ADVANCED SOFTWARE ENGINEERING – CS 5551

PROJECT INCREMENT 1

FOOD CART – FOOD ORDERING APPLICATION

TEAM – 15

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I. INTRODUCTION:

Food Cart – Food Ordering System is an Android Application where a user can register and login with his account into the application and can search for an item in two input ways. Speech to text conversion and the direct typing method. Once he searches for an item a list of the nearby online stores will be displayed and he can choose any of those stores and can add those items to the cart and place the order.

II. PROJECT GOAL & OBJECTIVES:

OBJECTIVE:

The main objective of our project is to ensure the correct delivery of the orders through visual confirmation. Since we are implementing the concept as an android application. It helps the user for the easy access to the services. It increases the speed of service, sales volume and earns the customer satisfaction. It also eliminates the use of paper and increase the level of efficiency.

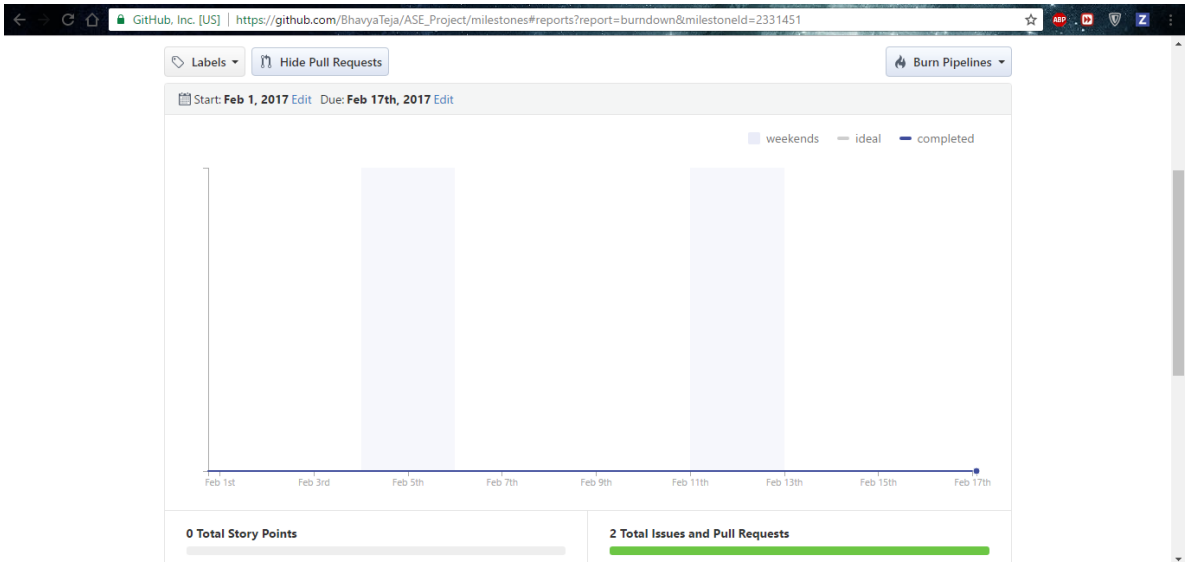
SYSTEM FEAUTURES:

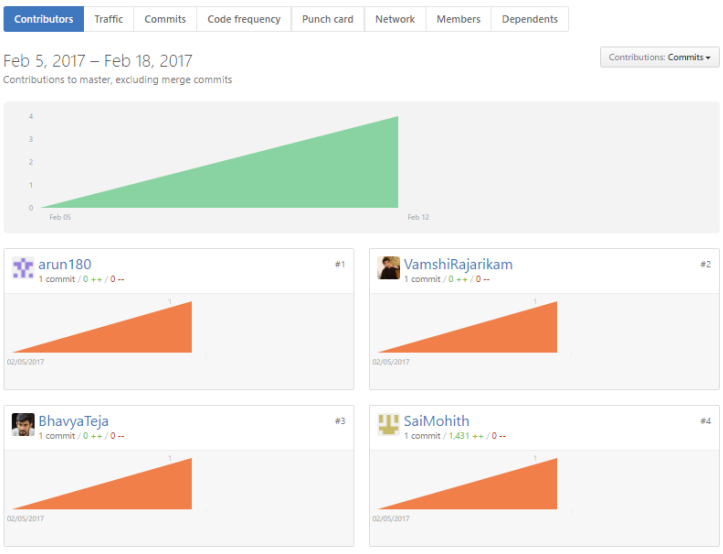
The major functionalities of the system which we are developing are:

1. Login & Register of user.
2. Speech to Text API for taking input.
3. Four Square Search API for searching the nearby places.
4. Adding items to the cart.
5. Placing the order.

III. PROJECT PLAN:

The Screenshots for the Project reports are attached below.





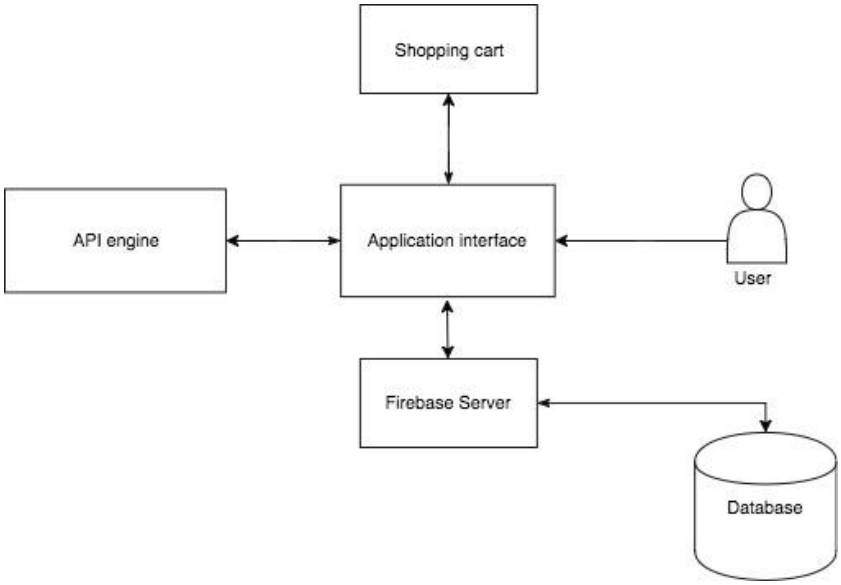
IV. FIRST INCREMENT REPORT:

The first increment of our project mainly focuses on the first two system features which are Login & Register pages followed by the Speech to Text API.

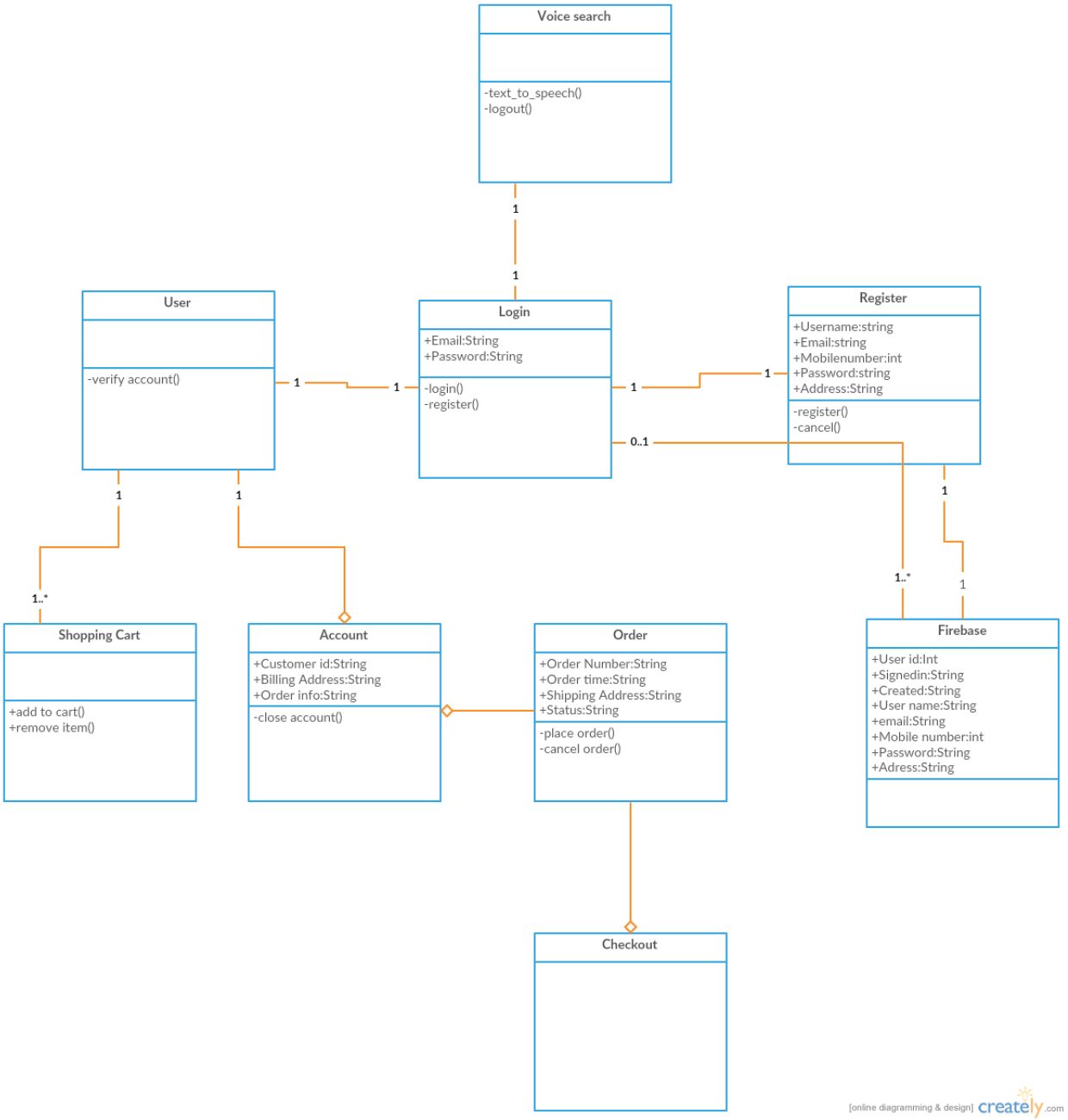
DESIGN:

The UML diagrams for the project are attached below.

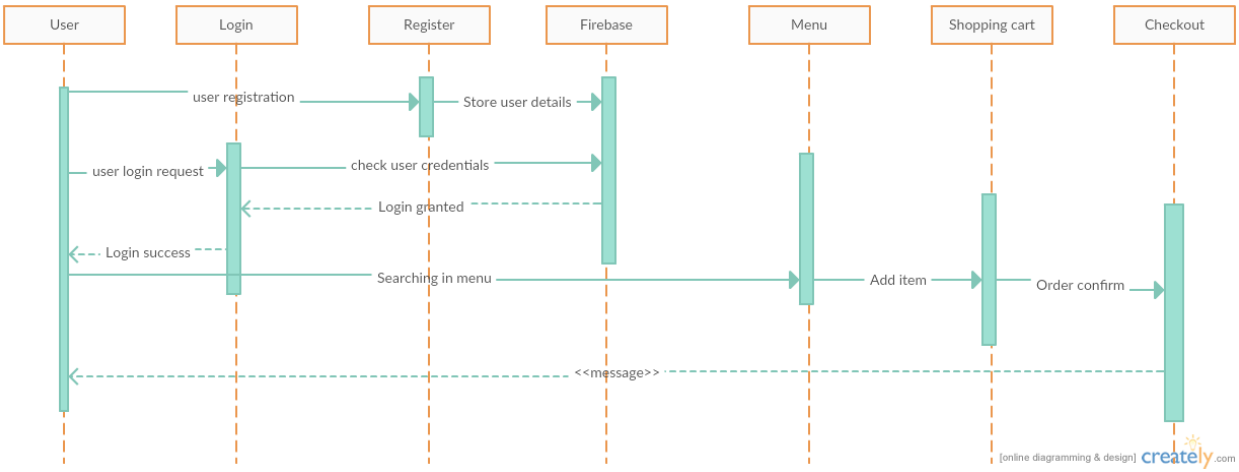
UMLArchitecture Diagram:



UML Class Diagram:

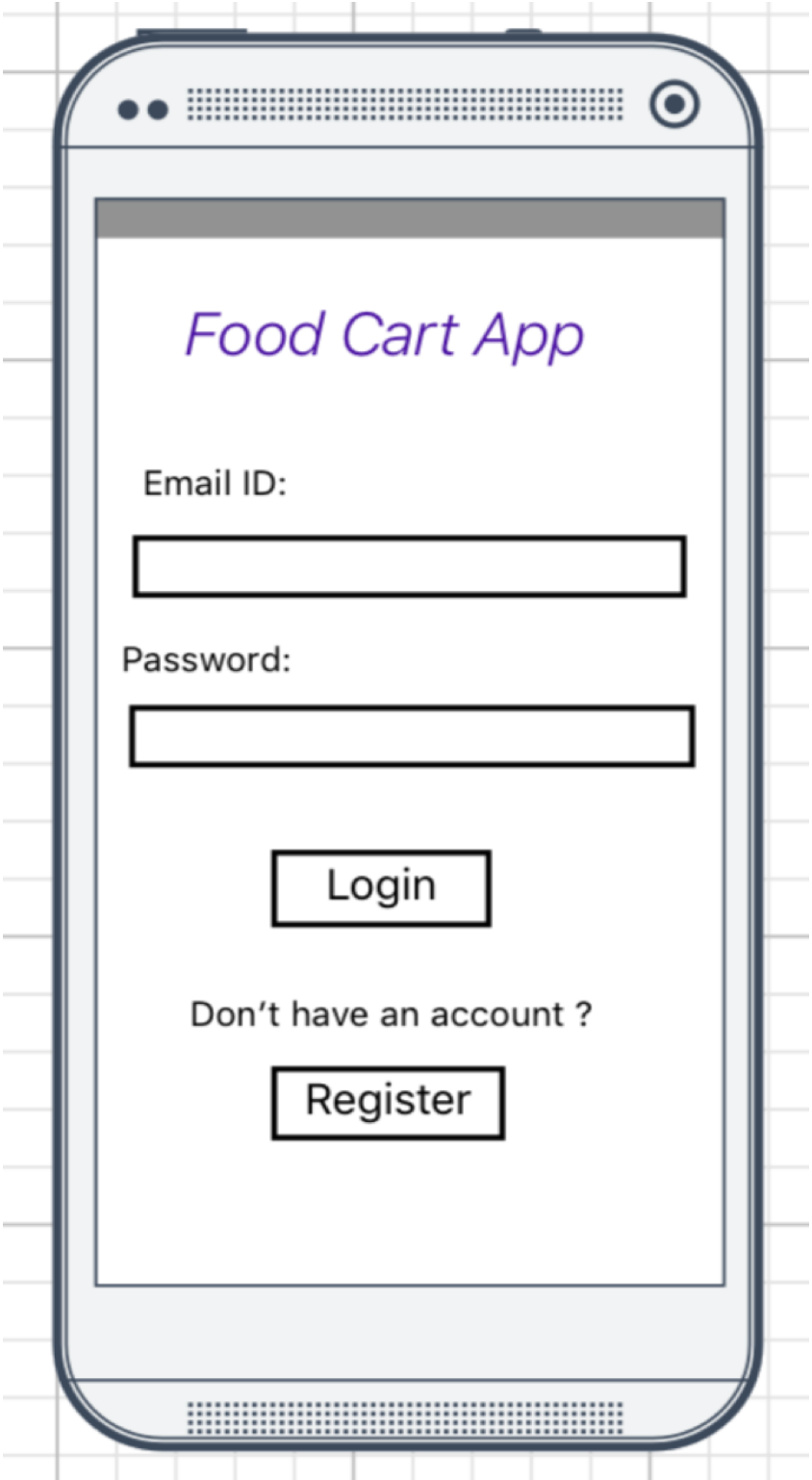


UML Sequence Diagram:

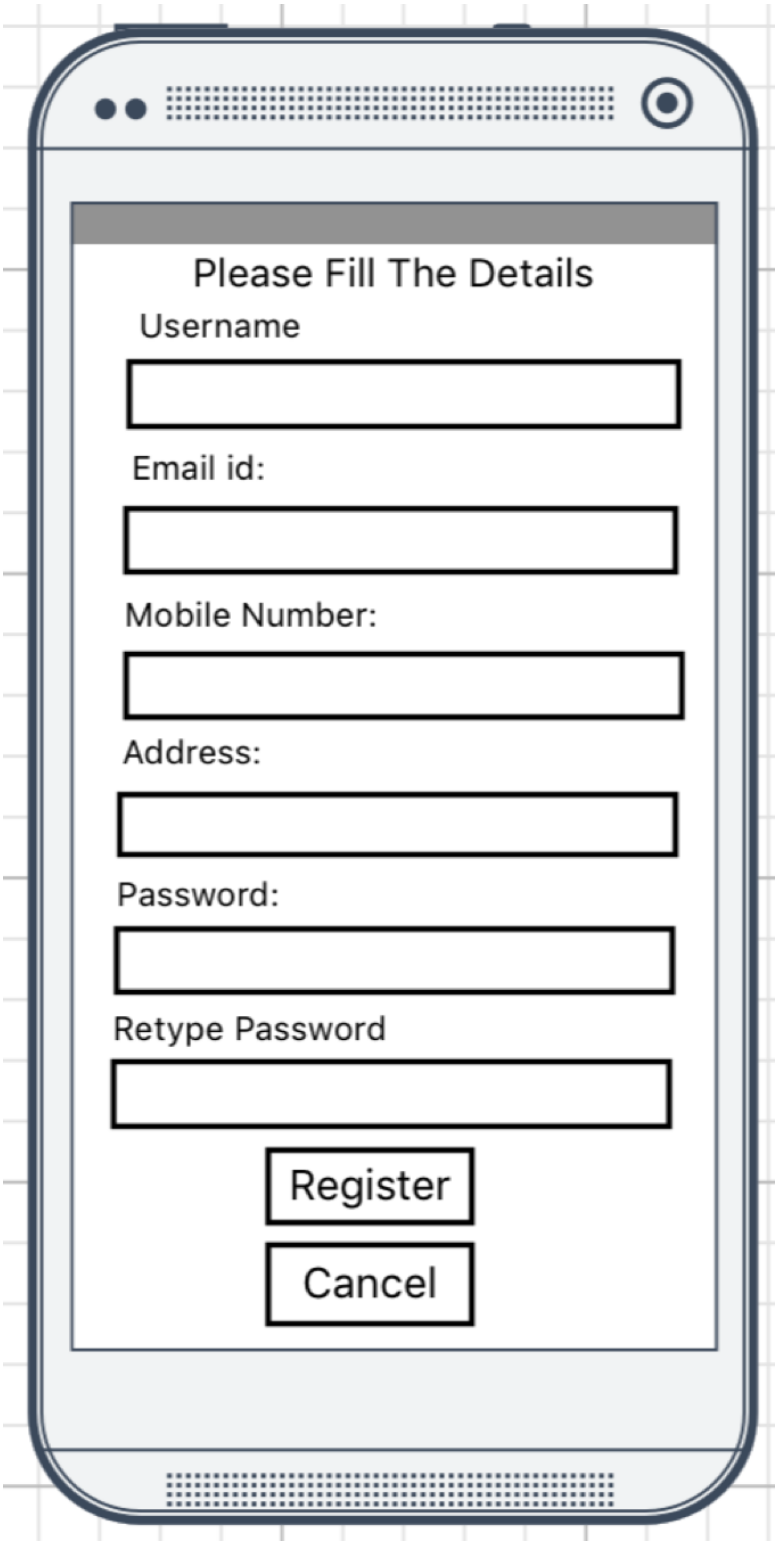


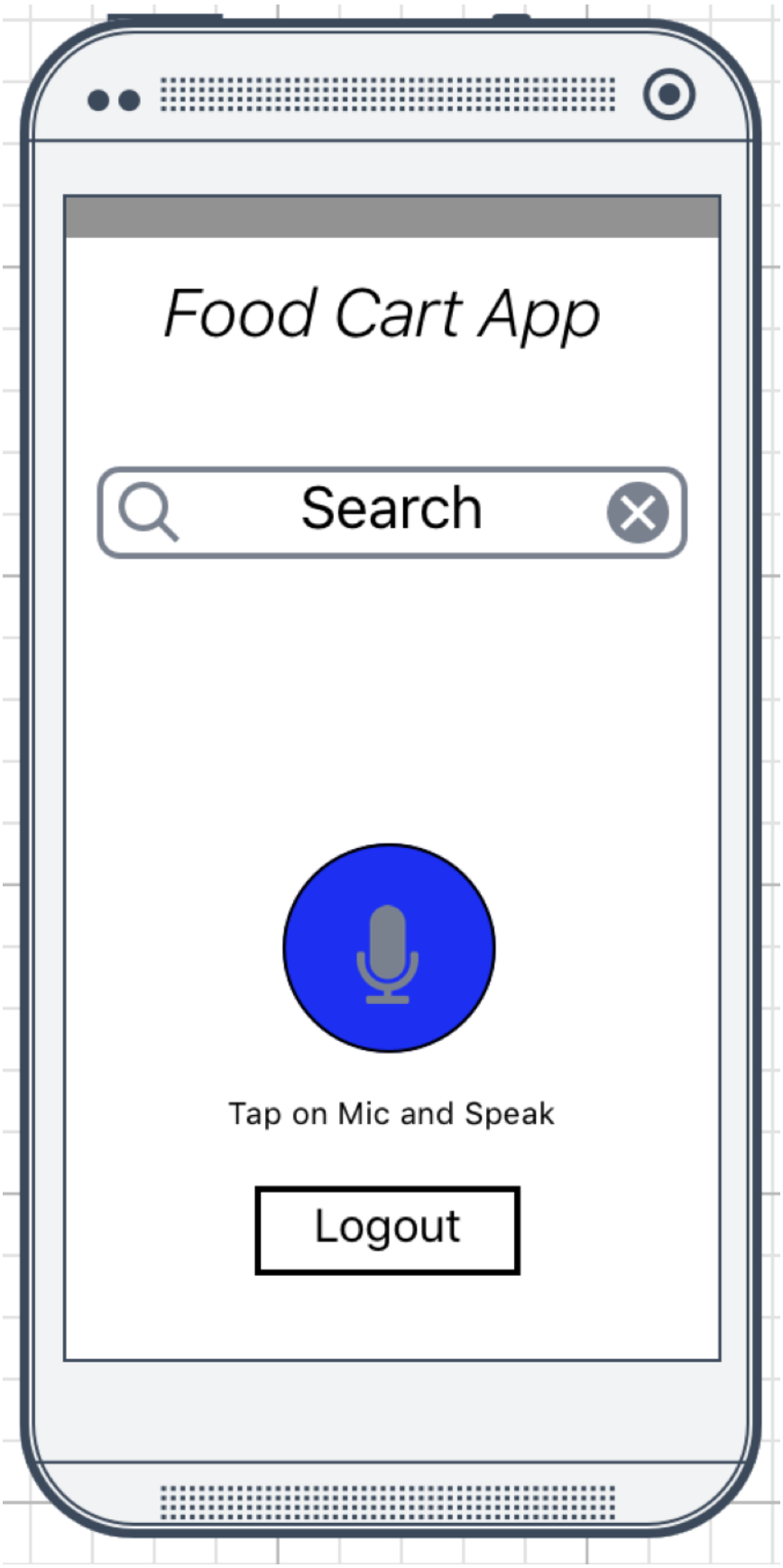
The Wireframes for the first increment would be:

Login Page:

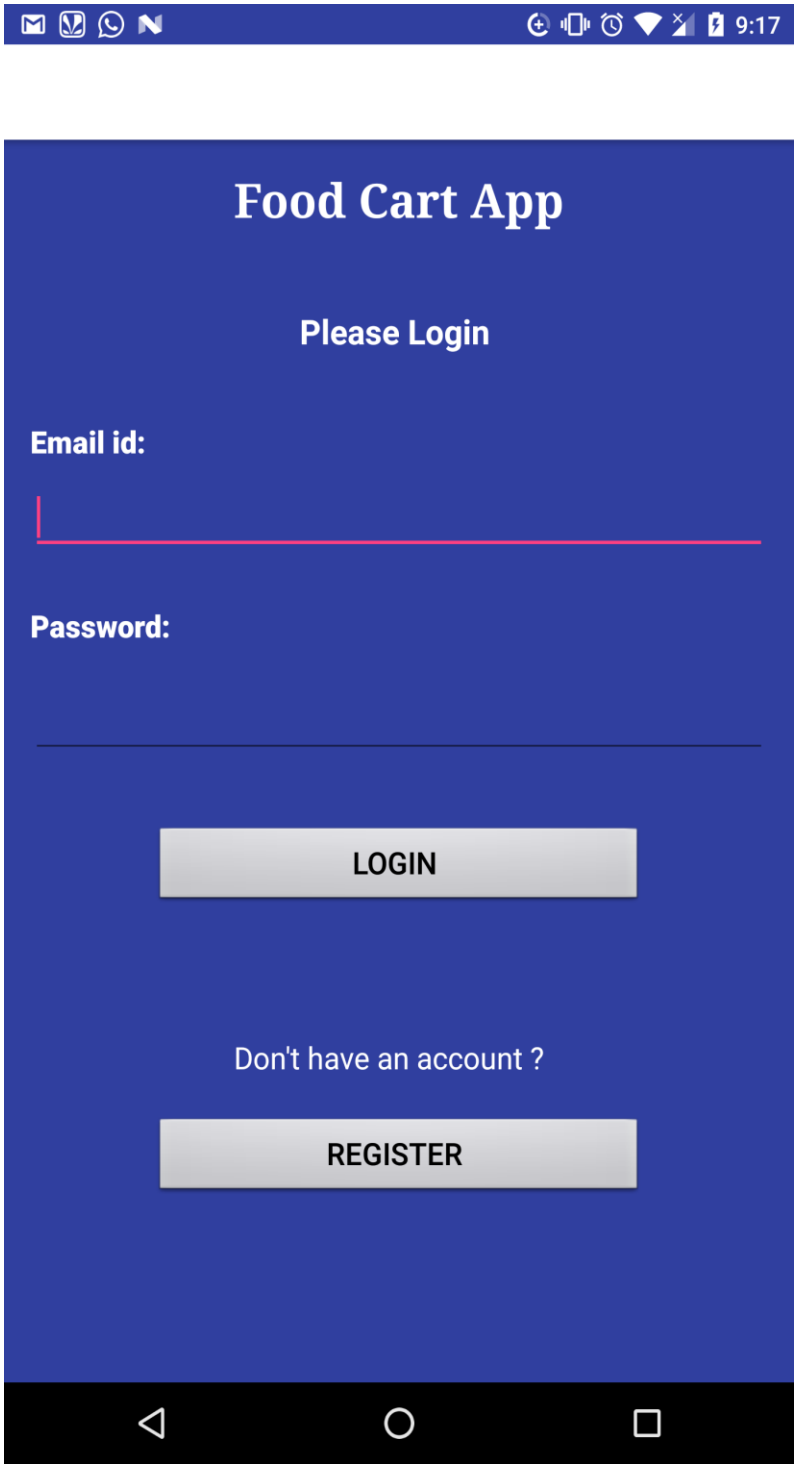


Register Page:

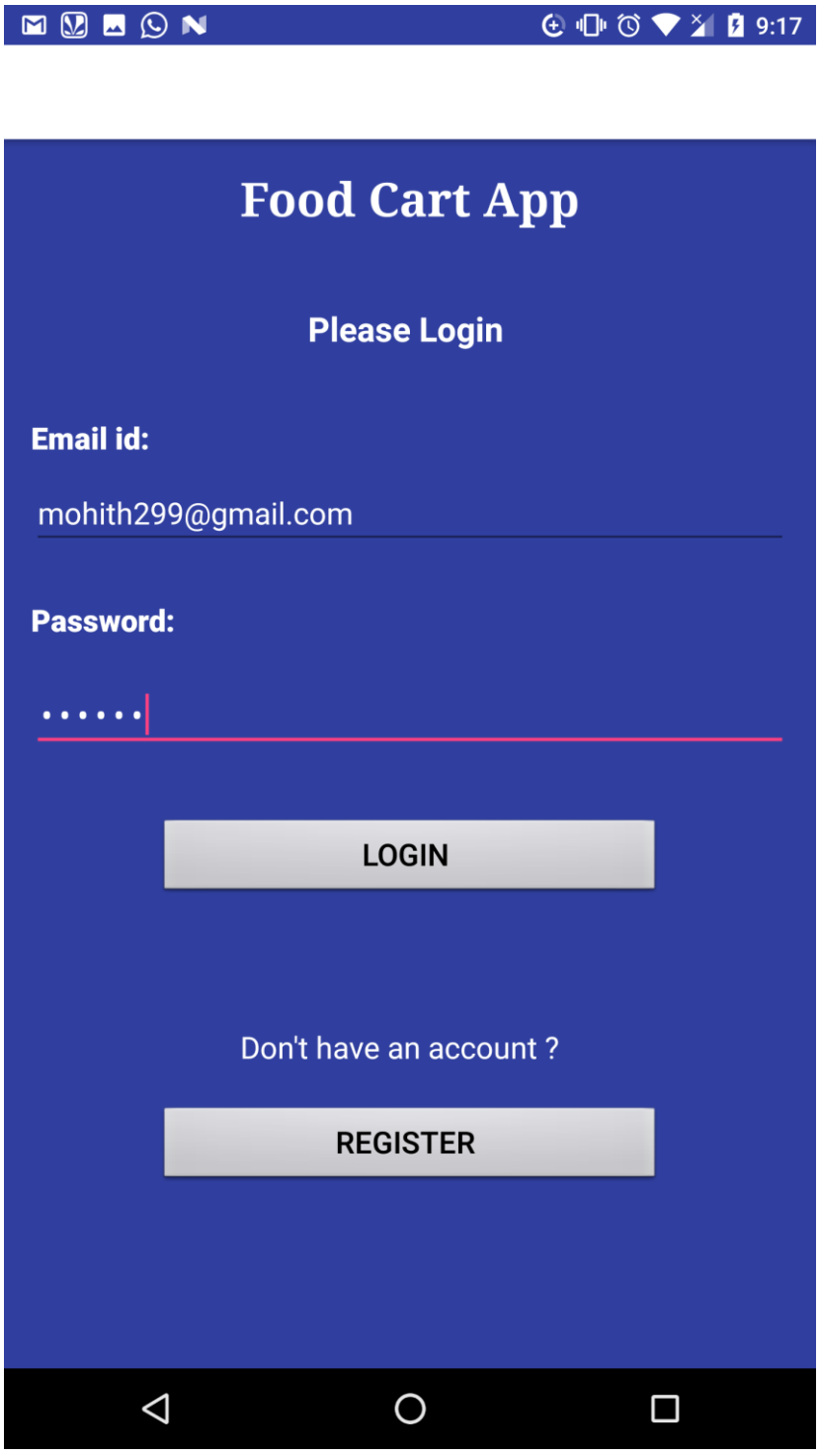



Food Cart App
Search
Tap on Mic and Speak
Logout

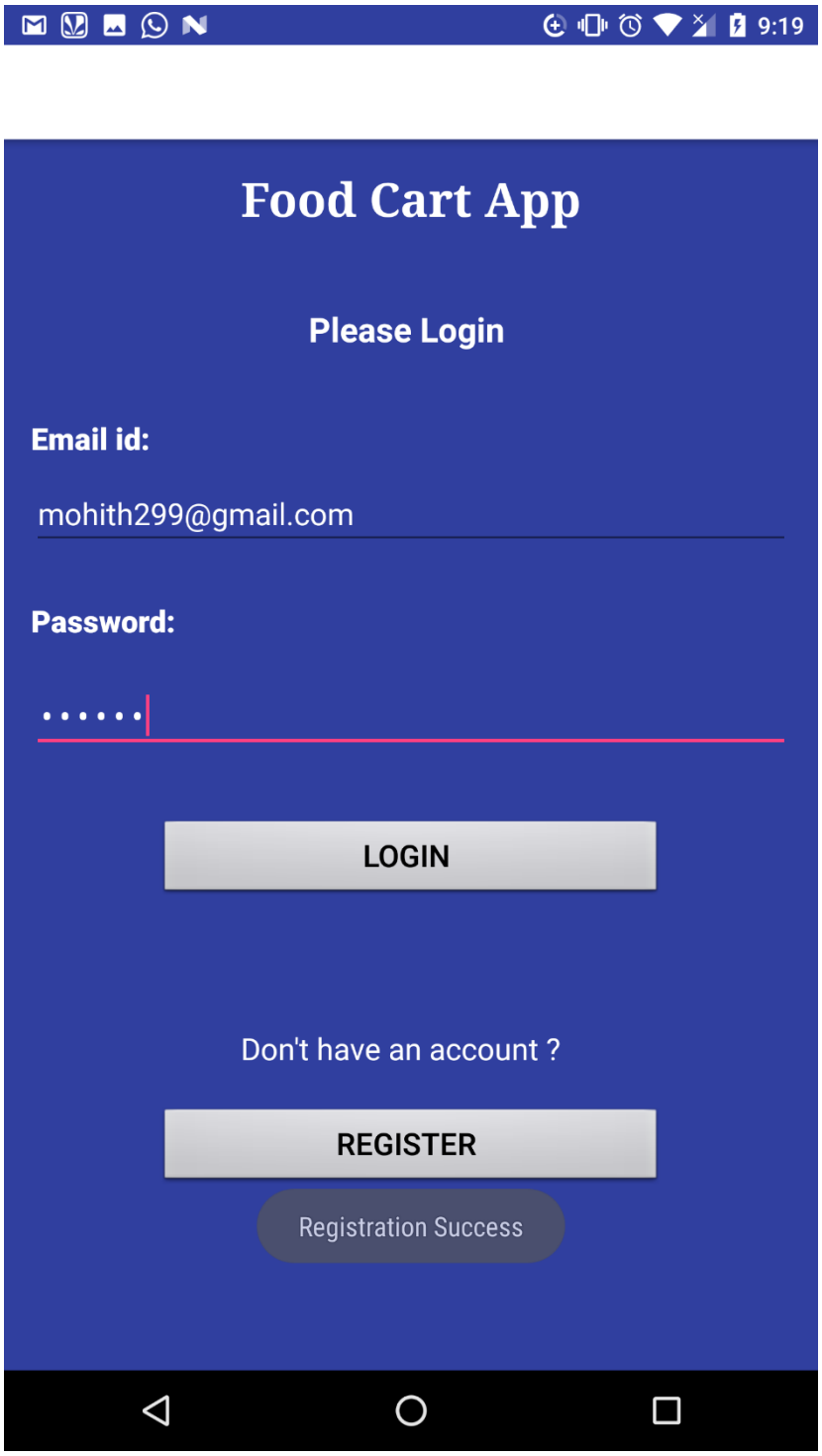
The User once opening the application can be viewed the Login page.



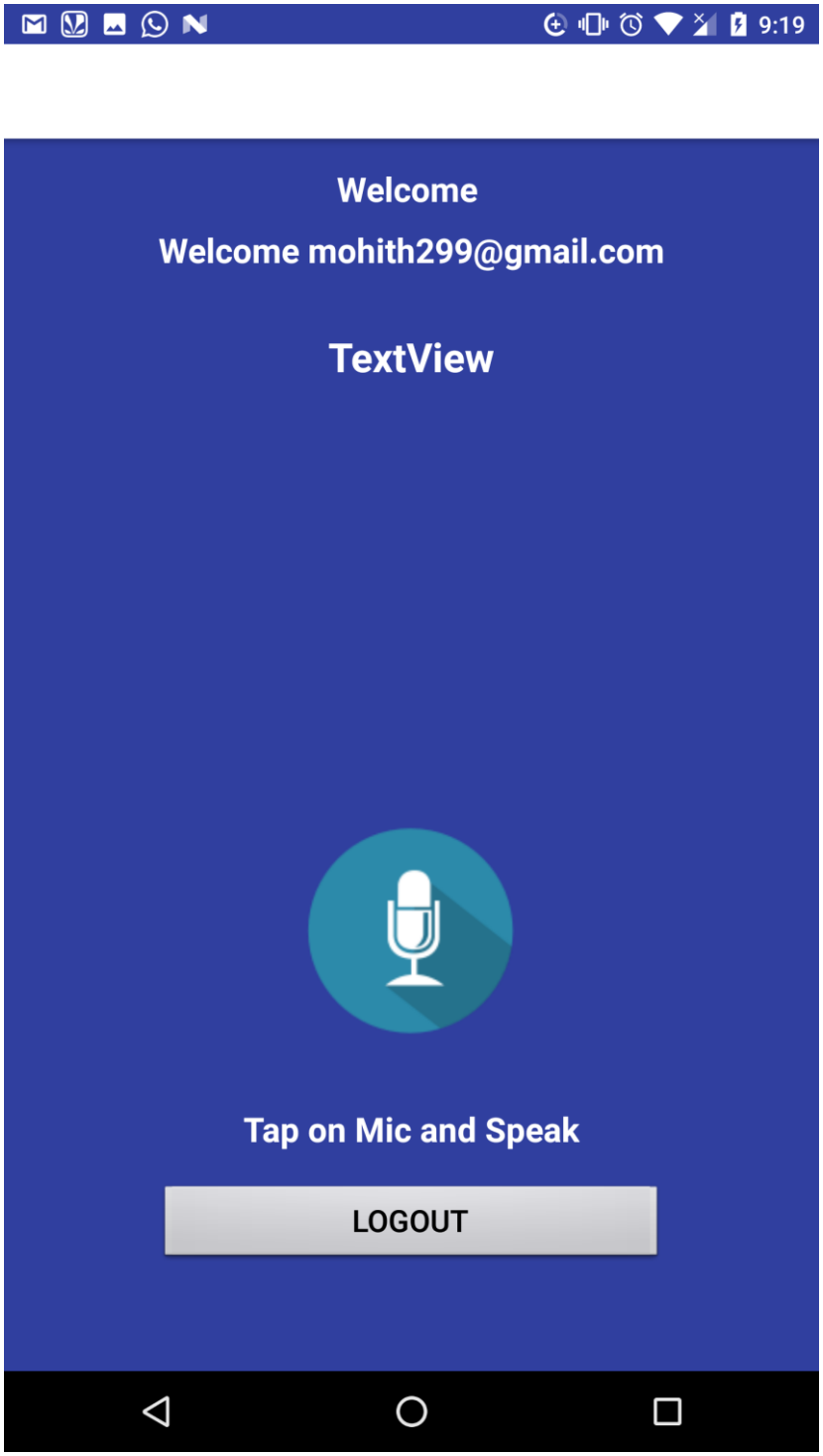
If the user is new to the application then user can register initially and can login into the application with his Login Credentials.

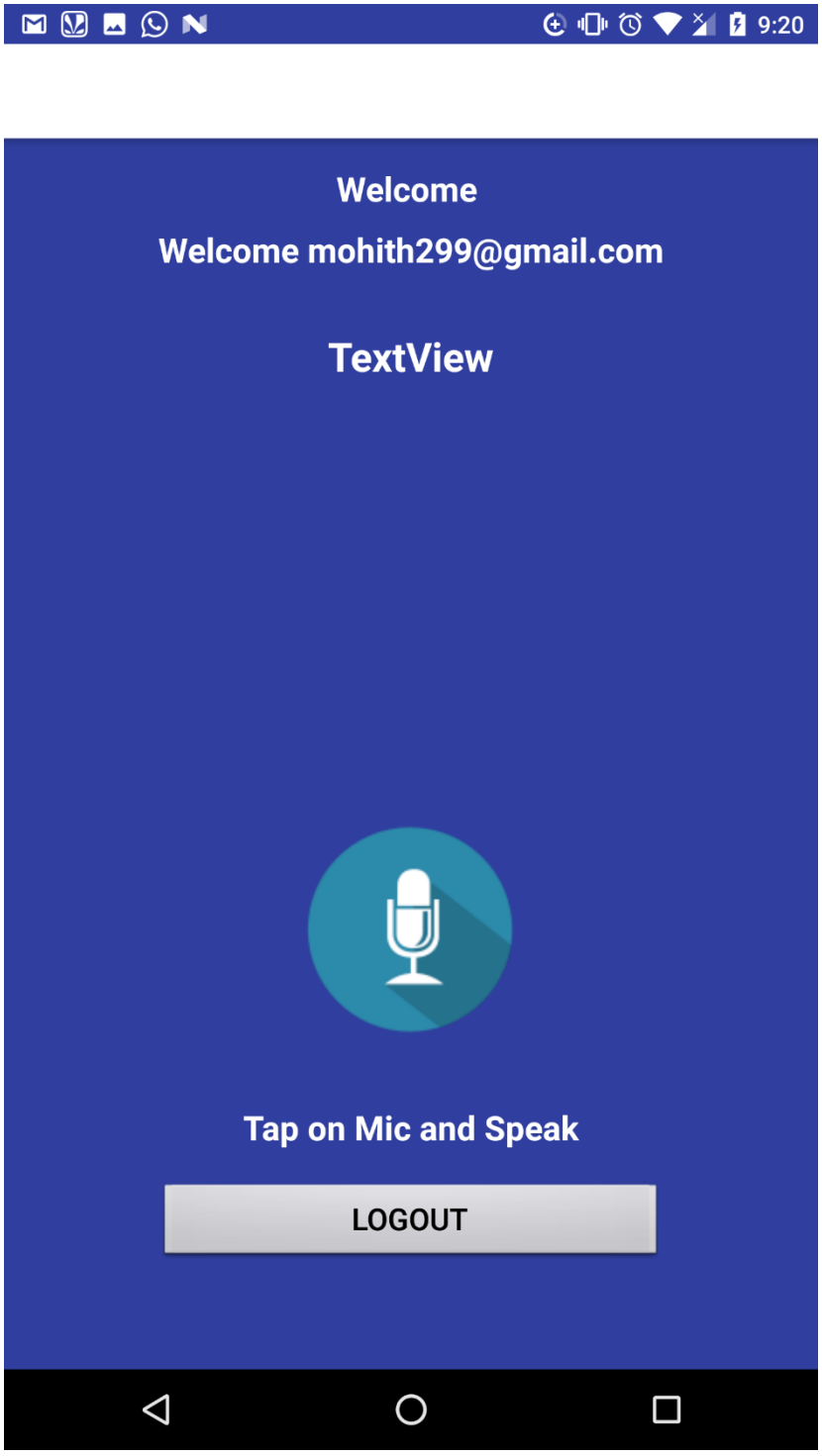


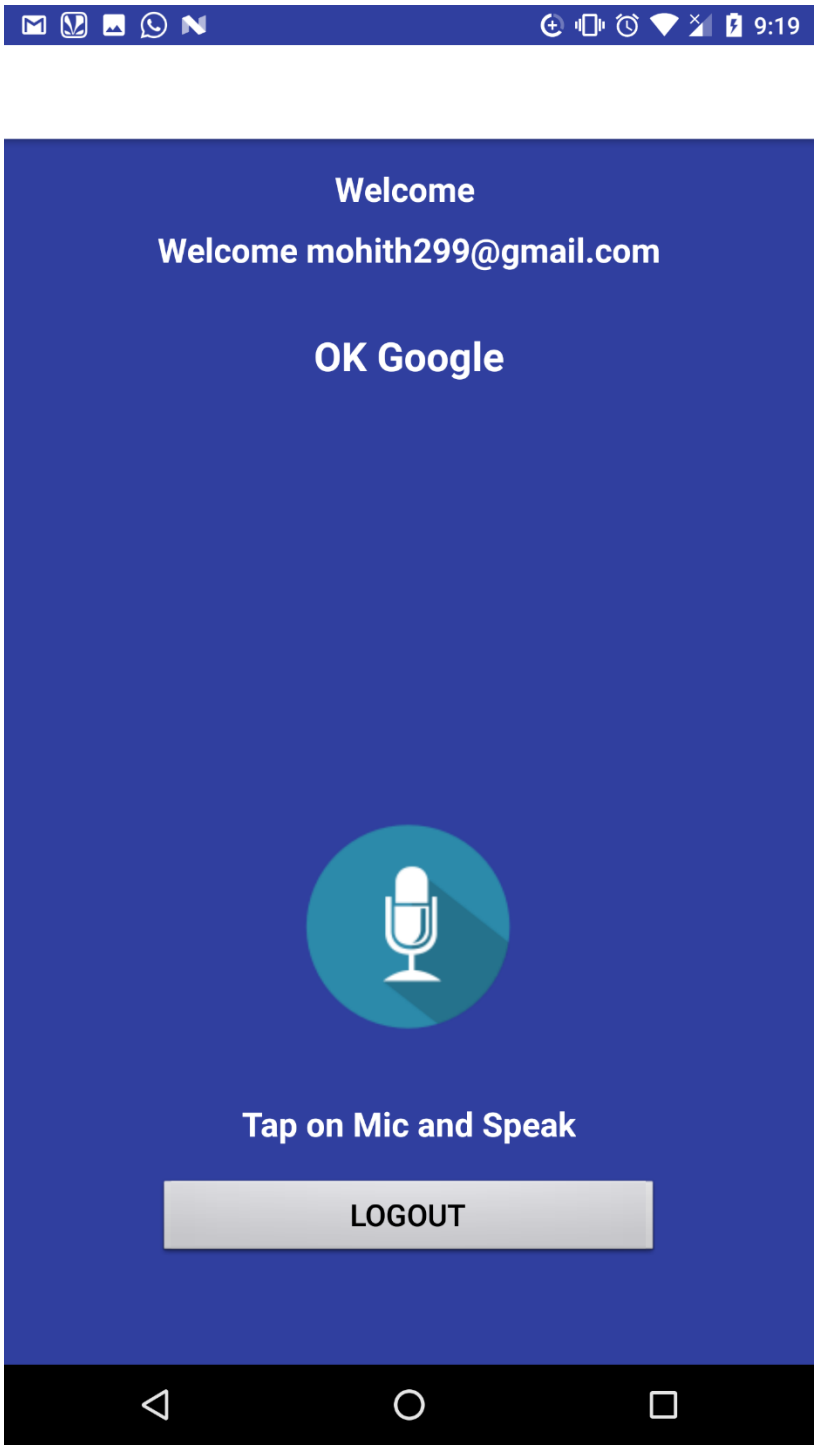
User once successfully registers is navigated to the login page.



User once login in to the application is asked to speak and that speech is converted to text.

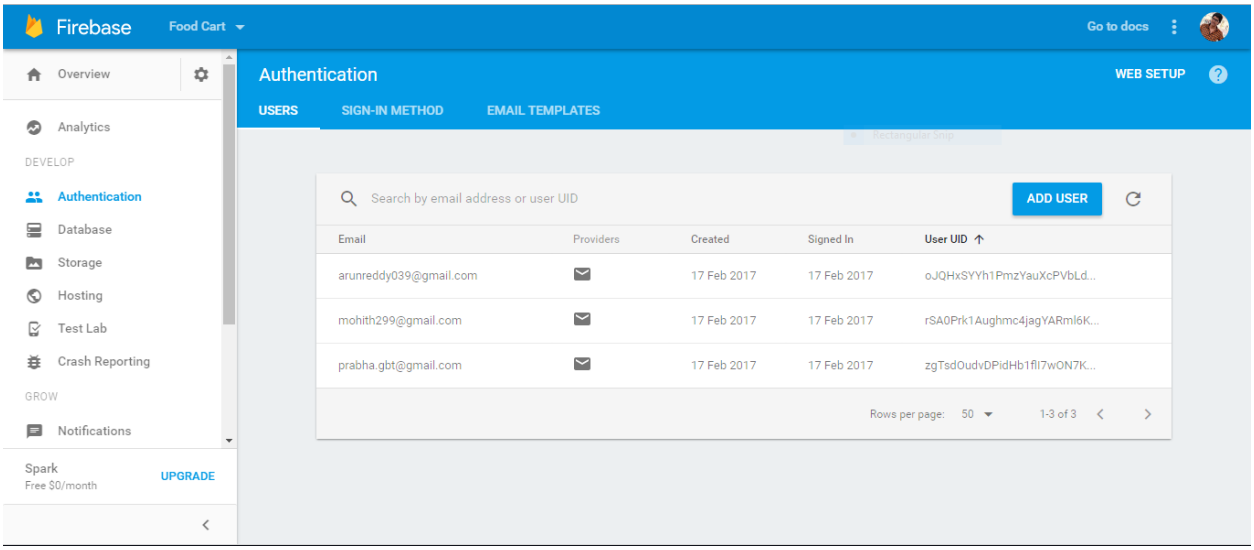



9:20
Welcome
Welcome mohith299@gmail.com
TextView
Tap on Mic and Speak
LOGOUT


9:19
Welcome
Welcome mohith299@gmail.com
OK Google
Tap on Mic and Speak
LOGOUT

IMPLEMENTATION:

We have used Android Studio for developing this Android Application. We have used “Firebase” for storing the Credentials of the user.



REST API SERVICES:

For the Increment 1 of our project we have used two Services:

1. Firebase Database Service
2. Speech to Text API

1. **FIREBASE DATABASE SERVICE:**

   The main intention of using the Firebase database Service is to store the User Information. User enters the Username, Email Address, Mobile Number, Address and the Password. The whole information is stored in the Firebase database and are retrieved when the user logs in to the Application.

2. **SPEECH TO TEXT API:**

   Speech to Text API is used to convert the speech to text which helps the user to give the input to the system. The input can be the food item which the user is looking for.

DEPLOYMENT:

The Increment 1 of the project is uploaded to the Github.

The entire progress of the first Increment can be found in the link that is attached below.

https://github.com/BhavyaTeja/ASE_Project

The Wiki Page link is attached below.

https://github.com/BhavyaTeja/ASE_Project/wiki/ASE-Project---At-a-Glance

PROJECT MANAGEMENT:

The First Increment of our project is to complete the following tasks.

1. Login Functionality of the User.
2. Register Functionality of the User.
3. Storing & Retrieving the User Credentials from the Firebase Database.
4. Implementing the Speech to Text API.

Successfully implemented all the above mentioned functionalities without any error in implementation.

CONTRIBUTION:

a. Bhavya Teja Gurijala – Login & Register Functionality
b. Sai Mohith Reddy Chagamreddy – Connecting to Firebase & Retrieving the credentials.
c. Vamshi Rajarikam – Implementing the Speech to Text API.
d. Arun Kumar Reddy – Entire UI/UX and Documentation.

Equal individual contribution – 25% each

It took us almost 10 – 12 hours for every person to get the best output. Every member of the project contributed solely for the project. We have discussed at every stage and proceeded further. Since we have used Agile Process it would be easy for us to divide the tasks among ourselves and integrate them at the end.

The Second Increment includes the following tasks.

1. Including Online Authentication for Login.
2. Implementing the Four Square Search API.
3. Retrieving all the details of the stores.
4. Knowing the nearby locations using the Google Maps API.

The estimated time would be 80 hours on a whole.

V. BIBLIOGRAPHY

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https://developer.android.com/reference/android/speech/package-summary.html

http://www.androidhive.info/2012/01/android-login-and-registration-with-php-mysql-and-sqlite/

https://firebase.google.com/docs/android/setup