

CS 5551 – Advanced Software Engineering

Project Increment-2

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

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.

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

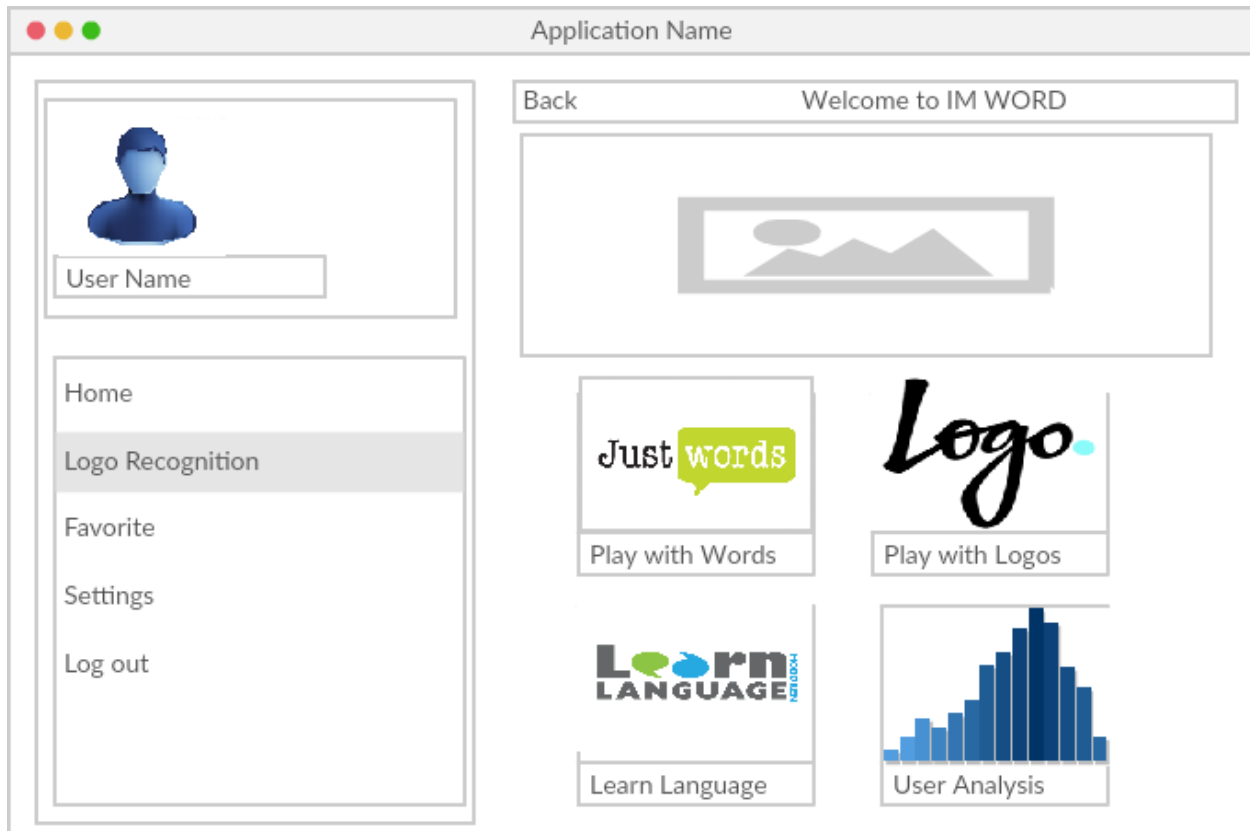
API and the user can hear the pronunciation of the word multiple times.

4. Existing Services/ API

For this increment we have used FullContact API, Firebase cloud services and cordova Oauth service plugin.


5. Detailed design of Features

Wireframes



Application Name

IM WORD



Email

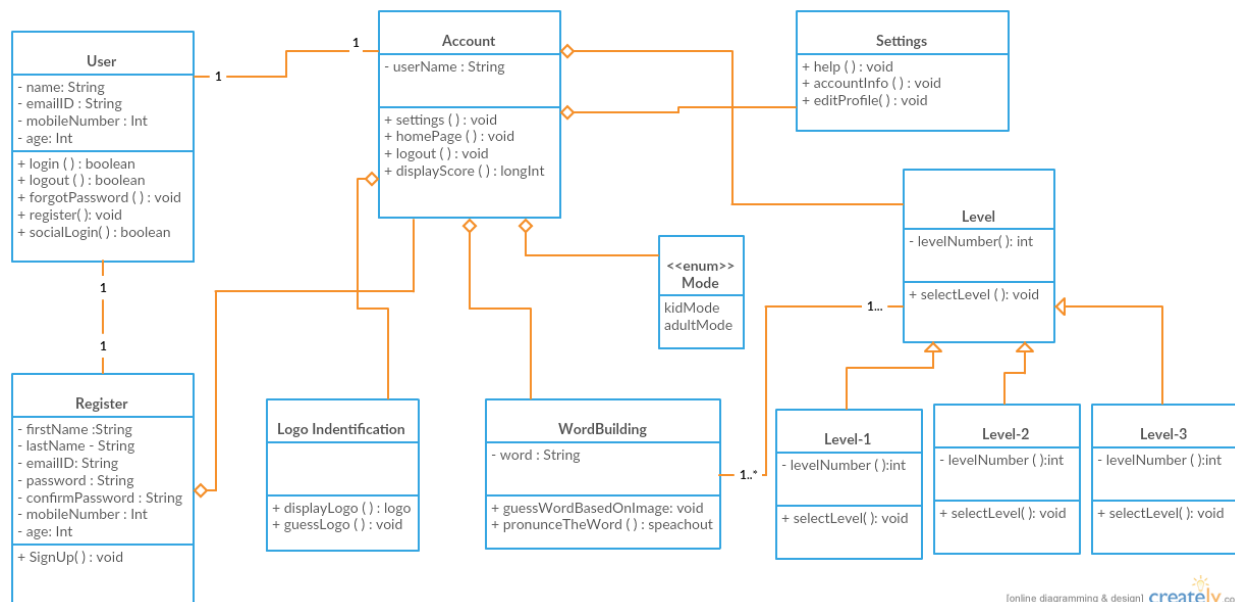
Password

Login with Email

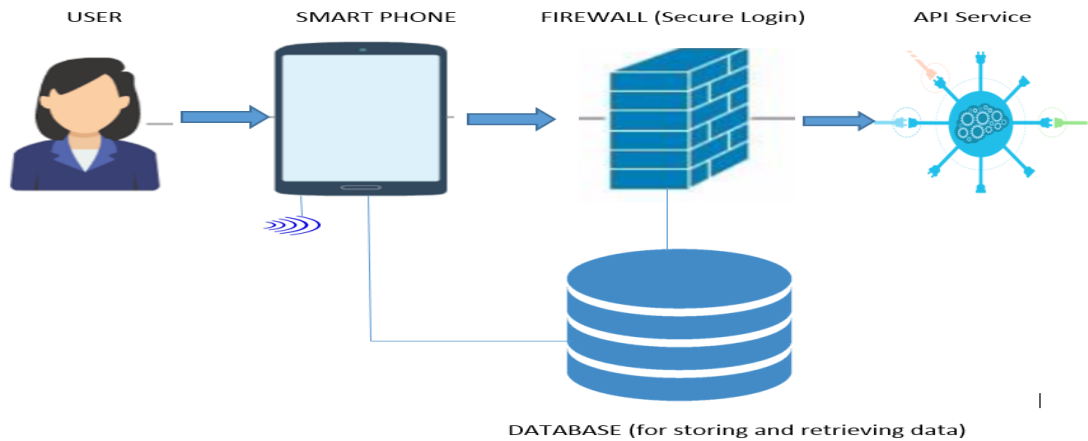
Facebook

Google

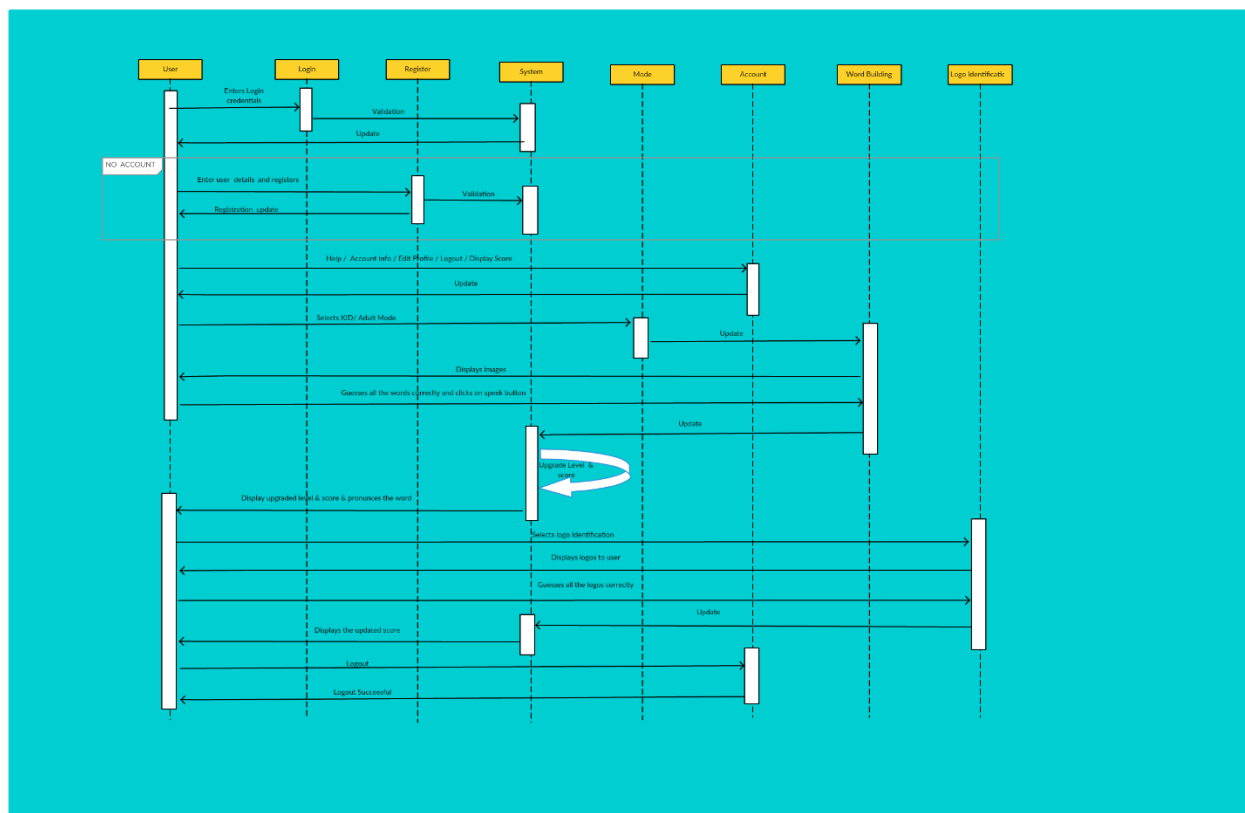
Class Diagram:



Architecture Diagram:



Sequence Diagram:



Word Building using images:

Learning words sometimes takes time and bit will be tedious job. Instead if the words can be learned in an interesting 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 WebStorm, nodejs Command line tool for running the application.

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.

IM WORD



Email

Password



LOGIN WITH EMAIL

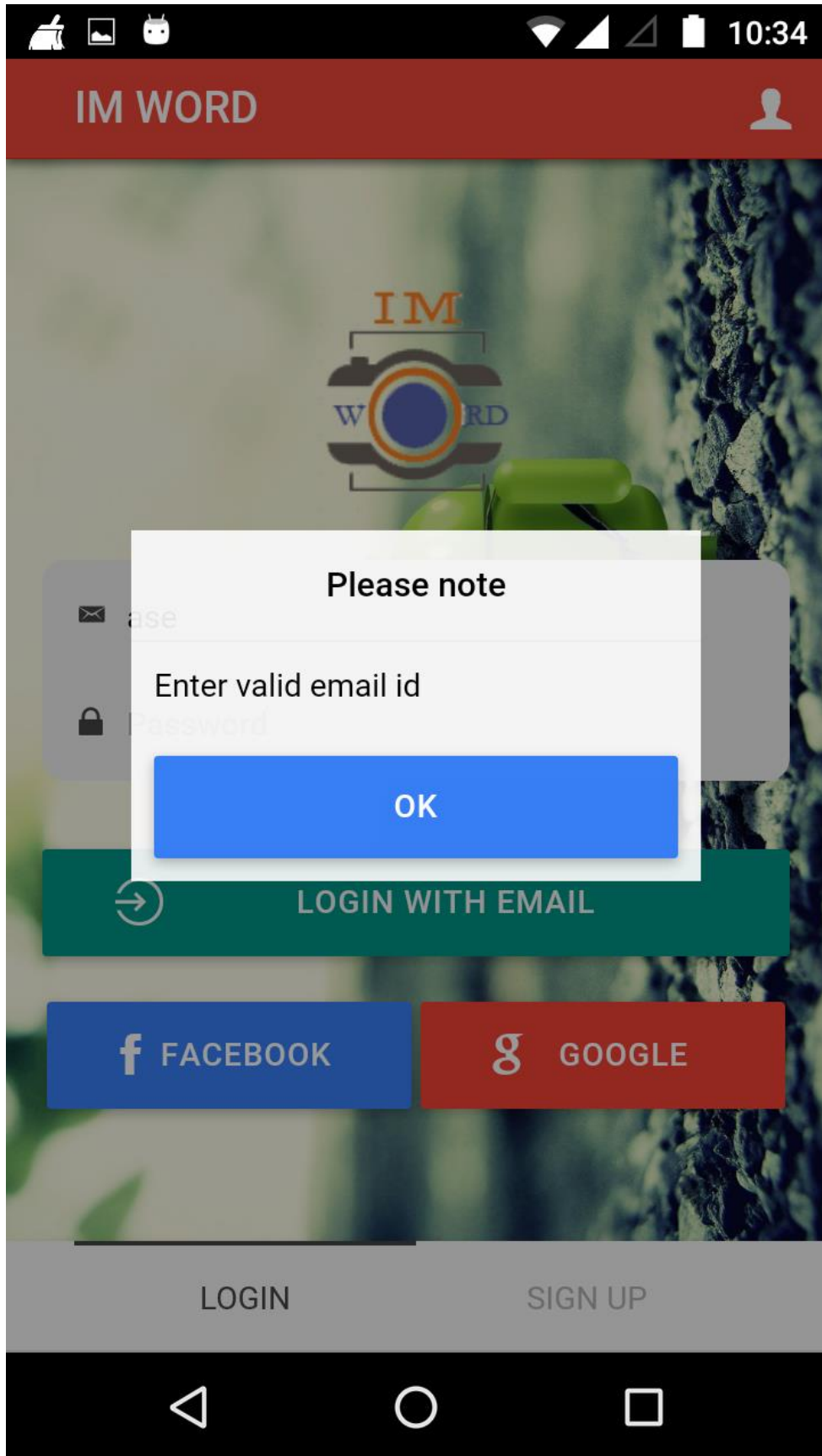
f FACEBOOK

g GOOGLE

LOGIN

SIGN UP






Signup



 Name

 Phone

 Email

 Password

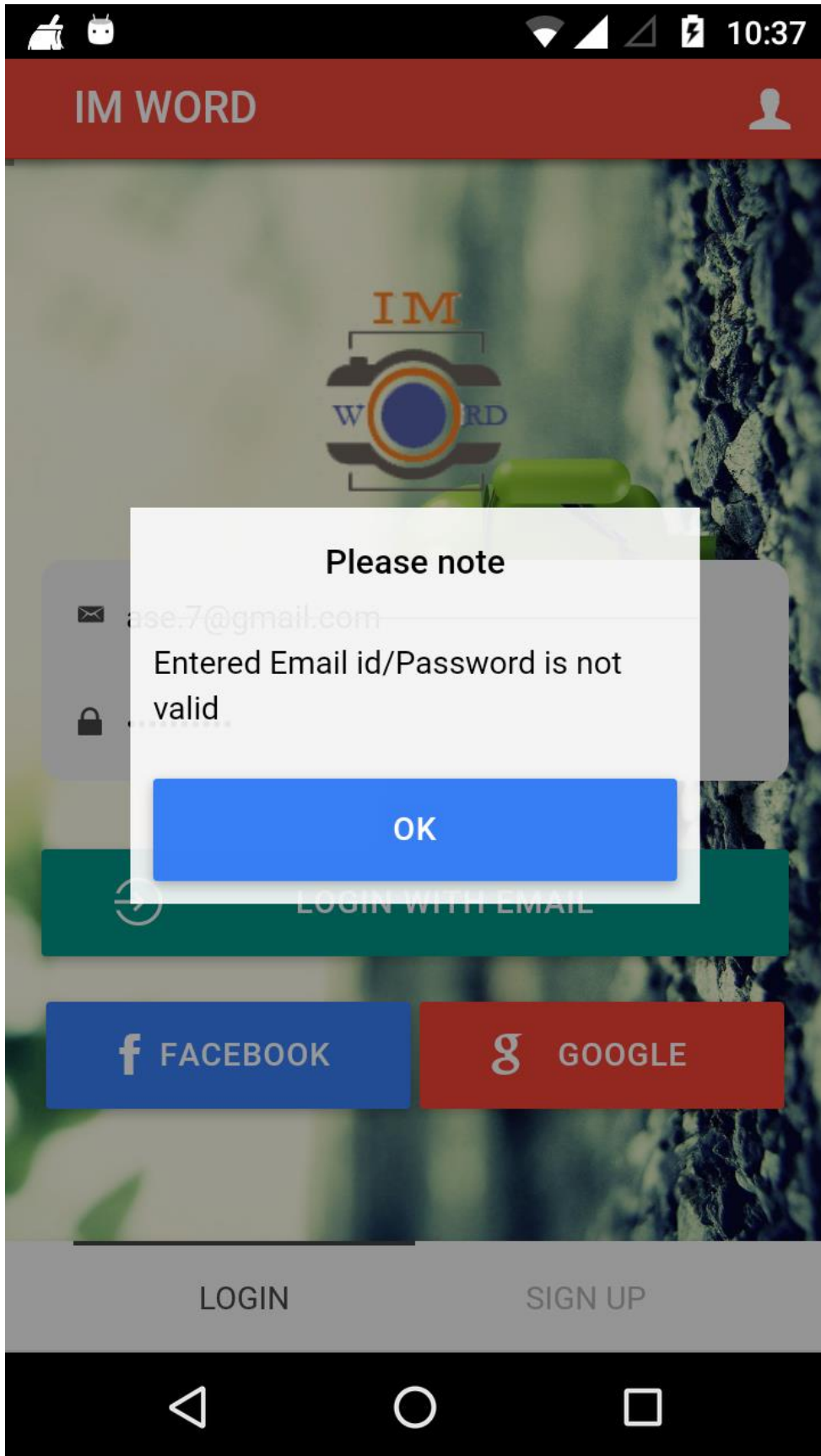


SIGN UP WITH YOUR EMAIL

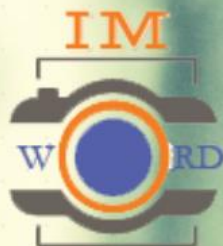
LOGIN


SIGN UP







Signup



 Moulika Chadalavada

 913-602-9999

 ase.team7@gmail.com

|



SIGN UP WITH YOUR EMAIL

LOGIN

SIGN UP





Settings



Moulika Chadalavada



913-602-9999



ase.team7@gmail.com



Update Password



Address 








CANCEL




SAVE








10:41

Settings



ASE


University of Missouri

64111


913-602-6666

CLOSE

SAVE



CANCEL



SAVE



Welcome to IM WORD



Play with words



Play with Logos



Play with Logos





Cerner.com



Im Info:

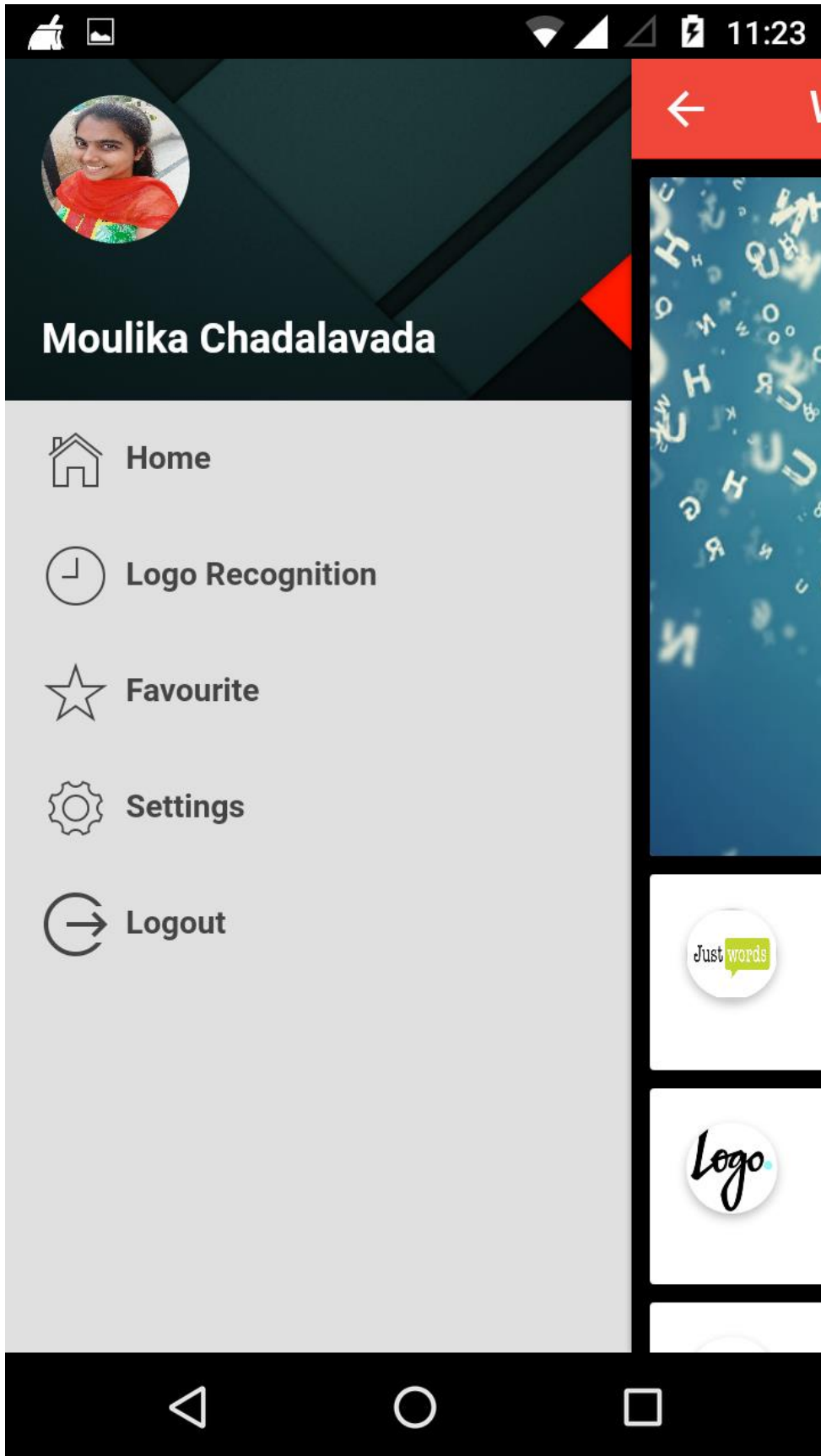
NAME:Cerner Corporation

CATEGORY:Other

WEBSITE:<http://www.cerner.com>

FOUNDED:

SERVICES: Centers for Disease Control and Prevention



7. Project Management

1. Project Timelines, Members, Task Responsibility

Work Completed

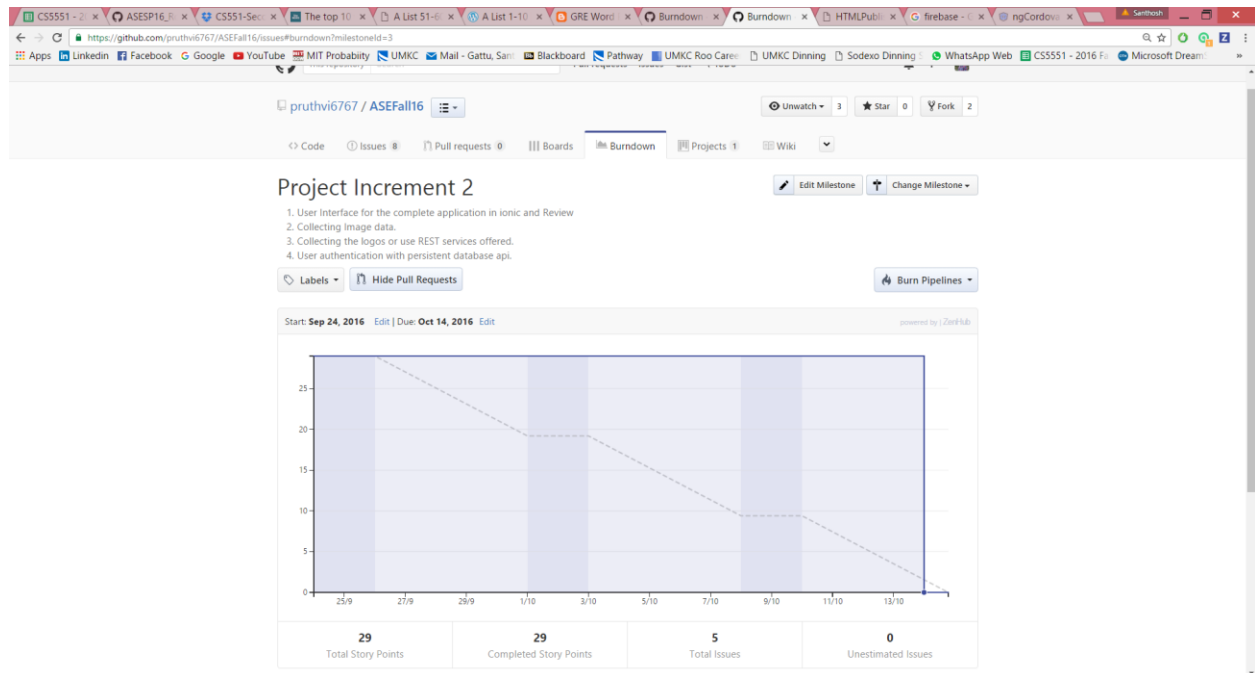
This screenshot shows the GitHub repository page for 'pruthvi6767 / ASEFall16'. The 'Issues' tab is selected, displaying a list of 8 open issues and 25 closed issues. The issues are listed with their titles, IDs, and status. The 'New issue' button is visible in the top right corner.

Issue Title	ID	Status
PPT and Video	#33	Open
Final Paper	#32	Open
FinalImplementation	#31	Open
increment 3 documentation	#30	Open
Image Recognition REST Service implementation	#29	Open
Logo image Processing and Identification	#28	Open
Game LLevels Implementation	#27	Open
Persistent Database	#26	Open

This screenshot shows the GitHub repository page for 'pruthvi6767 / ASEFall16' with the 'Boards' tab selected. The board displays a Kanban-style view of issues, categorized by status: New Issues, In Progress, Review/QA, and Done. The issues are listed with their titles, IDs, and status.

Issue Title	ID	Status
Persistent Database	#26	Open
Game LLevels Implementation	#27	Open
Logo image Processing and Identification	#28	Open
Image Recognition REST Service implementation	#29	Open
increment 3 documentation	#30	Open
FinalImplementation	#31	Open
PPT and Video	#33	Open

Burn down chart



Description:

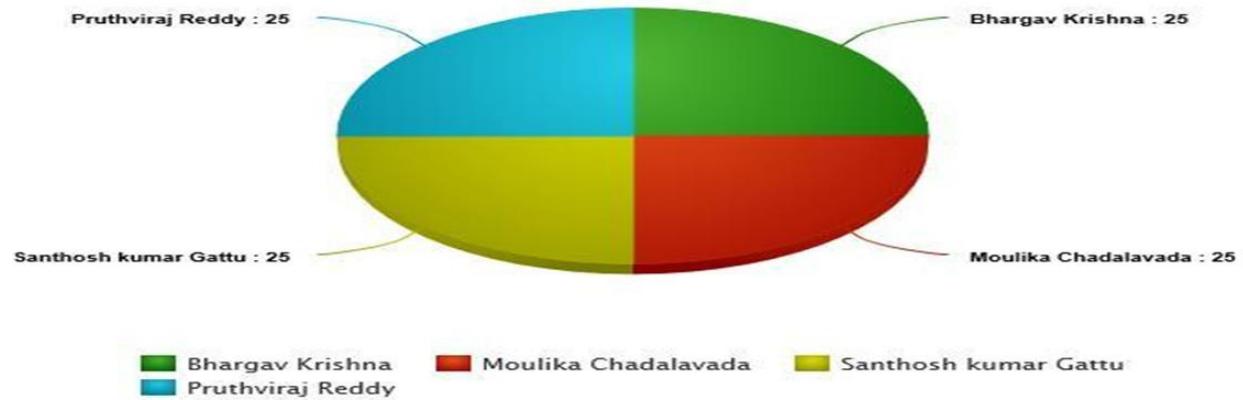
For this increment we have created login page with google and facebook social logins using cordova Oauth services, created registration page, used firebase for storing and retrieving the user details, updated user profile and deployed the application in web and mobile successfully.

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 Chadavalada	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

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.

8. Bibliography:

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

<http://ionicframework.com/>

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