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TRƯỜNG ĐẠI HỌC BÁCH KHOA
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BÁO CÁO CÔNG NGHỆ PHẦN MỀM

Assignment 2

SFCS - Smart Food Court System

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TP. HỒ CHÍ MINH, THÁNG 5/2020



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1 Introduction

In 2020, the university wish to build a smart food court system (SFCS) to make the university more smart. The system is for customers to order foods at the food courts or before coming to that places.

To build the system, first step is from diagrams. This report is for that purpose: team process on usecase diagrams.

2 Five main actors and their use-cases

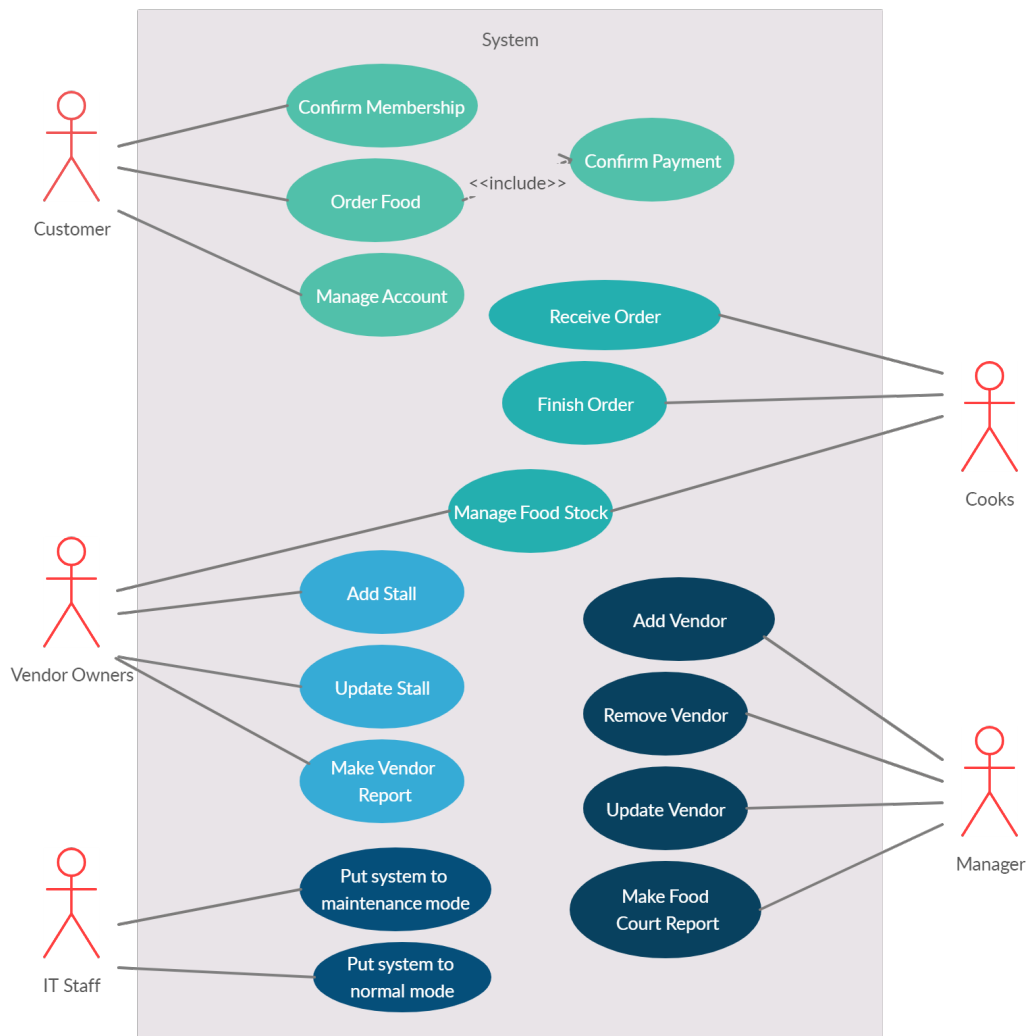
My group discuss and choose 5 main actors for SFCS include:

- Customer: Most important actor. Use-cases: Confirm membership, Order food, Manage account
- Cook: Receive and finish order, Manage Food Stock
- Vendor Owner: Add stall, Update stall, Make Vendor report, Manage Food Stock
- Manager: Add Vendor, Remove Vendor, Update Vendor, Make Food Court report
- IT Staff: Put system to Maintainance mode, Put system to Normal mode

Aside functional requirements, there are also non-functional requirements for each actors.

3 Task assign

3.1 Functional requirements



Hình 1: Usecase diagram

- Customer

Usecase name	Put system to maintenance modes		
Created by:	Trần Đức Bình	Last Updated by:	Trần Đức Bình
Date Created:	23/04/2020	Date Last Updated:	26/04/2020
Actor:	IT Staff		



Description:	Sometime the system need to be put in maintenance for maintain the stable of system or repair the serious problem. At this time, the IT staff will put system to maintennce.
Trigger:	None
Preconditions:	System is on normal mode, Being on the periodic maintenance time / System encounters a serious problem of the system.
Postconditions:	System is on maintenance mode.
Normal Flow:	1. IT staff announce the periodic estimated maintenance time 2. System confirms that announcement had been send 3. IT staff process shutdown all online services 4. System confirms that all online services had been shutdown
Alternative Flow:	Alternative 1: at step 3 3a. IT staff shutdown specific online services that necessary to maintain 3b. System confirms that specific online services had been shutdown 3c. IT staff announce the services that continue available 3d. System confirms that announcement had been send
Exceptions:	Exception 1: at step 1 1a. If there is a serious problem on the system, IT staff estimate dealing problem time 1b. Continue at step 1
Note and Issues:	None

Usecase name	Put system to normal modes		
Created by:	Trần Đức Bình	Last Updated by:	Trần Đức Bình
Date Created:	23/04/2020	Date Last Updated:	26/04/2020
Actor:	IT Staff		
Description:	After the IT staff finish the maintenance, they will put the system to the normal mode		
Trigger:	None		
Preconditions:	System is on maintenance mode, IT staff finished the maintenance process.		
Postconditions:	System is on normal mode.		
Normal Flow:	1. IT staff turn on all online services 2. System confirms that all online service being turn on		
Alternative Flow:	Alternative 1: at step 1 1a. IT staff turn on specific online services that unnecessary to maintain 1b. System confirms that specific online services had been shutdown 1c. IT staff announce the services that continue maintaining 1d. System confirms that announcement had been send 1e. After finished maintenance the specific services, IT staff turn on them and announce finish 1f. System confirms that announcement had been send		



Exceptions:	Exception 1: at step 1 1a. If the system need more time to maintain, IT staff estimate the delay time 1b. IT staff announce the delay time 1c. System confirms that announcement had been send 1d. After finished maintenance continue at step 1
Note and Issues:	None

- Cook

Usecase name	Put system to maintenance modes		
Created by:	Trần Đức Bình	Last Updated by:	Trần Đức Bình
Date Created:	23/04/2020	Date Last Updated:	26/04/2020
Actor:	IT Staff		
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Actor:	IT Staff		
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Note and Issues:	None

- Vendor Owner

Usecase name	Put system to maintenance modes		
Created by:	Trần Đức Bình	Last Updated by:	Trần Đức Bình
Date Created:	23/04/2020	Date Last Updated:	26/04/2020
Actor:	IT Staff		
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Note and Issues:	None		

- Manager

Usecase name	Put system to maintenance modes		
Created by:	Trần Đức Bình	Last Updated by:	Trần Đức Bình
Date Created:	23/04/2020	Date Last Updated:	26/04/2020
Actor:	IT Staff		



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Note and Issues:	None

- IT Staff

Usecase name	Put system to maintenance modes		
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Note and Issues:	None

3.2 Non-functional requirements

- Customer
 - Punctuality: The maintaining process should be complete earlier or punctually to avoid the delay making bad affect to the whole system. The extend time must be as short as possible.
 - Easier maintenance for later: The structure of the system
 - Flexible: The maintenance time should be flexible, it should be on the day off or outside working hour of the smart court.
 - Period: The maintenance should be periodic to make system more stable.
 - Security: The online services must be security to protect information of user from being leak out.
- Cook
 - Punctuality: The maintaining process should be complete earlier or punctually to avoid the delay making bad affect to the whole system. The extend time must be as short as possible.
 - Easier maintenance for later: The structure of the system
 - Flexible: The maintenance time should be flexible, it should be on the day off or outside working hour of the smart court.
 - Period: The maintenance should be periodic to make system more stable.
 - Security: The online services must be security to protect information of user from being leak out.

- Vendor Owner
 - Punctuality: The maintaining process should be complete earlier or punctually to avoid the delay making bad affect to the whole system. The extend time must be as short as possible.
 - Easier maintenance for later: The structure of the system
 - Flexible: The maintenance time should be flexible, it should be on the day off or outside working hour of the smart court.
 - Period: The maintenance should be periodic to make system more stable.
 - Security: The online services must be security to protect information of user from being leak out.
- Manager
 - Punctuality: The maintaining process should be complete earlier or punctually to avoid the delay making bad affect to the whole system. The extend time must be as short as possible.
 - Easier maintenance for later: The structure of the system
 - Flexible: The maintenance time should be flexible, it should be on the day off or outside working hour of the smart court.
 - Period: The maintenance should be periodic to make system more stable.
 - Security: The online services must be security to protect information of user from being leak out.
- IT Staff
 - Punctuality: The maintaining process should be complete earlier or punctually to avoid the delay making bad affect to the whole system. The extend time must be as short as possible.
 - Easier maintenance for later: The structure of the system
 - Flexible: The maintenance time should be flexible, it should be on the day off or outside working hour of the smart court.
 - Period: The maintenance should be periodic to make system more stable.
 - Security: The online services must be security to protect information of user from being leak out.

4 Conclusion and development strategy

In this assignment, team has successfully created all usecase possible for actors. This is the first step in building SFCS system. New process in assignment will be reported in next reports.