

## Group 9-03 Written Report 2019

### **Title: Food-Q**

Group 9-03 Members:

- Ng Shi Yu (1A1, 22) [Leader]
- Chong Kai Zhe (1A1, 06)
- Andreas Tan Kuan Yan (1A1, 26)

### Introduction:

#### Description:

This application allows students and staff to order food during recess. Since Hwa Chong Institution High School Canteen is usually very crowded and has very long queues, Food-Q would give people more convenience, by shortening the queues by a fair amount, indirectly allowing students to spend more free time during their short recess.

#### Rationale:

As many people in our school spends a lot of time in our canteen and most of it is taken up by having to queue up for the extremely long queues, this app will make the lives of students and staff members easier and more convenient by helping them to save time via the app. Students and staff will be able to order food via the app in advance and collect it when it's ready during recess.

#### Scope:

Stalls 3, 4, 6, 7 and 9 will be covered for ordering as others are either food, snack stalls or completely dependent on the ingredients that are chosen so there are no definite orders.

### Study & Methodology:

#### Ideation:

The group was discussing on which category and idea when one of us decided to go for lunch but the queues were too long and he was frustrated. Thus, he suggested to create an application to solve this problem so many other students won't have to continue facing this problem.

According to survey below, big percentage of students feels the same.

### Surveys:

We have done a survey with 18 students on their opinions and the results were positive, with 55.6% of students that we surveyed saying that the amount of time spent queueing for food bothers them, and 44.4% of students saying that an app can reduce time spent queueing and another 44.4% of students saying that an app might reduce the amount of time spent queueing.

### Roles and Job Distributions:

Ng Shi Yu [Leader]: Main Designer And Assistant Coder

Chong Kai Zhe: Coder and Report Writer

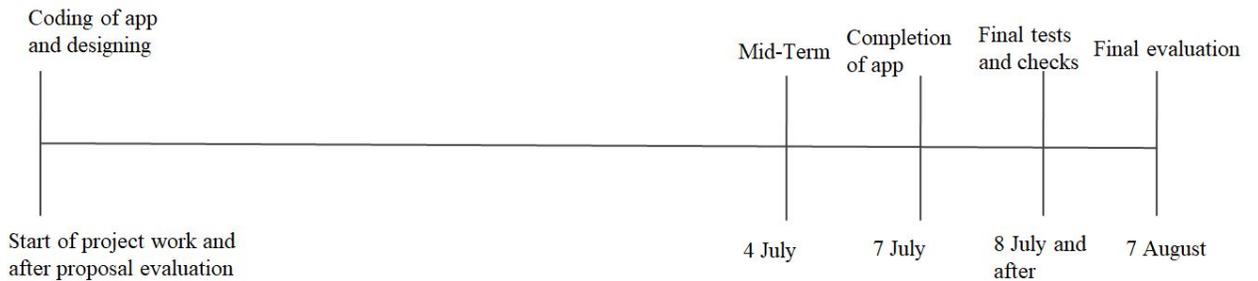
Andreas Tan Kuan Yan: Slide Maker and Report Writer

### Websites/Softwares Used:

MIT App Inventor 2 (coding and design)

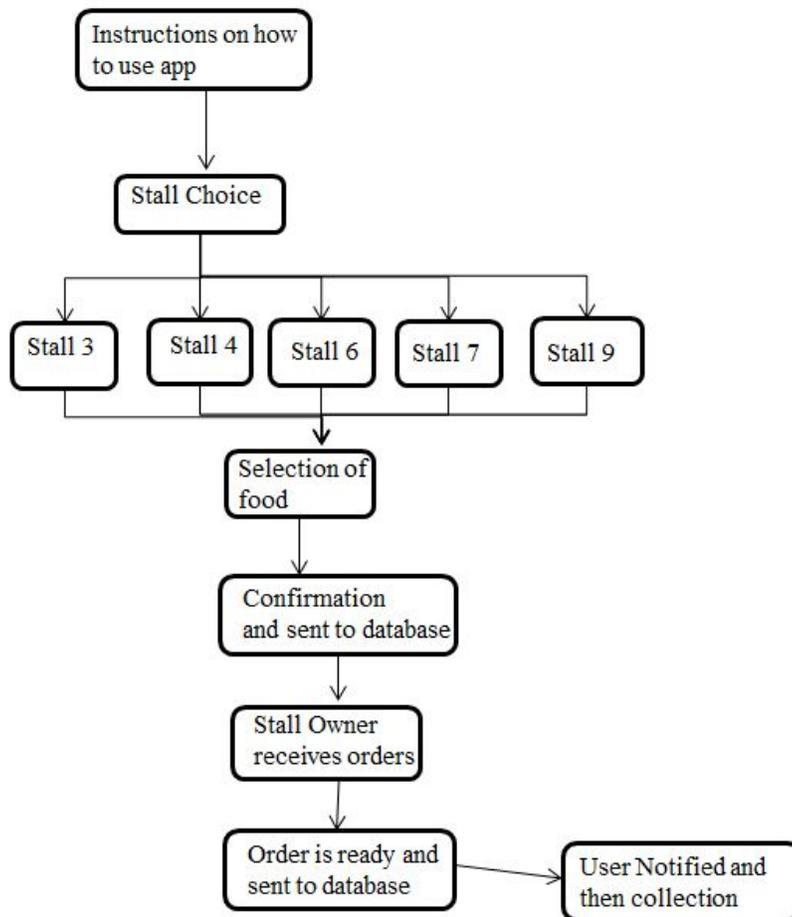
Firebase (Database)

### Project Timeline:



## Outcomes, Analysis & Discussions:

### Flowchart of Features:



### Screenshots:

#### Consumer Page:



**[Consumer]**

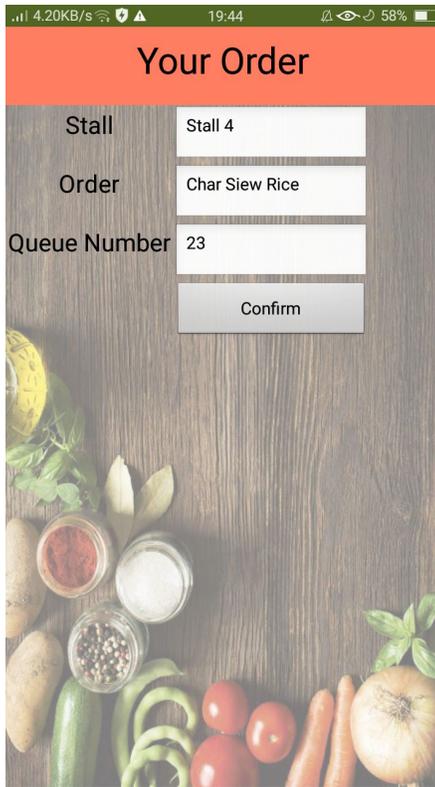
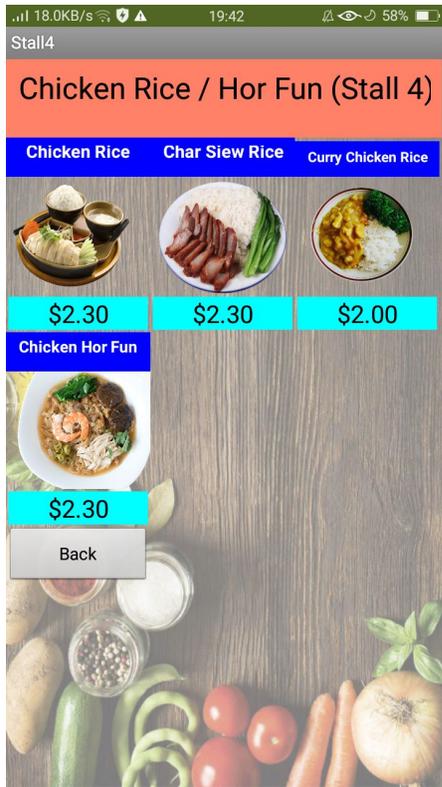
Order in three easy steps:

Step 1: Select the stall of your choice!

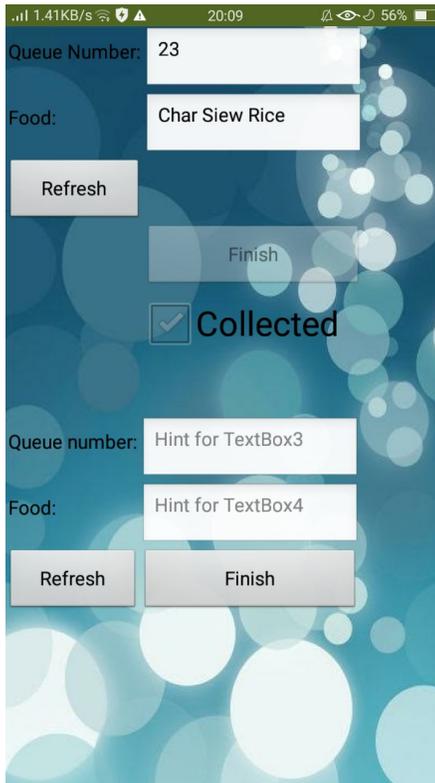
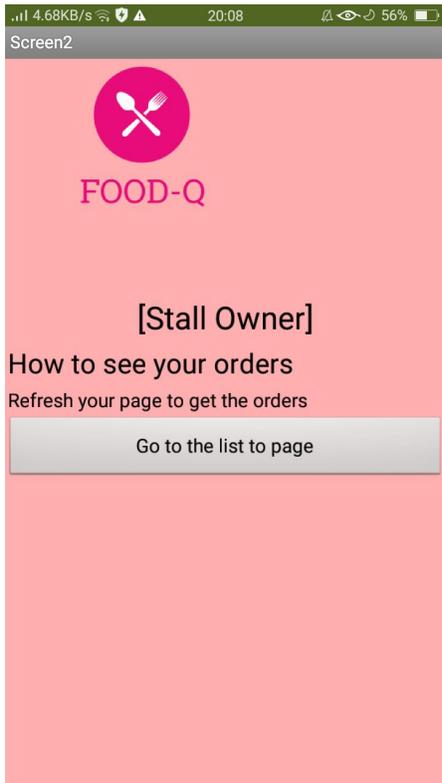
Step 2: Select your food!

Step 3: Wait for the food to be cooked! Collect and enjoy!





Stall Owner Page:



## Implications and Recommendations:

### Areas for improvements:

During our test of the app with the fishball noodle stall owner, they responded that it was laggy, needed to add individual choices such as extra noodles and ingredients and that it was not completely user friendly as it was a little bit hard to use.

### Possible further extensions:

- Page for users to login with name and class.
- More in-depth selection of food and choices.

## Conclusion:

### Reflections & Learning Points:

#### Personal Reflections

Ng Shi Yu:

I feel that we could have worked together better. Although I wasn't the best or the most ideal leader one could ask for, my teammates were extremely patient and cooperative with me.

Chong Kai Zhe:

I believed we could have spent more time on the project because we were not able to organise our time as well as we would have liked. Also, we sometimes did things individually without informing our teammates and thus caused mess ups so I think that we could have improved on that. We also could have split the jobs up more evenly because there were many times where Andreas had nothing to do and we ended up wasting time. Overall, I had a new experience doing this project and with these new friends. Our project wasn't very good but I think it is a good learning point for all of us and we will improve even if we are not in the same category or team next year.

Andreas Tan Kuan Yan:

I feel that as a group we could have improved on a lot of things, such as timing, coordination and preparedness. However, considering that this is our first time doing a project on this scale, I think we did considerably well, especially since we had to juggle between preparing for this and our homework and studies. My teammates were also very supportive and helpful and thus allowed us to finish our project successfully. I am sure that we will all put the knowledge we have gained from this project to good use in the future.