

Spring2018 CS5551: Advanced Software Engineering
Department of Computer Science Electrical Engineering
University of Missouri - Kansas City

SMART SHOPPING

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Video URL: <https://youtu.be/b2P5J7s4niE>

GitHub URL: <https://github.com/KranthiKumarGangineni/ASE-Project1>

ZenHub URL: <https://github.com/KranthiKumarGangineni/ASE-Project1#boards?repos=120060120>

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CHAPTER 1

INTRODUCTION

1.1 PROBLEM DEFINITION:

In day to day life having a healthy diet is a challenge. Build an android application which represents the cataloged dish and the recipe for the selected dish (include the calories). Navigate to the near by store. Implement an Augmented Reality feature.

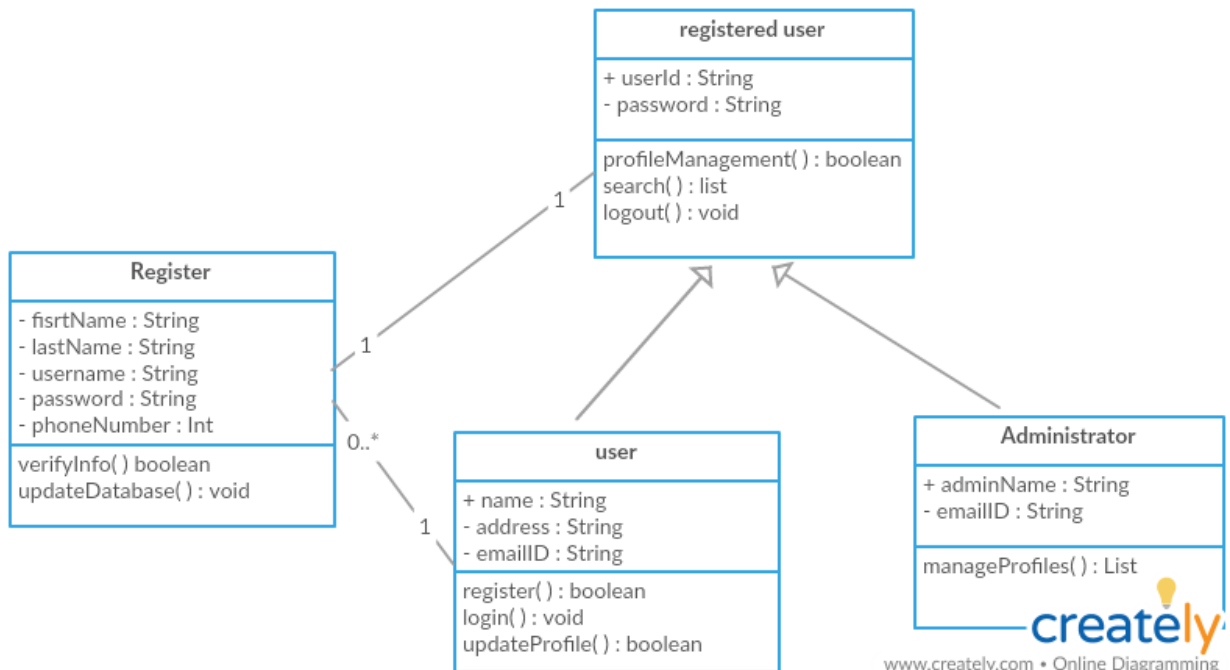
1.2 PROPOSED SYSTEM:

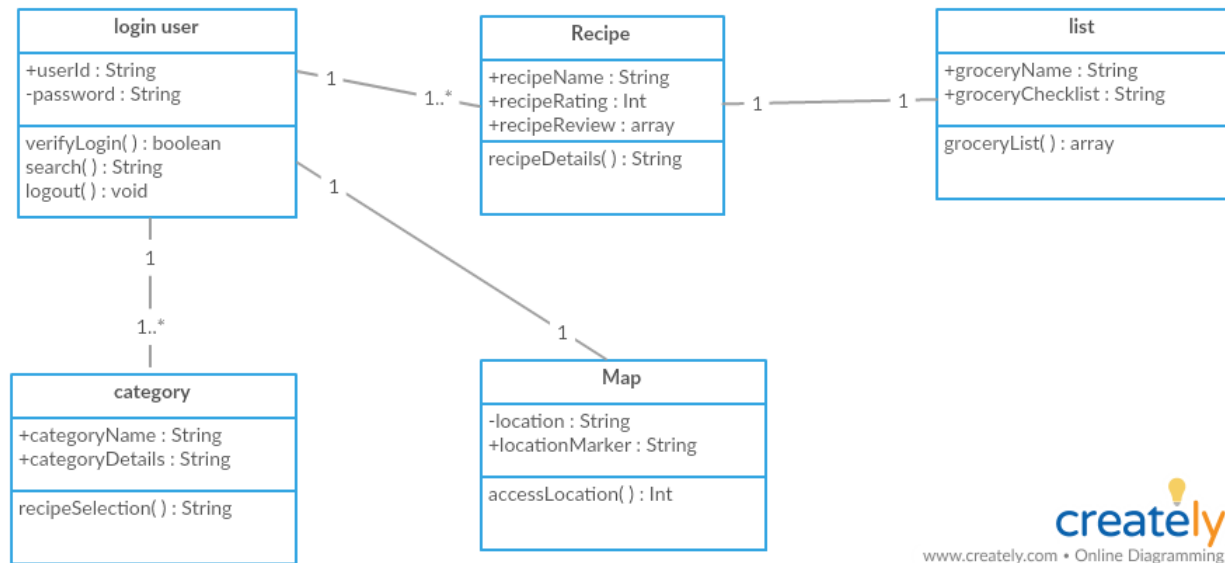
We have built an android application which satisfies the above requirements and we have added some additional features like rating, average rating of a dish and we have extracted tweets from twitter based upon the dish name.

1.3 SOFTWARE REQUIREMENTS:

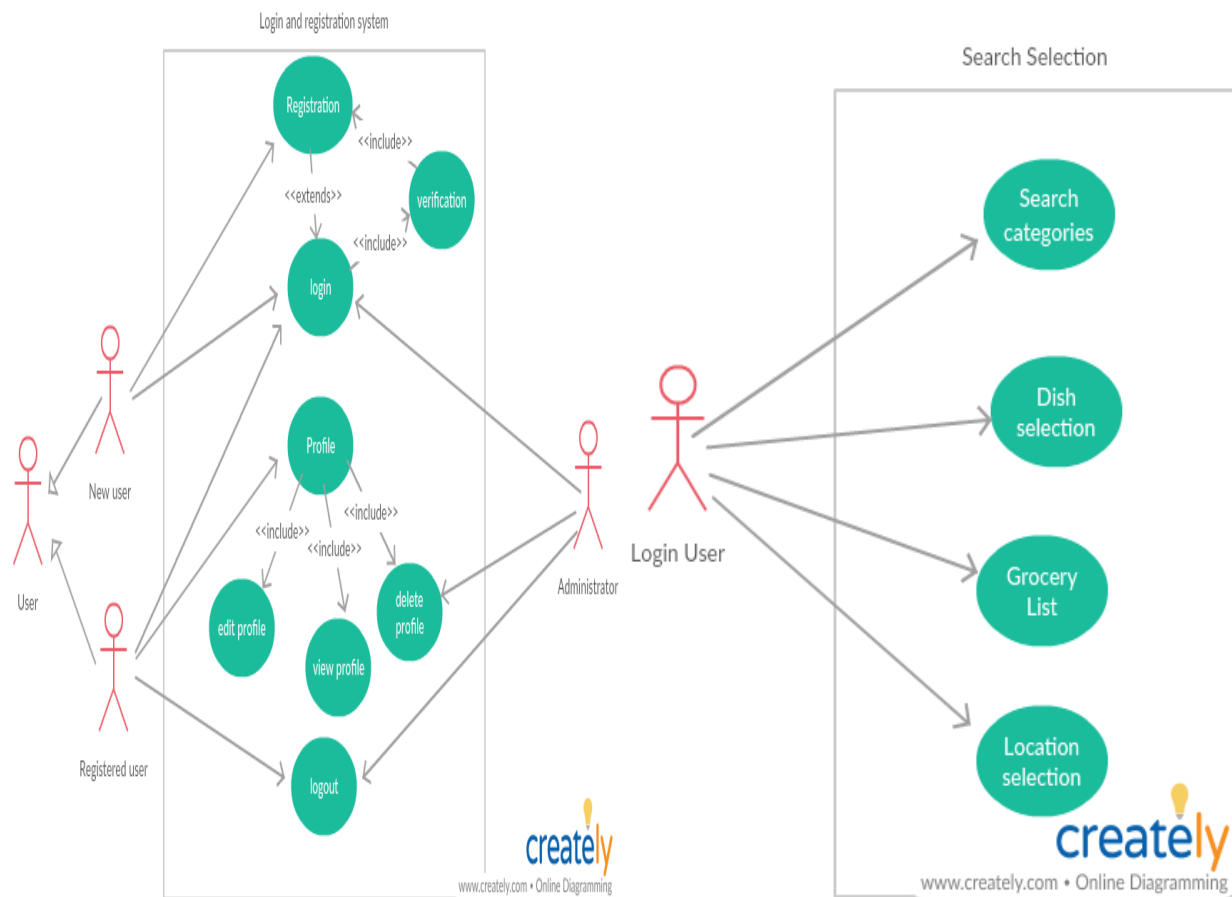
- Android Studio
- Unity Software
- Vuforia

1.4 CLASS DIAGRAM:





1.5 USECASE DIAGRAM:



CHAPTER 2

2. MODULE DESCRIPTION

Login and Registration Module:

Login Activity is created with validations like empty credentials and invalid credentials in which we have added Background Images.

Registration Activity is created with text fields first name, last name, email address, password, confirm password with validations like empty credentials, email should have @ symbol and . symbol, password and confirm password should match.

Home Page Module:

We have created three different categories namely that will be displayed in the homepage

- Vegetarian
- Non-Vegetarian
- Others

2.1 HOW TO USE THE SYSTEM

On successful registration and login above mentioned home module is displayed in which user can update his profile on click of My Profile button such as First Name, Last Name, Password and Confirm Password.

Under the categories on the Home page, respective items displayed basing on the category, for suppose to get the chicken related items user needs to select non-vegetarian category and can check for the chicken related items.

We have used below represented API to fetch the recipe catalog.

Edamam API:

`https://api.edamam.com/search?q=" + recipeInput + "&app_id=0da1fc3a" + "&app_key=1e189e176e3f058fab55715279137a81&from=0&to=10`

We have added a link naming source which redirects the page to complete recipe details.

Created a rating bar, the user can rate the recipe, the user can view the rating whenever he logs-in as the data is stored in the database. And an average rating bar is created which displays the average rating of the recipe that has been rated by the users.

On click of Get nearby store it will navigate to google maps we have used below represented Four Square API.

Four Square API:

https://api.foursquare.com/v2/venues/search?client_id=L4T1TGLT2ZW1C2LGBQREAG3NR5SKTFNKSZLKF33EA4MSIP2Z&client_secret=RBYSK0MNC53HECMIX1OCXCH02HGKWUYELKS1QNPVHAILKLHE&v=20180223&limit=5&ll='+this.lat+','+this.lng+'&query=super market

We displayed top 10 near by store from the current user location. On click of one store marker, we presented a code to represent the store name. On another click it navigates to the path.

We have added an additional feature Twitter trends in which top 10 tweets are displayed based on the selected dish name.

We have added a shake gesture to navigate to the implemented augmented reality feature in the respective page.

CHAPTER 3

3. ERROR RECOGNITION AND HANDLING

Registration Page:

We have added all the possible validations like

- Text fields cannot be empty.
- Password and confirm password must match
- Email ID must be unique
- Email ID must consists of @ and . symbol (valid email)

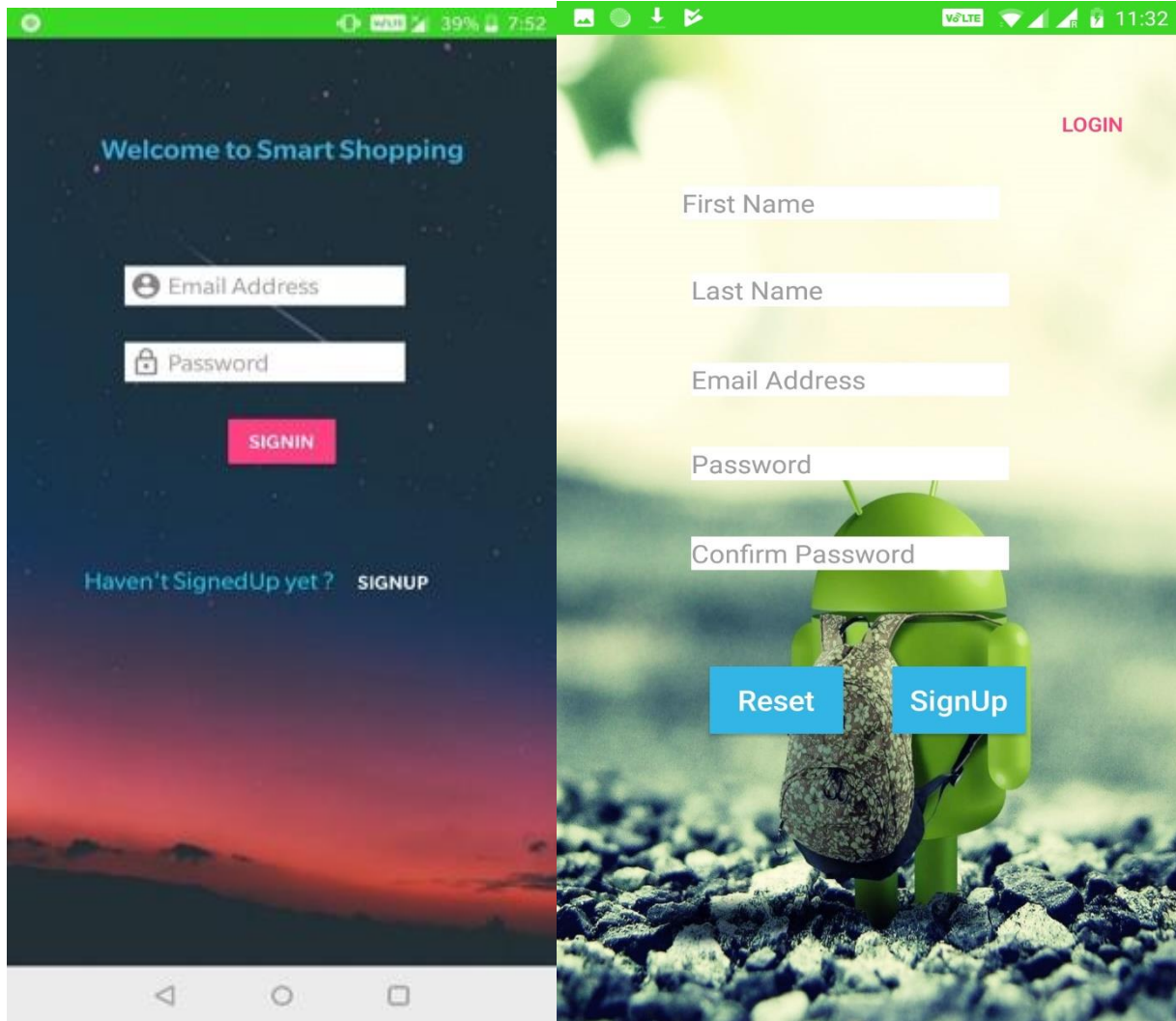
Login Page:

- Fields cannot be empty
- Credentials must match to the saved credentials on the database.

CHAPTER 4

4. SCREEN DUMPS

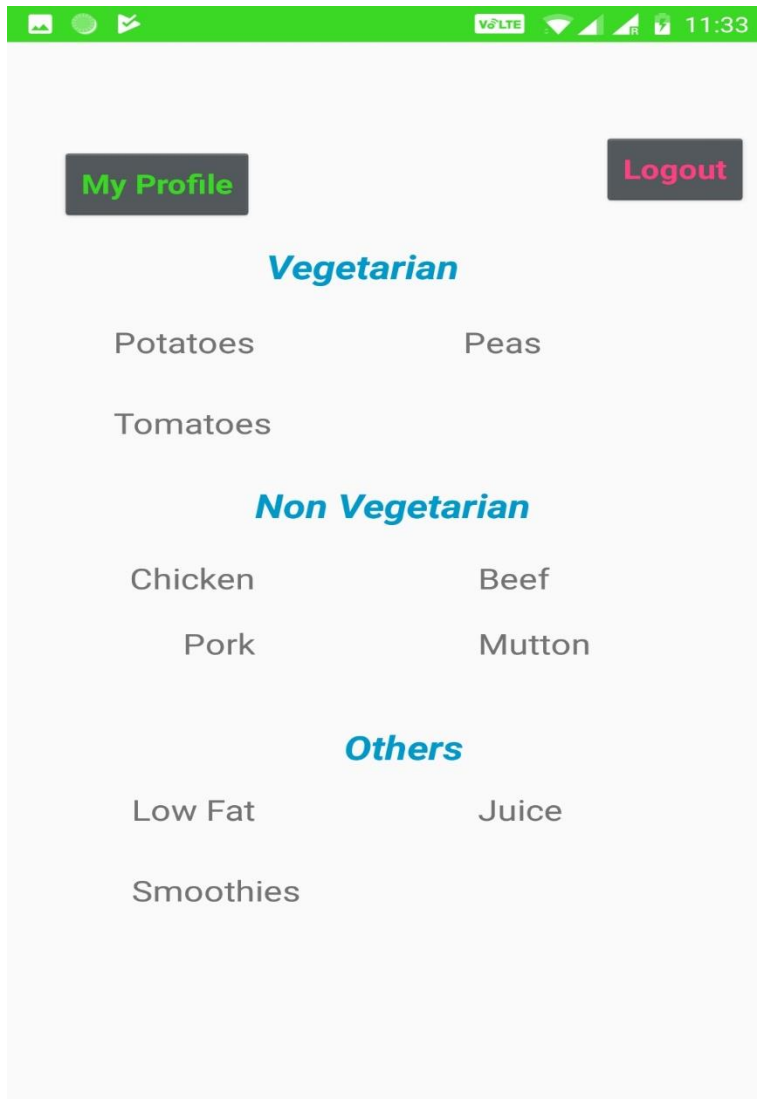
Login and registration screen:



Home Page:

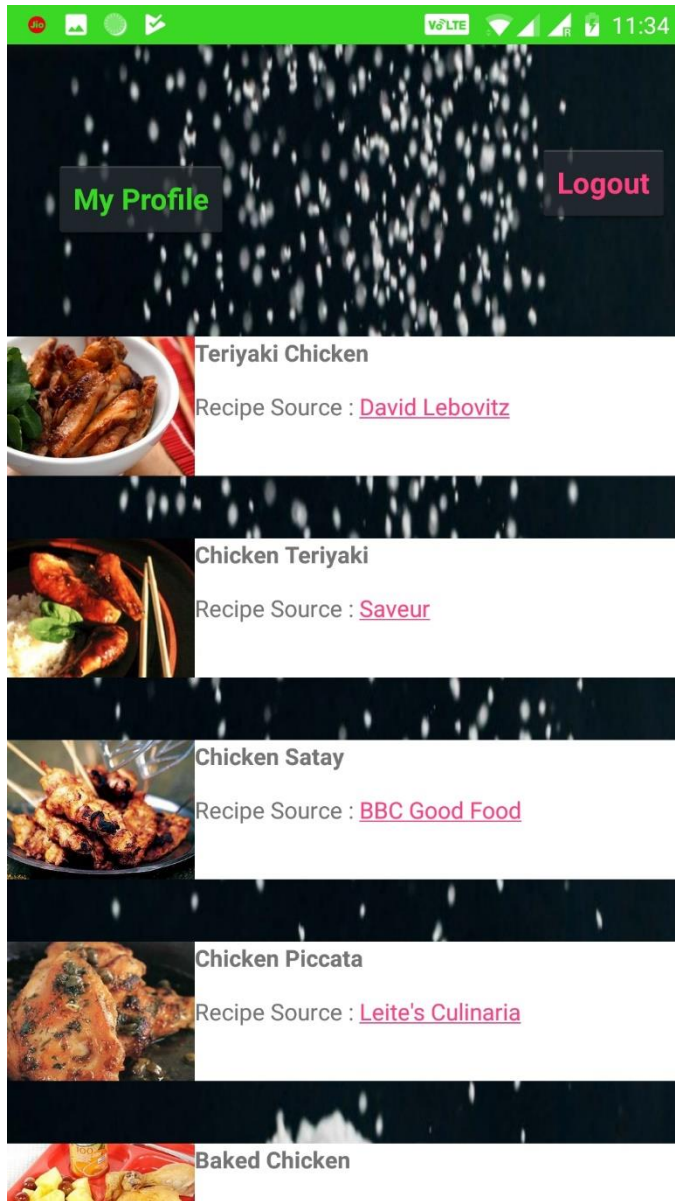
In this page, user can select the desired item under three different categories naming vegetarian, non vegetarian, others

There is one more feature i.e, to update the profile: on click of My Profile user can update the first name, last name and the profile password.




We have navigated to chicken item and on interaction with the adamam API the result output of top 10 dishes is generated.

On click of recipe source it navigates to the respective website.



On click of desired dish for example baked chicken, respective Ingredients and nutrients are displayed.

Baked Chicken



See Full Recipe at : [Martha Stewart](#)

★ ★ ★ ★ ★

Avg User Rating ★ ★ ★ ★ ★


4 Ingredients

- 6 bone-in chicken breast halves, or 6 chicken thighs and wings, skin-on
- 1/2 teaspoon coarse salt
- 1/2 teaspoon Mrs. Dash seasoning
- 1/4 teaspoon freshly ground black pepper

Nutrients
Number of People Dish Serves:4
Calories/Serving : 225

We have added a special feature, rating where the user can rate an individual dish and the average rate of all the users is displayed in the Avg User Rating rating bar.

Baked Chicken



See Full Recipe at : [Martha Stewart](#)

★ ★ ★ ★ ★


Avg User Rating ★ ★ ★ ★ ★

4 Ingredients

- 6 bone-in chicken breast halves, or 6 chicken thighs and wings, skin-on
- 1/2 teaspoon coarse salt
- 1/2 teaspoon Mrs. Dash seasoning
- 1/4 teaspoon freshly ground black pepper

Nutrients
Number of People Dish Serves:4
Calories/Serving : 225

Baked Chicken



See Full Recipe at : [Martha Stewart](#)

★ ★ ★ ★ ★

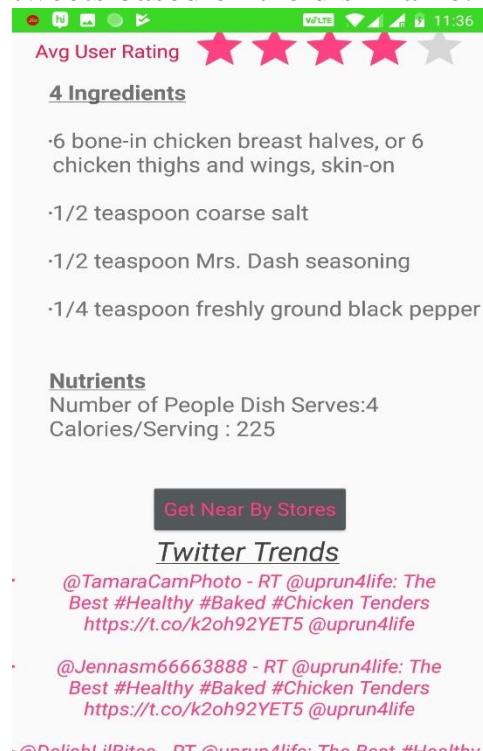
Avg User Rating ★ ★ ★ ★ ★

4 Ingredients

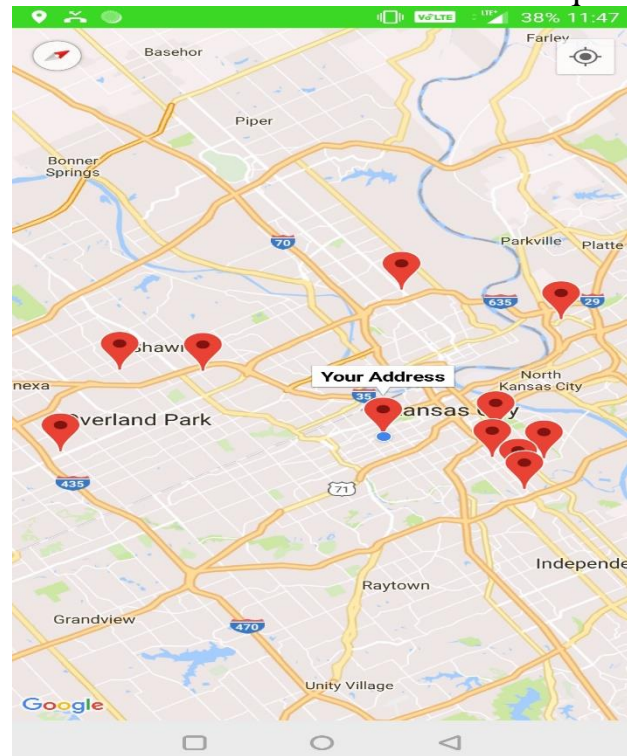
- 6 bone-in chicken breast halves, or 6 chicken thighs and wings, skin-on
- 1/2 teaspoon coarse salt
- 1/2 teaspoon Mrs. Dash seasoning
- 1/4 teaspoon freshly ground black pepper

Nutrients
Number of People Dish Serves:4
Calories/Serving : 225

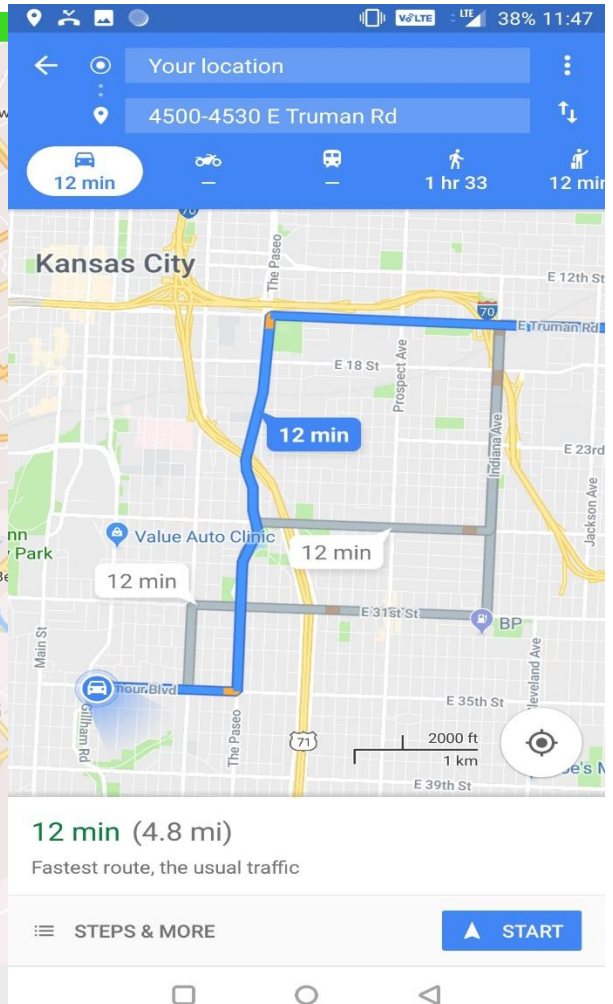
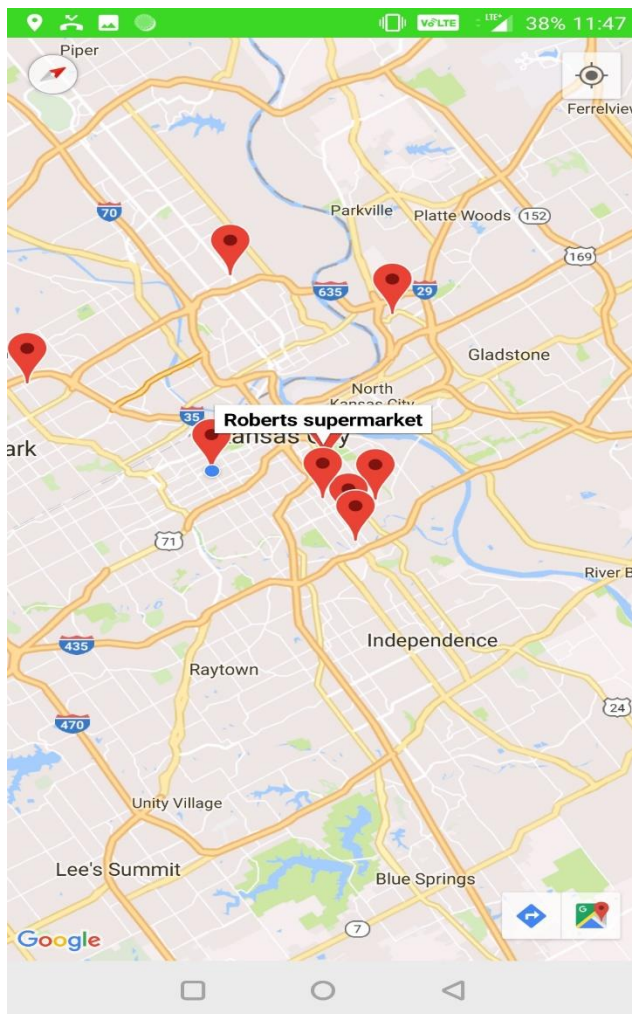
Most interesting feature, Twitter Trends, which automatically displays the top 5 tweets based on the dish name.



On click of Get Near By Stores button, screen navigates to the google maps where a marker of your address is displayed which represents the current location of the user and with the interaction of foursquare API, top 10 near by stores are displayed

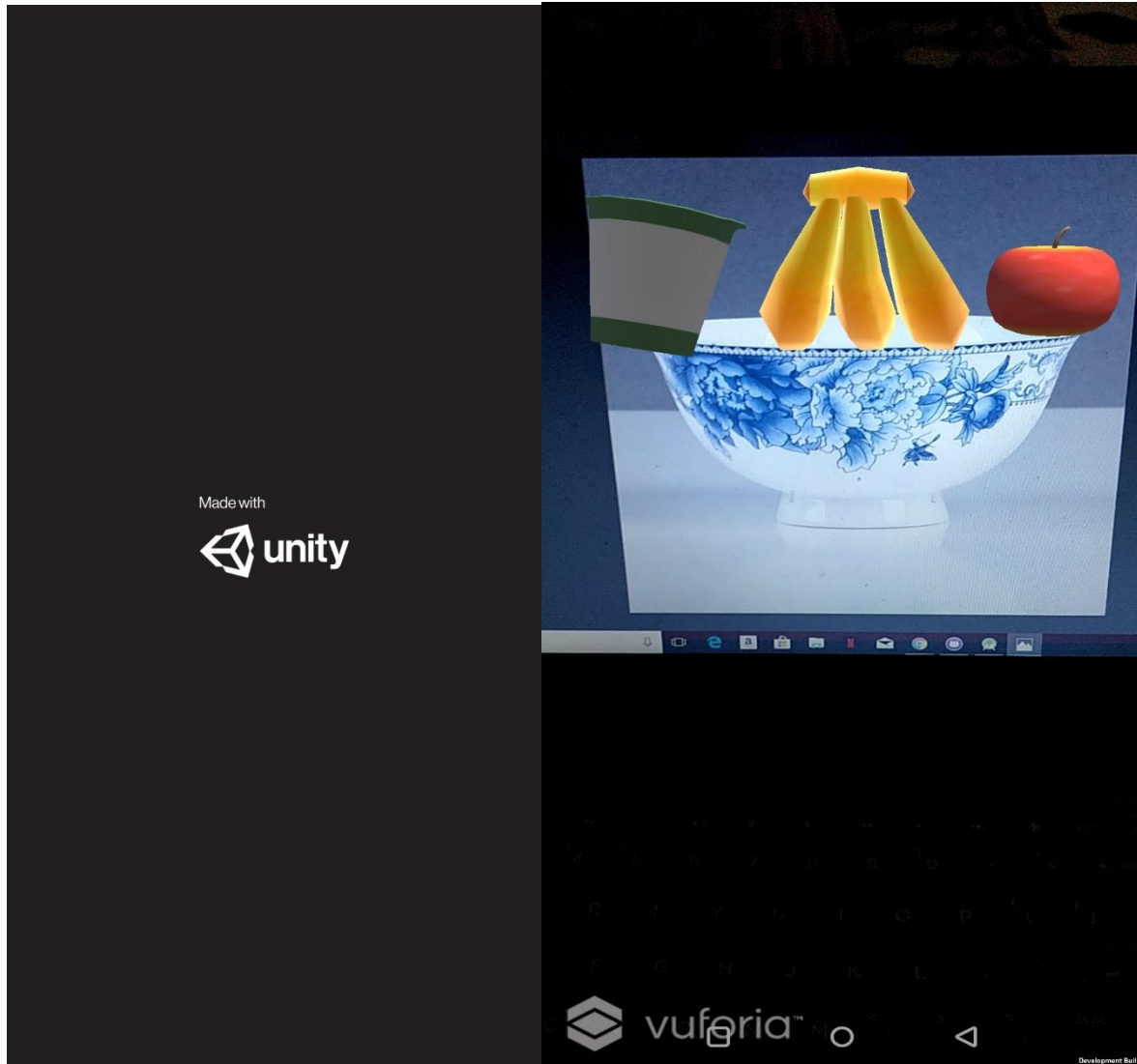


On click of any supermarket near by, specific store name is displayed on the marker. On another click on the marker the user will directly navigate to maps which displays the route map to the store from the user location.



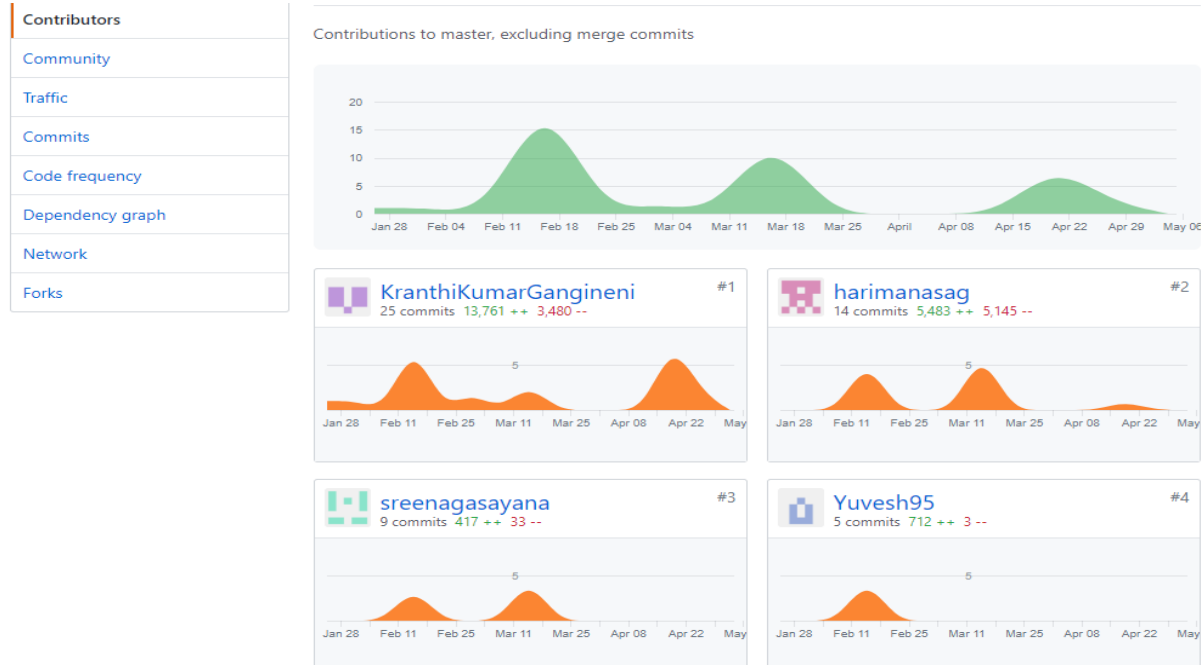
We have added a shake gesture to activate AR.

We have shaken the screen under the other category and the item that we have selected is smoothie. In which we have selected banana smoothie and the AR is obtained for the respective ingredients.



CHAPTER 5

5. PROJECT MANAGEMENT REPORT



GitHub repository interface for **KranthiKumarGangineni / ASE-Project1**.

Navigation tabs: Code, Issues (0), Pull requests (0), **ZenHub**, Projects (0), Wiki, Insights, Settings.

Left sidebar: Boards, Reports, Create..., Invite your team, View tutorials, Shortcuts, Open in web app.

Top bar: Repos (1/1), Labels, Milestones, Assignees, Epics, Releases, Find Issues (f+), New Issue (+).

Issue Board:

- Review/QA: 0 Issues - 0 Story Points
- Done: 0 Issues - 0 Story Points
- Closed: 12+ Issues - 18 Story Points
 - ASE-Project1 #10: Map Markings for nearest Grocery store
 - ASE-Project1 #11: Deployment of App to Mobile and Emulator
 - ASE-Project1 #9: UI development (Increment 2)
 - ASE-Project1 #12: Using REST API - Adamam (Increment 2)

Right sidebar: Add a Pipeline ...

Team member's contribution:

Kranthi Kumar Gangineni: 25%

Responsibilities: Update profile, SQLite interaction, home screen, worked on foursquare API, rating bar, twitter API, AR development

Hari Manasa Ganganagunta : 25%

Responsibilities: Update profile, SQLite interaction, home screen, worked on Admam recipe API, recipe screen, AR development

Sree Naga Sayana: 25%

Responsibilities: Login and registration screen, SQLite interaction, worked on Admam recipe API, recipe screen, AR development

Linga Sai Yuvesh Venketa Kotiala: 25%

Responsibilities: Login and registration screen, SQLite interaction, worked on foursquare API, rating bar, AR development

Acknowledgement Statement

The work has been completed under the guidance of Dr. Yugi Lee and TAs (Rohith Nagulapati, Sidrah Junaid, Nageswara Nandigam) in CS5551 Advanced Software Engineering, University of Missouri - Kansas City), Spring 2018.