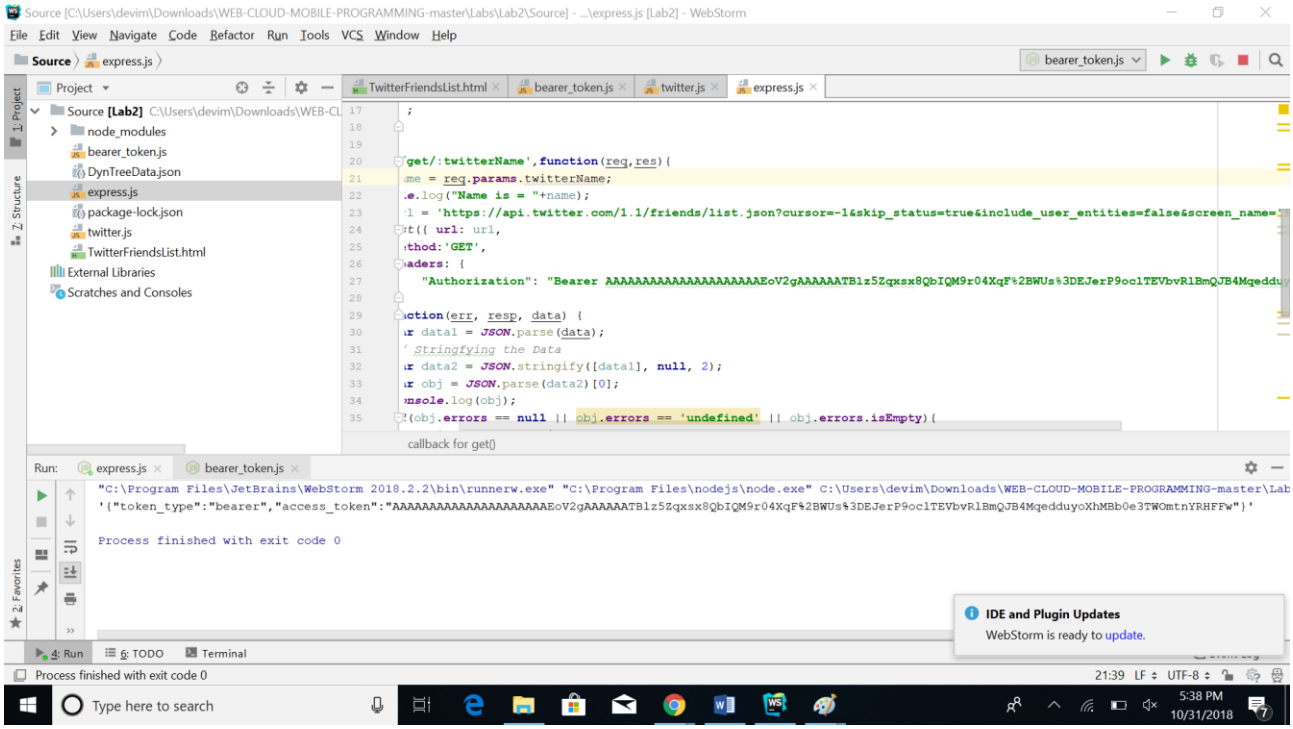
Solution:

Below is the Single Page developed with the Angular JS ,Express Js .Created the server to listen the client request .Access the token from the Twitter and generated the tokens related to the API from running the express js .Once the server starts listening the request data will be populated through a json object and the object is redirected to the D3 to visualize .

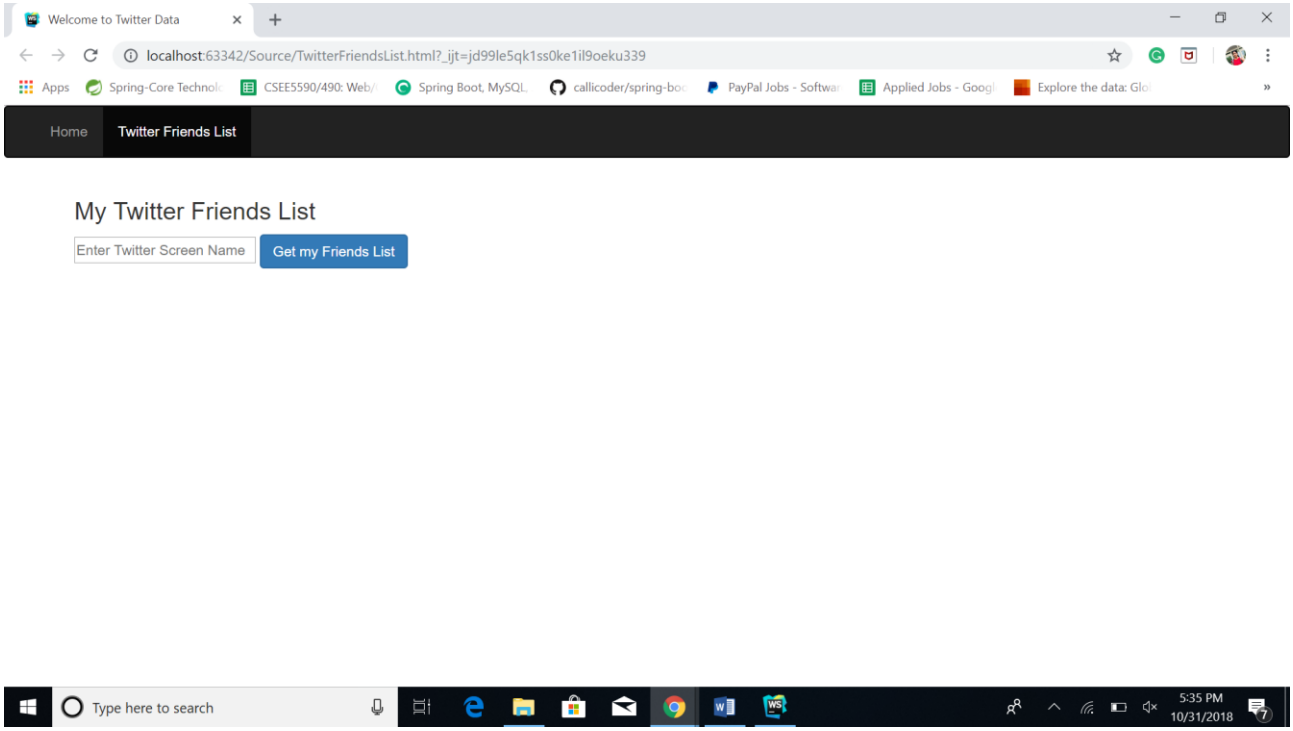
Below screen shots are related to the tasks that performed to develop the above requirement.

Code for getting the access token by using the server running in express js

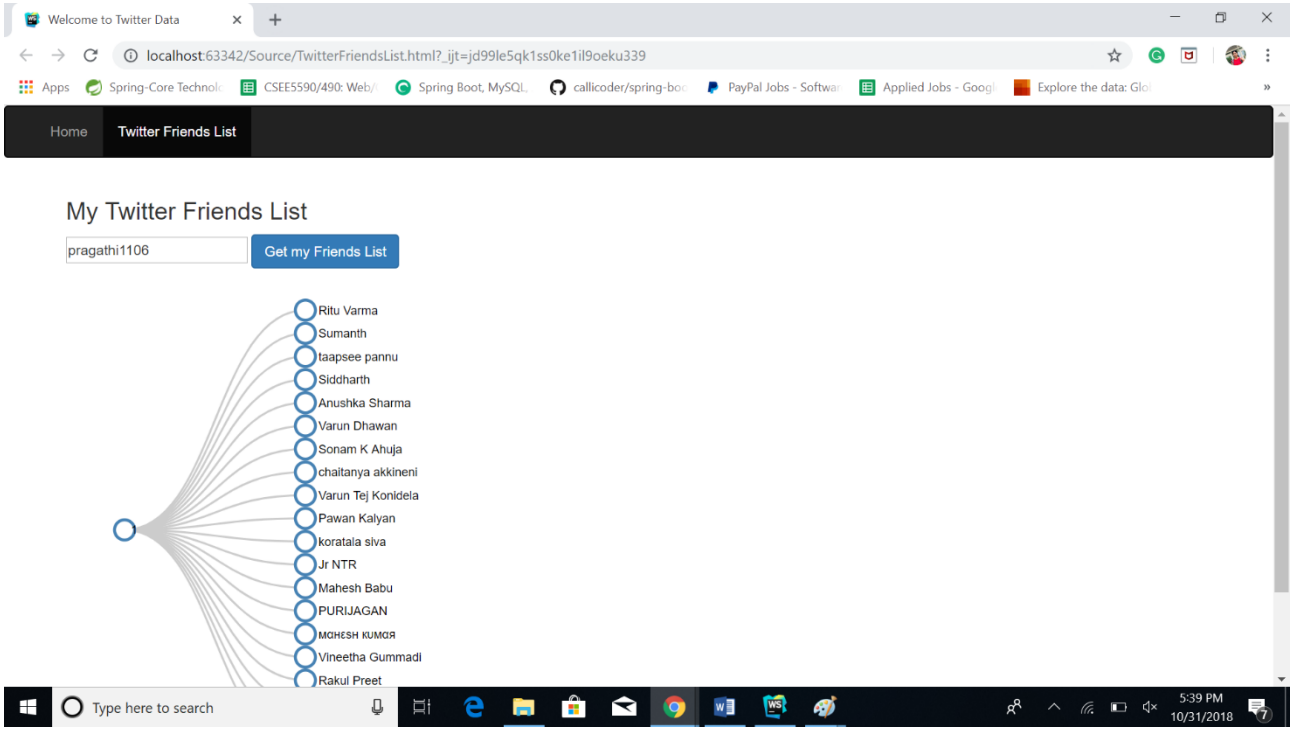




Single Page Application that let user to enter the request for fetching the data from the Twitter API



Visualized the results that are returned from the Get My Friend List Using D3 JS



Question 2:

Task2: Create a mobile application with the following requirements. The application should have **good UI/UX**.

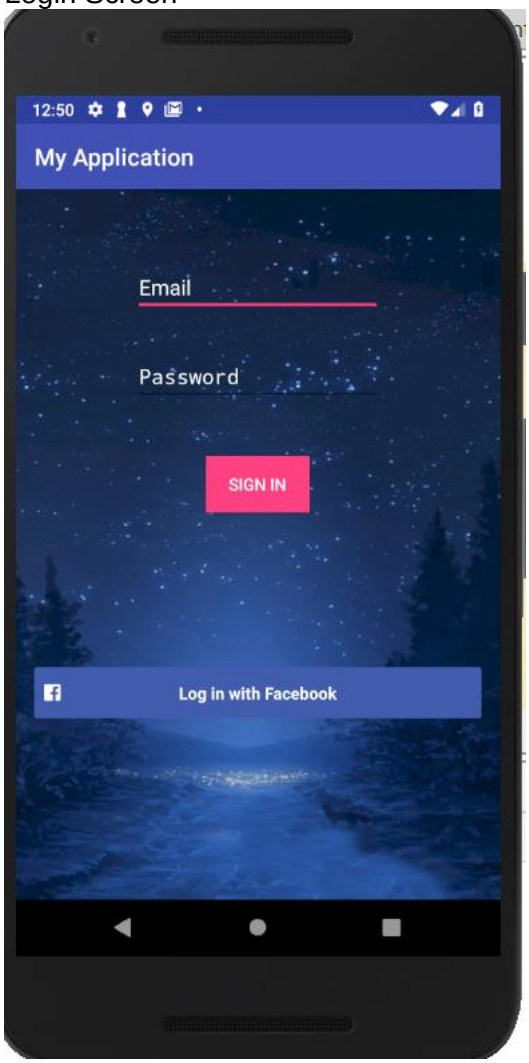
a. Include features such as login, signup, and social login
b. After login, the application should display a welcome message with user details (e.g., username, gender, university, branch, profile image etc.). No limit on user details, you can use your creativity on this screen.
c. It should have logout button

Note: Marks will be distributed among logic, implementation, and UI

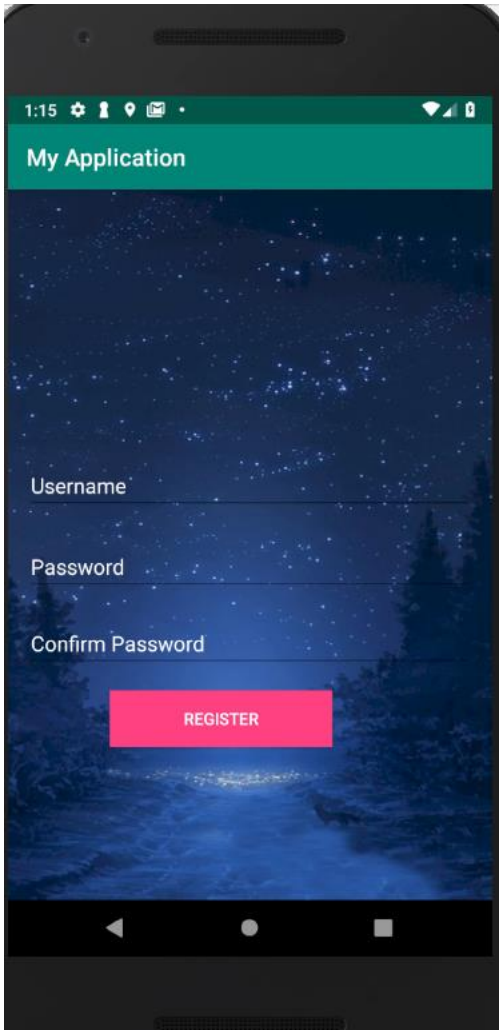
For this task we have created an android app with the basic login and register functionality And also include the Social login -Facebook

Below are the screen shots for the developed App

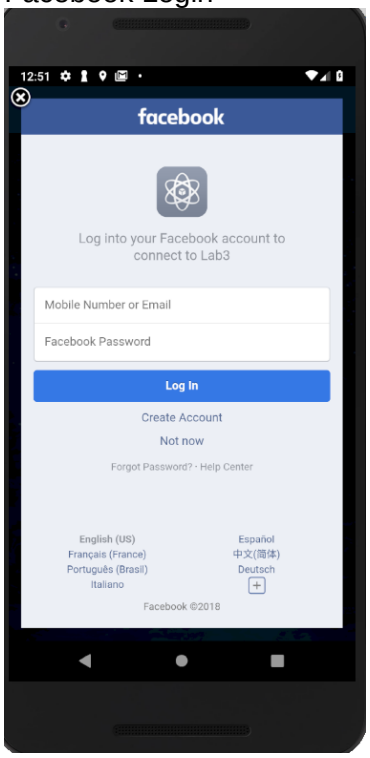
Login Screen



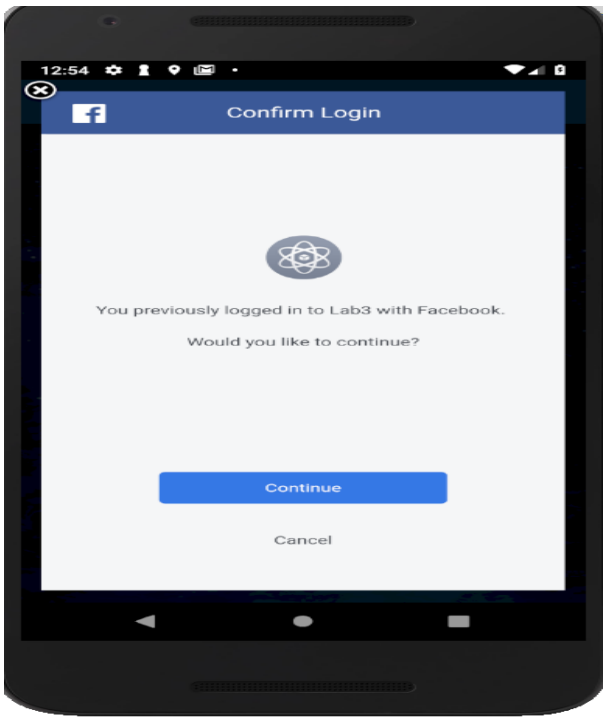
RegisterScreen



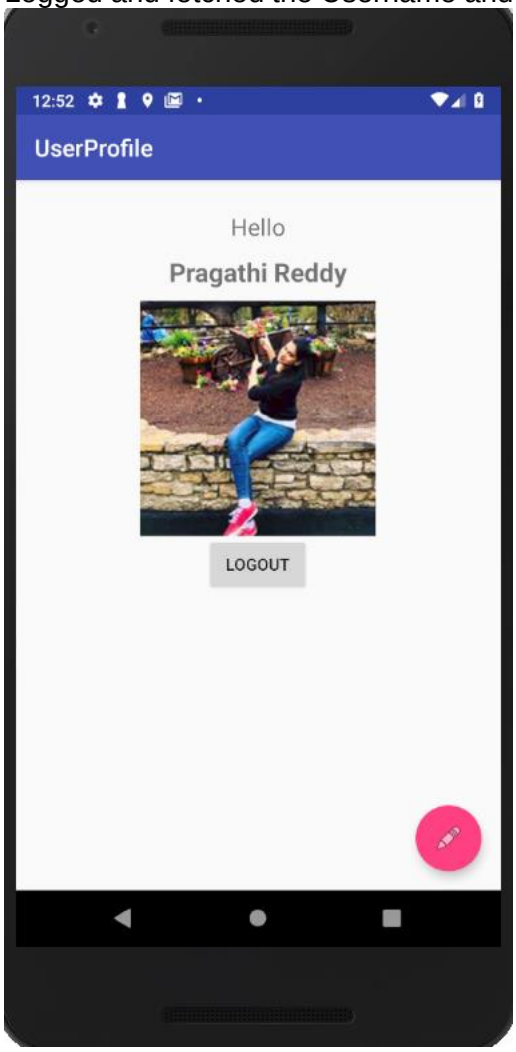
Facebook Login



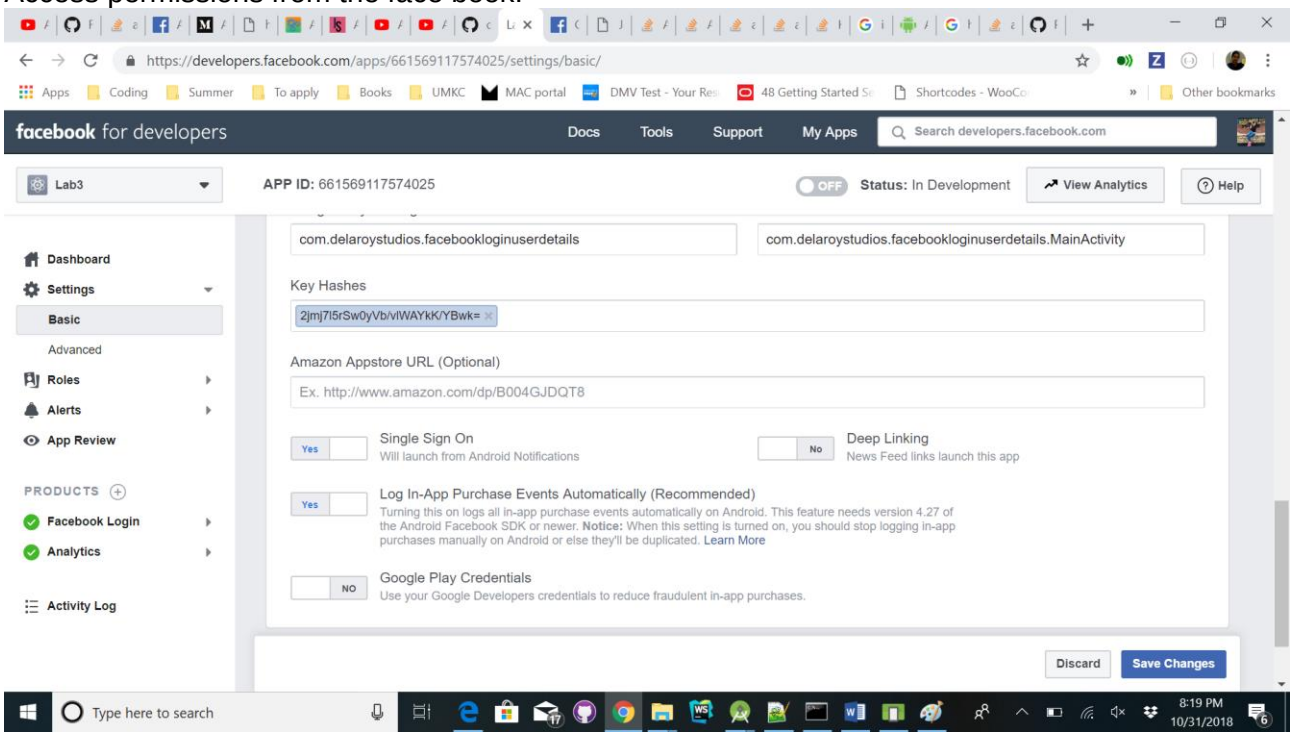
Login Activity via Facebook



Logged and fetched the Username and the profile picture



Access permissions from the face book:



Conclusion:

As stated the above workflow with certain set of parameters is followed in solving the execution by implementing the core and basic concepts of the web programming and android.

Source link: https://github.com/PragathiThammaneni/Programming-Web-Cloud-Mobile/tree/master/Assignment/Assignment%203

Video link : https://youtu.be/D6B3xDnw_o4

Wiki link : https://github.com/PragathiThammaneni/Programming-Web-Cloud-Mobile/wiki/Assignment-3