Project overview

In this project, an application is designed to be used in conjunction with posters/advertisements displaying QR codes to enhance the meal ordering experience in Can.teenII at HKUST. Users can then use their IOS devices to scan QR codes and order meals at Can.teenII.

Objectives
- Eliminating the queuing time for ordering.
- Eliminating the waiting time for food in house.
- Estimating the food pick-up time.
- Reducing the manpower used in canteen’s cashier.
- Increasing customer engagement.

The flowchart of the virtual canteen shop system

Methodology

This application is developed by Xcode with IOS 9.0 using the programming language Swift. Parse is used as the backend cloud server provider in order to handle user login, store meal information, store users’ transaction details and send notification to users when the order is ready.

Software Implementation – Application Block Diagram

Hardware Implementation

The Epson TM-U220 Kitchen Printer is linked with the Parse backend server. Once orders are uploaded to the backend via the application, the kitchen printer will fetch the orders from Parse and print them out.

Results

IOS Application Interface

Epson TM-U220 Kitchen Printer