

An Android application for restaurant business with SNS (Meal Master)

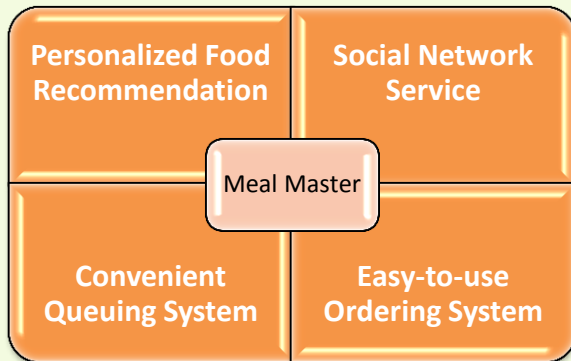
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Supervised by Prof. Sung Hun Kim

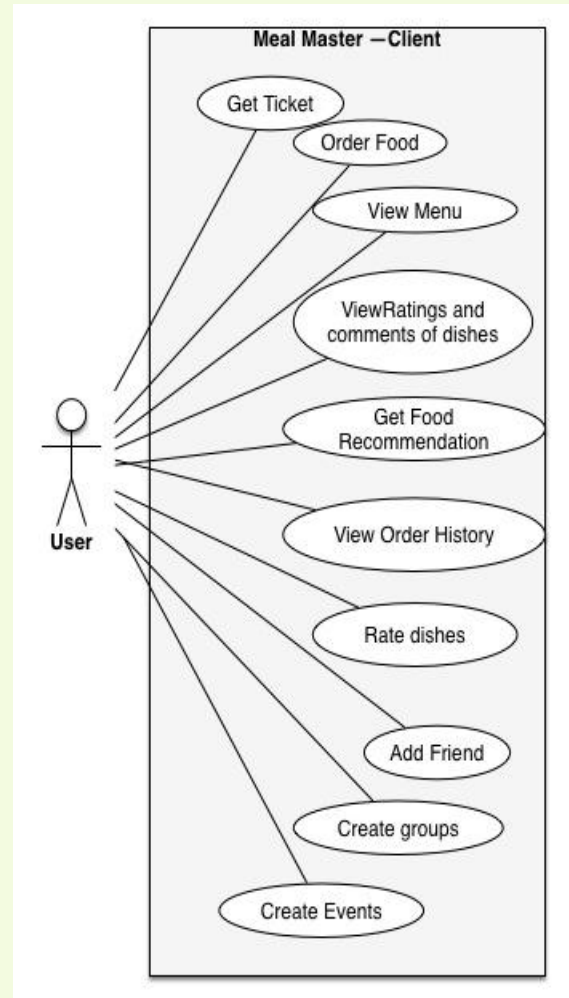
Overview

Inspired by the fact that Hong Kong people like dining in restaurants as well as using their mobile phones everywhere at any time, this Android Application, *Meal Master*, was developed to provide a one-stop service for customers to have meals in restaurants using their NFC-enabled mobile phones.

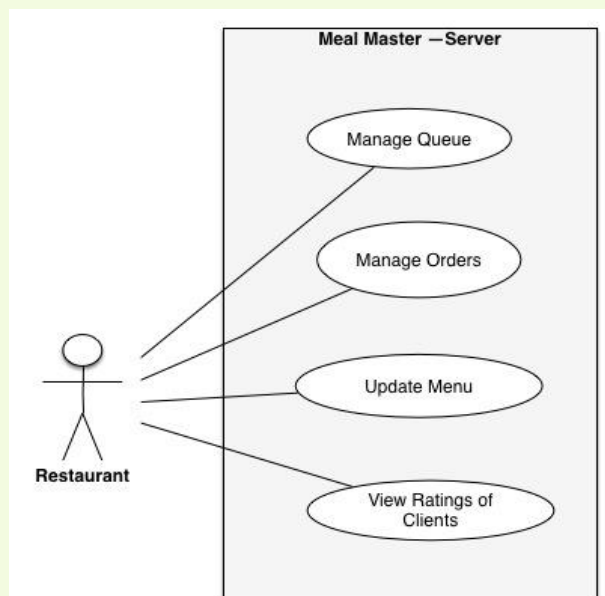
Main Features:



Features in Client side:

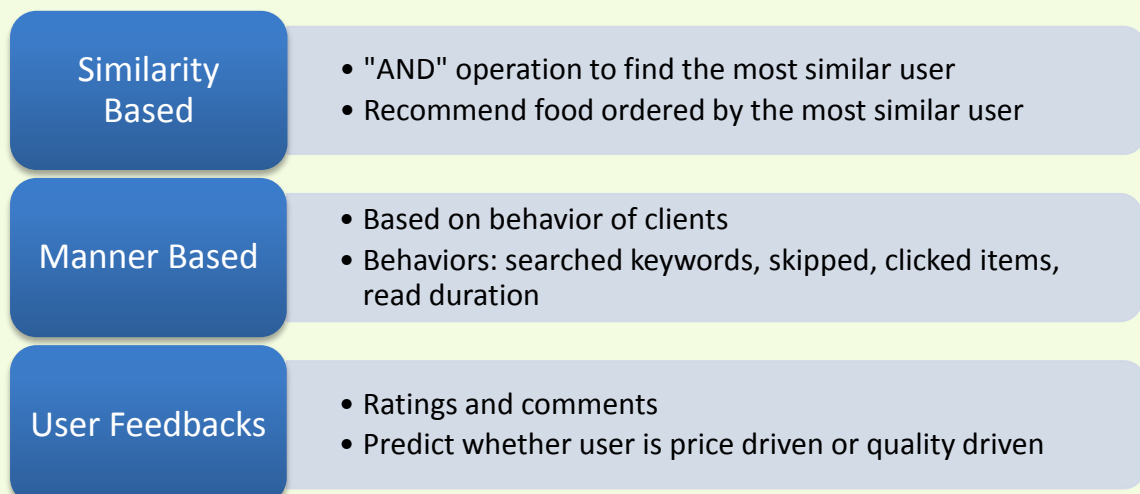


Features in Server side:

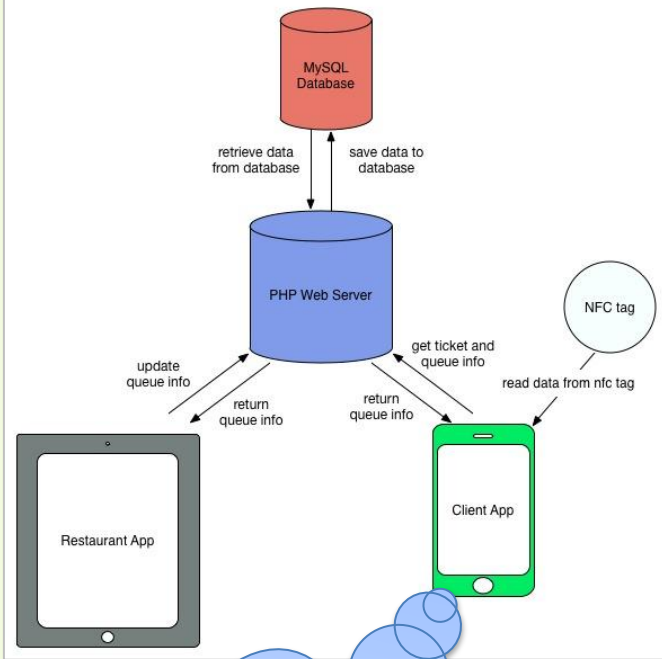


Methodology

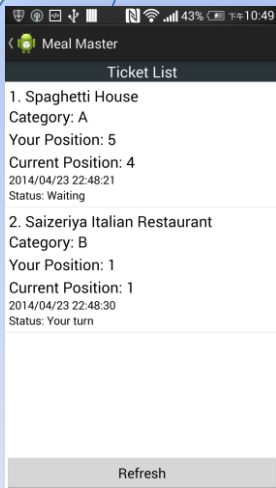
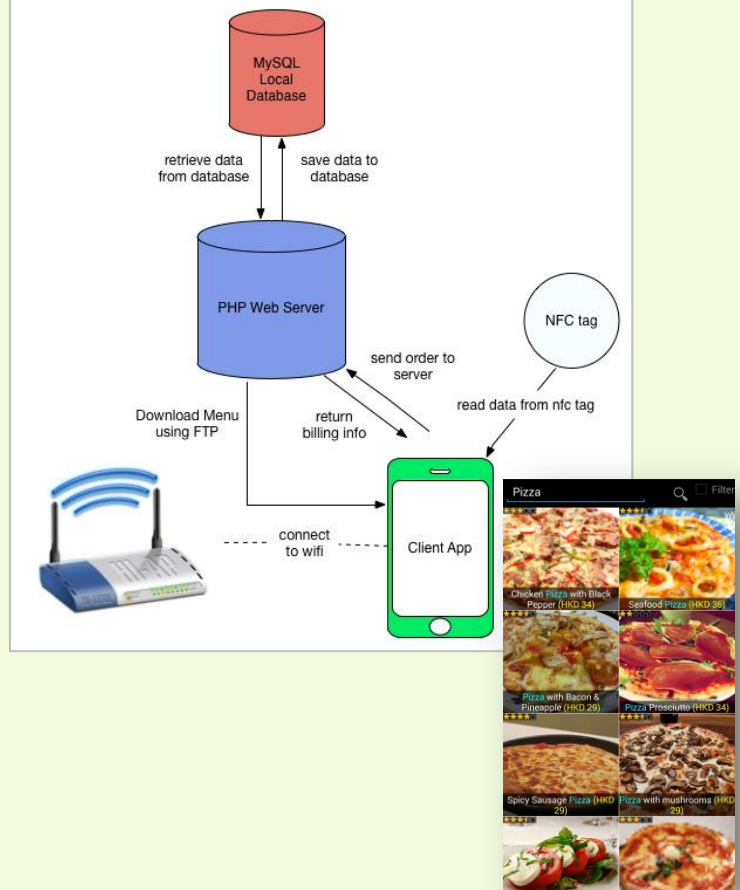
A.I. Food Recommendation Schema



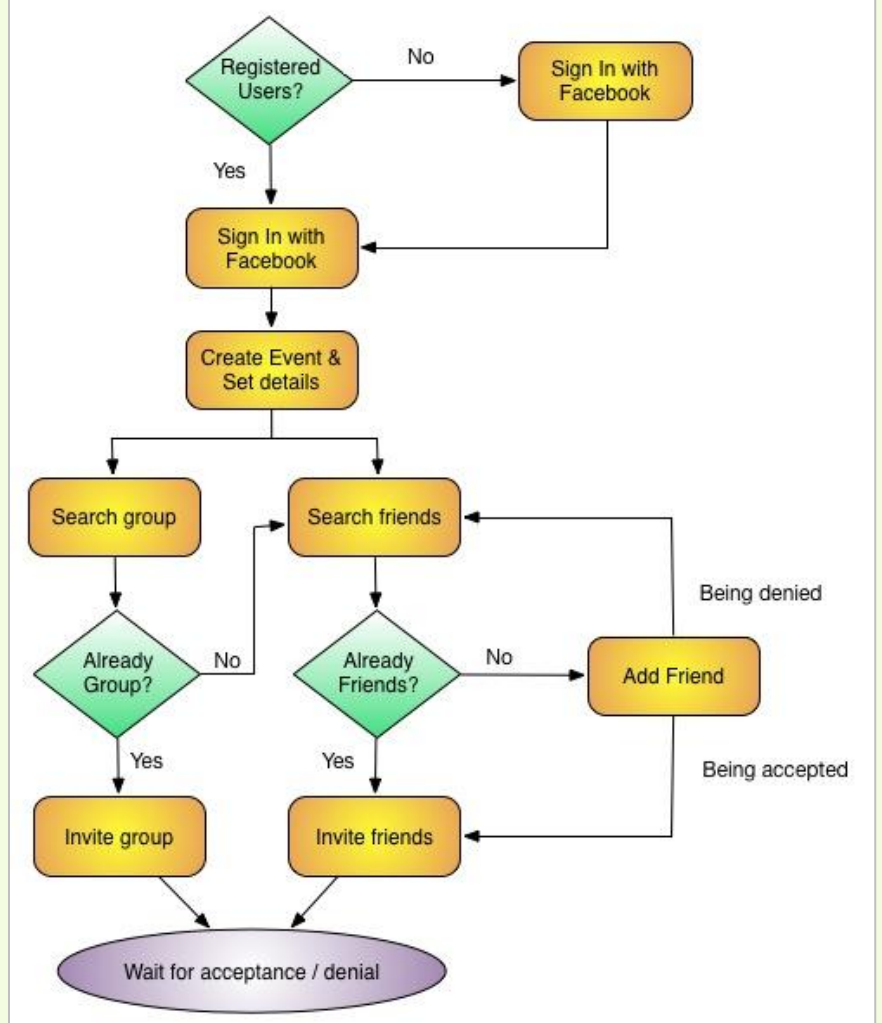
Data Flow of Queueing System



Data Flow of Ordering System



Flow Chart of Social Network Service

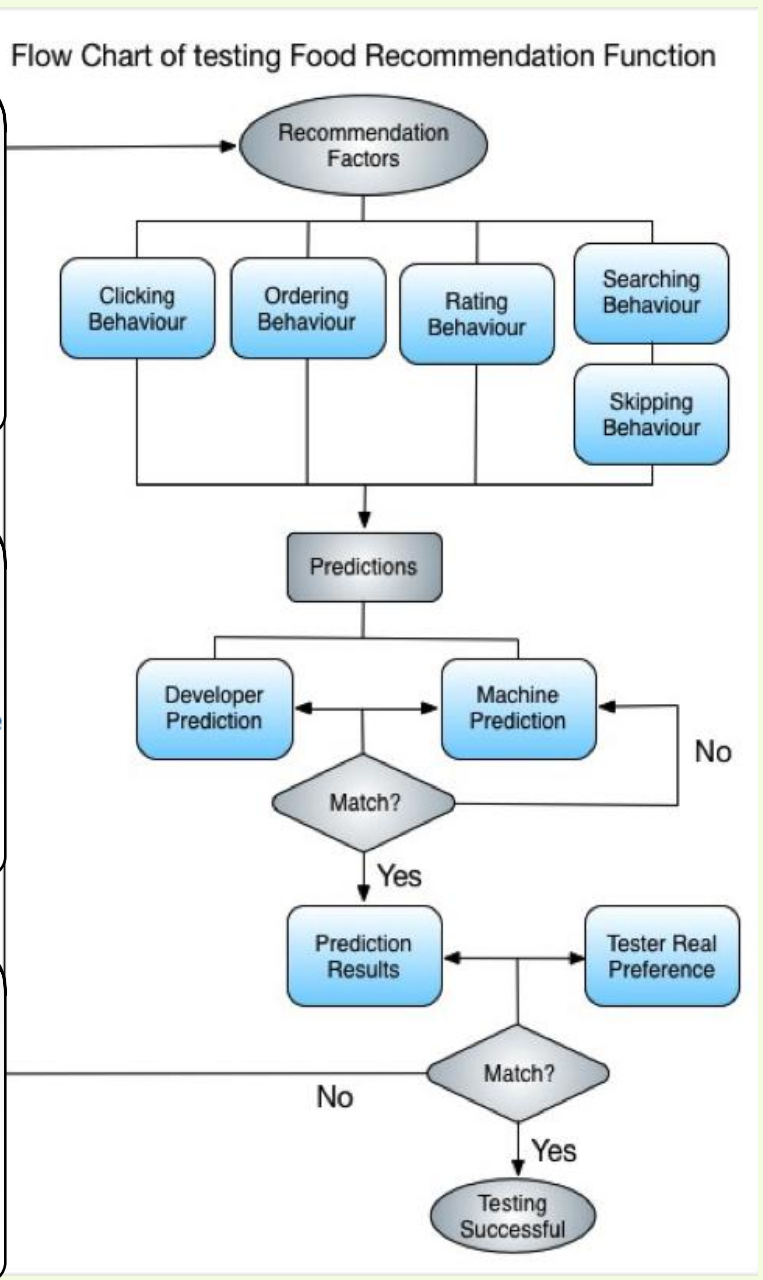
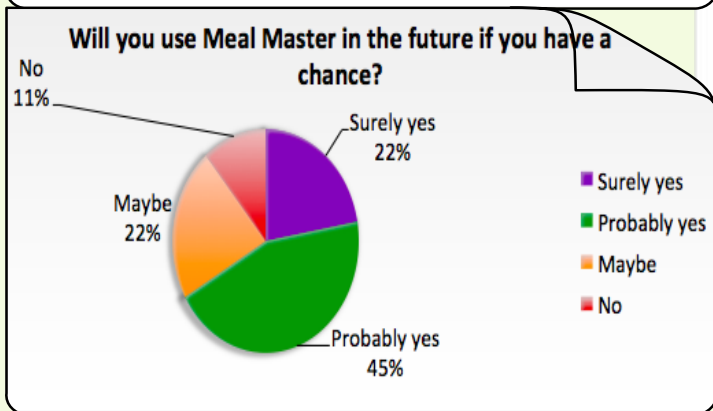
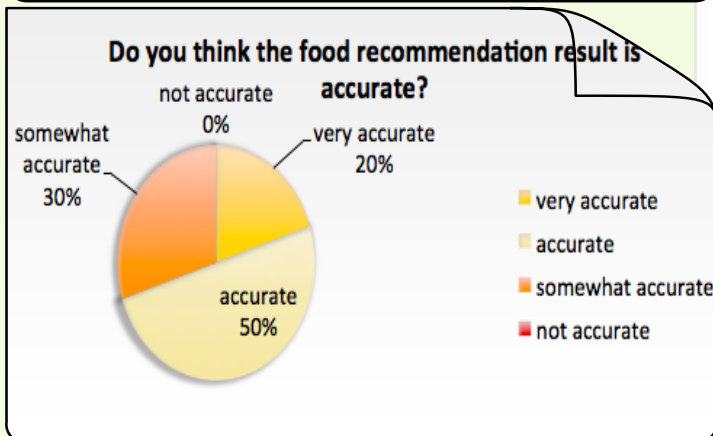
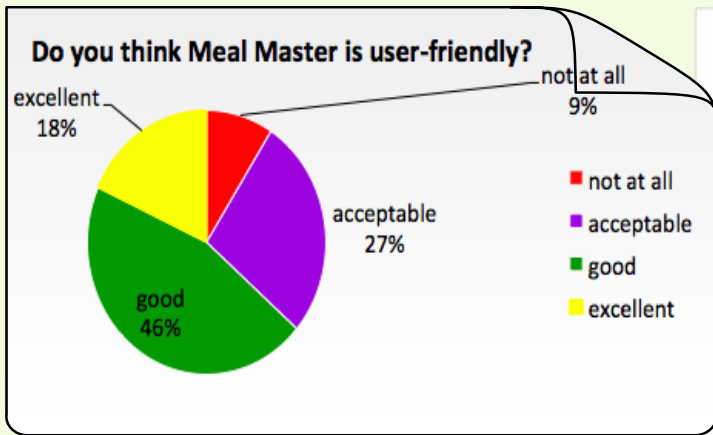


Specification:

- Mobile device
 - Android
 - NFC Hardware
- Data Storage
 - MySQL (Server)
 - SQLite (Client)

Testing

Black Box Testing had been carried out by inviting our family and friends to perform test on user experience as well as accuracy on food recommendation. Below are the feedbacks from testers as well as flow of turning test on food recommendation.



Possible Improvements:

1. Rank score system could be adjusted so that the system could predict the users' preferences more accurately.
2. Translation function could be added to the system to provide better parsing function.
3. Calculation algorithm of preference prediction could be improved to increase calculation speed when the data set was large

Conclusion

In this project, an Android Application, Meal Master, was developed for restaurants to provide better service and greater user experience. Meal Master can provide personalized dish recommendation, which estimates users' preference based on the behavior of the user. With Meal Master, customers can create events and send invitation request to their friends or group members. Last but not least, users can get the electronic queuing tickets as well as ordering food by scanning the corresponding NFC tags.