

FOOD-CYCLED



Team number - 1

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I. INTRODUCTION

Food is one of the basic necessity of life and fuel for the human body and yet, many people still do not have access to a good meal. Many don't realize how much they throw away every day from uneaten leftovers which could otherwise be made available to people in need. In today's world, recycling is a major topic and the idea of reusing would aid in reducing waste. This motivated us to look for a project that combines these two ideas.

'Natural Resources Defense Council estimates that about 40 percent of food in the U.S is never eaten and at the same time one in eight americans struggle to get proper food.'

The above brief description outlines the core idea of our project, which helps reduce wastage of food and make it available to people in need. This inspired us to take a step forward to initiate this project with the help of an user friendly application and website which will attract more people to be involved in this process and make it a success. Individuals and restaurants can support in this cause and make a difference in their community by providing excess food to those who are in need.

II. PROJECT GOAL AND OBJECTIVES

Overall Goal :

The main objective of this project is to develop user friendly application and website that could be used by individuals and restaurants to give away this excess food to those who don't have access to it. Through this project, food is provided for homeless or less privileged people and also to reduce the wastage of food.

Specific Objectives :

There has not been an easy process outlined to help in repurpose excess food that are otherwise going to be thrown. The project proposes a streamlined simple approach to resolve this with the help of smart technology.

Specific Features :

- User friendly application and website to help ease donation and collection of excess food.
- Identifying Stall Locations using Maps.
- Chat feature between user and volunteer to smoothen food pick up process.
- Check for nutritional value, ingredients and validity of the food by a simple scan.
- Login can also be done using social websites such as Facebook, google+, etc.
- Feedback on volunteers by users.

Significance :

We are developing an application and a website to effectively collect and make food available to homeless and less privileged people. People who wish to be part of this program are grouped into two types –

1. User(s) – people who wish to contribute food
2. Volunteer(s) – people who wish to collect food from users and drop off at the nearby stall location.

Initially volunteers are registered with their details including photo and valid ID. The user also needs to register and then mention the food they wish to donate. After that, a request will be sent to the nearby volunteer to pick up the food. Nearby volunteer who is available accepts the request from the user to pick up food. Also the volunteers details will be sent to the user and chat conversation is enabled between them. After the volunteer picks up the food, he/she drops off in the nearby stall location. After accepting the food from the user, volunteer scans the food in the application to find out the nutritional value and expiry of the food. If deemed acceptable then the food is then dropped off by the volunteer in a nearby stall location. Different type of foods available in every stall location is displayed in the application and website for information.

III. PROJECT PLAN

Schedule for the four different increments

Increment I (Android application and Website)

Launch Page

Login Page

Registration Page

Facebook Oauth Android

Increment II(ionic Application)

Launch Page

Login Page

Registration Page

Facebook Oauth login

Google Oath login

Photo Upload and Firbase Storage

Implement Nutrition API

Maps for stall locations

Increment III

Enable Chat conversation

Thank You page for contributors

Feedback for Volunteers

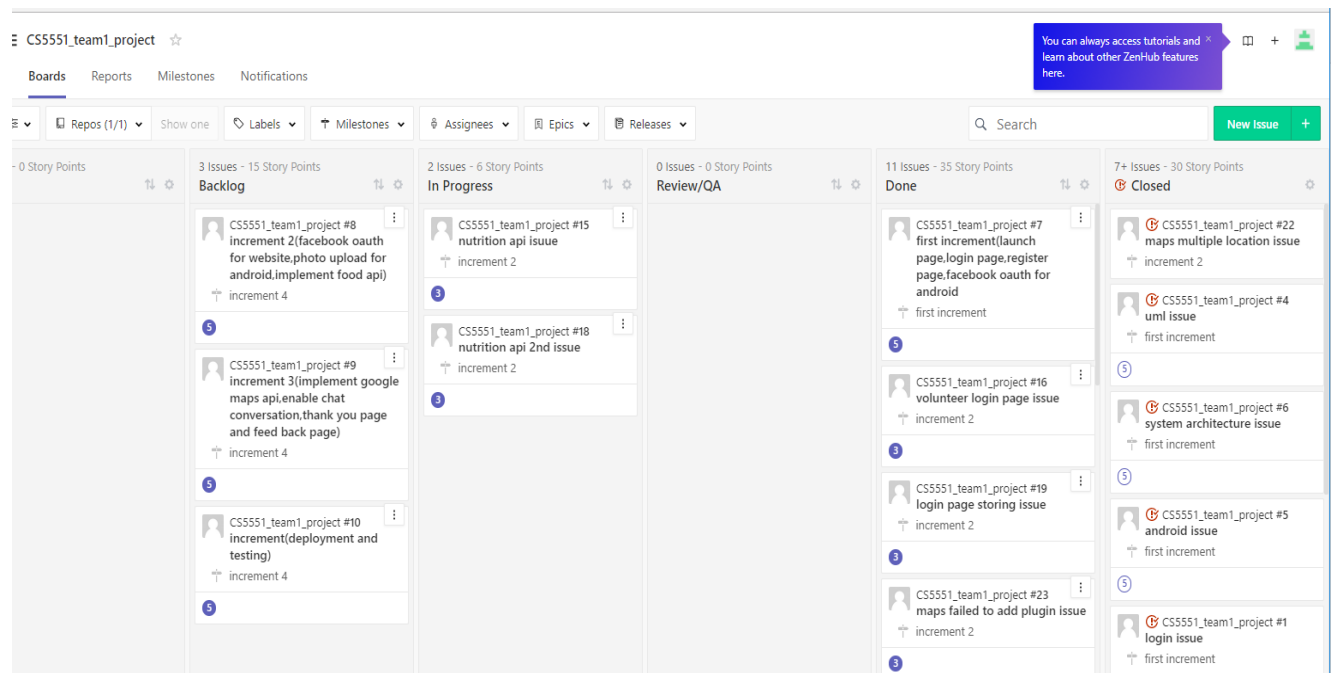
Increment IV











Deployment


Testing

Stories (Issues) : Scenario & Use Case Specifications

- User logs into the application or signs up if not registered.
- Also Volunteers are registered or can sign up if not registered.
- The User will then provide details such as Name of the food , preparation date, expiry date , spice levels and image of the food.
- A request is then sent to the volunteers nearby.
- After a volunteer accepts request he/she will be able to receive the user information and a volunteer details are sent to the user.
- After the volunteer picks up the food , they drop it in the nearby Stall locations.
- Later on , the user can provide a feedback for the volunteer.
- User then logs out of the application.



<input type="checkbox"/>	5 Open ✓ 19 Closed	Author ▾	Labels ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	 nutrition api 2nd issue #18 opened 5 hours ago by sulochanamulpuri  increment 2						
<input type="checkbox"/>	 nutrition api issue #15 opened 5 hours ago by sulochanamulpuri  increment 2						
<input type="checkbox"/>	 increment(deployment and testing) #10 opened 21 days ago by harikaadivanne  increment 4						
<input type="checkbox"/>	 increment 3(implement food api,enable chat conversation,thank you page and feed back page) #9 opened 21 days ago by harikaadivanne  increment 4						
<input type="checkbox"/>	 increment 2(facebook oauth for website,photo upload for android,implement food api) #8 opened 21 days ago by harikaadivanne  increment 2						

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IV. SECOND INCREMENT REPORT

i. Existing Services/REST API

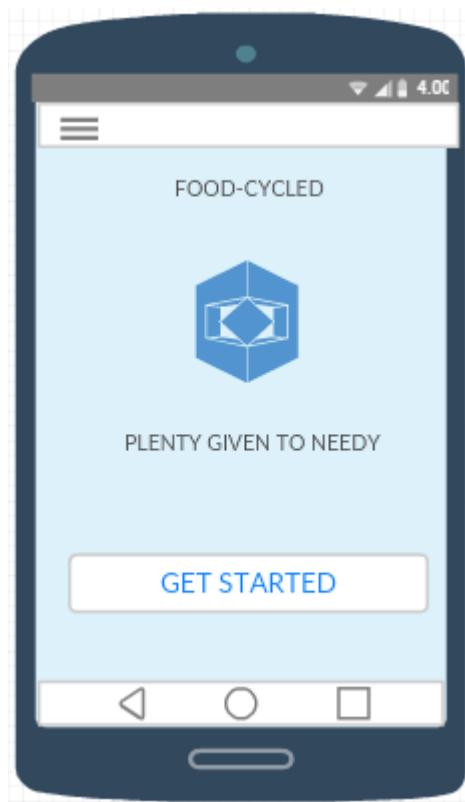
Facebook OAuth Login API , Food API, Google Maps API ,Google Auth LoginAPI, Camera API

ii. Detailed Design of Features

WIREFRAMES

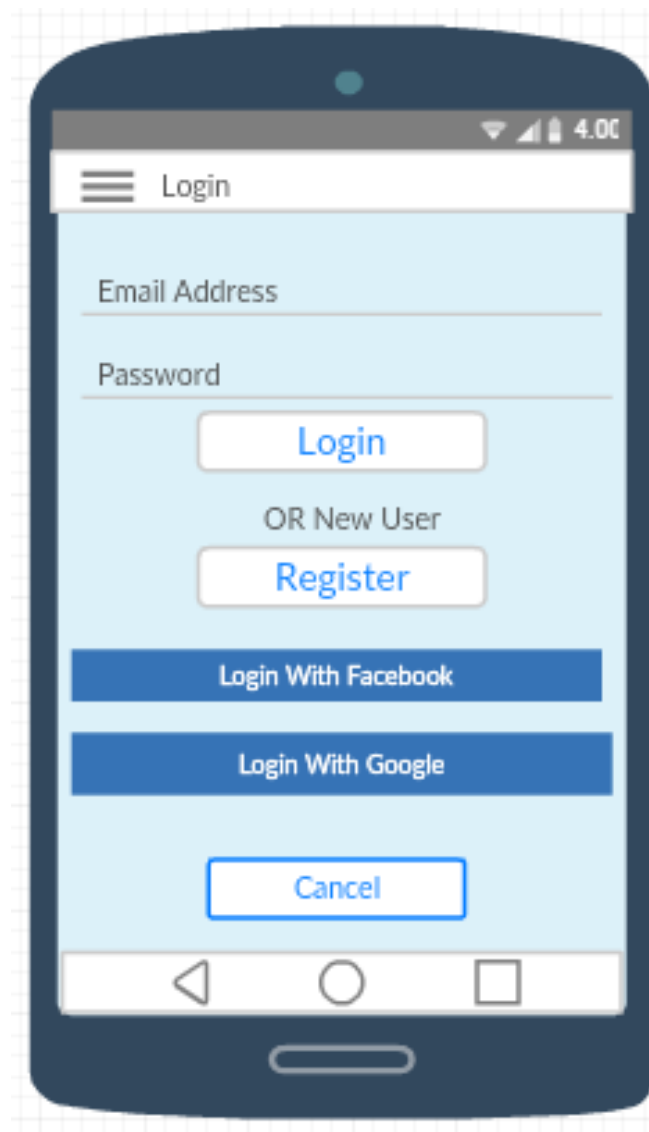
i)Wireframe for Launch Page

The Launch Page is the initial page which loads on opening the Application. It contains Group Logo and side menu which connects to different pages.



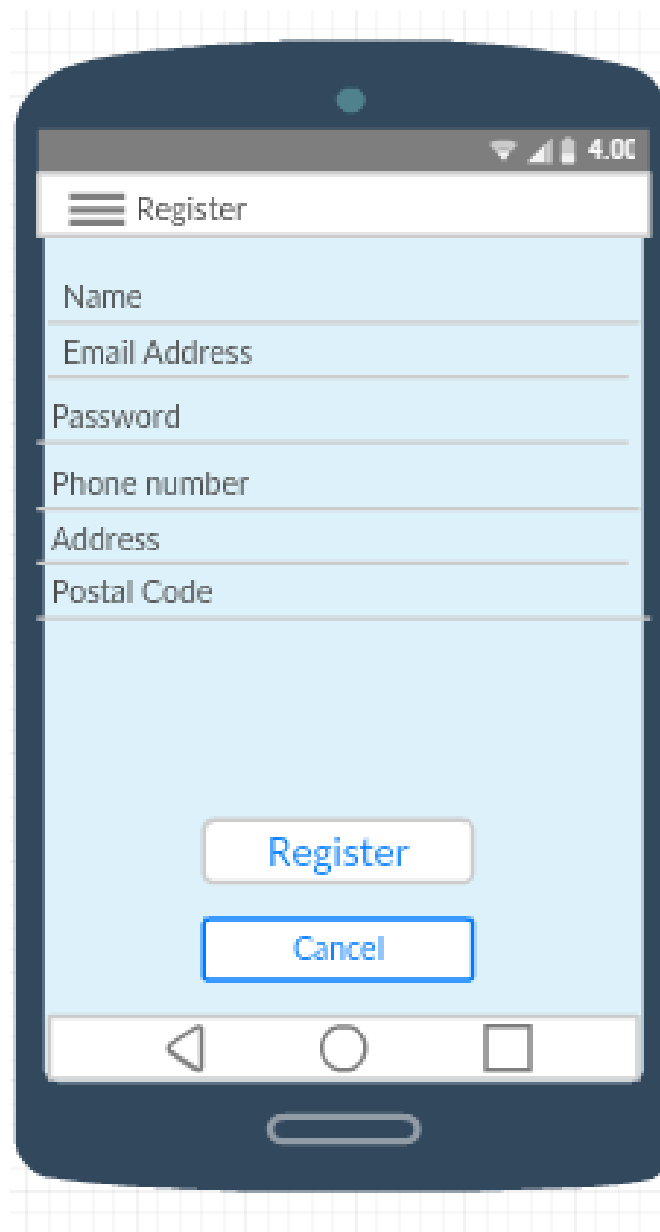
ii) Wireframe for Login Page

Login Page contains Username and Password. User can register through register button. User can Login through Facebook and Google.



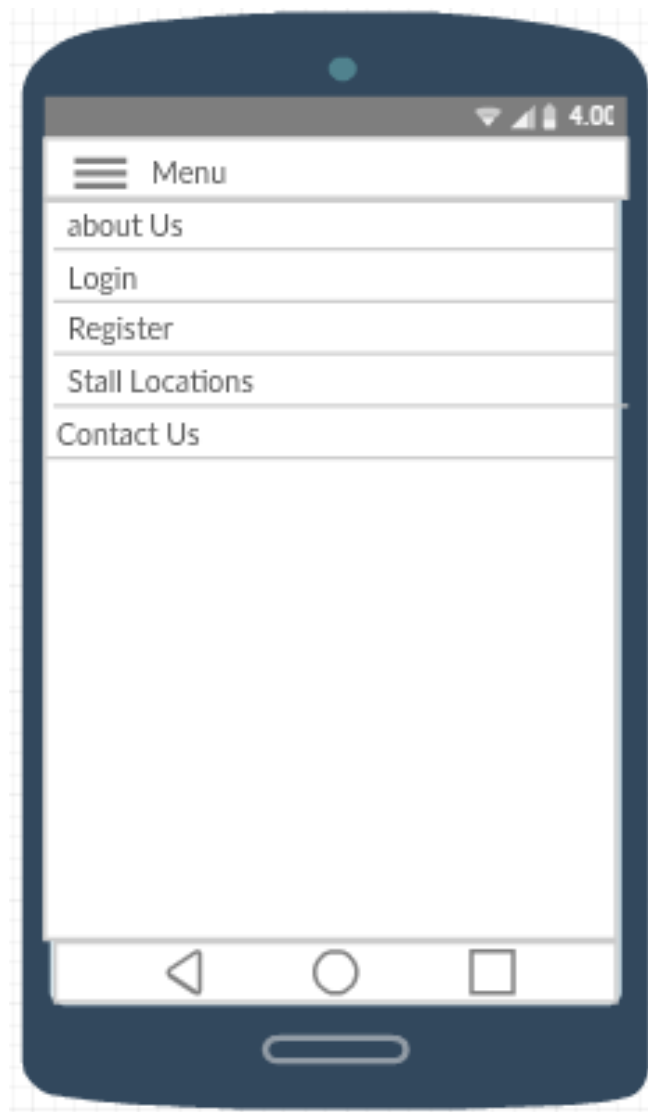
iii) Wireframe for Registration page

User will be providing the basic details for registration.



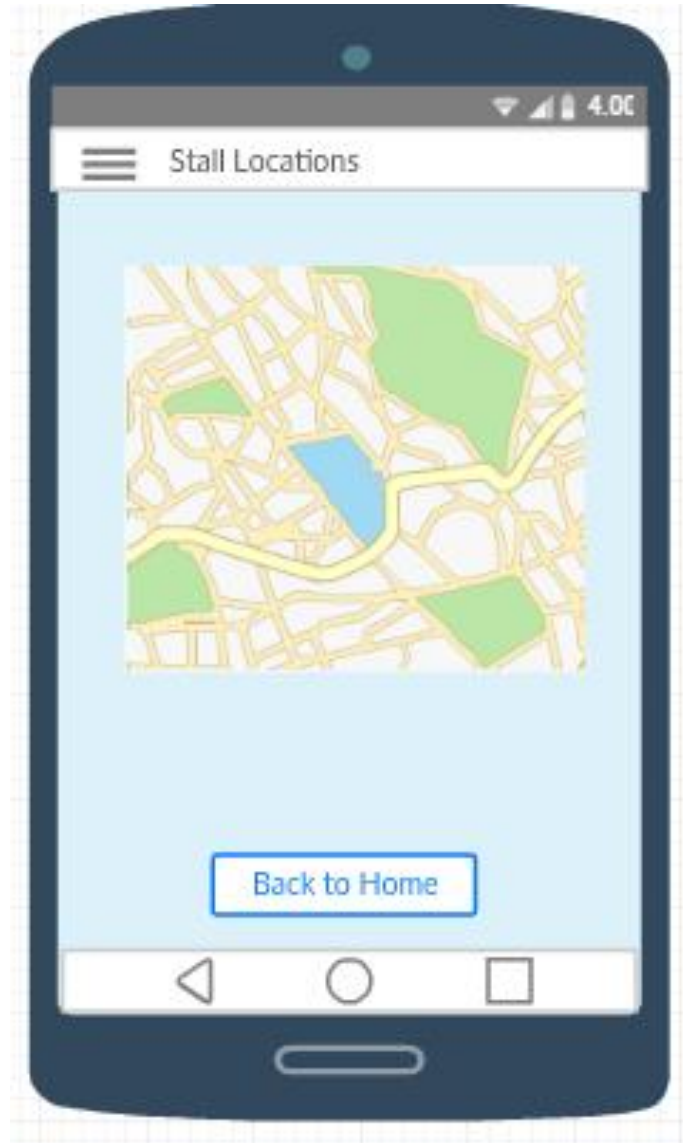
iv)wireframe for menu

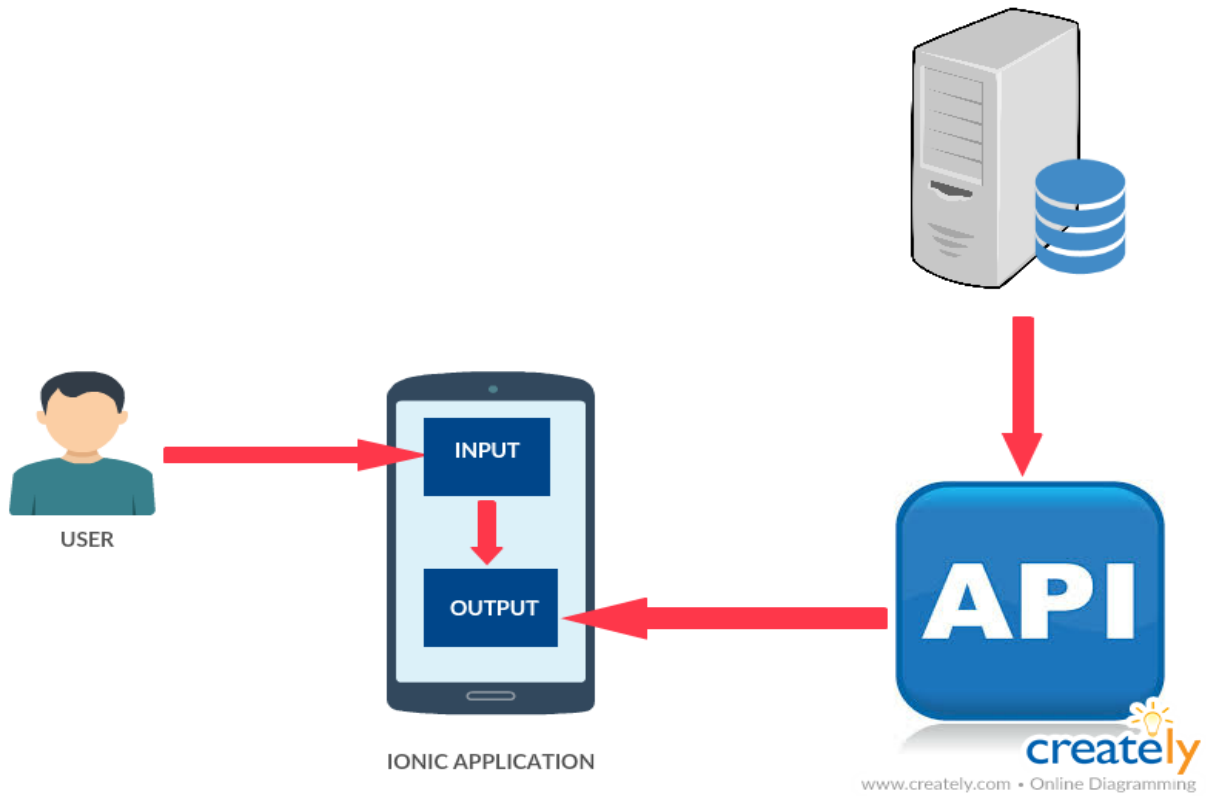
If you press the menu bar to the left ,the following options About us,Login,Register,Stall Locations,Contact US will be displayed.



v)wireframe for stall locations in maps:

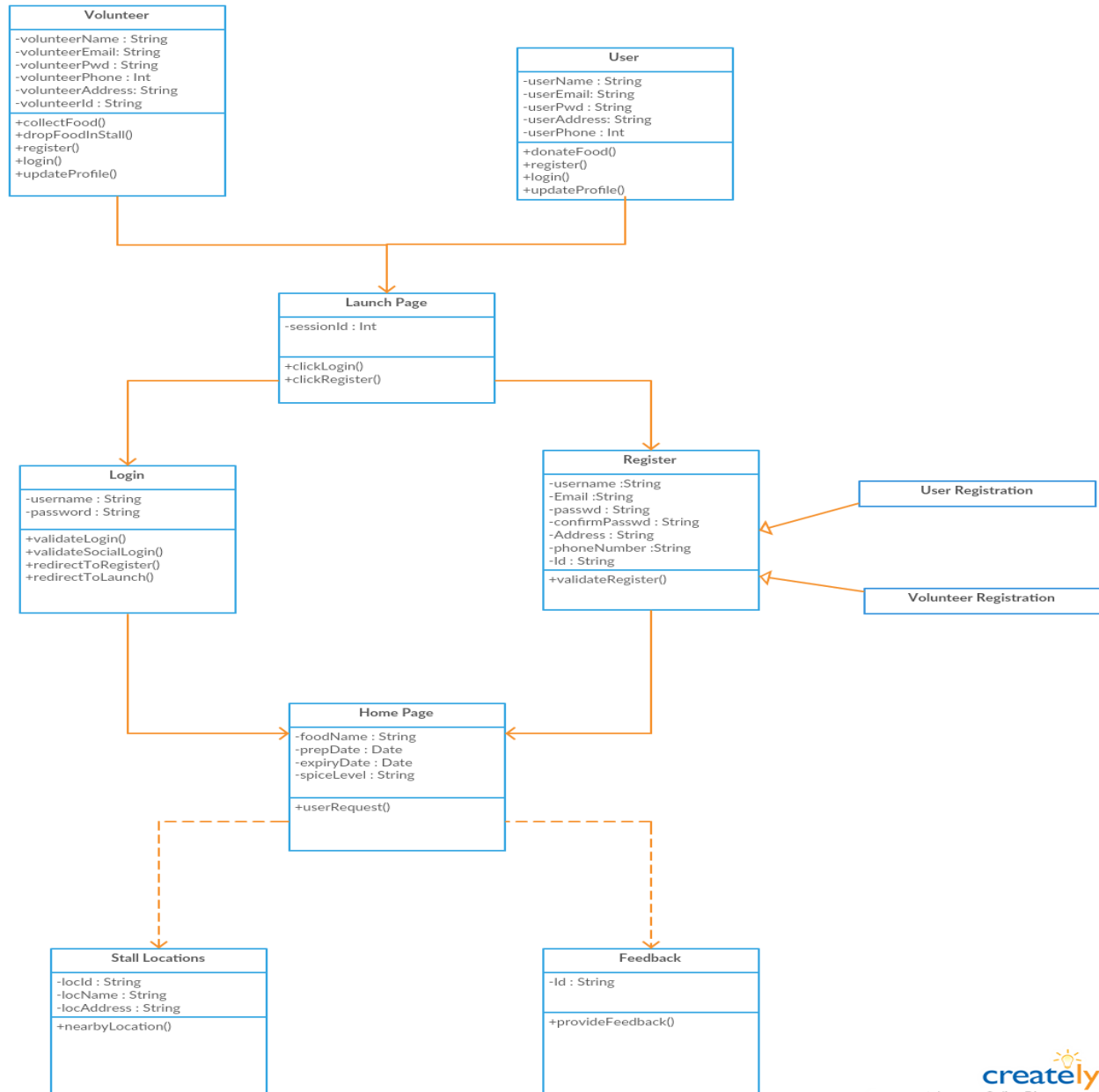
Displays nearby Stall locations and has a button to redirect to the Launch Page.



ARCHITECTURE DIAGRAM

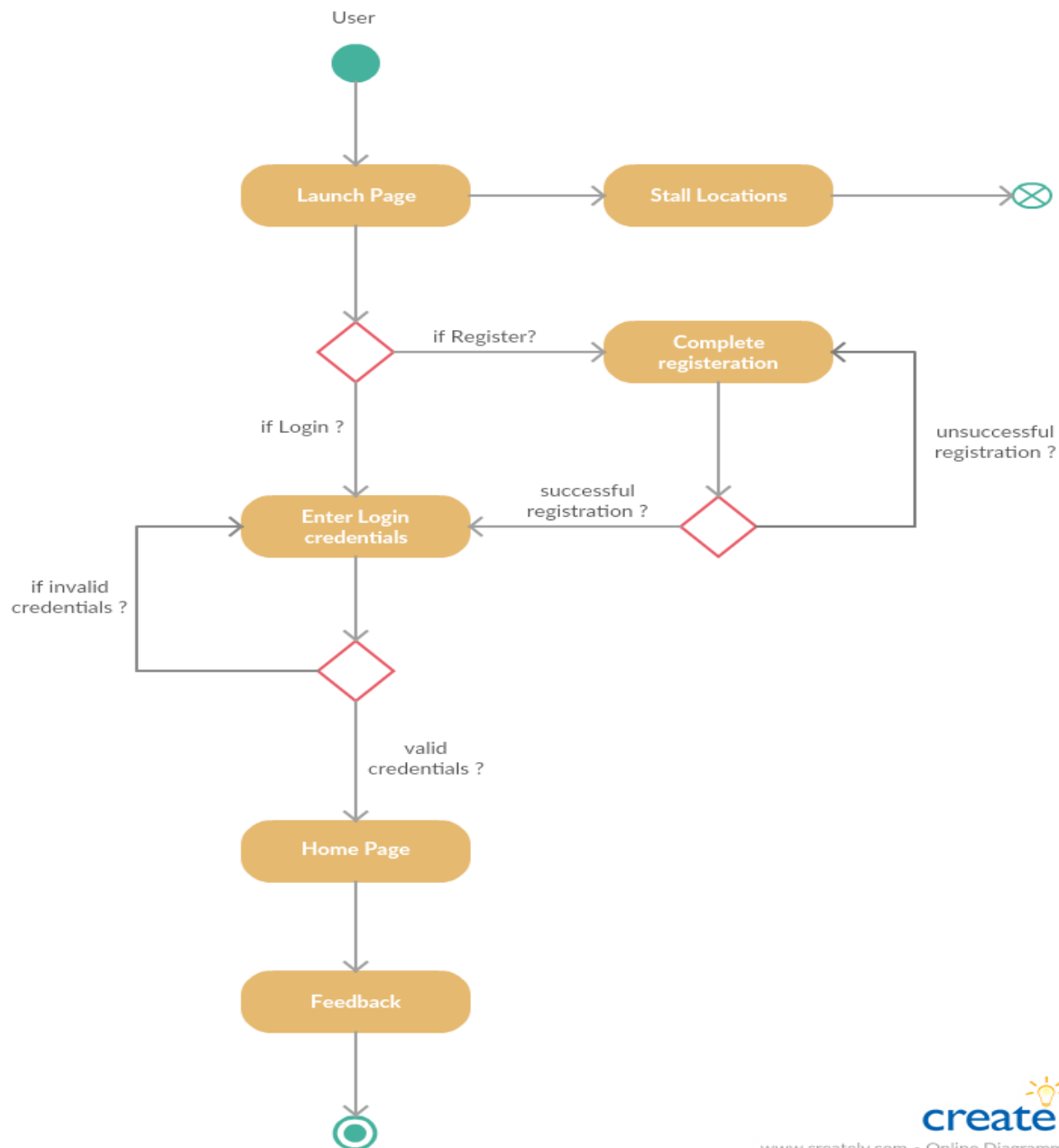
CLASS DIAGRAM

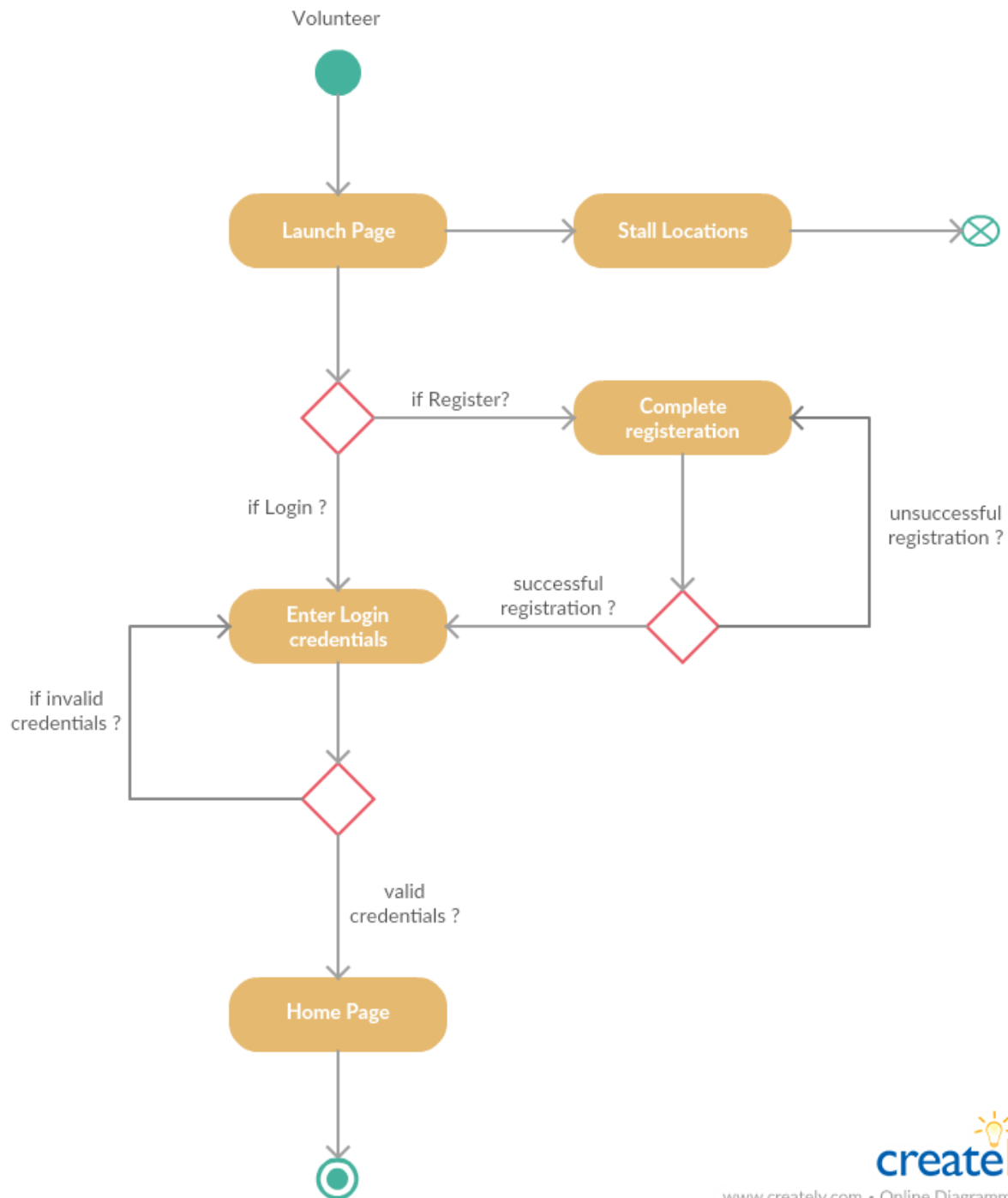
This is the class diagram which represents the Login ,Home and Register page . User and Volunteer are inherited from Register as they have to register with same details. After entering credentials once authentication is successful it will redirect to Home page.

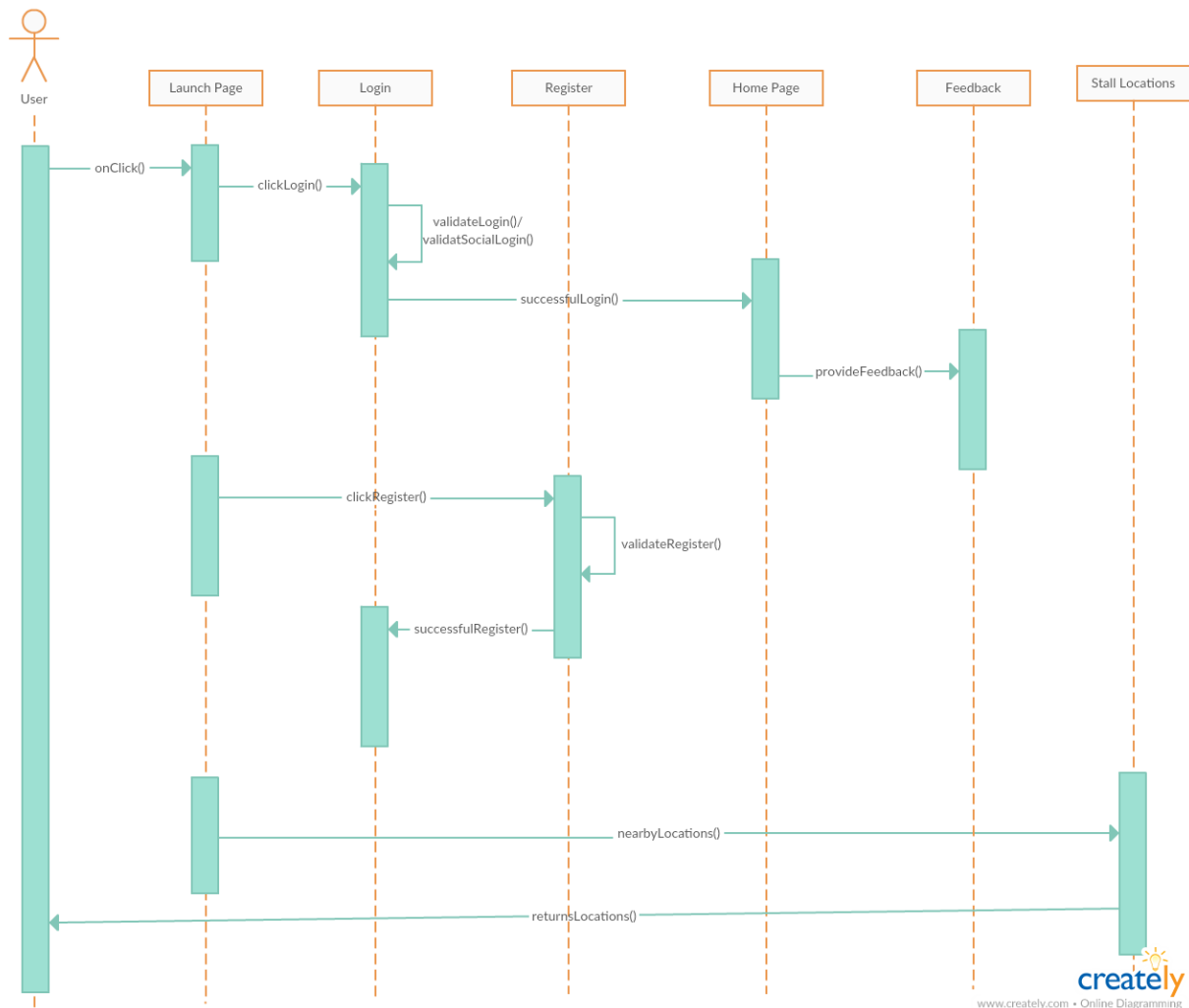


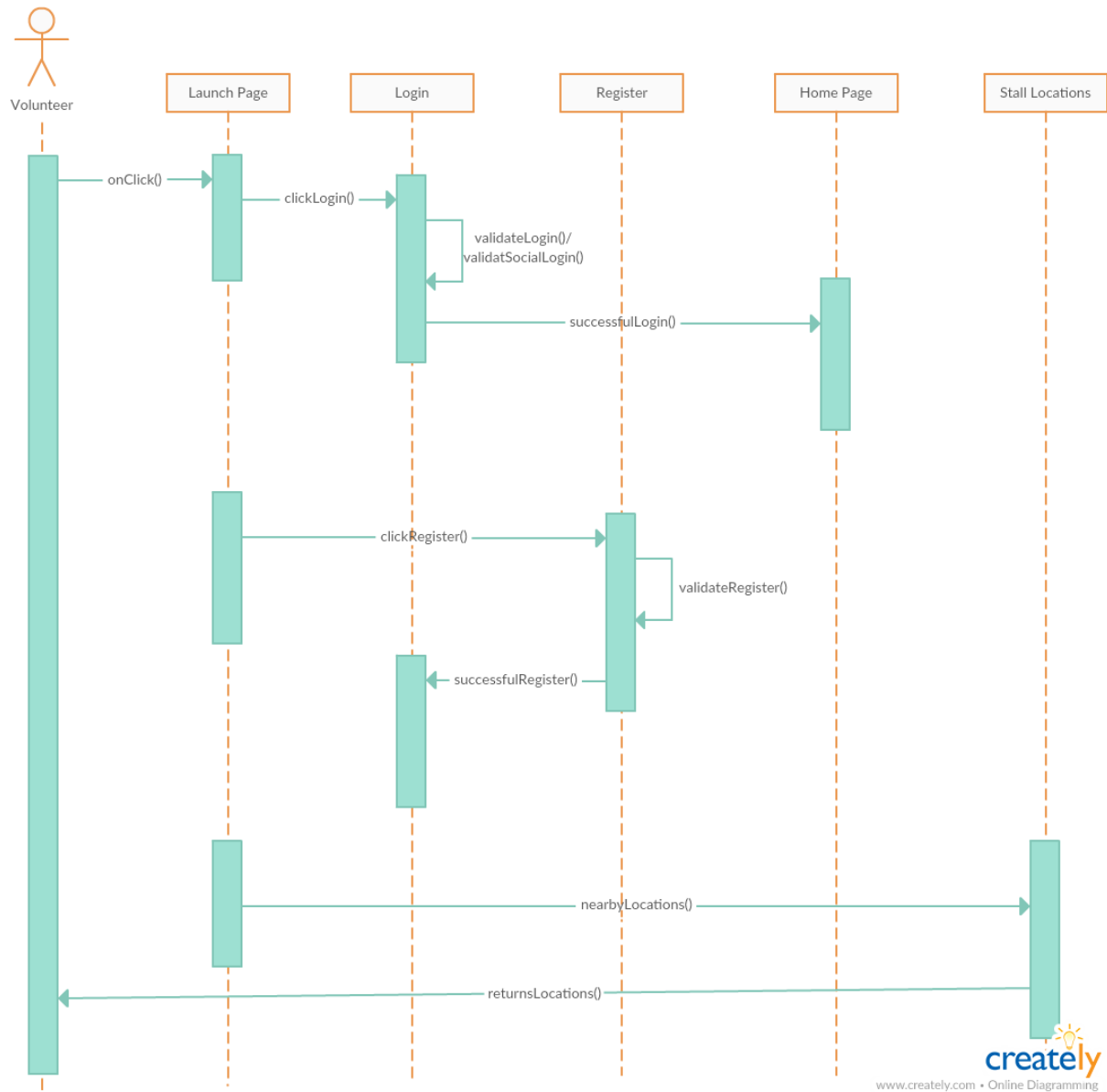
ACTIVITY DIAGRAM

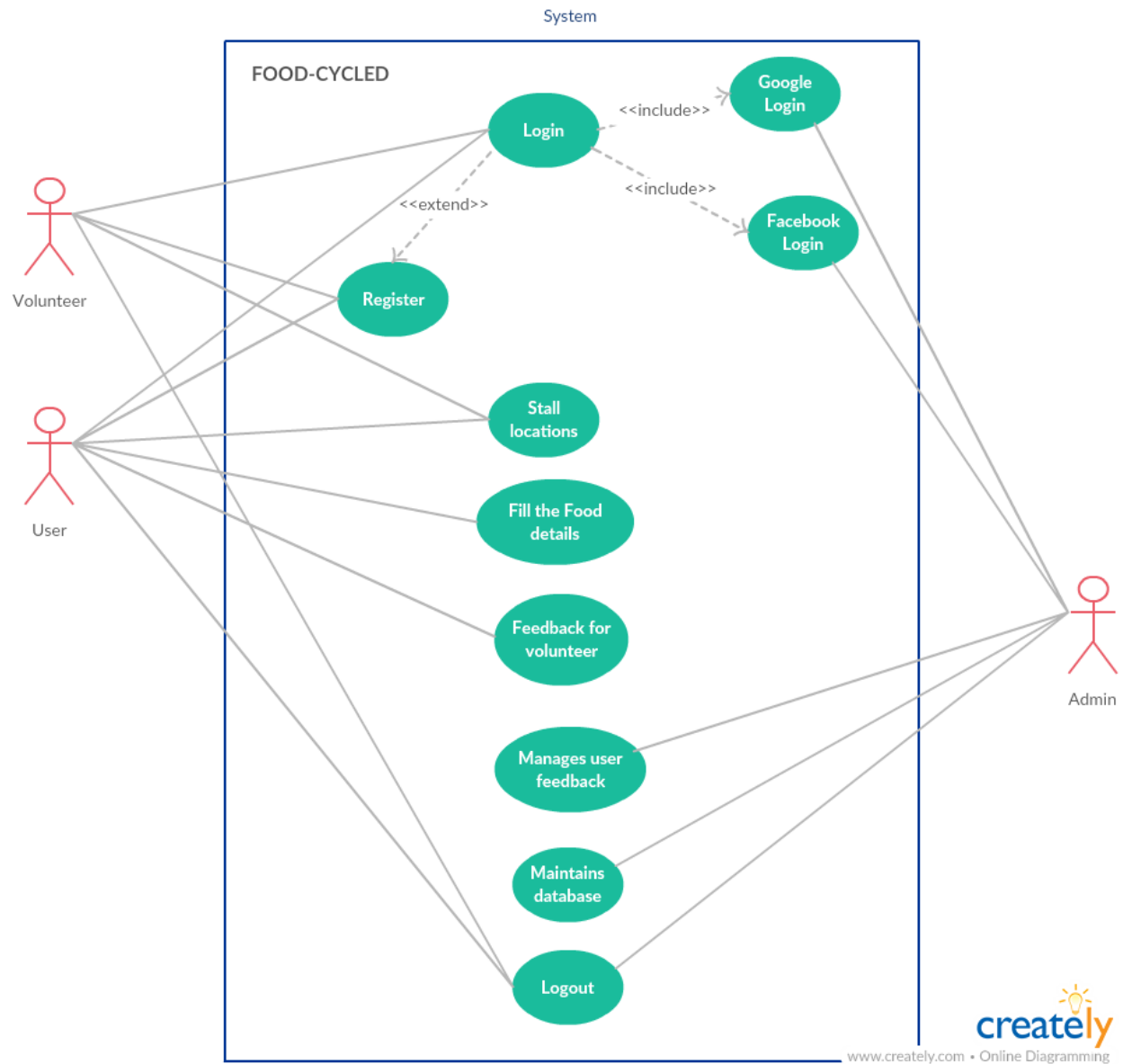
Activity diagram describes the flow of activities involved for user and volunteers to login and to register to enter the home page.

i) USER

ii) VOLUNTEER

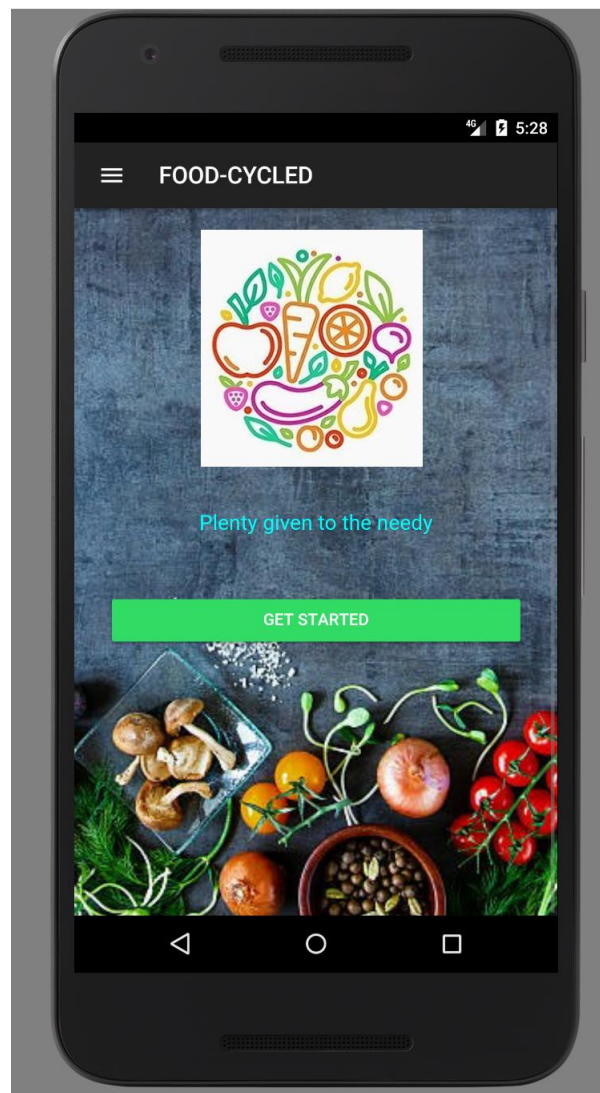
SEQUENCE DIAGRAM**i) USER**

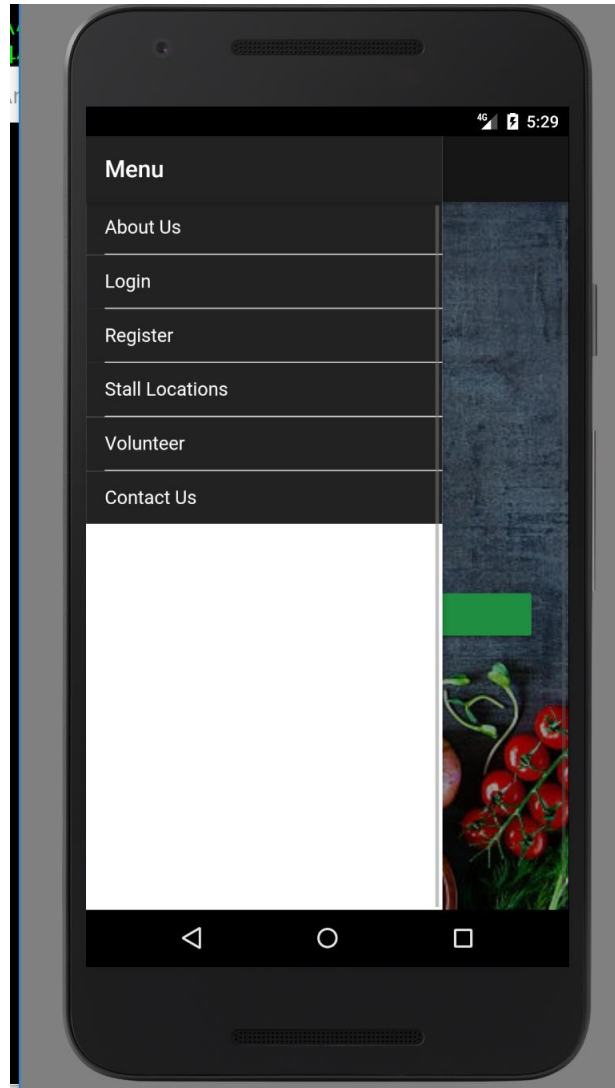
ii)VOLUNTEER

USECASE DIAGRAM

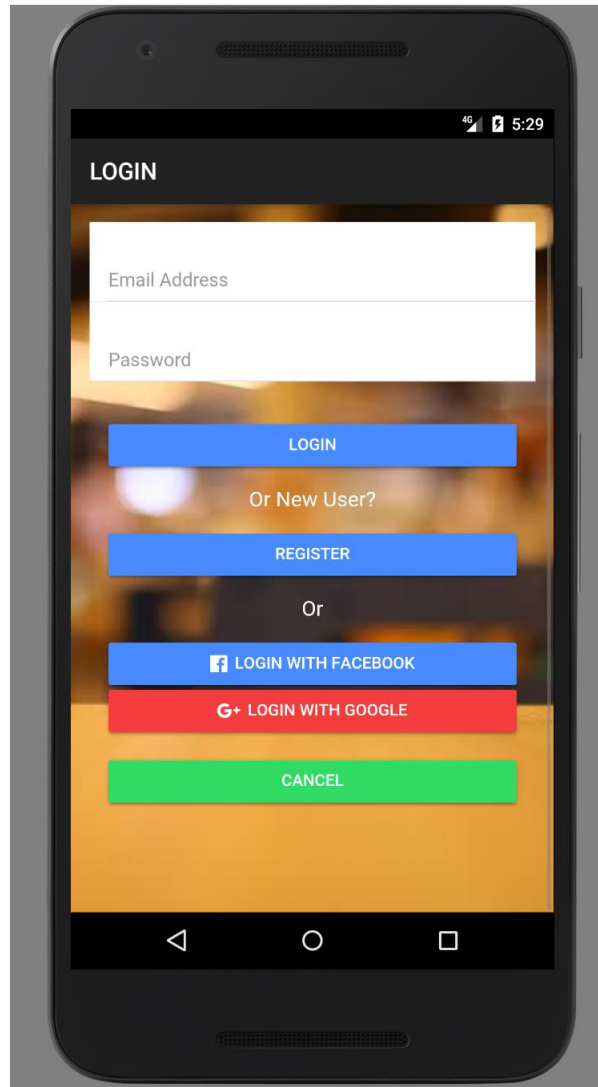
V. IMPLEMENTATION

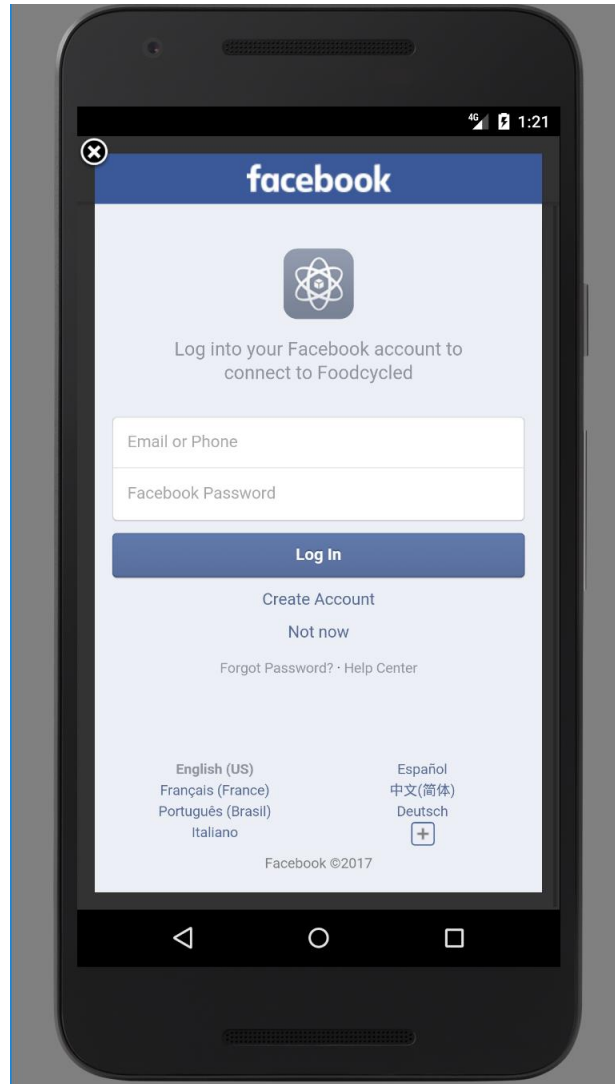
LAUNCH PAGE

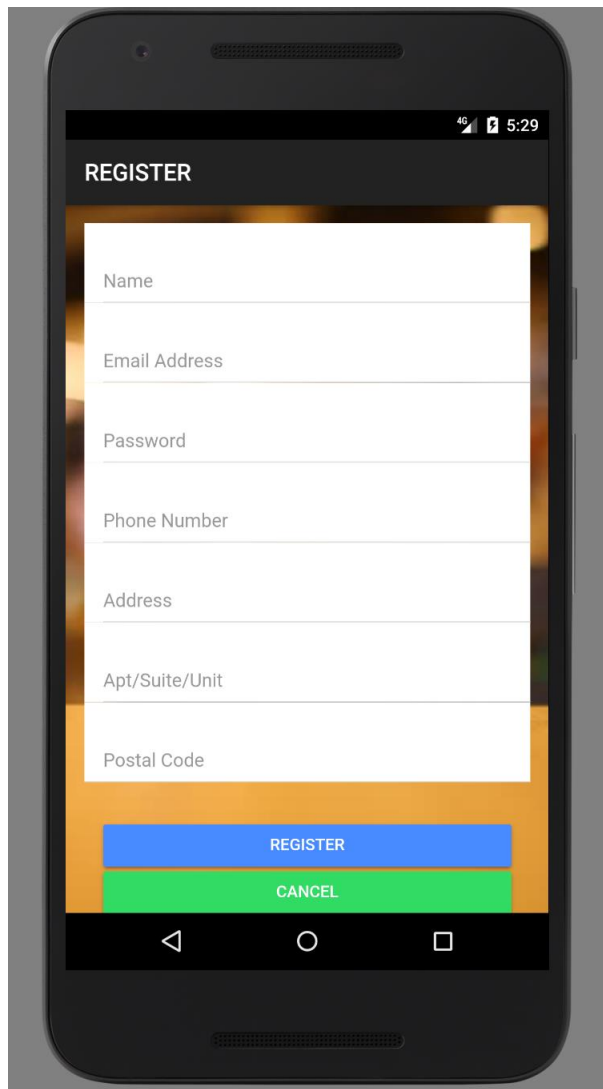


MENU PAGE:

LOGIN PAGE

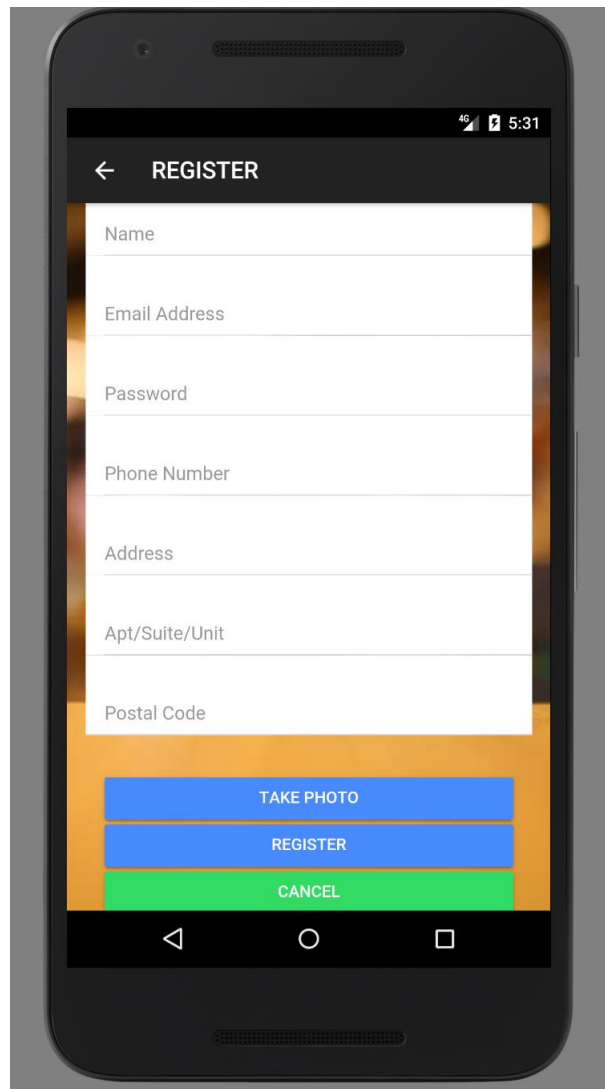


LOGIN WITH FACEBOOK

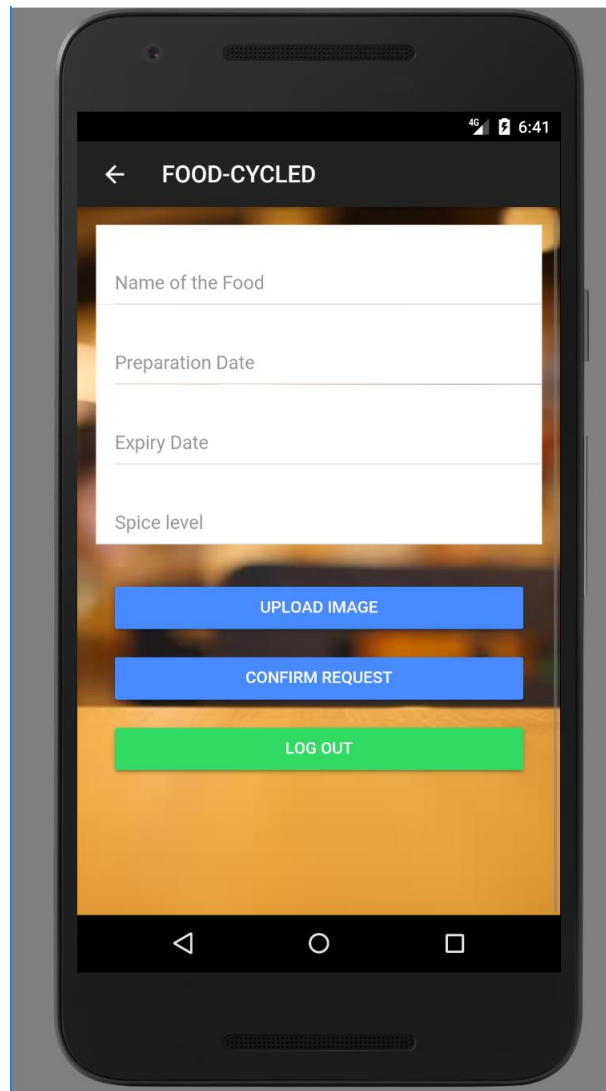
USER REGISTRATION PAGE:

The image shows a mobile application interface for user registration. The screen is titled "REGISTER" and features a series of input fields for user information. The fields are labeled "Name", "Email Address", "Password", "Phone Number", "Address", "Apt/Suite/Unit", and "Postal Code". Below the input fields are two buttons: a blue "REGISTER" button and a green "CANCEL" button. The interface is displayed on a smartphone screen with a black status bar at the top showing the time as 5:29 and a 4G signal. The bottom of the screen shows the standard Android navigation bar with back, home, and recent apps icons.

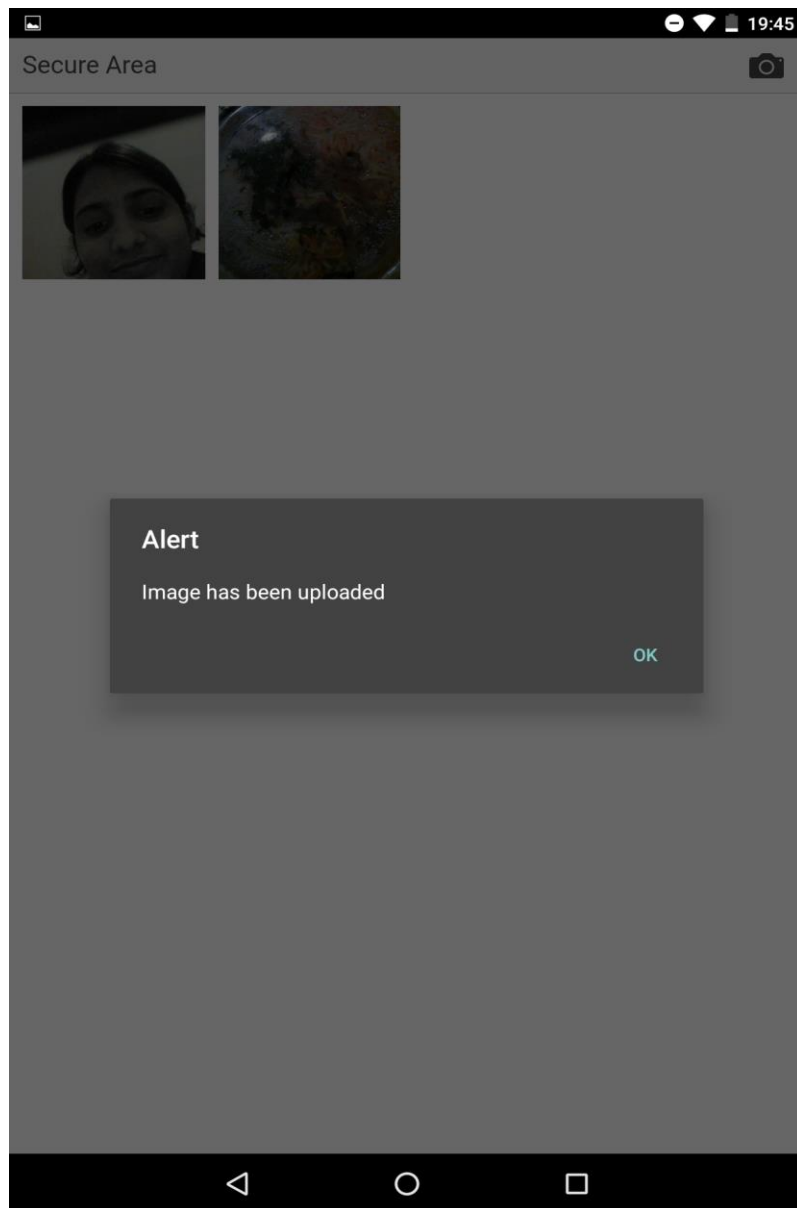
VOLUNTEER REGISTRATION PAGE:



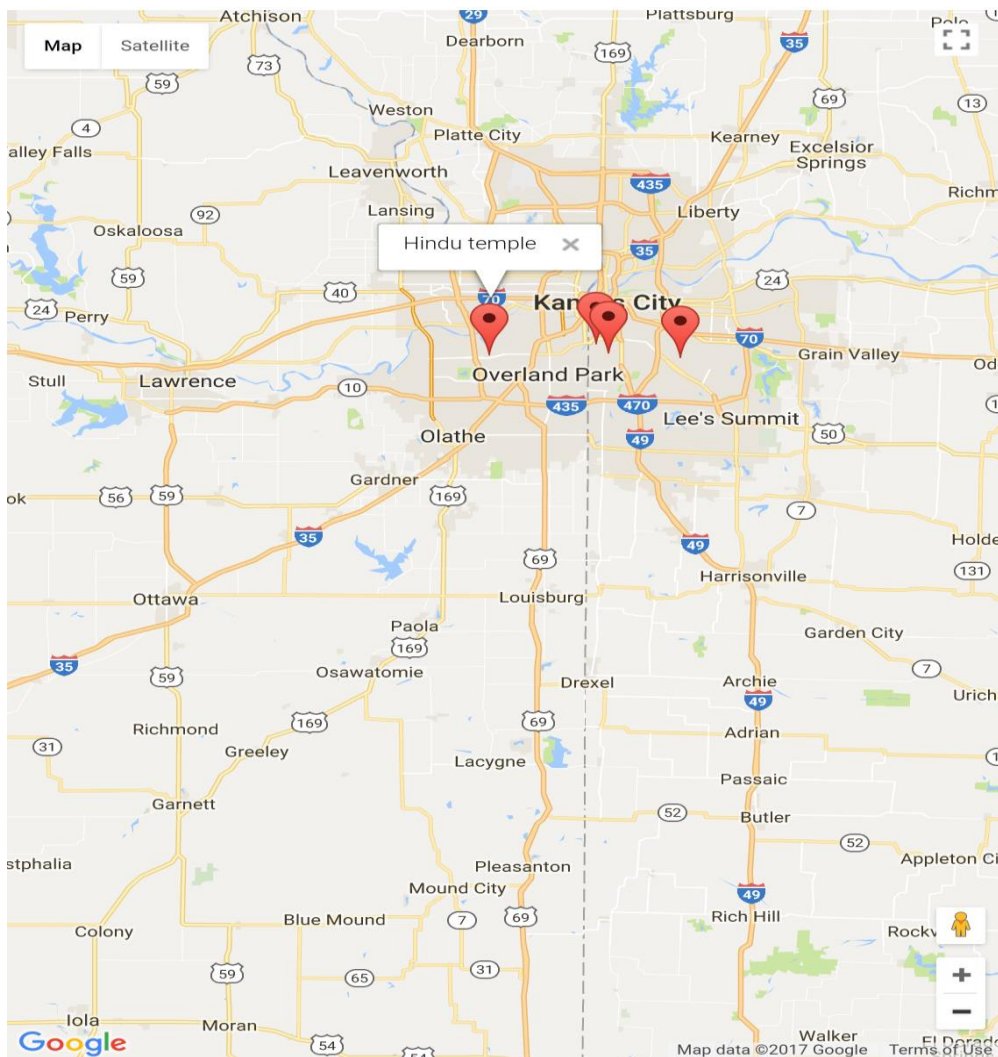
USER HOME PAGE:

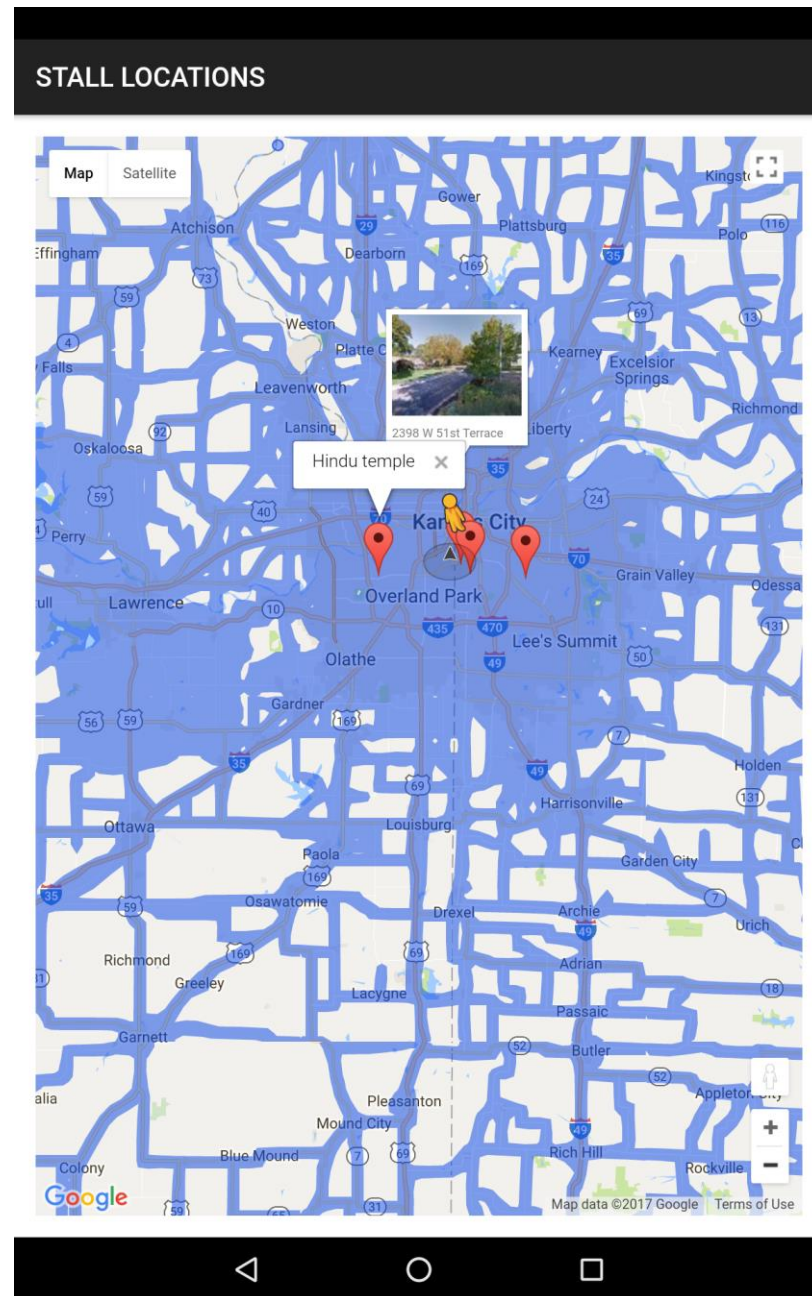


UPLOAD IMAGE:



STALL LOCATIONS:

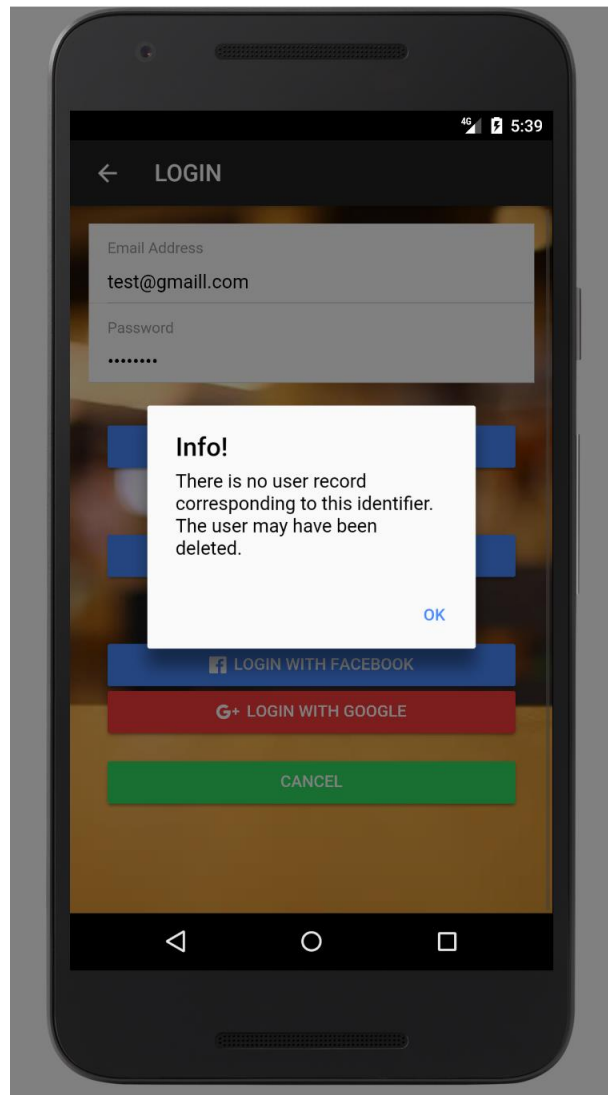
STALL LOCATIONS

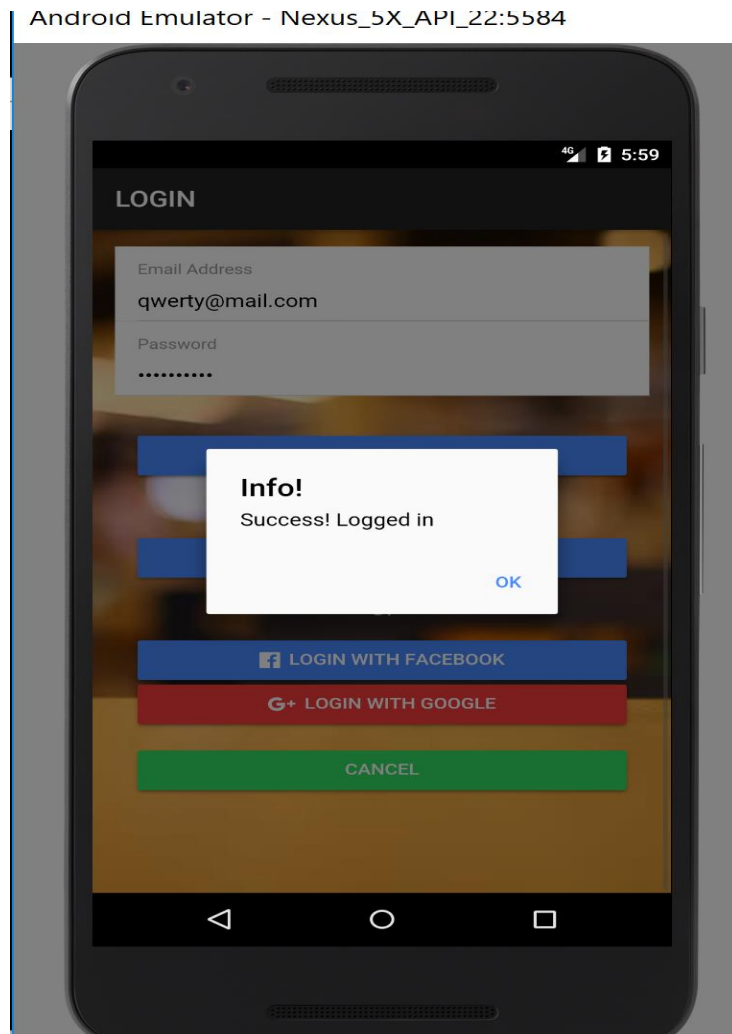


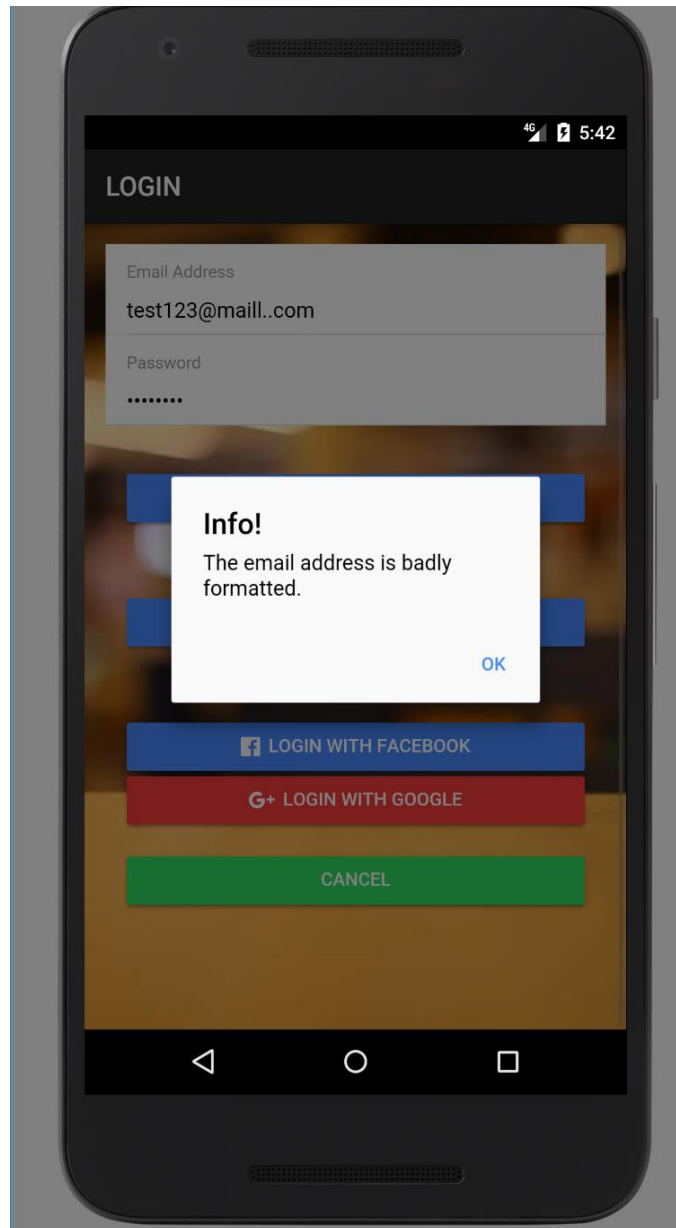
VI. TESTING

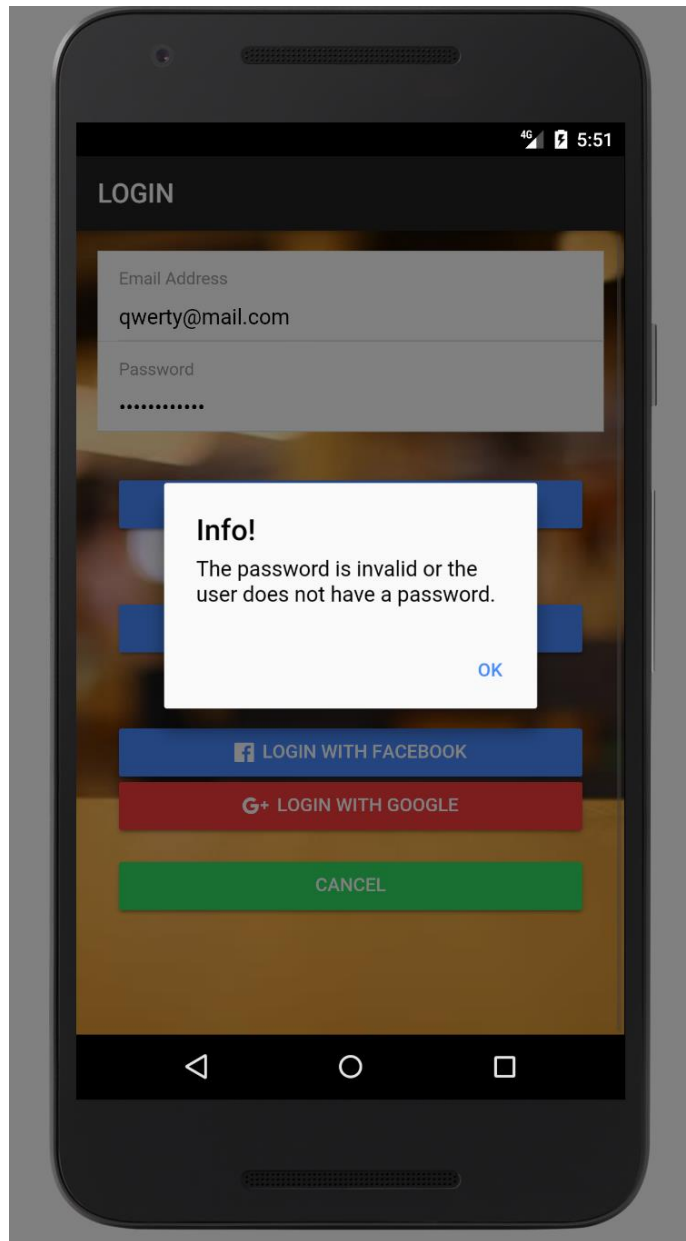
Unit Testing

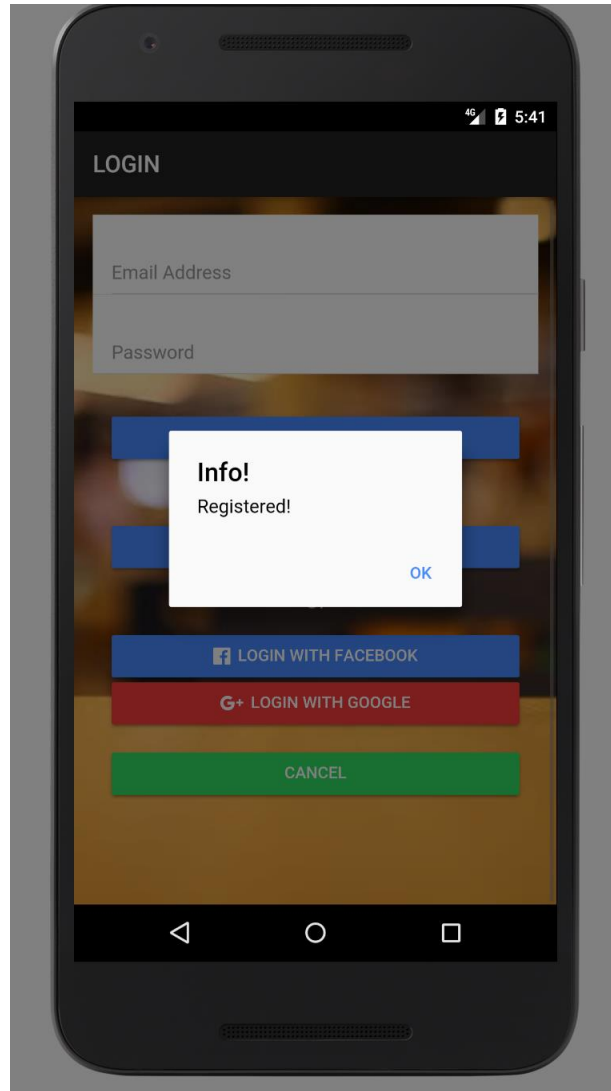
Sr No.	Test Case	Description	Expected Outcomes	Result
1.	Successful User Authentication	User should be able to Login with the Email and password	Successful Login	Pass
2.	Unsuccessful User Authentication	User provides wrong credentials	Login Unsuccessful with error prompts	Pass
3.	Successful User OAuth Login (Social login)	The User provides correct credentials	Successful login	Pass
4.	Registration by User and Volunteer	Any User should be able to successfully register	Successful Registration	Pass
5.	Registration Page	User should be able to successfully register	Successful Registration	Pass

UNIT TESTING:









VII. TECHNOLOGY USED

Implementation of Mobile Apps- Technology Used

- Android SDK
- HTML
- CSS
- Ionic
- Javascript
- Firebase

VIII.PROJECT MANAGEMENT

Open Issues

<input type="checkbox"/>	5 Open	19 Closed	Author	Labels	Projects	Milestones	Assignee	Sort
<input type="checkbox"/>		nutrition api 2nd issue	#18 opened 5 hours ago by sulochanamulpuri	increment 2				
<input type="checkbox"/>		nutrition api issue	#15 opened 5 hours ago by sulochanamulpuri	increment 2				
<input type="checkbox"/>		increment(deployment and testing)	#10 opened 21 days ago by harikaadivanne	increment 4				
<input type="checkbox"/>		increment 3(implement food api,enable chat conversation,thank you page and feed back page)	#9 opened 21 days ago by harikaadivanne	increment 4				
<input type="checkbox"/>		increment 2(facebook oauth for website,photo upload for android,implement food api)	#8 opened 21 days ago by harikaadivanne	increment 2				

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Closed Issues

CS5551_team1_project

Boards

Reports

Milestones

Notifications

Repos (1/1)

Show one

Labels

Milestones

Assignees

Epics

Releases

Search

New Issue

0 Story Points

Backlog

CS5551_team1_project #8
increment 2(facebook oauth for website,photo upload for android,implement food api)
increment 4

CS5551_team1_project #9
increment 3(implement google maps api,enable chat conversation,thank you page and feed back page)
increment 4

CS5551_team1_project #10
increment(deployment and testing)
increment 4

2 Issues - 6 Story Points

In Progress

CS5551_team1_project #15
nutrition api issue
increment 2

CS5551_team1_project #18
nutrition api 2nd issue
increment 2

0 Issues - 0 Story Points

Review/QA

11 Issues - 35 Story Points

Done

CS5551_team1_project #7
first increment(login page,register page,facebook oauth for android)
first increment

CS5551_team1_project #16
volunteer login page issue
increment 2

CS5551_team1_project #19
login page storing issue
increment 2

CS5551_team1_project #23
maps failed to add plugin issue
increment 2

7+ Issues - 30 Story Points

Closed

CS5551_team1_project #22
maps multiple location issue
increment 2

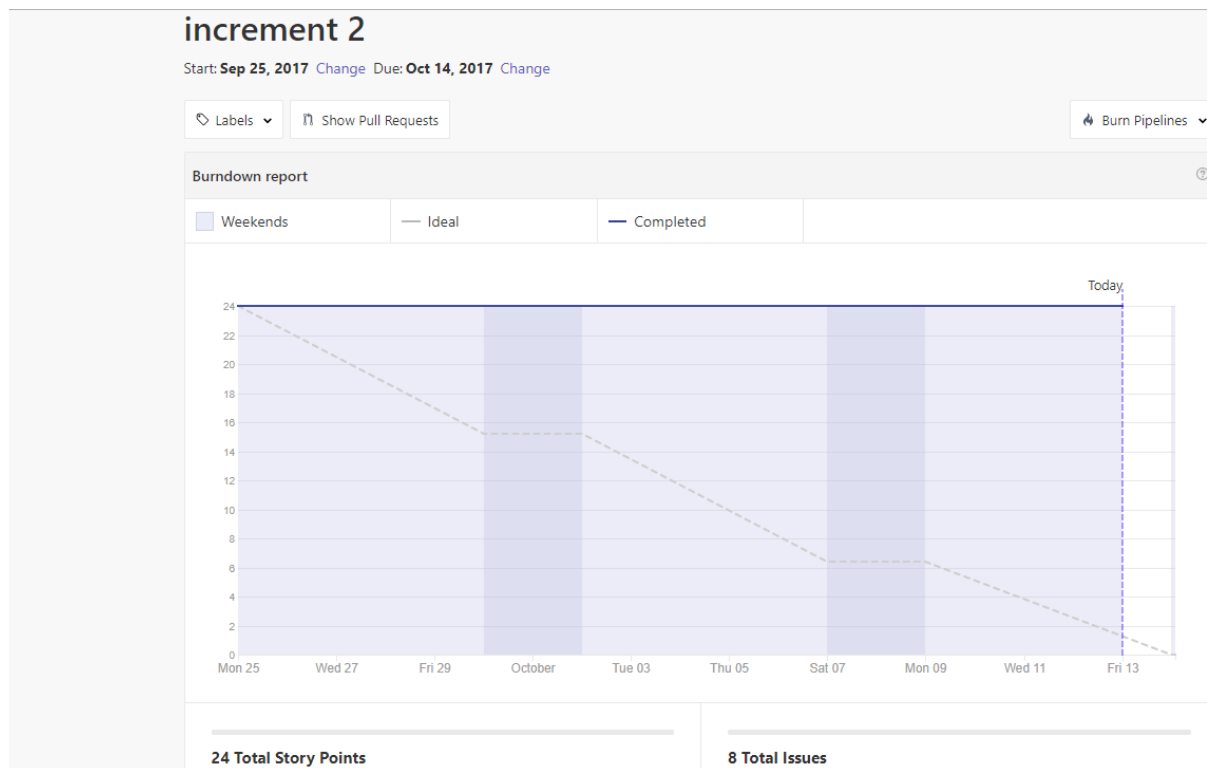
CS5551_team1_project #4
uml issue
first increment

CS5551_team1_project #6
system architecture issue
first increment

CS5551_team1_project #5
android issue
first increment

CS5551_team1_project #1
login issue
first increment

Burndown chart for Increment 2



WORK COMPLETED

Shreyaa Sridhar

- Login Page
- Camera API
- User Main Page (Food API)
- Class Diagram
- Project Documentation

Sulochana Rani Mulpuri

- Login Page
- Camera API
- User Main Page (Food API)
- Sequence Diagram
- Zenhub Tool

Harika Adivanne

- Launch Page
- Registration Page
- Stall Location (Google Maps API)
- Use Case Diagram

Navya Bhattu

- Login Page
- Camera API
- User Main Page (Food API)
- Activity Diagram

IX. BIBLIOGRAPHY

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<https://developers.facebook.com/>

<https://developers.google.com/>

<https://firebase.google.com/>