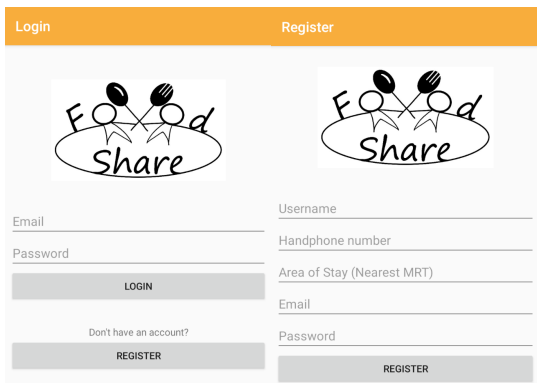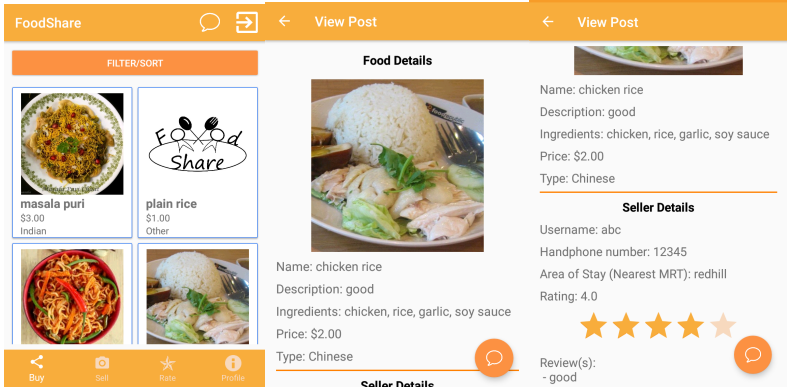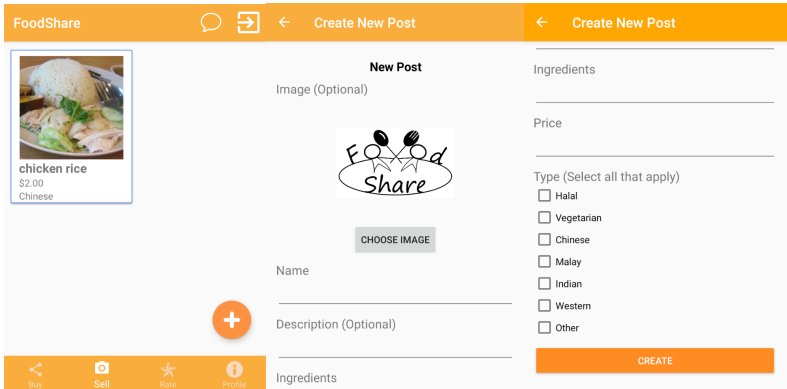**Proposed Level of Achievement:** Gemini

Project Scope
A platform that allows users to post the details of the meal they want to share and view the meals available for purchase, with the aim of sharing delicious home cooking, lowering food cost and reducing food wastage and leftover.

Buy	- View the meals available and details of the seller (e.g. area of stay, mobile phone number, rating, review) - Filter (e.g. vegetarian, halal, nearby) and sort (e.g. recent, lowest to highest price) the meals available based on preferences - Chat with sellers to indicate interest in the meal, discuss details and make necessary arrangements
Sell	- Post meals, indicating the name of the dish, a picture of the dish (optional), the ingredients used, the type of dish, a short description (optional) and the price of dish - Update post and make modifications - Delete post once the meal is sold
Rate	- Search for other users - Rate and review other users
Profile	- Register an account - Login - View and edit profile - Delete account

Core Features Developed

Feature	Images	Details
Login and Register		Login using email and password or register with username, handphone number, area, email and password

Buy		View meals available and details of the seller
Sell		Post meals, update post and make modifications, and delete post once the meal is sold
Rate		Search and rate and review other users
Profile		View own details and other users' review and rating of yourself

Problems Encountered and Bugs Squashed

Problem	Solution
Retrieving images again from phone's storage leads to error due to phone storage access problem.	Store the image in firebase storage and retrieve the image from there instead of the phone's storage.
Working on the same code together leads to clashes and errors when one is not informed of the changes made by another.	Communication and planning so that we work on the code at different times and inform each other on changes.
Messy code leads to difficulties in understanding what is going on and finding errors in the new code.	Re-organise, comment and explain to each other. Searching the web can also help to solve some issues that occurred.

User Testing

Self-evaluation

With the drawer layout, the menu is situated at the very top of the screen, making it impossible to hit with your thumb. In contrast, the bottom navigation bar is easy to reach on a handheld mobile device and core features are more visible to users. Consequently, we have decided to change the drawer layout to bottom navigation layout.

Moreover, users may have difficulty finding a meal that appeal to them. To facilitate the food search, we will add a search bar. We will also add a delete button for users to delete the image after uploading it when creating a post to improve their experience.

Cognitive Walkthrough

We conducted cognitive walkthrough to evaluate the usability of the application and analyse the thoughts of users as they walk through the assigned tasks. We hope to focus on the user's ability to learn and understand the system as a new or infrequent user unfamiliar with the application. The reviewer will walk through tasks that would be important for the target user to accomplish their goals and then answer the following four questions during each sequence of the assigned task:

1. Will the user try to achieve the right effect?
2. Will the user notice that the correct action is available?
3. Will the user associate the correct action with the effect that the user is trying to achieve?
4. If the correct action is performed, will the user see that progress is being made toward the solution of the task?

Target User	Housewives	Working adults
Test Scenario	A user wants to post a meal on the platform for sale.	A user wants to find a meal they are interested in.
Tasks	Register/Login	
	Post a meal	View meals available

	Update/delete post	View details of a meal

Steps Needed to Accomplish the Tasks:

Task	Steps
Register	1. Select "register" button 2. Enter username, phone number, area of stay, email, password 3. Select "register" button
Login	1. Enter email, password 2. Select "login" button
Post a meal	1. Select "sell" in bottom navigation 2. Select the "+" floating action button 3. Select "choose image" button to upload image 4. Enter name of dish, description, ingredients, price 5. Select food type 6. Select "create" button
Update post	1. Select "sell" in bottom navigation 2. Select the post to update 3. Update post 4. Select "update" button
Delete post	1. Select "sell" in bottom navigation 2. Select the post to delete 3. Select "delete" button
View meals available	1. Select "buy" in bottom navigation
View details of a meal	1. Select "buy" in bottom navigation 2. Select the meal to view details

Why are the Tasks so Important?
Every user that signs up for the application will need to go through the process of registering and logging in to successfully use the application. As a seller, users will need to be able to post a meal. As a buyer, users will need to be able to view meals. These are essential functions that a user needs to successfully utilise the application.

Findings:

Issue	Recommendation
Users may not be aware of what to indicate under area of stay when registering for an account. (Q1)	Be clearer and more specific in the hint. Change the hint from "Area of Stay" to "Area of Stay (Nearest MRT)".
Users may not be aware that they can select more than one option for food type when creating a post. (Q1)	Be clearer and more specific in the title. Change title from "Type" to "Type (Select all that apply)".

Users may not be aware that they do not have to include the $ sign for the price when creating a post. (Q1)	Be clearer in the price field. Add $ sign before the price field.*
Users may not be aware that they have to click on their post to update or delete it. (Q2, 3)	Add edit and delete icon to the post. Selecting the edit icon directs users to the page to update post. Selecting the delete icon deletes the post.*
Users may not notice that their post has been updated. (Q4)	Print a toast message "Post updated successfully!" to alert users that their post has been updated.

* implement in milestone 3

By implementing these usability recommendations, we hope to improve the functionality and ease of use for users navigating the application. By enhancing the users' experience, we hope that users would be more inclined to utilise the application to share their meals.

Survey of Potential Users
We also gathered feedback from potential users. A major concern was the privacy of users when providing their mobile phone number and address. As such, we decided to implement a chat system to facilitate communication so that mobile phone numbers need not be collected and revealed. In addition, users need to only indicate the nearest MRT to their place instead of the address to further protect their privacy. Users can arrange to meet up anywhere both parties are comfortable with.

Furthermore, there were concerns about food allergies. To mitigate this problem, users are required to indicate the ingredients used in preparing the meal to cater to the preferences of those buying their food. Issues can also be clarified in the P2P chat system.

Features for the Next Phase

Feature	Details
Filter/sort	Allow buyers to filter and sort the meals available based on their preferences
Chat system	Allow buyers to send messages to sellers to express interest in the meals and find out more about the meals, as well as allow both parties to discuss collection and payment details
Edit/delete profile	Allow users to edit their profile when needed (e.g. when users move house and their area of stay changes) and delete their account when they no longer use the application

Project Log

S/N	Task	Date	Orbitee 1 (hrs)	Orbitee 2 (hrs)	Remarks
1	Liftoff Day 1	13/05/2019	9	9	- Attend workshop
2	Liftoff Day 2	14/05/2019	9	9	- Attend workshop
3	Meeting with Adviser	14/05/2019	1	1	- Discuss possible features and areas to focus on - Discuss the technology required
4	Design Logo	15/05/2019	2	2	- Create and edit logo
5	Discussion	16/05/2019	2	2	- Formulate project idea and structure - Discuss and lay out the skeleton of the application - Brainstorm and discuss core features to implement
6	README	17/05/2019	3	3	- Describe problem motivation, aim and user stories - Describe proposed core features, program flow and development plan
7	Research	18/05/2019	5	5	- Pick up the necessary technology (Android Studio)
8	Frontend Programming	19/05/2019	4	4	- Design login page and registration page
9	Frontend Programming	20/05/2019	3	3	- Design homepage
10	Backend Programming	25/05/2019	5	5	- Design app navigation - Store user's profile in database
11	Project Video	26/05/2019	5	5	- Showcase project idea - Describe aim, features, app navigation and technology used
12	Project Poster	01/06/2019	3	3	- Showcase project idea - Describe aim, features, app navigation and technology used
13	Project Log	02/06/2019	1	1	- Record tasks performed and hours spent

14	Programming	05/06/2019	8	8	- Create a form for users to post their food - Store information of posted food in firebase
15	Programming	07/06/2019	3	3	- Design sell page - Allow users to view their posted food
16	Programming	08/06/2019	8	8	- Allow users to update their post and make modifications - Allow users to delete their post once their meal is sold - Store updates in firebase
17	Peer Evaluation for Milestone 1	09/06/2019	3	3	- Watch and read milestone 1 materials presented by other teams - Evaluate and provide comments
18	Programming	14/06/2019	3	3	- Design buy page - Allow users to view the meals available
19	Programming	15/06/2019	5	5	- Allow users to view details of the food and details of the seller
20	Programming	16/06/2019	8	8	- Design rate page - Allow users to search for other users - Allow users to give ratings and reviews to other users - Store ratings and reviews in firebase - Display ratings and reviews in seller's details
21	Programming	21/06/2019	3	3	- Design profile page - Allow users to view their profile details
22	Testing	22/06/2019	3	3	- Perform user testing on the system and made necessary changes - Change drawer layout to bottom navigation layout
23	Project Video	23/06/2019	5	5	- Showcase prototype/ complete system - Demonstrate key features and app navigation
24	Project Poster	28/06/2019	3	3	- Showcase prototype/

					complete system - Demonstrate key features and app navigation
25	README	29/06/2019	4	4	- Describe project scope - Showcase core features developed - Analyse problems encountered - Describe testing performed on the system - Describe features for the next phase
26	Project Log	30/06/2019	1	1	- Record tasks performed and hours spent

Total hours spent per member: 109