

# **Proposal for Orbital 2022**

## **Team Name:**

AuroraLab

## **Proposed Level of Achievement:**

Apollo 11

## **Motivation**

At NUS canteens, the only current way to order food is to line up in front of the stall and wait until your turn. Imagine your stomach is growling after hours of brainstorms in lectures and tutorials, but when you reach a canteen, you have no clue about what to eat at all, and it may take several minutes for you to walk around the whole canteen and hesitate! Finally, you have decided what to order, but worse still, the canteen is so crowded with people that you have to wait patiently for another ten minutes or so in a queue! When thinking about delicious dishes, every minute of waiting is like hours. The total unnecessary time wasted on meals may add up to one hour in a single week! It may also happen that you want to have your favorite dish, but the hawker tells you it has been sold up, which is so disappointing for food lovers!

For restaurants outside NUS, we know there are apps like Grab and Foodpanda on which we can see the menu and reviews. Fast food restaurants usually provide online platforms for ordering. We are looking forward to this kind of platform for NUS canteens where we can read through the menu, leave comments on the dishes, order yummy food in advance, etc. In a nutshell, we want to have a more enjoyable dining experience at NUS.

## **Aim**

We hope to achieve an efficient and interactive way of ordering food in NUS via our app to create our own food culture on campus.

## **User Stories**

1. As a customer at NUS school canteen, I want to browse the menu of each hawker.
2. As a customer, I want to order food in advance and pick it up as soon as I arrive there so that I don't have to wait so long for food
3. As a customer who is losing weight or aiming for a healthier diet, I want to know such information as calories about the dishes

4. As a customer, I want to leave comments on the dishes or the hawkers
5. As a customer, I want to see others' reviews on the dishes
6. As a customer, I want to get the food I like at a discount.
7. As a hawker, I want to estimate the demands, so that I can serve customers with their favorite dishes and reduce the loss on unsold food
8. As a hawker, I want to get feedbacks from customers so that I can improve and enhance my sales
9. As a hawker, I want to see a list of orders to prepare dishes more efficiently, prepare in advance and serve more customers at peak hours.
10. As a hawker, I want to post announcements about new kinds of dishes, vouchers to attract more customers.

## **Features and Timeline**

The app serves as a convenient platform for customers to browse the information of food at each canteen in all NUS canteens to decide which stall to head to and what food to order.

Meanwhile, there will be a food review and feedback channel for customers to make any comments about the food and the owners to consider some plausible advice for them.

Besides, there are promotions during some particular periods for students to choose from and food reviews as a reference.

In addition, we allow the modes of the app to switch between the English and Chinese versions, considering the translations of the food might not be obvious for some customer groups and between light and dark versions.

Such features will make the services more efficient and time-saving both for customers and hawkers.

By the end of May, the app has limited features but can accomplish its basic tasks, namely providing information about the food. Features to be completed by then:

1. Menu
  - a. Allow stall owners to update the information of food, such as its names, photos, prices, available numbers and calories
  - b. Accordingly, allow customers to view the information of food
2. Food reviews and feedback

- a. Allow users to make comments and feedback on the food they order with real photos for other customers as a reference and for the hawkers to make adjustments.

Features to be completed by the mid of June:

1. Authentication
  - a. Personal information, including payment methods, should be provided to authenticate the identity of each user so that they can further can reservations and make purchases.
2. Promotions
  - a. Enable stall owners to provide some promotions for the students, and there will be a separate page for promotions in all the canteens on the main page of the app

Features to be completed by the mid of July:

1. Reservations
  - a. Allow customers to reserve their food according to the timeslot and availability via the app
2. Payment
  - a. Allow customers to complete their purchase via the app directly both efficiently and securely

## **Tech Stack**

1. Xamarin/Flutter/React Native
2. Kotlin/Java/Javascript/Python/Go/Ruby/Swift
3. PostgreSQL/MySQL/Hadoop
4. Apache
5. Xcode/Android Studio

## **Qualifications**

1. Built a task management app with basic CRUD (create, read, update, delete), search and tag functions. Experienced in React, Ruby on Rails and PostgreSQL.
2. SOC Dean's List
3. Have taken CS core modules including CS1101S(Programming Methodology I) & CS2030(Programming Methodology II), CS2040S(Data Structures and Algorithms)