### ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH TRƯỜNG ĐẠI HỌC BÁCH KHOA KHOA KHOA HỌC - KỸ THUẬT MÁY TÍNH



# CÔNG NGHỆ PHẦN MỀM

## Đề tài

# SFCS - Smart Food Court System

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# Trường Đại Học Bách Khoa Tp.Hồ Chí Minh Khoa Khoa Học và Kỹ Thuật Máy Tính

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#### 1 Member List

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### 2 Project Introduction

Along with the development of technology, increasingly modernization. Order food also becomes more necessary, along with modern equipments like touch screens, pagers or mobile applications. It help customer to save more time to order foods at the food courts or before coming to that places.

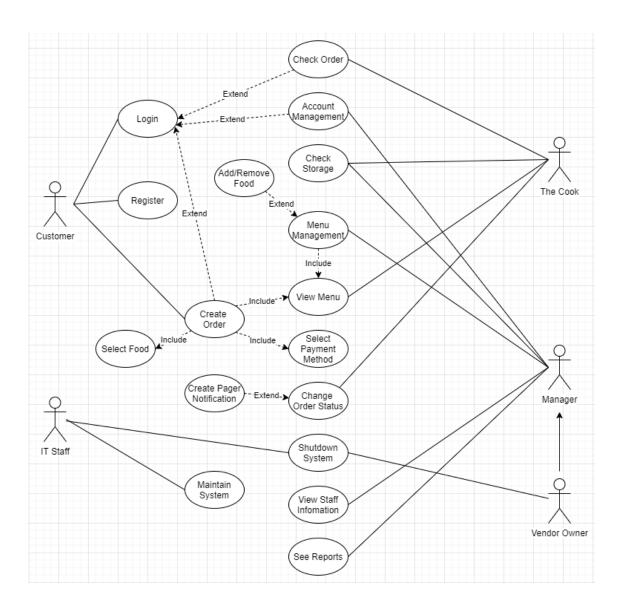
There will be some machine with touch screen around the food court for ordering food. When the payment is made, the order is confirm and will be put in the order list at the food stall kitchen. An order slip will be printed by the machine. The customer can grab a near-by pager that has the number matched with the order number and wait for its notification then goes get the food. He/she can also simply wait at the food stall and then shows the order slip to take the food.

Of course, the software system has to have the managing features. For the cooks, they can see the orders, inform the ready of the food, or inform the system that some food is out-of-order, etc. For the managers of the food courts, they can see the report of the whole food court, see all orders of the day, see revenue, etc. For the vendor owners, they ca see the report about their stalls, and some action like the manager. For the IT staffs, they can put the system in the maintenance mode, that shutdowns all online services.

And this project will meet those conditions.



## 3 Use case of the project



This is use case of the project.



#### 4 Project Features in General

Feature 1: Making SFCS for user

User login to their account. There are four options for user to choose: search, confirm order, update information, exit app...

Feature 2: food selection using in-app search

Users enter the feed name or look through the list of available menus. Touch the feed name to display the order, where the user performs the select and cancel operations.

Feature 3: Complete your order using order confirmation

The user will choose the payment method by online payment service such as Momo wallet, Samsung Pay, Apple Pay, etc.. The system sends the user an order number and sends a message confirming the successful order.

Feature 4: Change order information using the update information feature Users want to change order information or cancel orders within a certain time limit. The system will send a message to the user.

Feature 5: Save system history

After confirming the order, the system will record the user's order data to survey favorite food or evaluate service quality. The cook can use it to confirm the order.

Feature 6: See report

Manager and Vendor Ower can view daily sales summary report. From there they can come up with appropriate plans.

Feature 7: Maintain system

The IT staff can shutdown system to repair or upgrade the system when needed.

Feature 8: View staff information

Managers can manage employees who work online and see customer feedback on the quality of their staff.



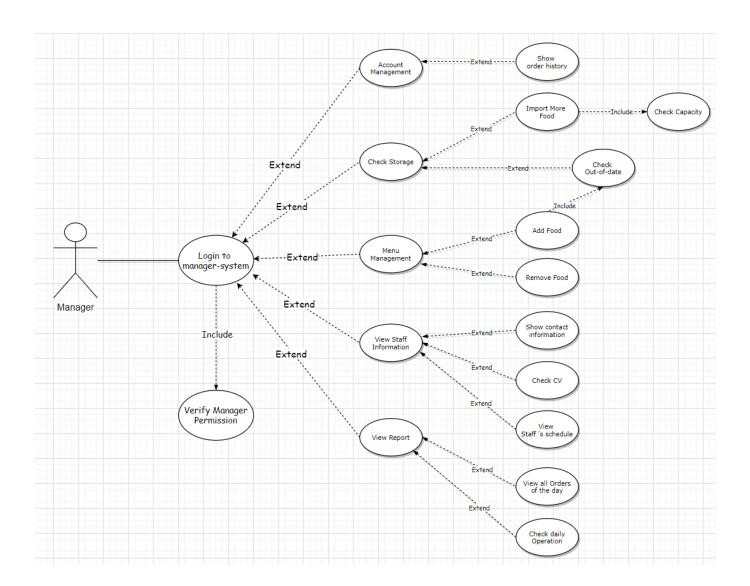
#### 5 Non-functional Requirement

- Feature: System can operate at least 3 (up to 5) touch screen concurrently.
- Constrain 2: System maintenance is required every 30-day.
- Constrain 3: Menu list can have up to 100 items.
- Constrain 4: Menu list is refresh daily. Menu changes will apply the following day.
- Constrain 5: Touch screen response time is less than 1 second.
- Constrain 6: Mobile App is available for both Android and iOS.
- Constrain 7: Mobile App can handle up to 2,000 users concurrently.
- Constrain 8: System allows to register up to 100,000 accounts.
- Constrain 9: Number of Order Record is up to 10,000,000 orders.
- Constrain 10: Payment methods are associated with e-bank services from banks.
- Constrain 11: Don't require more information than name, student ID and phone number verification are required information when registering.



## 6 Manager System

#### 6.1 Use case for manager system



#### 6.2 Non-functional Manager System

- Account Management can manage at least 500 users latest transaction.
- Always show the capacity of the storage in Check Storage feature.
- Notify when there are bad feedback.
- Remove food and add food can be done immediately.
- Avoid intentionally logging into the system by 3 failed login.