

ASE

Project Plan & First Increment

Fall 2016

TEAM: 7

Chukkannagari, Pruthvi Raj Reddy
Velagapudi, Bhargav Krishna
Gattu, Santhosh Kumar
Chadalavada, Moulika

ASE



1. Introduction

IM WORD

“IM Word” is a hybrid application with the main idea to offer image based learning of vocabulary which is more easy and efficient. Our objective is to build a game combined with hint images and words which helps users to expand their knowledge in vocabulary. In turn, this also helps to users learn a new language which is a very good use of our application.

In addition to these the application also includes the logo identification game with a recommendation system to suggest logos of other similar organizations. Moreover, we would like to also include celebrity identification using their images. All these services are offered only when the user registers in the application. We are also including the social sign in plugins so that any user can login without the hassle of signup/registration forms.

The word building game with images is categorized into two. One consists of three levels -identifying the word using the hint images/image is the task at each level. The second category is finding the words embedded in the image. This helps the user to know the object names in the image and triggers enthusiasm. Furthermore, we have also included the kid and adult mode in the application which distinguishes the complete view/game experience and the difficulty in levels of the game. We would like to implement some the image processing REST API's which would be relevant to the application and creates an education experience.

2. Project Goal and Objectives

2.1 Overall Goal

Goal is to develop an hybrid application “IM Word” which is a word building game for both kids and adults. It uses image processing API's for image analysis and verifies the answer given by the user.

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.

2.3 Specific Features

Word building: This feature is divided into two categories.

1. In this feature, application displays a series of images which convey a specific word. User should analyze the images and guess the word correctly. Based on the score obtained, user will be upgraded to the next level and also score will be displayed.
2. In this feature, application displays an image with hidden words. User should analyze the entire image and guess the words hidden in it correctly. Based on the score obtained, user will be upgraded to the next level and also score will be displayed.

Logo Identification: In this feature, application displays one logo at a time to the user, the logo can be of any company, accessory brand, university/ school etc. User should analyze the logo and guess it. Based on the number of logos identify by the user, score will be updated and displayed to the user.









Words pronunciation: This feature uses text to speech API which pronounces the resultant word correctly. Using this feature, user can listen the pronunciation of the word correctly.

2.4 Significance

This application helps in new language learning, sparks enthusiasm in the users and we are going to introduce new image processing API's which provides effective user interface which grabs the user attention.

3. Project Plan

3.1 Schedule for different Increments

Project Increment 1  Due by September 24, 2016  Last updated about 1 hour ago Design and Architecture Login and Signup User Interface Web and Android screens	<div><div></div></div> 75% complete 1 open 3 closed Edit Close Delete
Project Increment 2  Due by October 15, 2016  Last updated about 1 hour ago User Interface for the complete application in ionic and Review C...(more)	<div></div> 0% complete 5 open 0 closed Edit Close Delete
Project Increment 3  Due by November 3, 2016  Last updated about 1 hour ago Developing the complete Game Modifying any UI Mongolab persistent storage Logo finding and similar recommendations search	<div></div> 0% complete 4 open 0 closed Edit Close Delete
Project Increment 4  Due by December 5, 2016  Last updated about 1 hour ago Reviewing the app and start end-end testing Making the final paper, presentation and video	<div></div> 0% complete 4 open 0 closed Edit Close Delete

pruthvi6767 / ASEFall16

Unwatch 3Star 0Fork 0

<> Code

Issues 15

Pull requests 0

Boards

Burndown

Projects 1

Wiki

Filters

is:issue is:open

Labels

Milestones

New issue

15 Open 18 Closed

Author Labels Milestones Assignee Sort

1

PPT and Video

bug 3

#33 opened 11 minutes ago by pruthvi6767

Project Increment 4

New Issues

1

Final Paper

bug

#32 opened 11 minutes ago by pruthvi6767

Project Increment 4

New Issues

1

FinalImplementation

bug 13

#31 opened 13 minutes ago by pruthvi6767

Project Increment 4

New Issues

1

increment 3 documentation

bug 8

#30 opened 17 minutes ago by pruthvi6767

Project Increment 3

New Issues

1

Image Recognition REST Service implementation

bug 5

#29 opened 18 minutes ago by pruthvi6767

Project Increment 3

New Issues

1

Logo image Processing and Identification

bug 5

#28 opened 20 minutes ago by pruthvi6767

Project Increment 3

New Issues

1

Game LLevels Implementation

bug 21

#27 opened 21 minutes ago by pruthvi6767

Project Increment 4

New Issues

1

Persistent Database

bug 5

#26 opened 22 minutes ago by pruthvi6767

Project Increment 3

New Issues

1

Increment_Documentation_2

enhancement 8

#25 opened 26 minutes ago by pruthvi6767

Project Increment 2

New Issues

1

UI Development for the game

bug 8

#24 opened 39 minutes ago by pruthvi6767

Project Increment 2

New Issues

1

GameDesign

bug 3

#23 opened 41 minutes ago by pruthvi6767

Project Increment 2

New Issues

The screenshot displays a GitHub project board for the repository 'pruthvi6767 / ASEFall16'. The board is organized into columns representing different stages of the project workflow: New Issues, Icebox, To Do, Backlog, In Progress, Review/QA, Done, and Closed. The 'In Progress' column currently holds two items: ASEFall16 #20 (Increment1 Documentation) and ASEFall16 #18 (Android Login app). The 'Closed' column shows a list of 15 completed items, including ASEFall16 #16 through ASEFall16 #11. The board also features a sidebar with filters for Labels, Milestones, Assignees, and a top navigation bar with links to Code, Issues, Pull requests, Boards, Burndown, Projects, and Wiki.

Column	Item ID	Item Description
New Issues	ASEFall16 #22	Security and Authentication
New Issues	ASEFall16 #23	GameDesign
New Issues	ASEFall16 #24	UI Development for the game
New Issues	ASEFall16 #25	Increment, Documentation, 2
New Issues	ASEFall16 #26	Persistent Database
New Issues	ASEFall16 #27	Game Levels Implementation
New Issues	ASEFall16 #28	Logo image Processing and Identification
New Issues	ASEFall16 #29	Image Recognition REST Service implementation
New Issues	ASEFall16 #30	Increment 3 documentation
In Progress	ASEFall16 #20	Increment1 Documentation
In Progress	ASEFall16 #18	Android Login app
Closed	ASEFall16 #16	Create Login UIMockup/Wireframe
Closed	ASEFall16 #19	Setting the Login code
Closed	ASEFall16 #17	Login web app Development
Closed	ASEFall16 #17	UI Design
Closed	ASEFall16 #12	Rest Services
Closed	ASEFall16 #13	ionic framework
Closed	ASEFall16 #14	ionic implementation
Closed	ASEFall16 #15	Project package Review
Closed	ASEFall16 #8	UI review
Closed	ASEFall16 #11	Project Review


3.3 Burndown Chart

Project Increment 1

1. Design and Architecture
2. Login and Signup User Interface
3. Web and Android screens

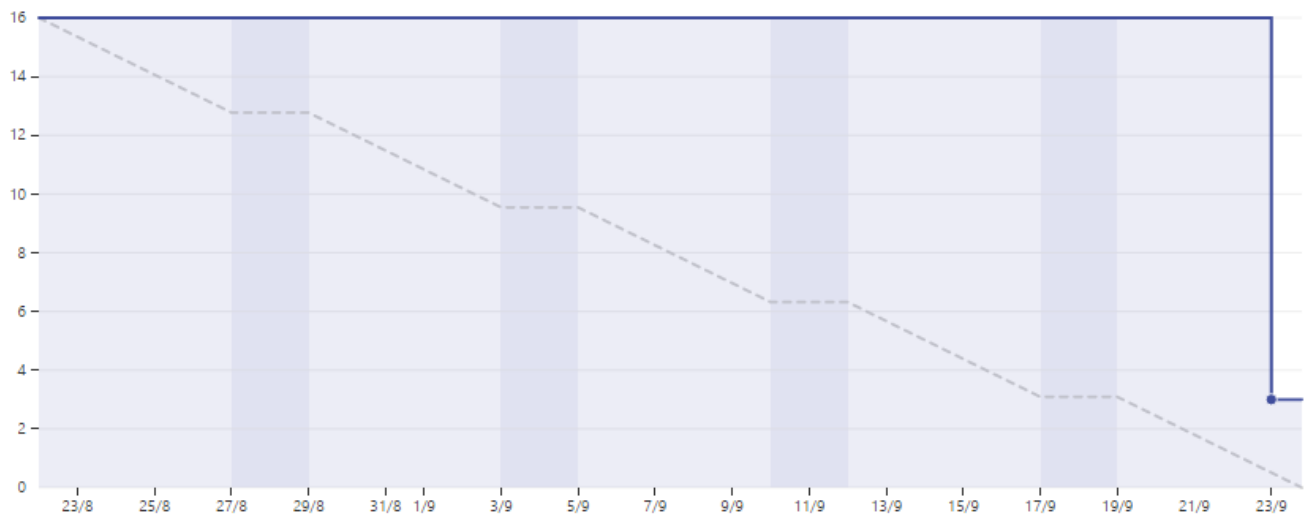
 Edit Milestone  Change Milestone ▾

 Labels ▾  Hide Pull Requests

 Burn Pipelines ▾

Start: **Aug 22, 2016** [Edit](#) | Due: **Sep 23, 2016** [Edit](#)

powered by | ZenHub



16
Total Story Points

13
Completed Story Points

4
Total Issues

0
Unestimated Issues

4. First Increment Report

- In first increment of the project we have designed Login, Registration and Home Page for the application. Also created UML diagrams, Wireframes and created test cases for the part of code that is implemented.

4.1 Existing Services/Rest API

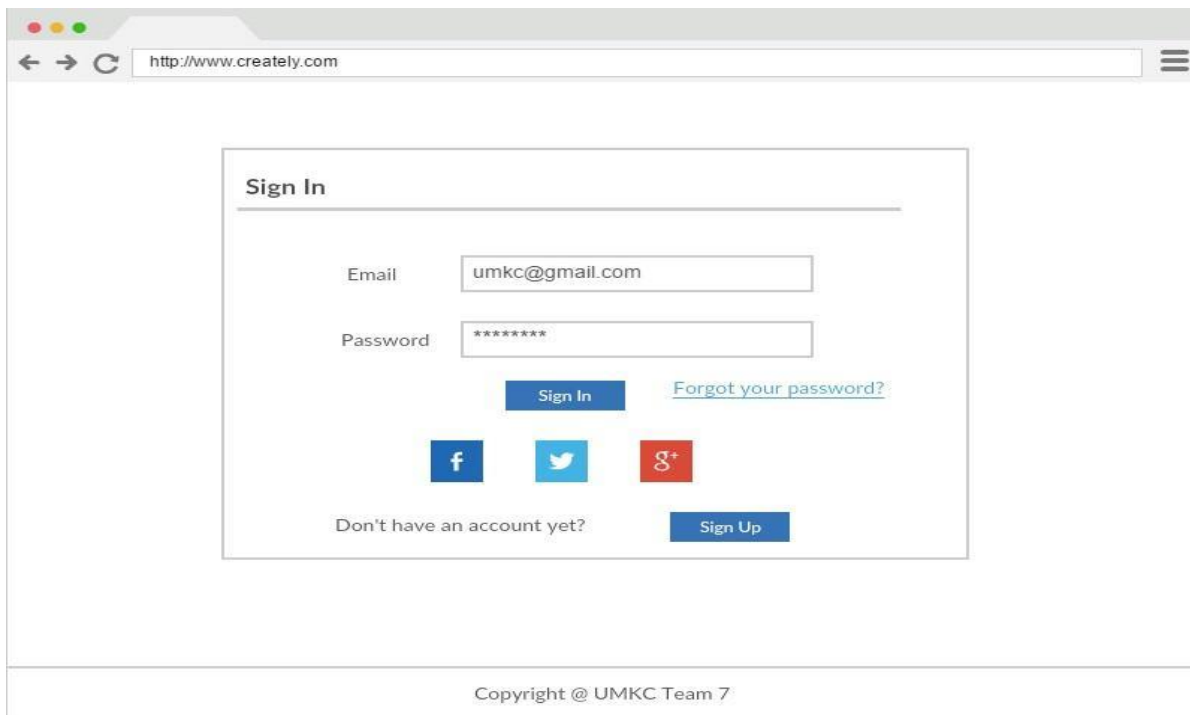
In this increment, we have not used any of the API's but going forward we will be using Vision API, IBM Watson Analytics API, Clearbit company logo API.

4.2 Detail Design of Features

4.2.1 Wireframes

- The wireframes for first phase of project is shown below.

Login Page: After user clicks on Login button, he/she will be asked for login credentials i.e. user name and password.



The image shows a wireframe of a web browser window displaying a 'Sign In' page. The browser's address bar shows 'http://www.createely.com'. The page content is enclosed in a light gray border. At the top, the text 'Sign In' is followed by a horizontal line. Below this, there are two input fields: 'Email' with the value 'umkc@gmail.com' and 'Password' with masked characters '*****'. To the right of the password field is a link that says 'Forgot your password?'. Below the input fields is a blue 'Sign In' button. Underneath the button are three social media icons: Facebook (f), Twitter (bird), and Google+ (g+). At the bottom of the form area, there is a link 'Don't have an account yet?' and a blue 'Sign Up' button. At the very bottom of the browser window, outside the main content area, is the text 'Copyright @ UMKC Team 7'.

Registration Page: If the user does not have an account already with the application, he/she can create one by giving some details.

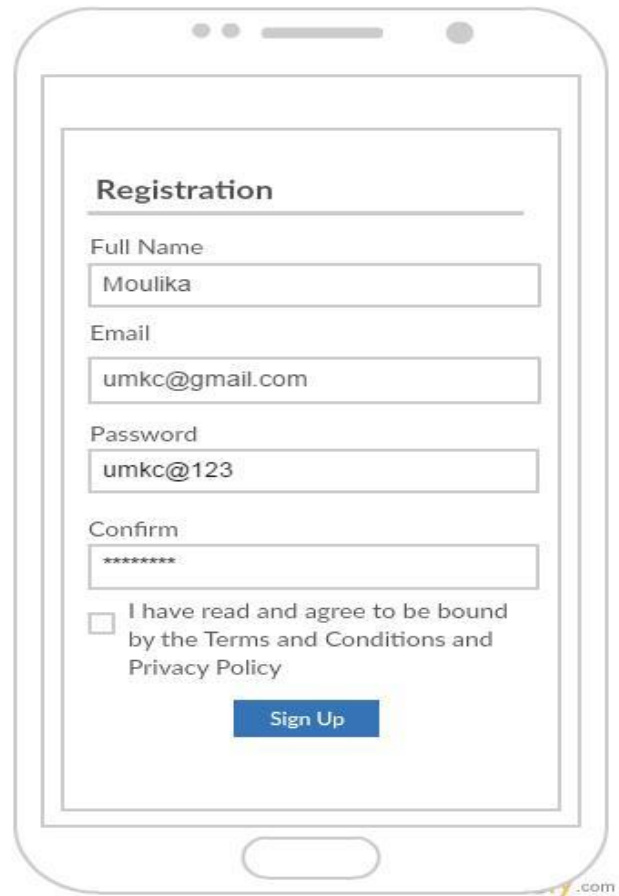
The screenshot shows a web browser window with the address bar displaying `http://www.createely.com`. The main content area features a registration form titled "Registration". The form contains the following fields and elements:

- Full Name:** A text input field containing the value "Moulika".
- Date of Birth:** A text input field containing the value "08/08/1993".
- Email:** A text input field containing the value "umkc@gmail.com".
- Password:** A text input field containing the value "umkc@123".
- Confirm Password:** A text input field containing a series of asterisks "*****".
- Terms and Conditions:** A checkbox followed by the text "I have read and agree to be bound by the Terms and Conditions and Privacy Policy".
- Sign Up:** A blue button with the text "Sign Up".

At the bottom of the browser window, a footer bar contains the text "Copyright @ UMKC Team 7".



A mockup of a mobile login page. The title "Sign In" is at the top. Below it are two input fields: "Email" with the value "umkc@gmail.com" and "Password" with masked characters "*****". A blue "Sign In" button is below the password field. A link "Forgot your password?" is below the button. Three social media icons (Facebook, Twitter, Google+) are in a row. At the bottom, the text "Don't have an account yet?" is next to a blue "Sign Up" button.



A mockup of a mobile registration page. The title "Registration" is at the top. Below it are four input fields: "Full Name" with the value "Moulika", "Email" with the value "umkc@gmail.com", "Password" with the value "umkc@123", and "Confirm" with masked characters "*****". Below the confirm field is a checkbox and the text "I have read and agree to be bound by the Terms and Conditions and Privacy Policy". A blue "Sign Up" button is at the bottom.

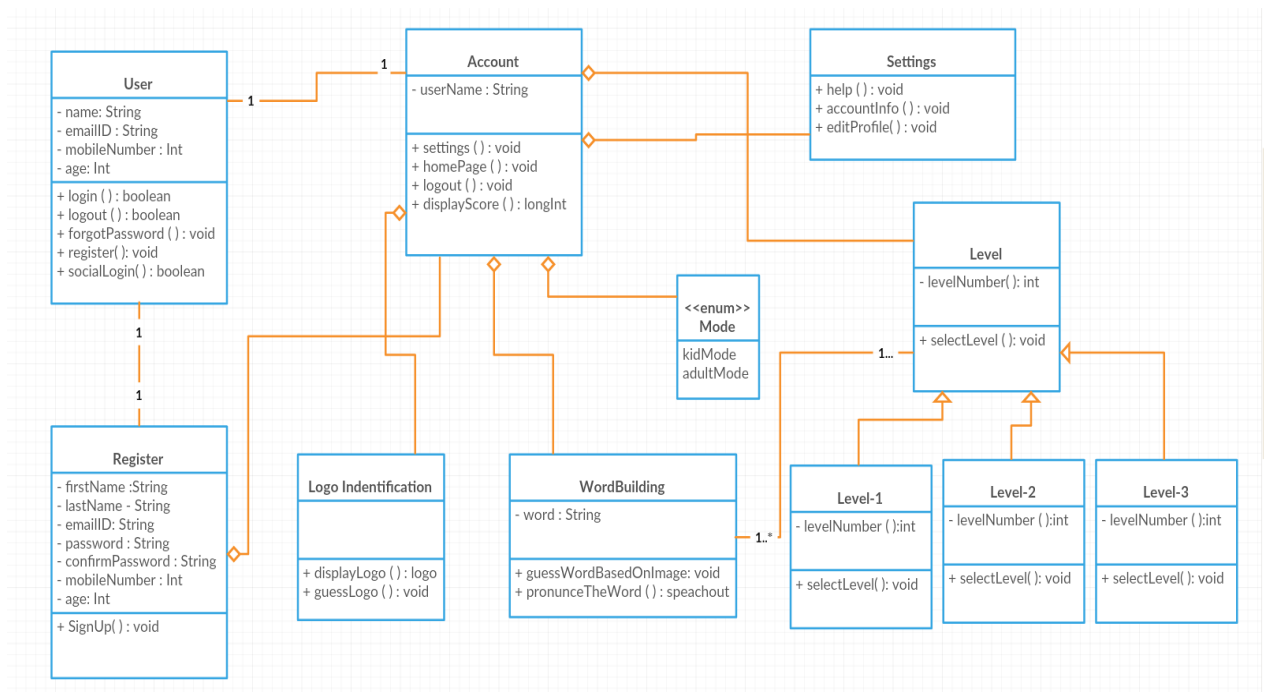
4.2.2 User Stories

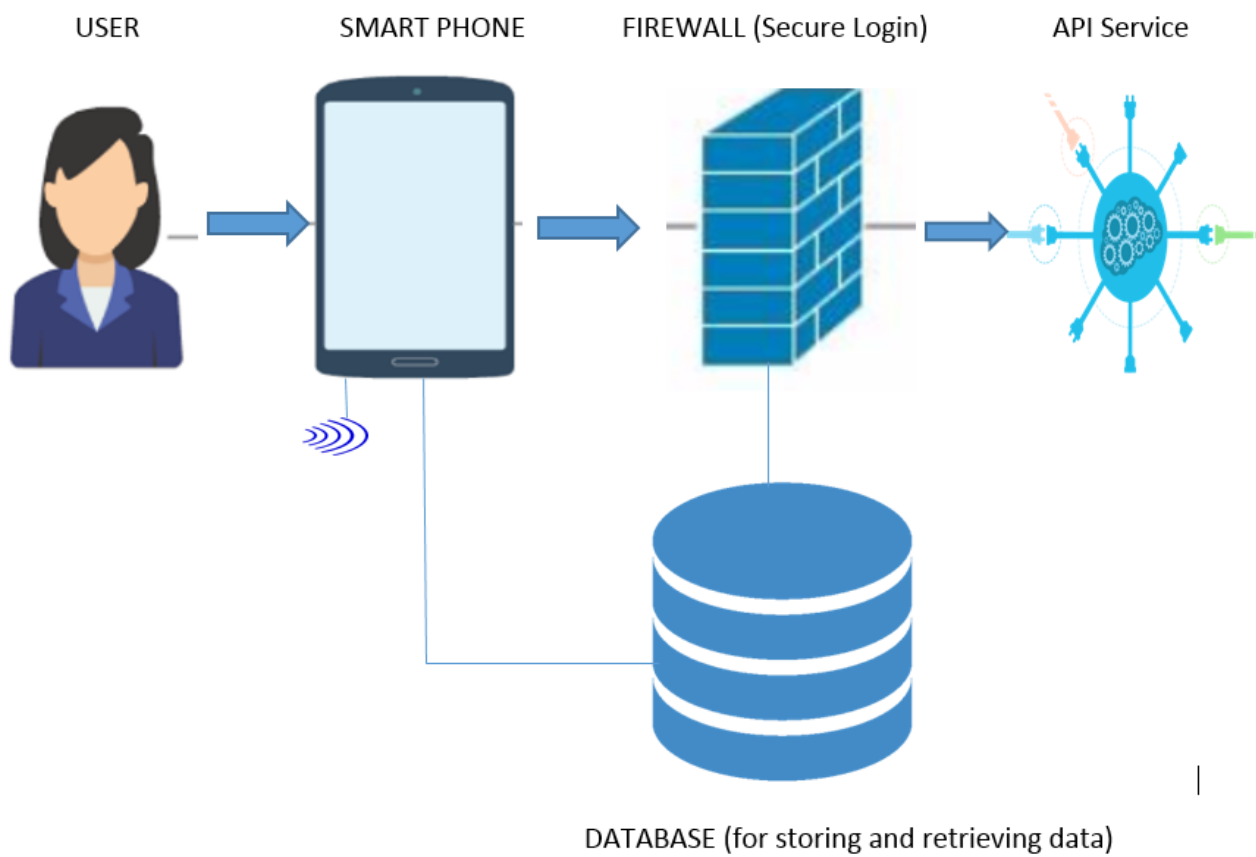
Vocabulary Building:

The most important takeaway from our application is vocabulary building. The plethora of words available in English language makes an individual to opt for easy and efficient ways of learning. Our application serves one amongst them

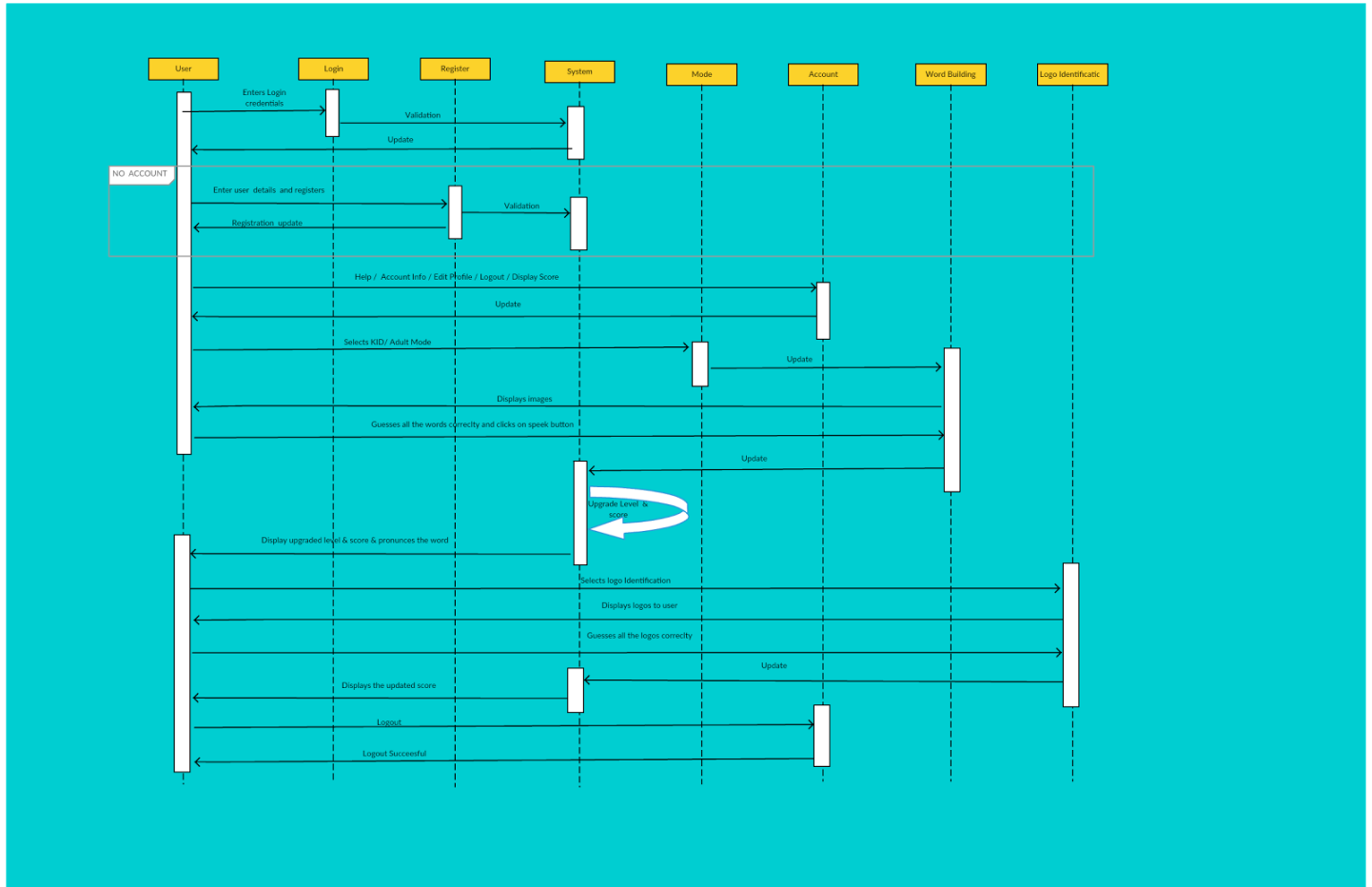
New Language Learning:

The application also serves to enhance the user experience of learning a new language through images. Currently, we would like to implement to the new language to learn as Spanish.

Class Diagram:

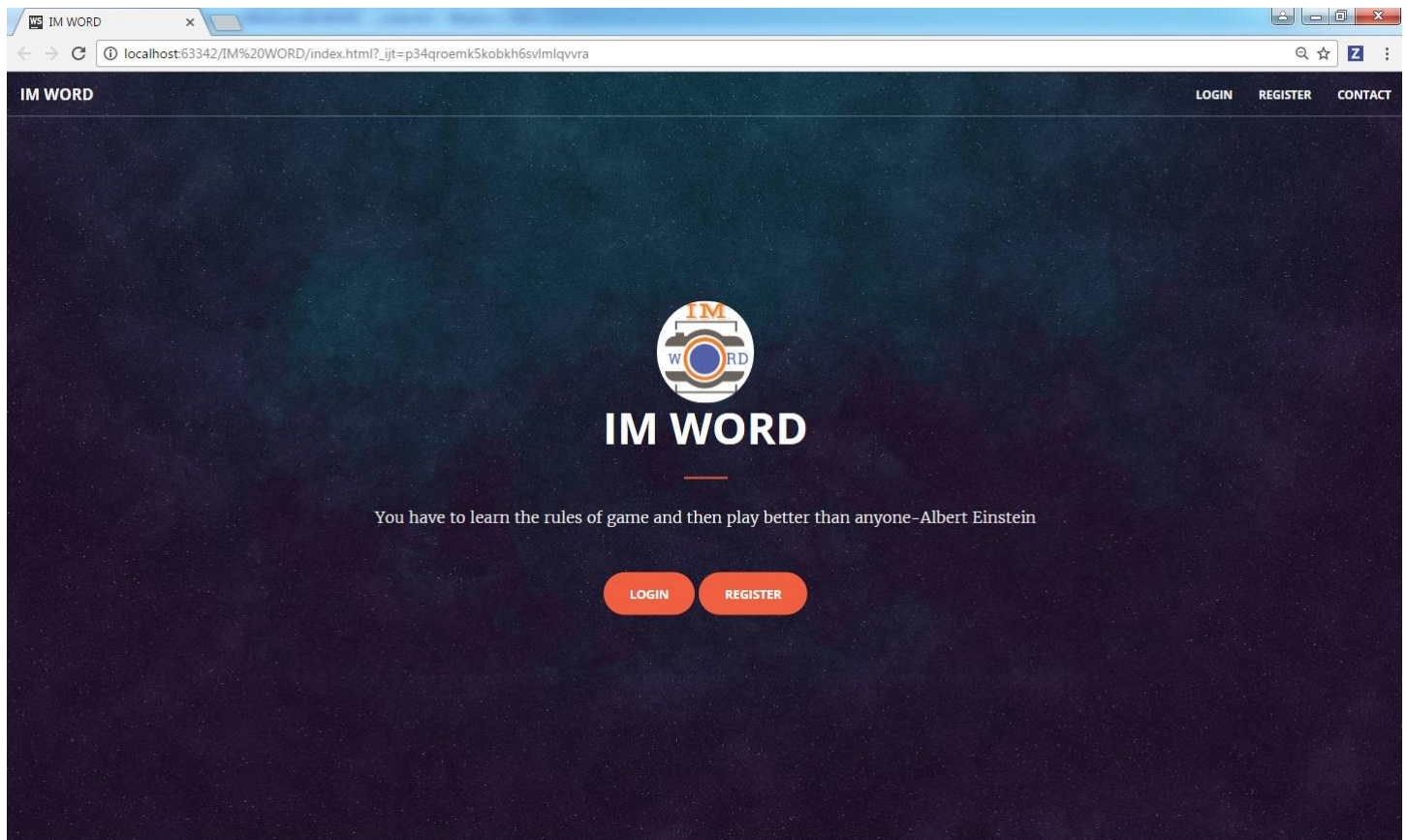


Sequence Diagram:

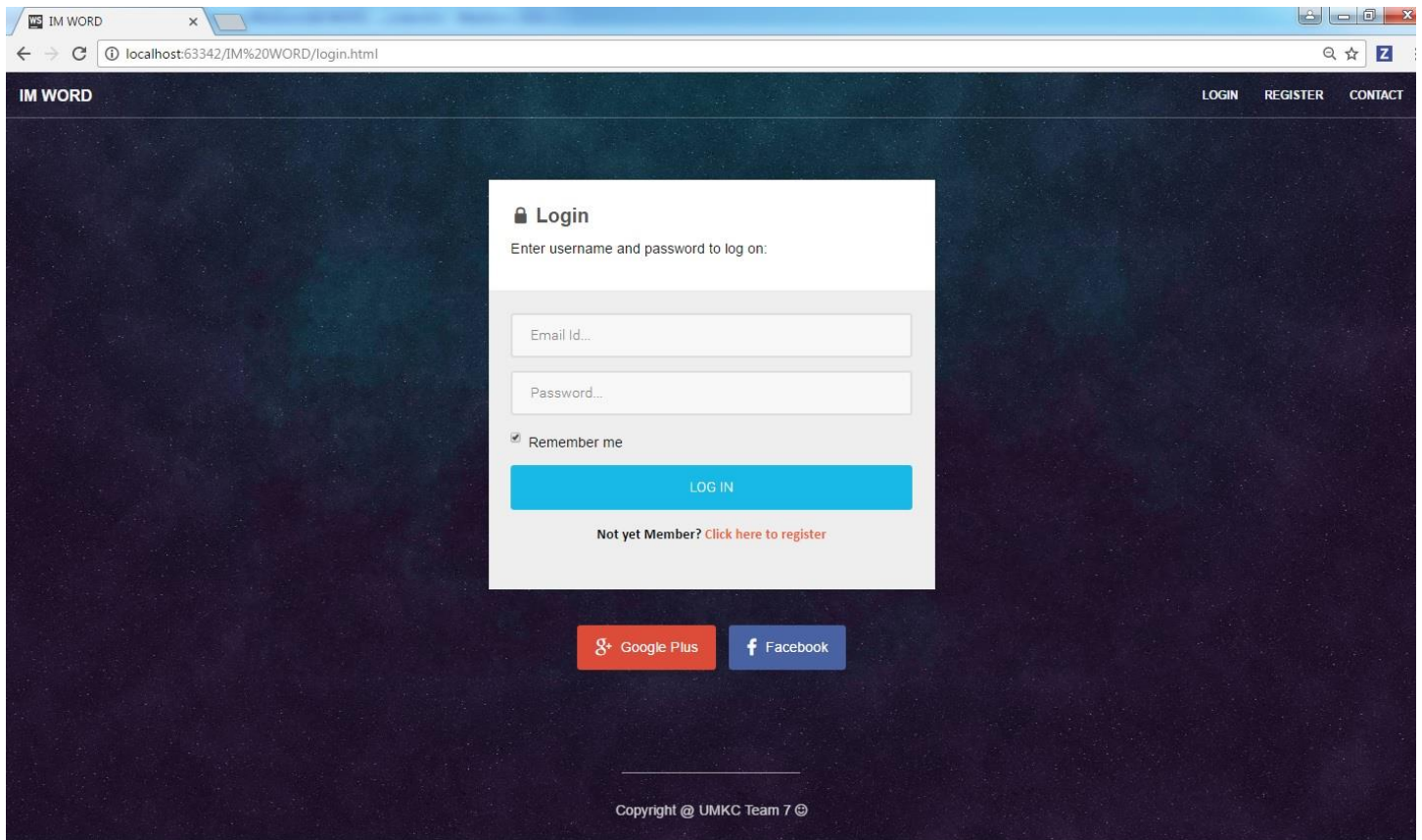


4.3 Implementation.

Home Page in web application



Login using web Application.



The screenshot shows a web browser window with the address bar displaying 'localhost:63342/IM%20WORD/login.html'. The page has a dark blue background with a subtle pattern. At the top left, the text 'IM WORD' is visible. At the top right, there are links for 'LOGIN', 'REGISTER', and 'CONTACT'. The main content area features a white login form with the title 'Login' and a lock icon. Below the title, it says 'Enter username and password to log on:'. The form contains two input fields: 'Email Id...' and 'Password...'. Below these fields is a checkbox labeled 'Remember me' which is checked. A blue 'LOG IN' button is positioned below the checkbox. Below the button, there is a link that says 'Not yet Member? Click here to register'. At the bottom of the form, there are two social media buttons: 'Google Plus' and 'Facebook'. At the very bottom of the page, there is a copyright notice: 'Copyright @ UMKC Team 7 ©'.

IM WORD

LOGIN REGISTER CONTACT

Login

Enter username and password to log on:

Email Id...

Password...

☒ Remember me

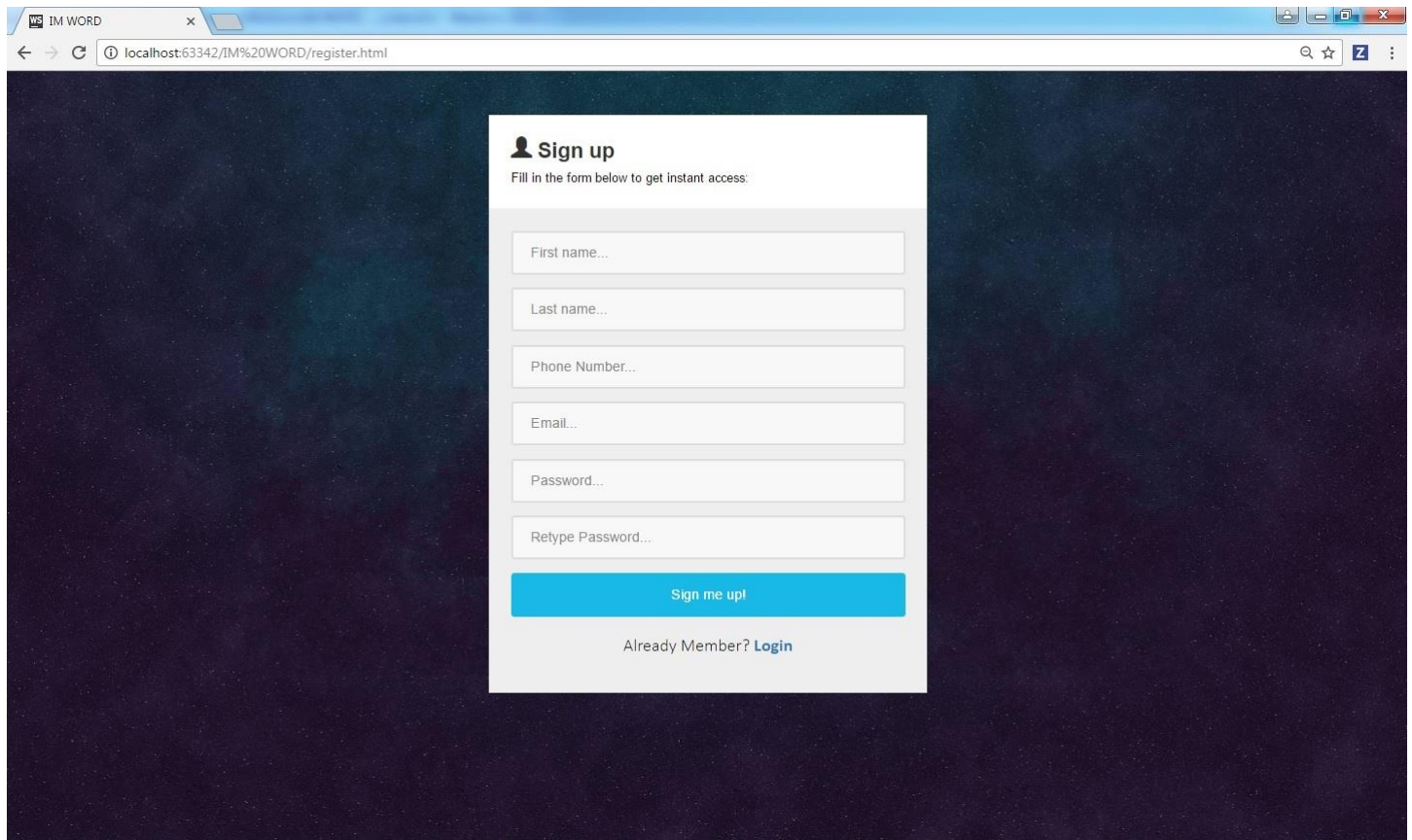
LOG IN

Not yet Member? [Click here to register](#)

Google Plus Facebook

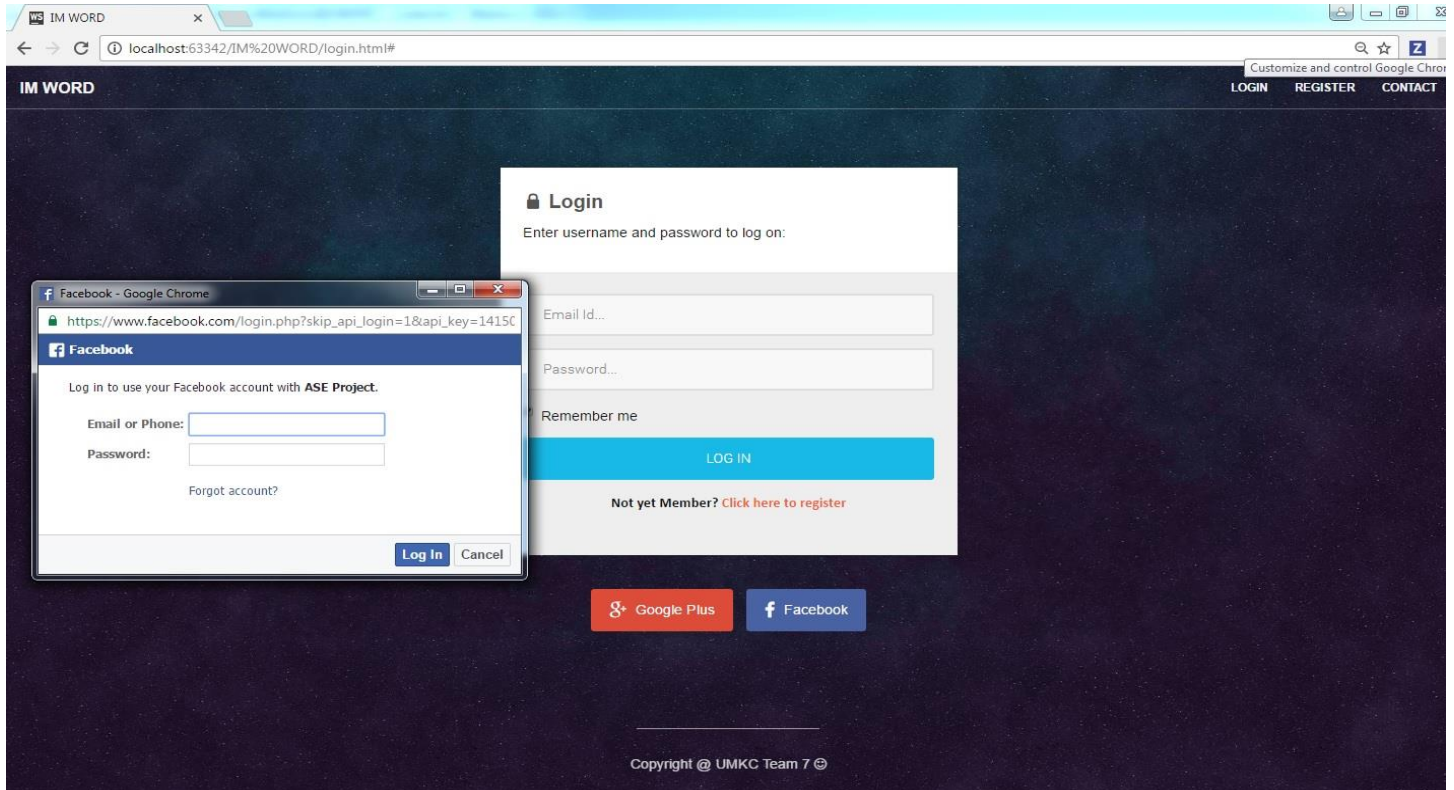
Copyright @ UMKC Team 7 ©

Registration using web Application

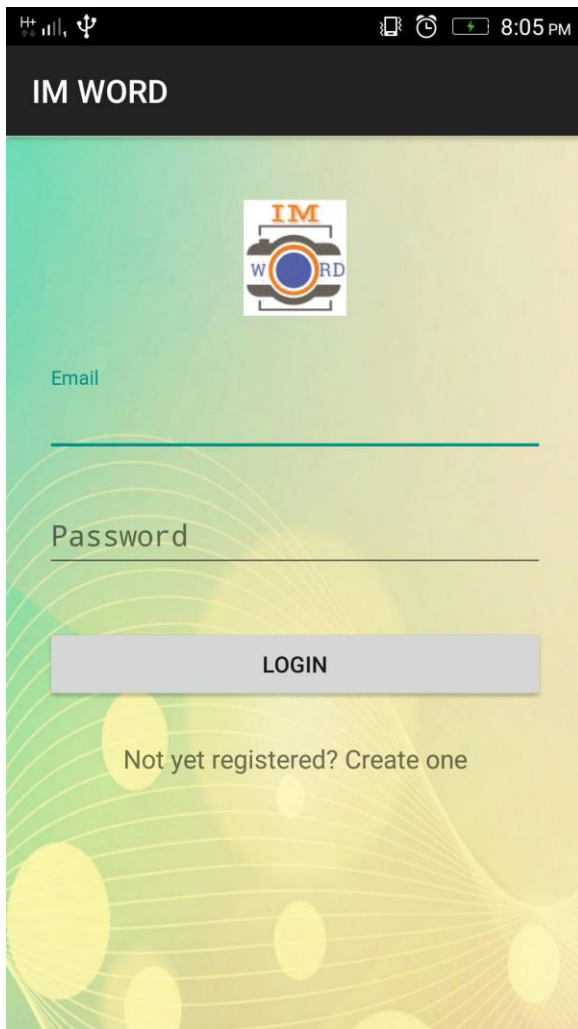


The screenshot shows a web browser window with a single tab titled "IM WORD". The address bar displays "localhost:63342/IM%20WORD/register.html". The page content features a dark, starry background. Centered on the page is a white registration form titled "Sign up" with a user icon. Below the title is the instruction "Fill in the form below to get instant access:". The form contains six input fields: "First name...", "Last name...", "Phone Number...", "Email...", "Password...", and "Retype Password...". A blue "Sign me up!" button is positioned below the fields. At the bottom of the form, it says "Already Member? [Login](#)".

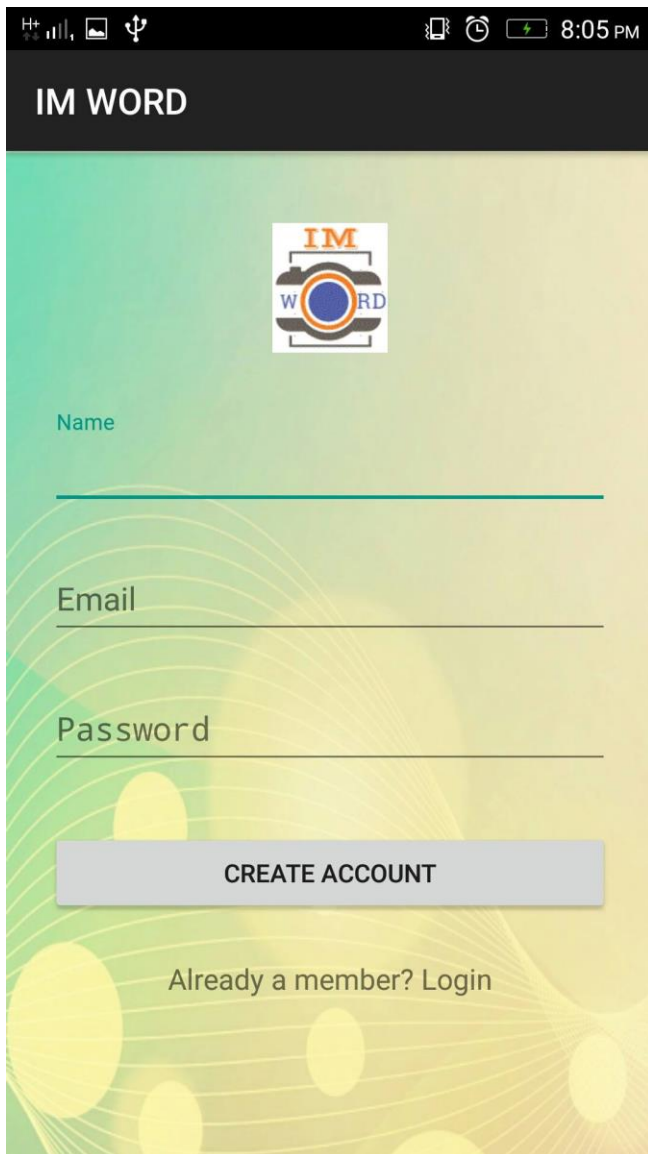
Social Login using web Application



Login page in Android



Sign up page using android



The screenshot shows an Android application interface for a sign-up page. At the top, a black status bar displays various icons and the time 8:05 PM. Below this, a black header bar contains the text "IM WORD" in white. The main background is a light green and yellow gradient with abstract circular patterns. In the center, there is a logo consisting of a blue circle with a white 'O' in the middle, surrounded by the letters "IM" above and "WORD" below. Below the logo, there are three input fields labeled "Name", "Email", and "Password" in a light green font. Each field has a corresponding horizontal line for text entry. Below these fields is a grey button with the text "CREATE ACCOUNT" in black. At the bottom, there is a link that says "Already a member? Login" in a light green font.

4.4 Testing**4.4.1 Unit Testing**

The below are the unit test cases for first phase of the project.

S.no	Test case Title	Description	Expected Outcome	Result
1	User Login Verification	The user should login with the registered email id and password.	Login has to be successful and user has to be redirected to Home page.	Pass
2	User Login Verification with invalid details	The user enters either wrong email id or password.	Login should fail with error message on the Login Screen.	Pass
3	User Login Verification with no details	The user enters no details (email id , password) and tries to login	Login should fail with error message on Login Screen	Pass
4	New user registration	The new user should enter all the details such as Name, Email, Password etc. and the admin has to validate the entered details.	User should be able to register successfully and is redirected to Login page	Pass
5	Invalid User Registration	New user tries to register with no details and tries to Sign Up.	Registration should fail and error message has to be shown on registration screen.	Pass

4.5 Project Management

Technologies Used: Bootstrap, Angular JS, HTML, CSS, Android SDK

Softwares Used: Android Studio, Webstorm.

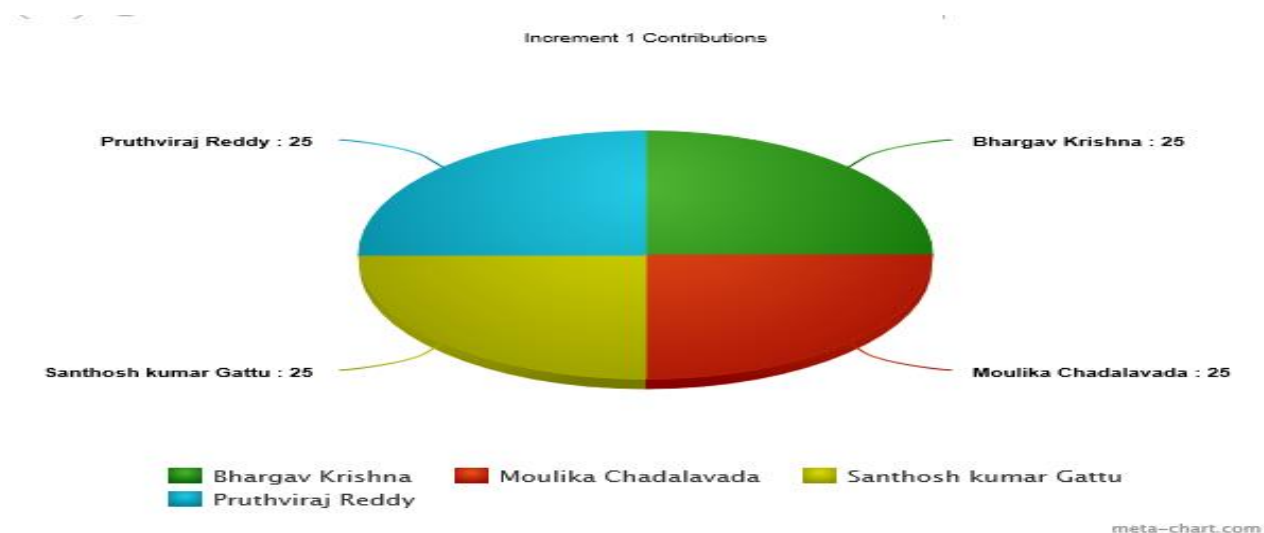
Completed the following work:

1. Uml diagrams.
2. Created increments in Zenhub.
3. Created wireframes.
4. Login and registration page for both android and web applications .
5. Also added social sign in to the login page.

Contributions:

Pruthvi raj Reddy - 25% Bhargav Krishna - 25%

Santhosh Kumar Gattu - 25% Moulika chadalavada - 25%



4.6 Bibliography

<http://scrapelogo.com/dead-simple-api/>

<http://catchoom.com/documentation/image-recognition-api/>

http://fastandfluid.com/publicdownloads/AngularJSIn60MinutesIsh_DanWahlin_May2013.pdf