



Project Increment-2

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Submitted By:

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1. Introduction

IM WORD

Our project was to develop a hybrid application “IM Word” which is a word building application. Our focus here was to develop an application which consists of vocabulary building for users of all ages. This application can be used for users to learn new words based on images, increase their knowledge, helps in gaining exposure to new languages.

Each user will be provided with an account by which he/she can access the application. New user can register with the application by giving his/her basic details and can sign up. If the user already has an account he/she can directly login into the application. For this application we have implemented social login using google and face book authentication using their respective services.

Application consists of two groups, in the first group user has to recognize the word based on the images displayed and it has been divided into 3 levels. In each level the complexity of the word will be increased. As soon as the user completes one level he/she will be navigated to the next level. Users will be regularly updated with the scores. Other part of the application contains identifying a domain/company logo upon some suggestions provided to the user. We have integrated all the features and used REST API's with an interactive user experience.

2. Objectives

2.1 Overall Goal

Objective is to implement a vocabulary building application for adults and kids which is a hybrid application “IM Word”. In this application we have used image processing API's for image analysis.

2.2 Specific Objectives

“IM Word” application can be used for both educational and entertainment purpose. Kids can learn alphabets, object names, numbers and small words so that they can have lively and interactive learning. For Adults, this application can be used for fun and stress release.

3. Features

Main features of the application are vocabulary building and logo identification.

Vocabulary building: Here user is displayed with continuous images and the user should recognize the word based on the image displayed. If the user correctly guesses the word he/she will be directed to the next image. Scores are updated in the user account and the user can view the scores at any time. When the user reaches a certain score he/she will be upgraded to the next level. For this feature we are implementing 3 levels.

Logo Identification: This feature is really an interesting and stress buster for the user. Logos of any domain/ company are displayed to the user and he/she has to identify them correctly. User can view the score from the respective account and can play the game any number of times without any limits.

Words pronunciation: Here once the user correctly identifies the word and if he/she wants to know and learn the pronunciation of the word can click on a small button which converts text to speech using an API and the user can hear the pronunciation of the word multiple times.

4. Existing Services/ API

For this increment we have used Full Contact API, Firebase cloud services and Cordova Oauth and InAppBrowser plugins.

In next increments we will be using Vision API, IBM Watson Analytics API, Clearbit company logo API.

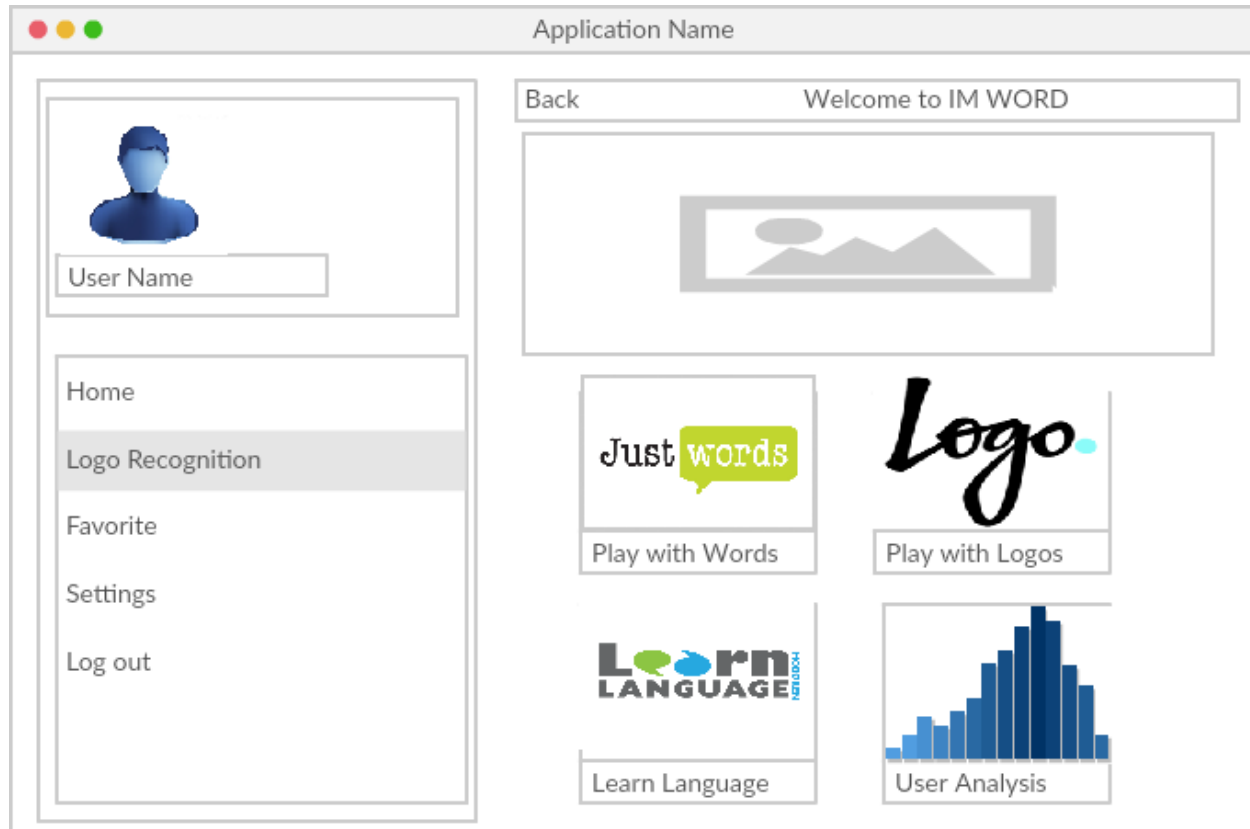
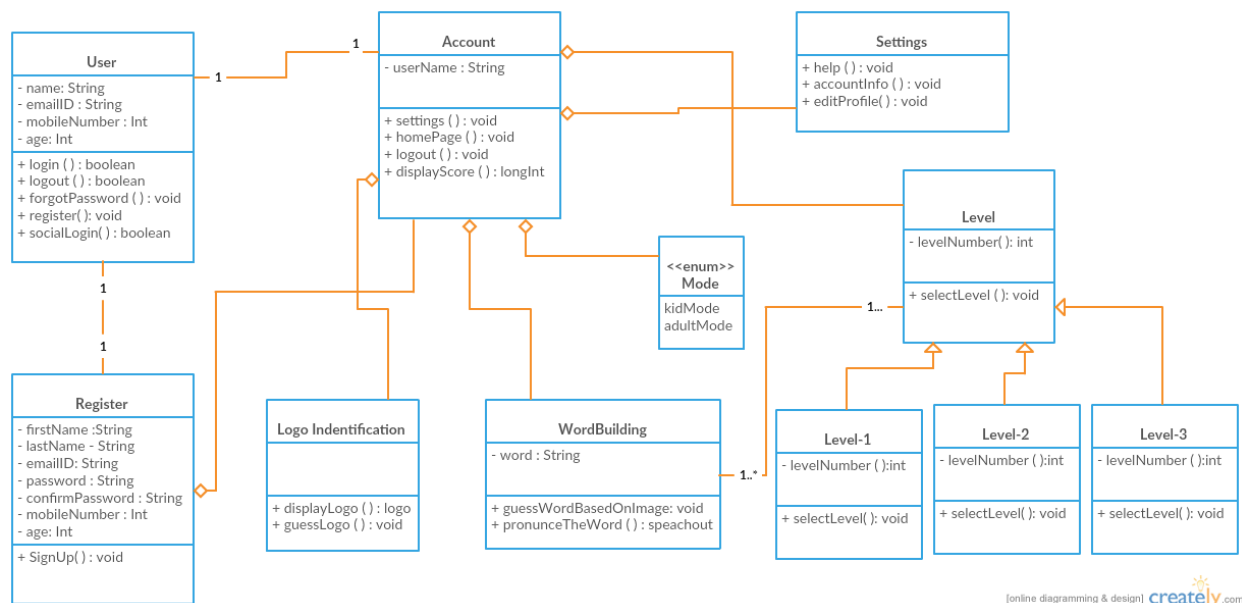
5. Detailed Design of Features

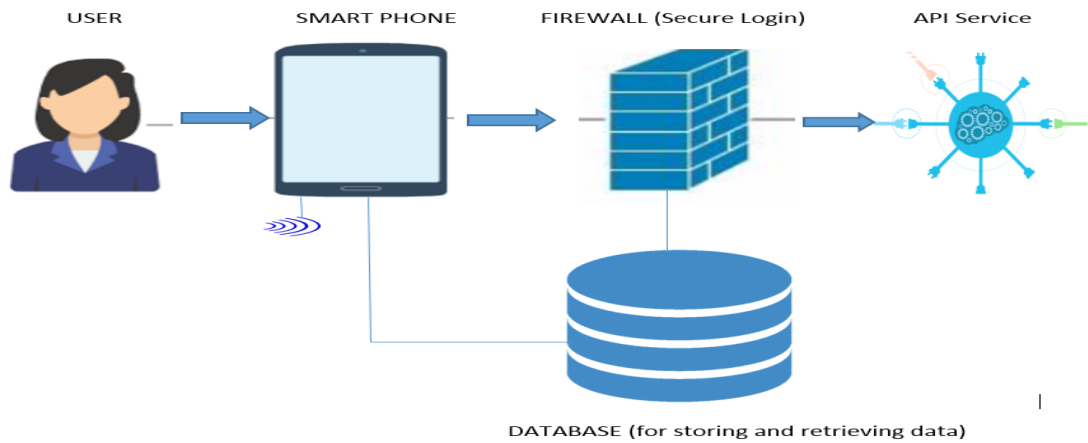
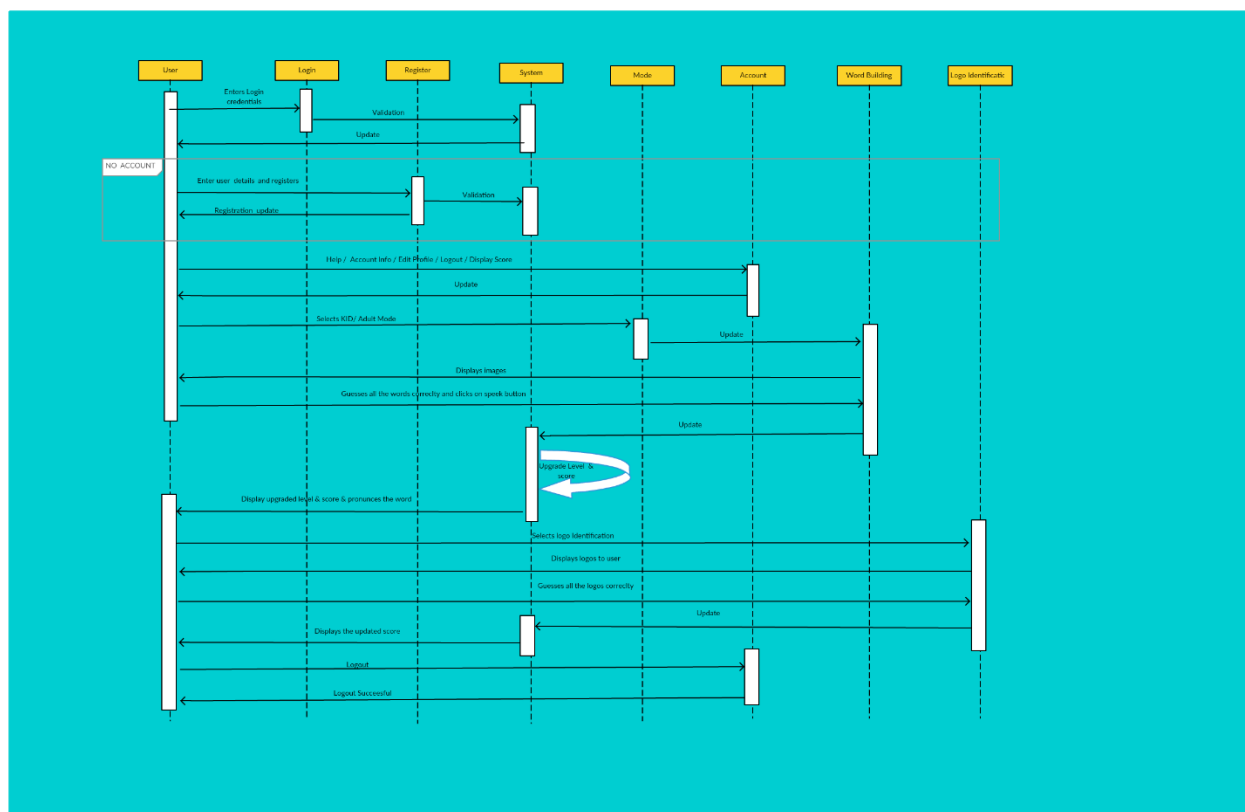
5.1 Wireframes

The below are the wireframes for Login, Registration and home page.

Wireframes for Home Page:

The wireframe shows a web browser window titled "Application Name". Inside the window, there is a header bar with the text "IM WORD". Below the header, there is a large logo featuring the letters "IM" in orange and "WORD" in blue, with a stylized camera lens or shutter in the center. Underneath the logo, there are two input fields: "Email" and "Password". Below these fields is a blue button labeled "Login with Email". At the bottom of the form, there are two buttons: "Facebook" (blue) and "Google" (red).

Wireframes for Home page:**5.2 User Stories****Class Diagram:**

Architecture Diagram:**Sequence Diagram:**

Word Building using images:

Learning words sometimes takes time and it will be a tedious job. Instead if the words can be learned in an interesting way with the help of images will be an enthusiastic task. By using our application users can learn words easily in a game oriented way.

Learning new language:

Learning a new language will always be an exciting process. Users can learn new language using this application with vast number of words.

6. Implementation

We have implemented the application in ionic framework using Web Storm, Nodejs Command line tool for running the application.

Languages Used: Angular JS, HTML, CSS, JavaScript

Software's/Tools Used: Brackets, WebStorm, NodeJS, Firebase.

Database:

We have used firebase cloud services for storing and retrieving the information.

Deployment:

We have deployed the application in both web and mobile and captured the screenshots which are described as below with screenshots.

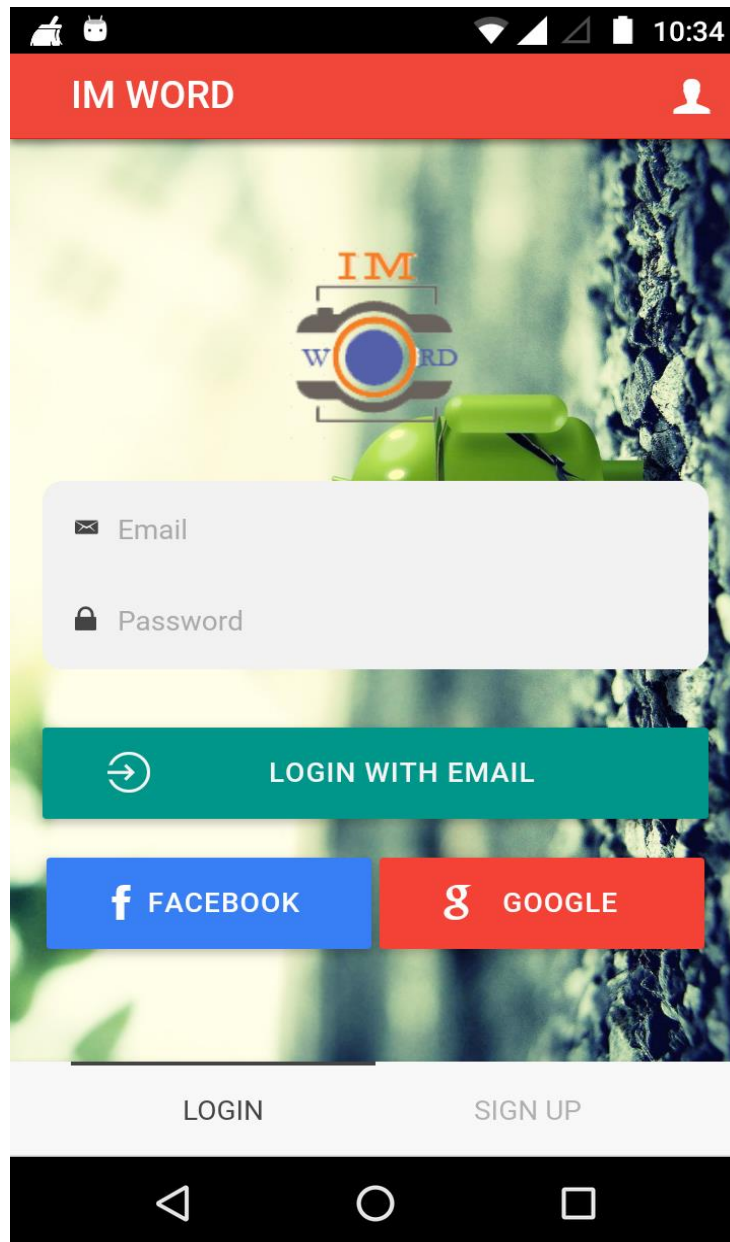
Increment Implementation:

In this increment the project is converted to Ionic which is applicable in both web and android view. Implemented Login and Registration using Firebase service.

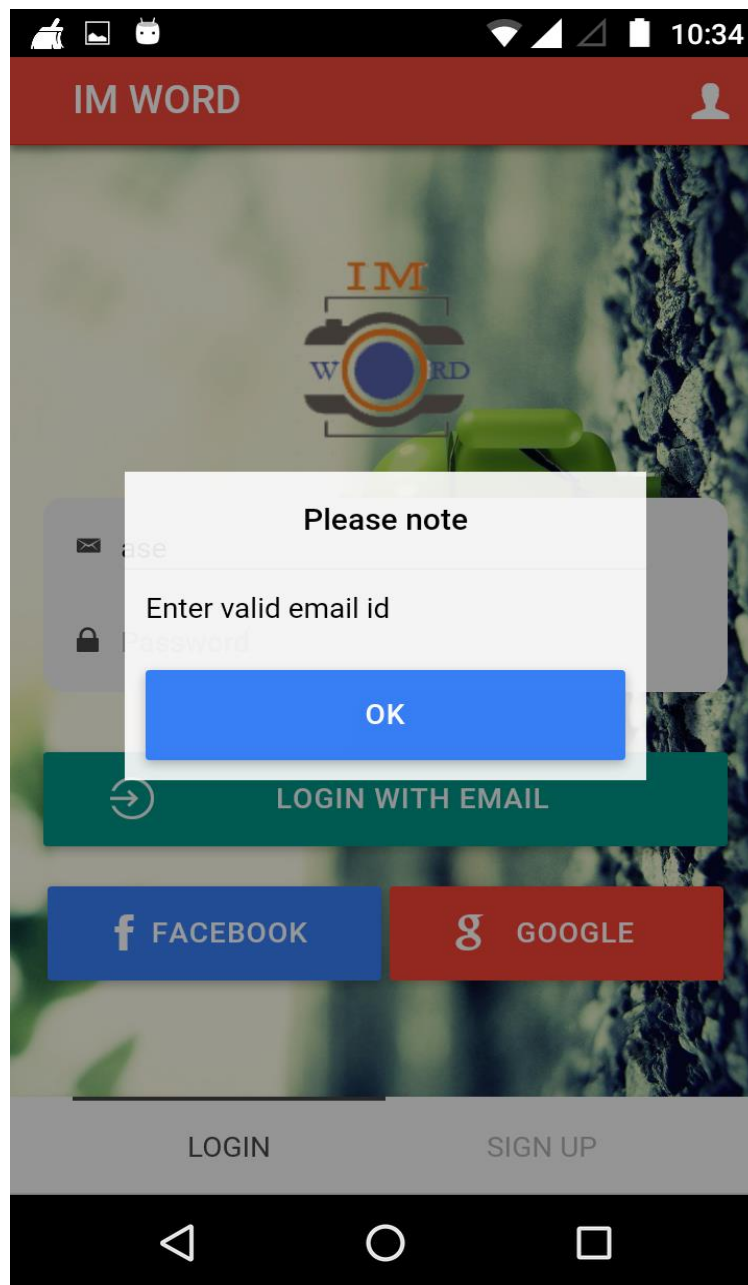
Login Page:

In Login page the user can login using email id and password. If the user has not entered valid email id and password or the email id which is not already registered, then validation will be thrown. Also the user can login through Social Logins Google and Facebook. All the user details are stored in Firebase storage.

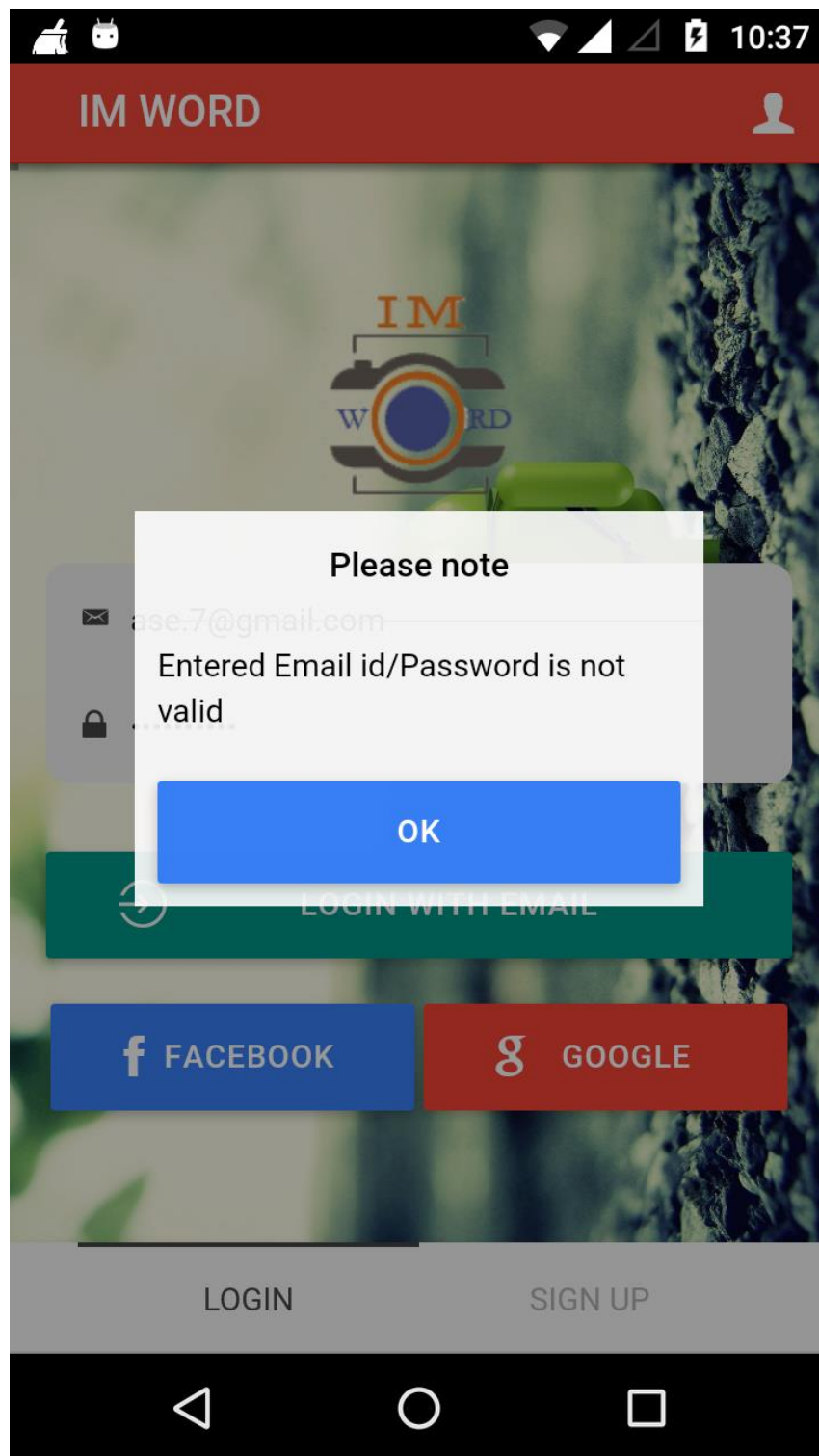
- The below is the Login page where user can to login using valid email id and password.



- Validation thrown when invalid email id is thrown. ('@,' Is not present)



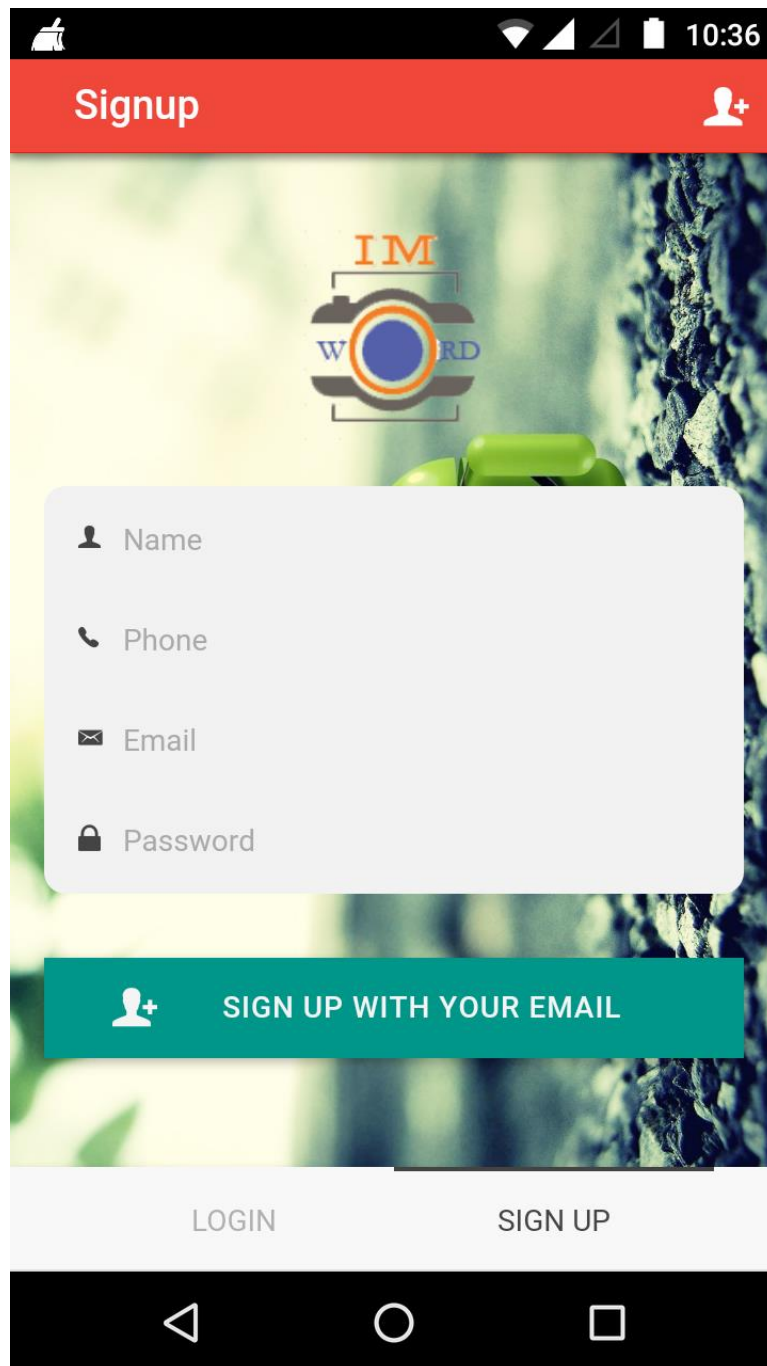
- Validation is thrown if entered email id and password is not present in Firebase.



Registration Page:

New users can sign up is registration page, by giving Name, Phone Number, Email Id, Password. If user has not entered all the details validation will be thrown. Also validation is thrown if the user entered invalid email id and password. If the user selected already registered email id, then validation will be thrown.

- Registration page where user has to enter all valid details.



The screenshot displays a mobile application interface for user registration. At the top, a red header bar contains the word "Signup" in white text and a white user icon. The background of the app is a blurred image of a green apple. In the center, there is a logo featuring the letters "IM" in orange and "WORD" in blue, with a camera lens graphic. Below the logo is a white rounded rectangle containing four input fields: "Name" (with a person icon), "Phone" (with a phone icon), "Email" (with an envelope icon), and "Password" (with a lock icon). At the bottom of this rectangle is a green button with a white user icon and the text "SIGN UP WITH YOUR EMAIL". Below the input fields is a white bar with "LOGIN" and "SIGN UP" buttons. The bottom of the screen shows the Android navigation bar.

- User registered will below details the details will be stored in Firebase.

Signup

IM
WORD

Moulika Chadalavada

913-602-9999

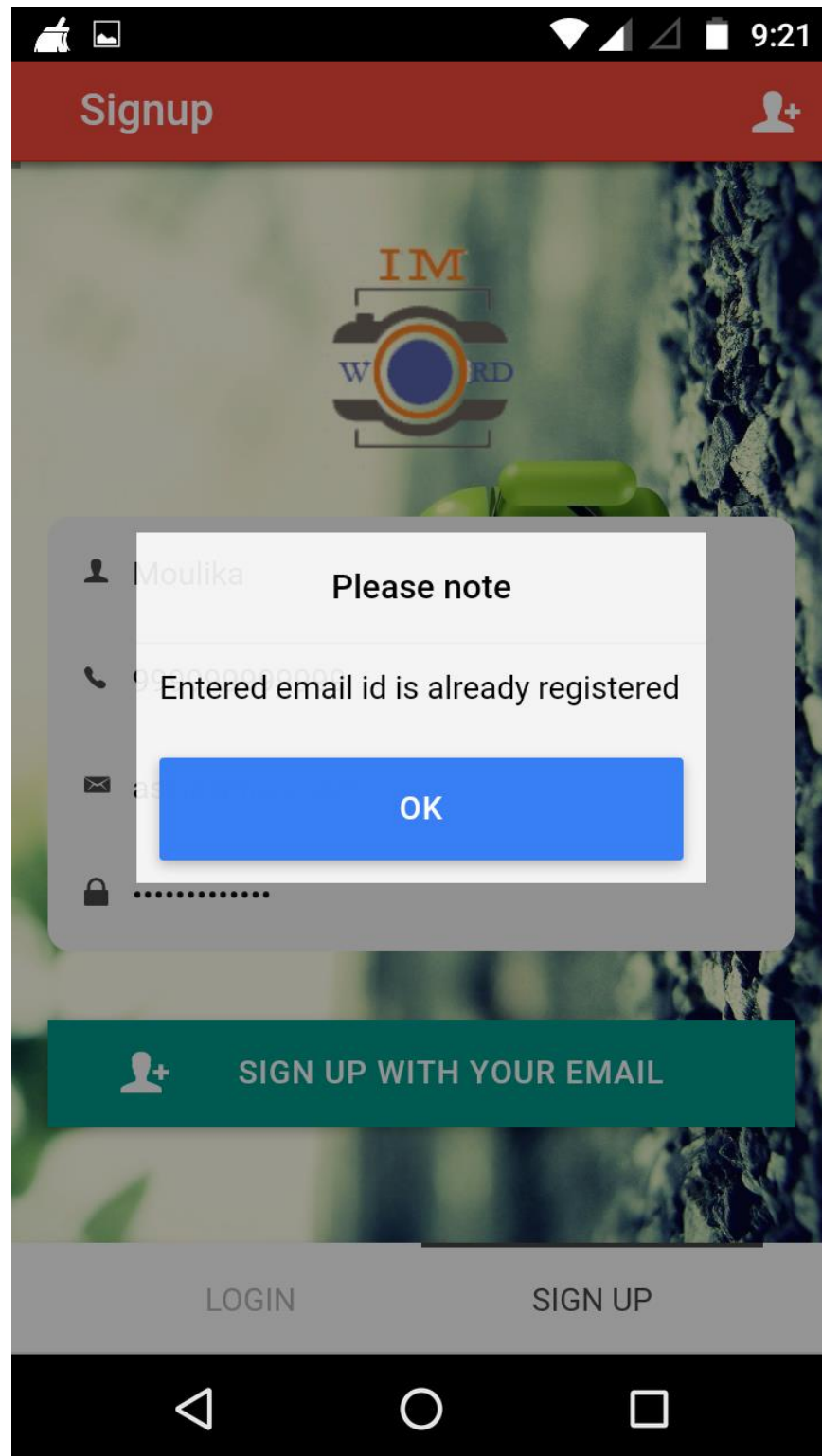
ase.team7@gmail.com

.....

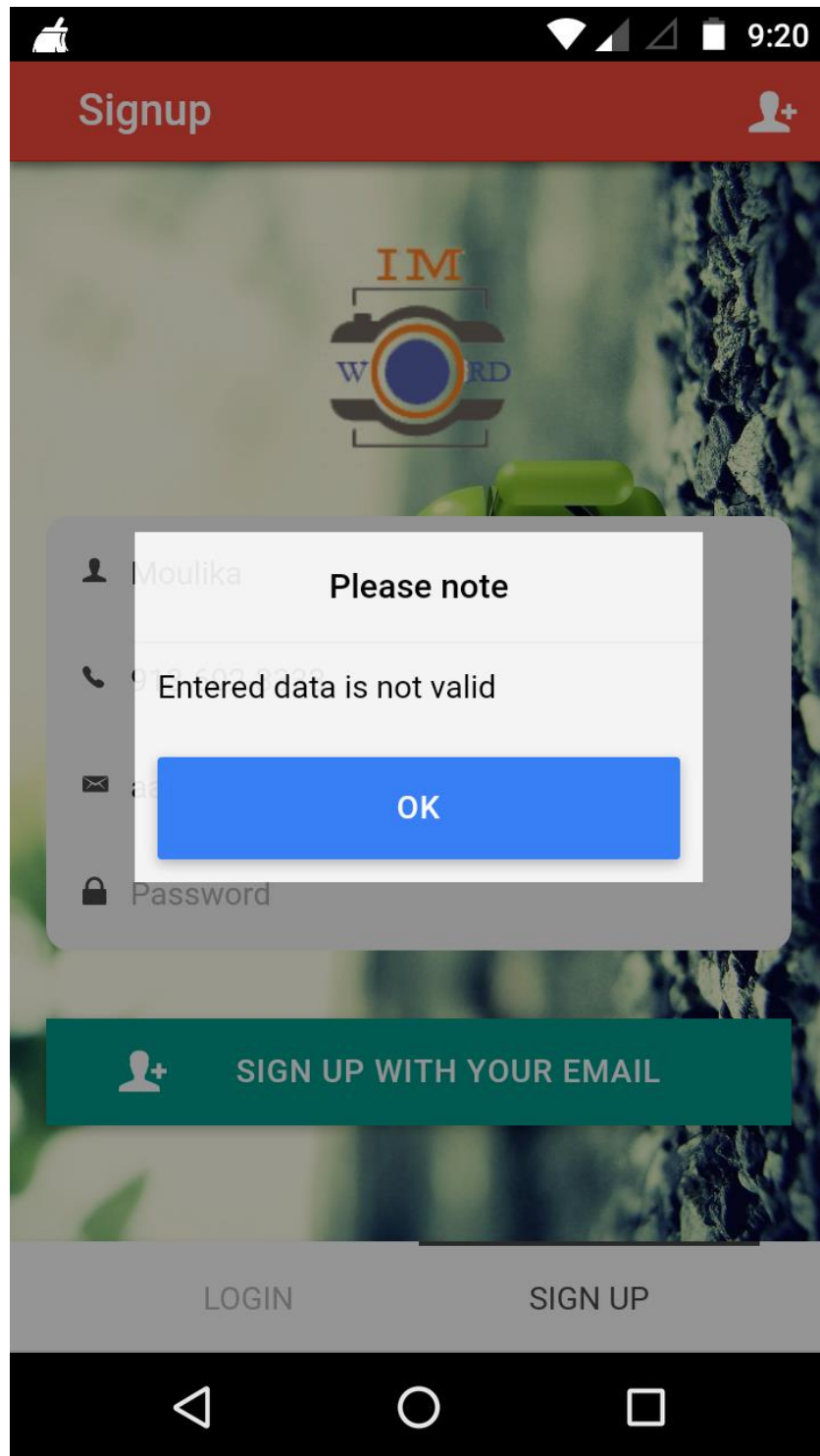
SIGN UP WITH YOUR EMAIL

LOGIN SIGN UP

- Validation thrown if the user has entered already registered email id and password.



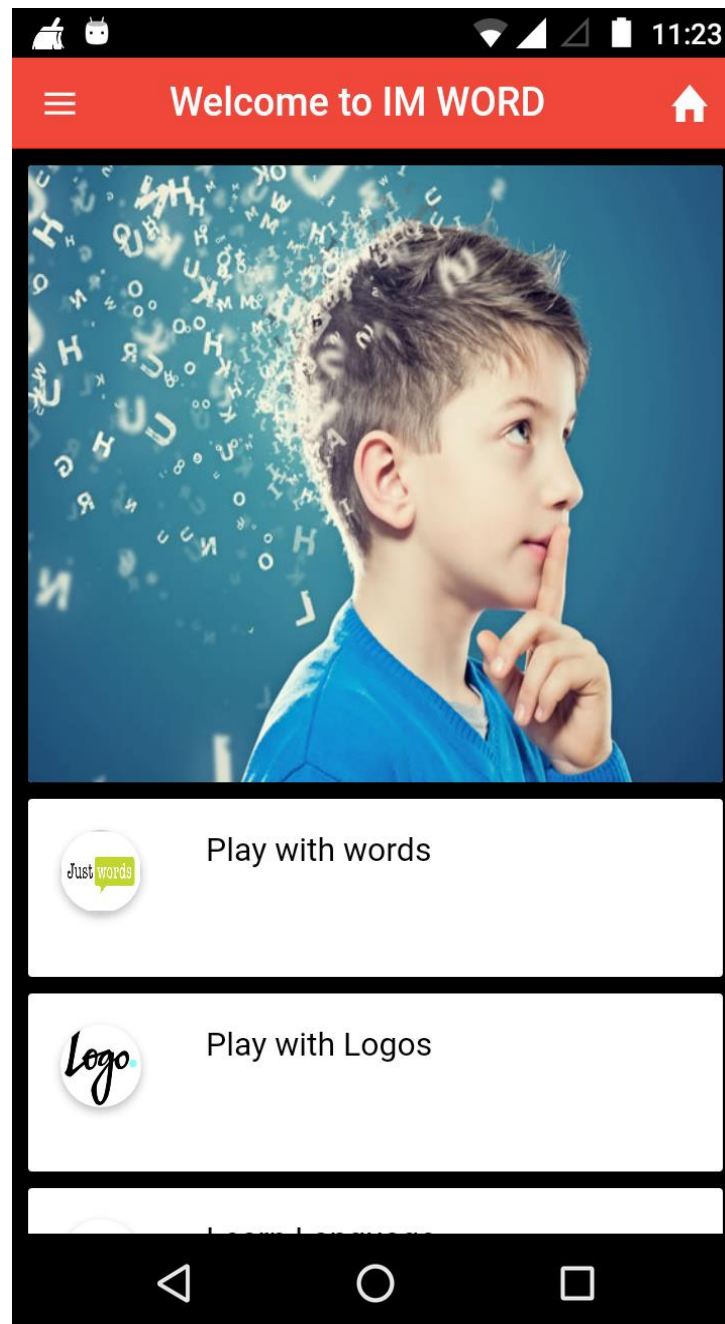
- Validation is thrown if invalid email id and password is entered.



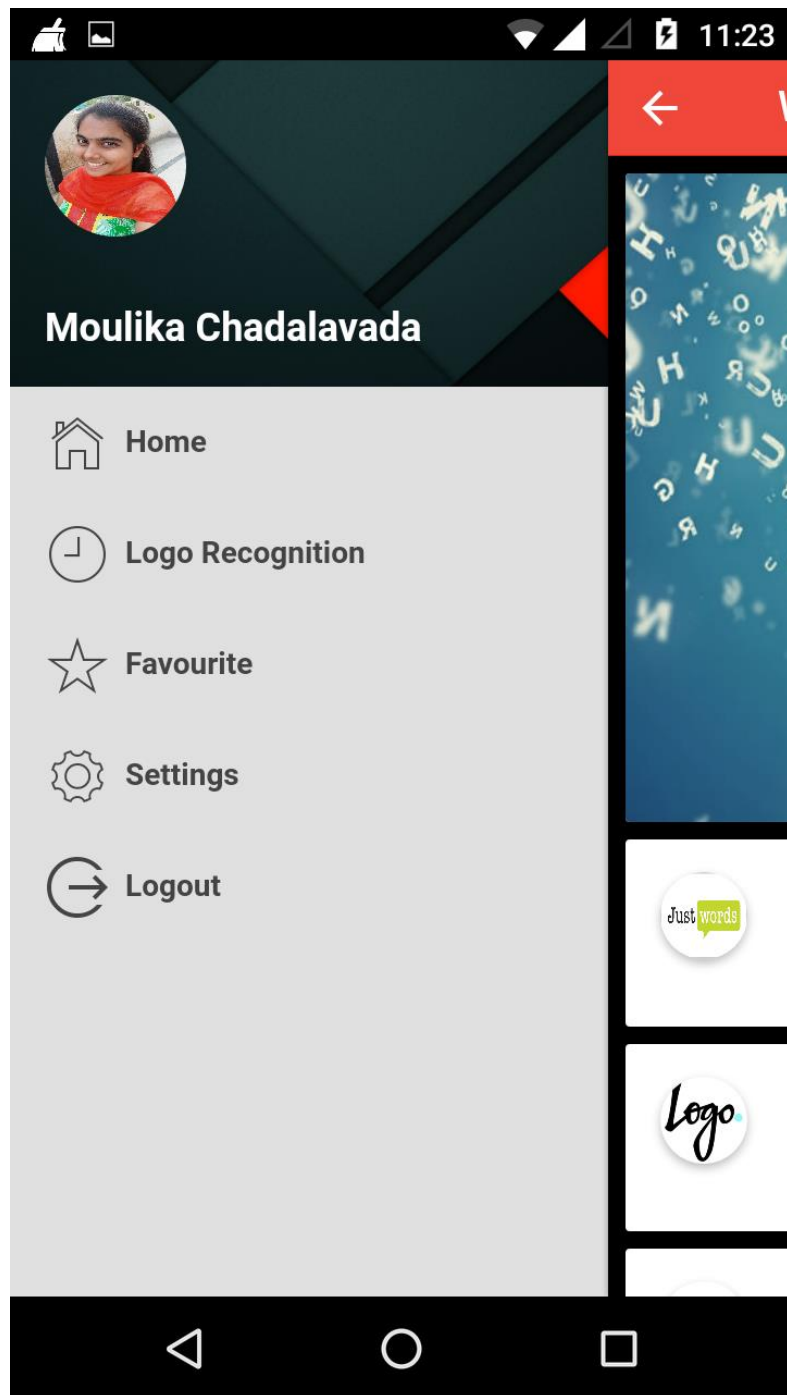
Home Page:

In home page the user is given many option to play with words, logos and know statistics. Side-menu is maintained where in Settings user can view profile details update profile details such as Address, Mobile Number, Password. Also in recognize logo tab when any organizations url is given the organization's details and logo is displayed to user.

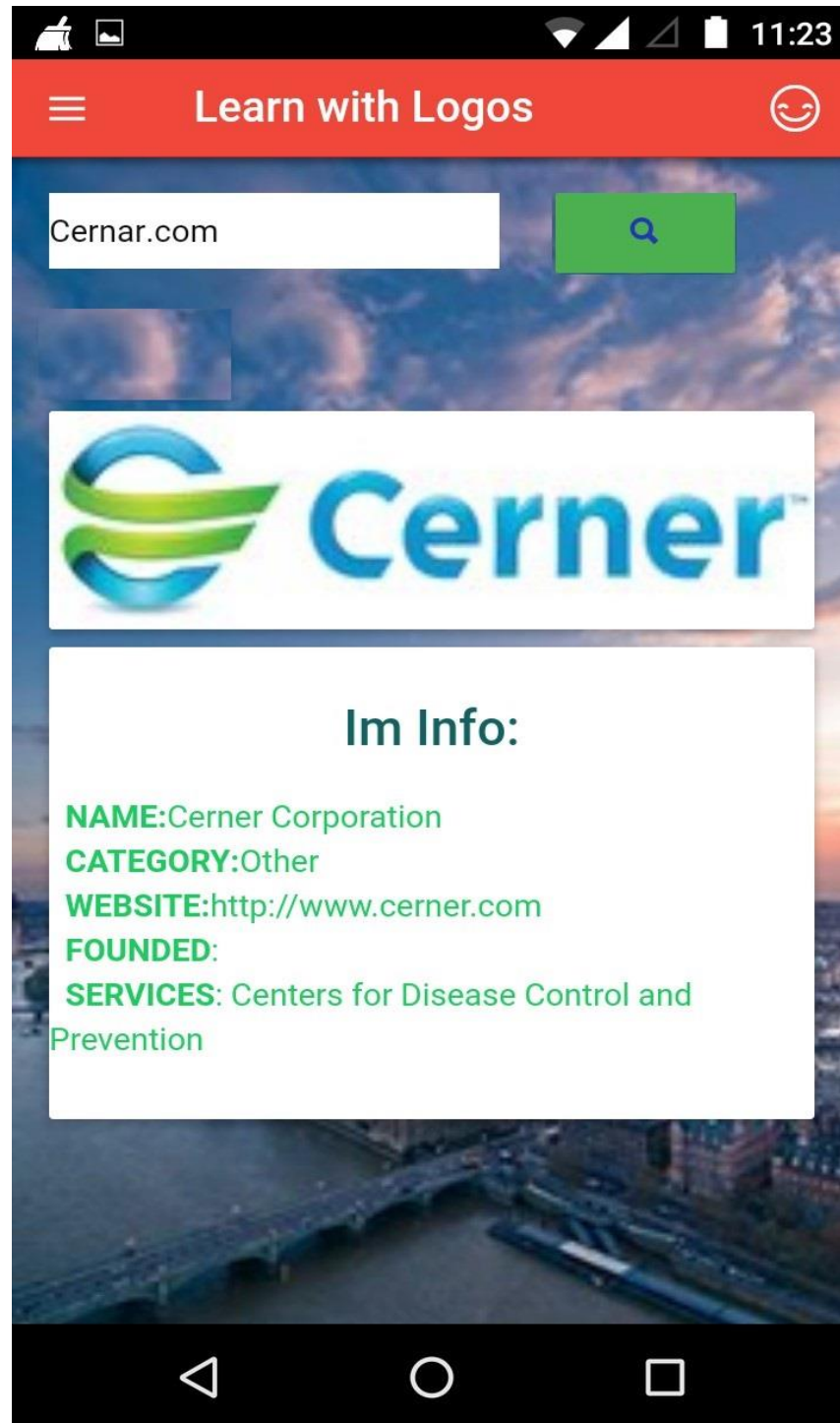
- Home page with options to users.



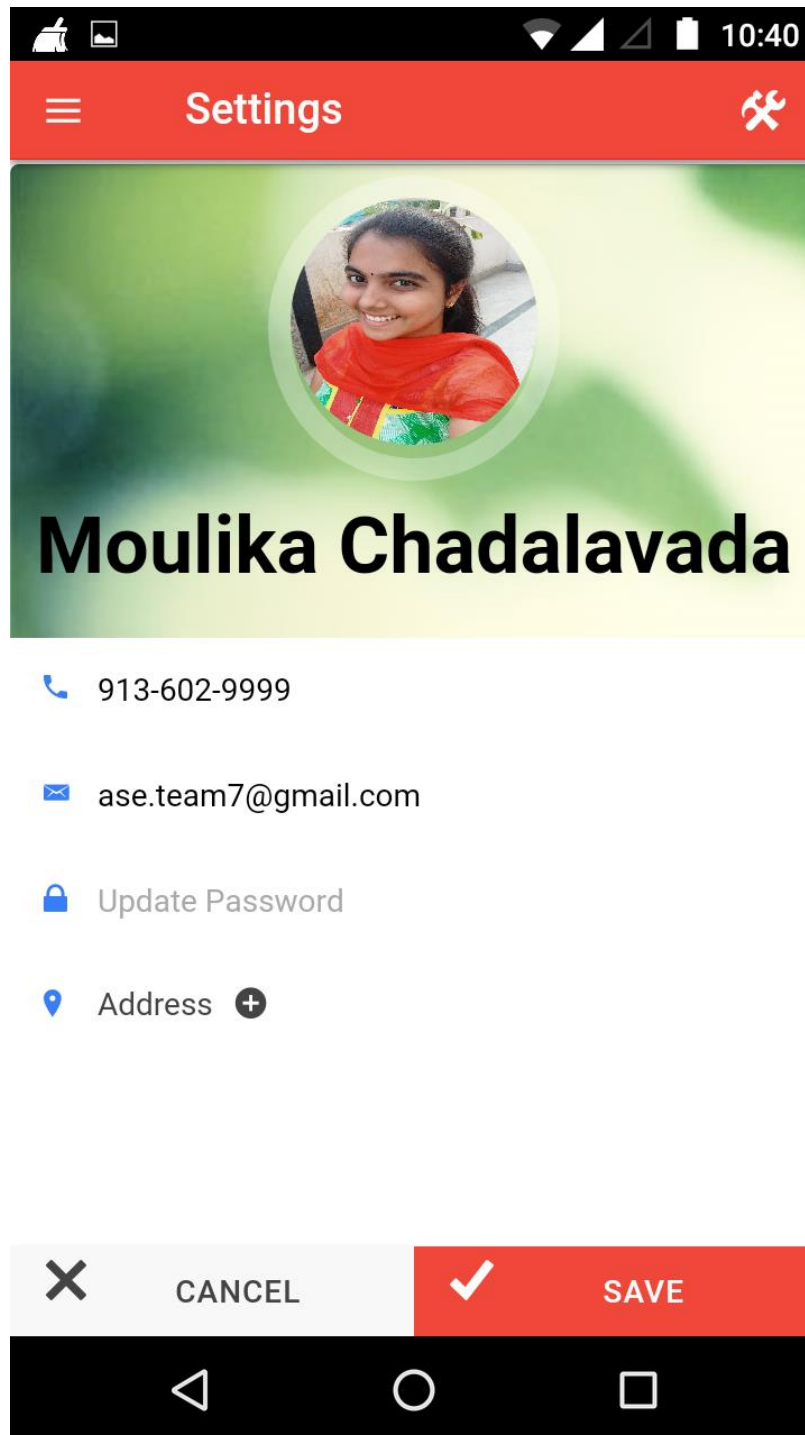
- Side-Menu with options such as Logo-Recognition, Settings, Logout.

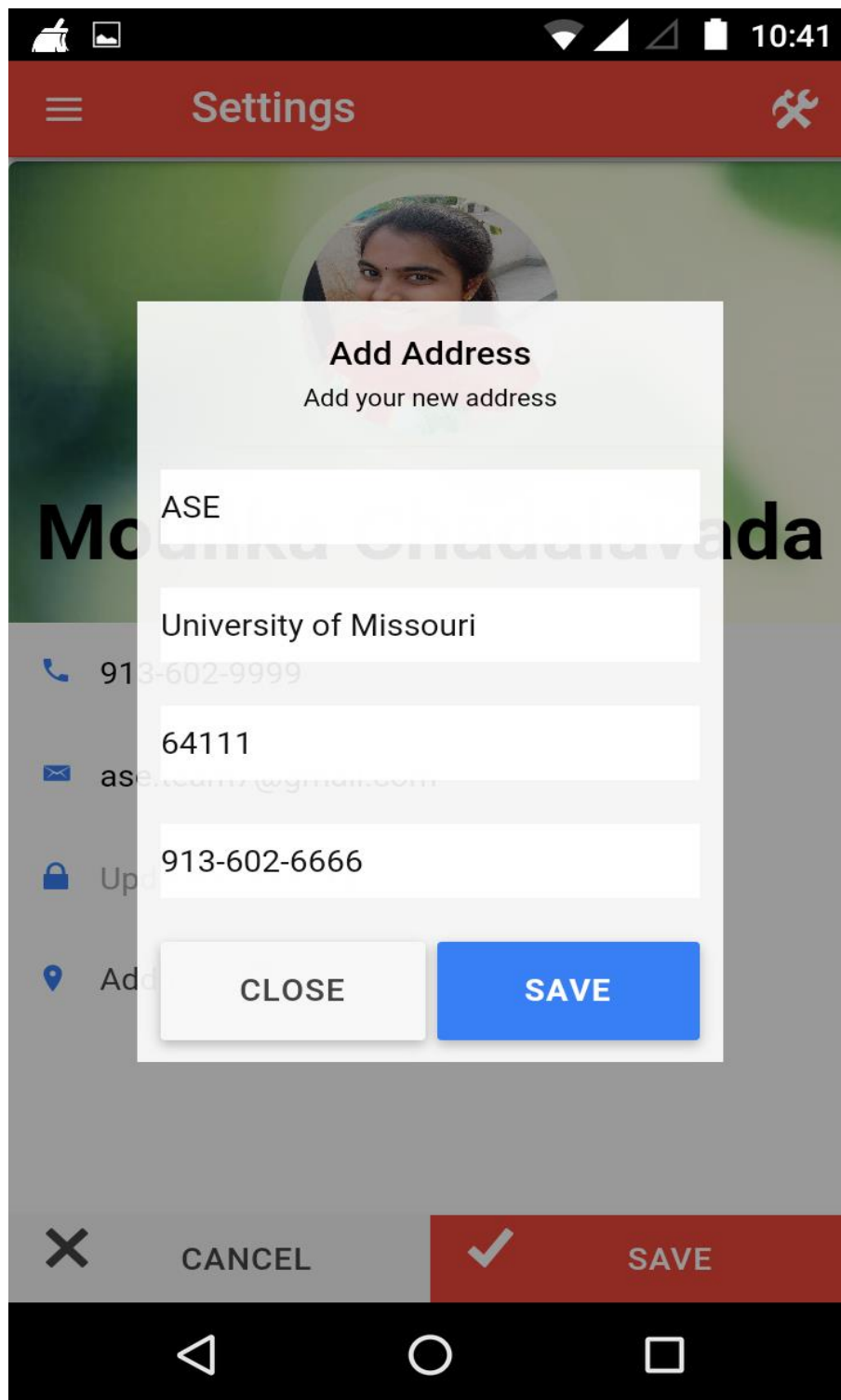


- In side-menu when user clicks on Logo-Recognition below page is displayed to user, when in search button if organization name is given, the logo and details are displayed.



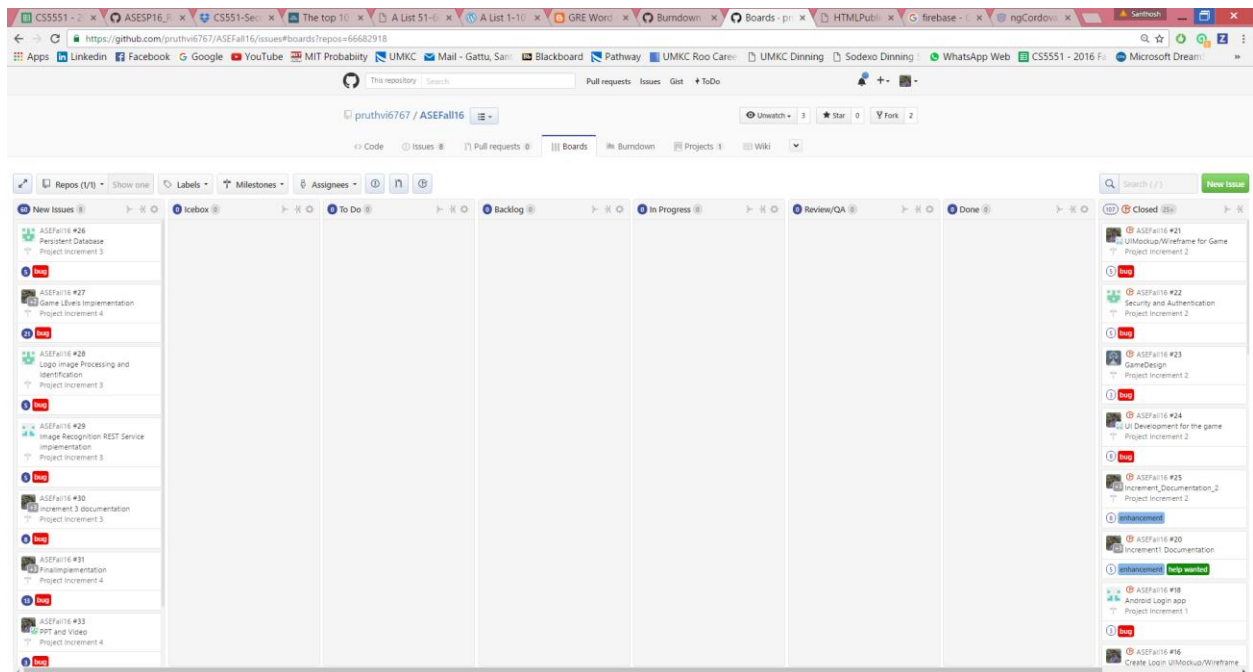
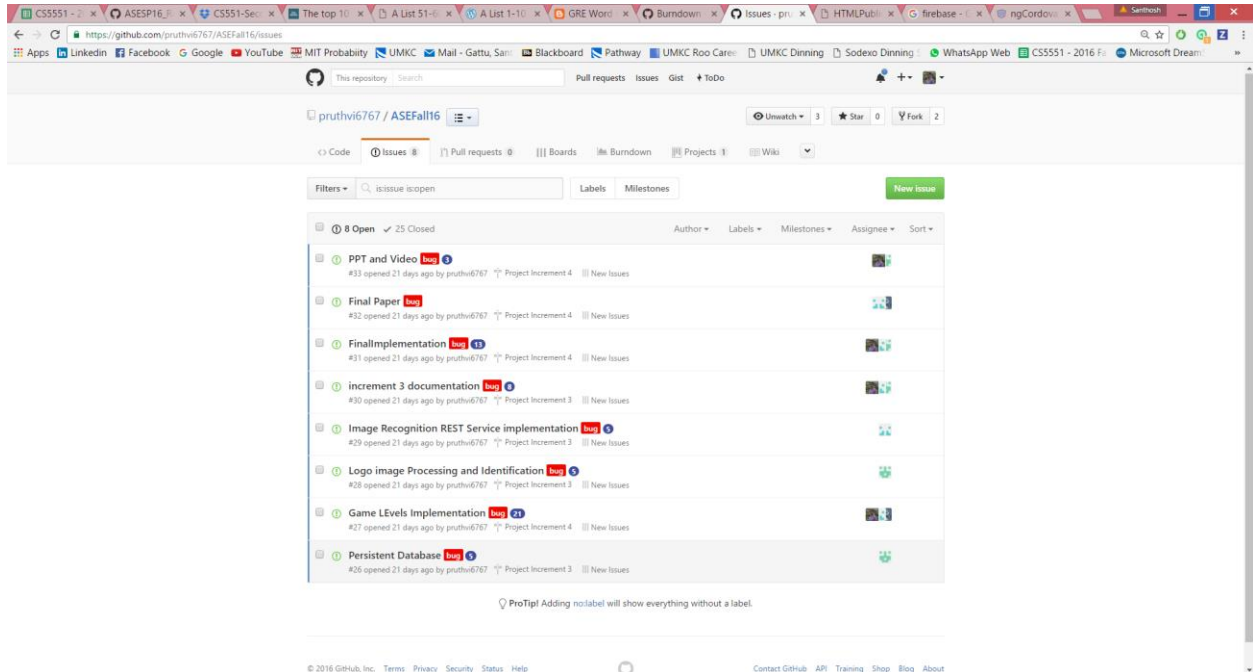
- The below is the settings page where user details are displayed and password, mobile and address can be changed all the changed details are stored in Firebase.



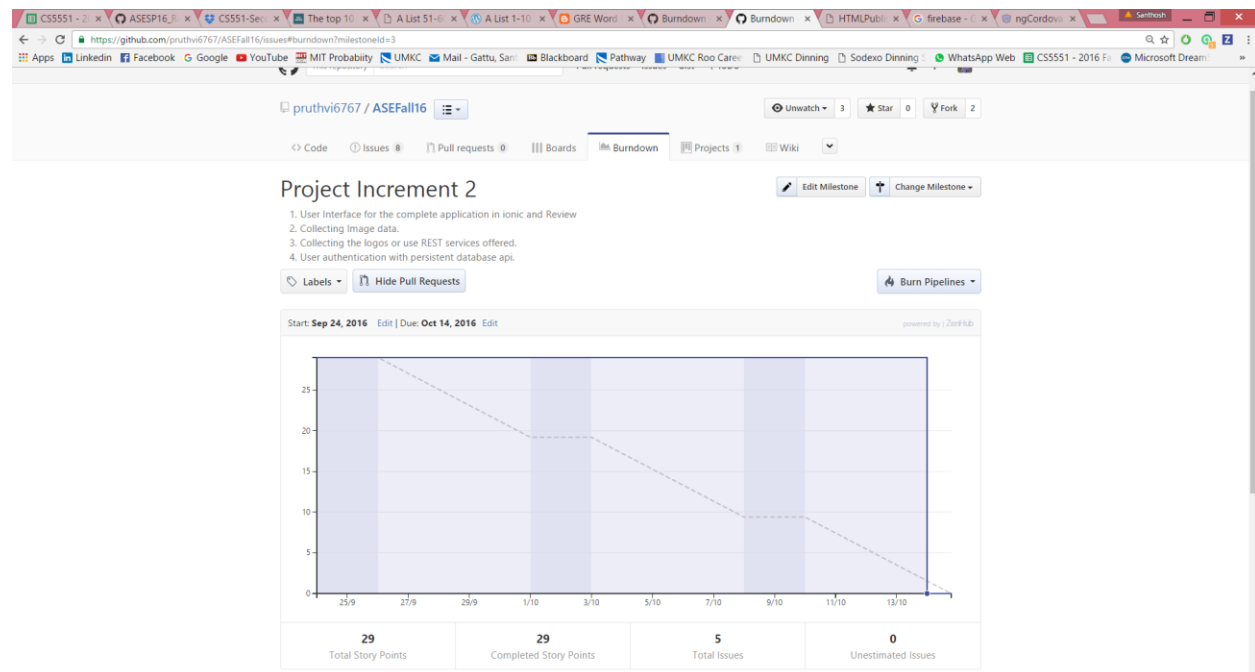


6. Project Management

6.1 Project Timelines, Members, Task Responsibility



Burn down chart



Description:

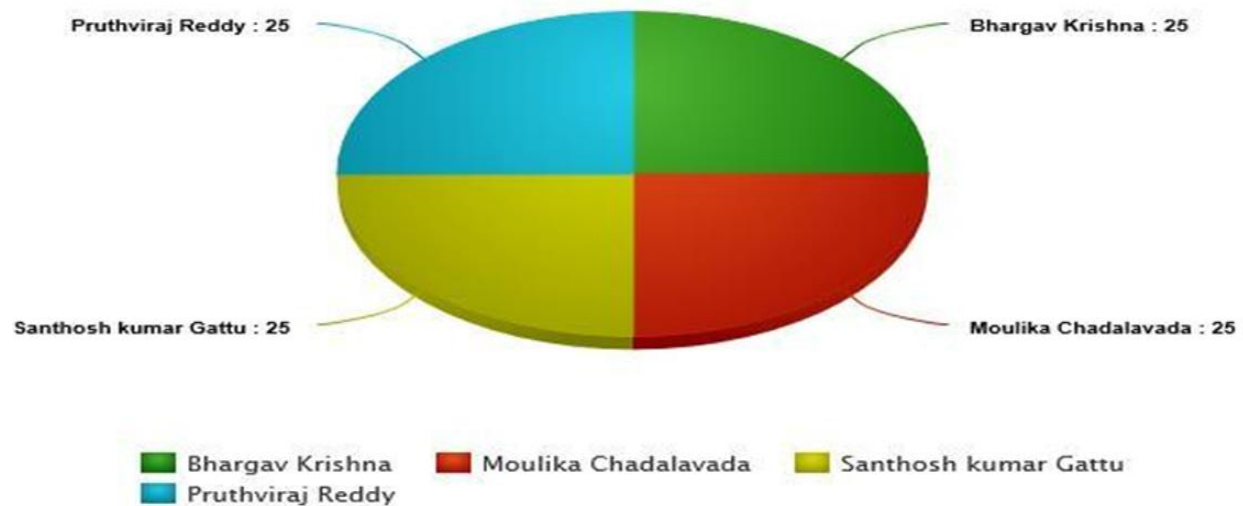
For this increment we have created login page with google and facebook social logins using cordova OAuth services, created registration page, used firebase for storing and retrieving the user details, updated user profile and deployed the application in web and mobile successfully.

Responsibility:

S.NO	Team Member Name	Task Assigned	Status
1	Pruthvi Raj Reddy Chukkanagari	Designing login page, implementing google social login, integrating firebase for user details, deploying application, documentation	Completed
2	Moulika Chadavalavada	Designing registration page, implementing facebook social login, integrating firebase for user details, deploying application, documentation	Completed
3	Santhosh Kumar Gattu	Designing login page, implementing google social login, collecting images and words, documentation	Completed
4	Bhargav Krishna Velagapudi	Designing registration page, implementing facebook social login, integrating firebase for user details, documentation	Completed

Time taken:

50 hours

Contributions:**Work to be completed:****Description:**

For the next increment we have planned to implement word building feature with different levels and tracking the user game, updating score to the user, implementing text to speech feature.

Responsibility:

S.NO	Team Member Name	Task Assigned	Status
1	Pruthvi Raj Reddy Chukkanagari	Word building feature implementation and integrating with different levels and documentation	Not started
2	Moulika Chadalavada	Tracking the user game, integrating score feature with the progress of the game, implementing text to speech feature and documentation	Not started
3	Santhosh Kumar Gattu	Word building feature implementation and integrating with different levels and documentation	Not started

4	Bhargav Krishna Velagapudi	Tracking the user game, integrating score feature with the progress of the game, implementing text to speech feature and documentation	Not started
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Estimated Time:

90 hours

Issues/Concerns

1. Faced issues while deploying the social login, it was working fine in the web but not in the mobile.
2. Had issues while integrating the firebase with the application for updating user details.

7. Deployment

- We have deployed the application in mobile and captured the screenshots.
- Also deployed the same in web application.
- We have explained them in detail under Implementation section above.
- GitHub URL for the project documentation and source code
<https://github.com/pruthvi6767/ASEFall16/wiki/Project-Increment-2>

8. Bibliography

<http://grepicture.wordpress.com/2009/01/22/a-list-1-10/>

<http://ionicframework.com/>

<http://ngcordova.com/docs/plugins/>