

Gebze Technical University
CSE 343 Software Engineering, Fall 2022
Homework 1 - User Requirement Documentation

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Automated Order Management System (AOMS)

“Marti Lounge is a famous restaurant chain, and the head office of Marti Lounge wants to get an automated order management system in which the branch can digitally update the available menu whose images, ingredients, lists, and prices are defined by the head office. The customer of the department can either give the order using the web page that can be launched via QR Code and track the status of their order or give the order via the waiter. Chefs in the branches can see the orders on the kitchen screen and update the order status using a web panel. Please consider the allocation of the staff.”

Actors in the system can be listed as follows:

1. Head office of Marti Lounge
2. Branch
3. Chef
4. Waiter
5. Costumer

Subsystems

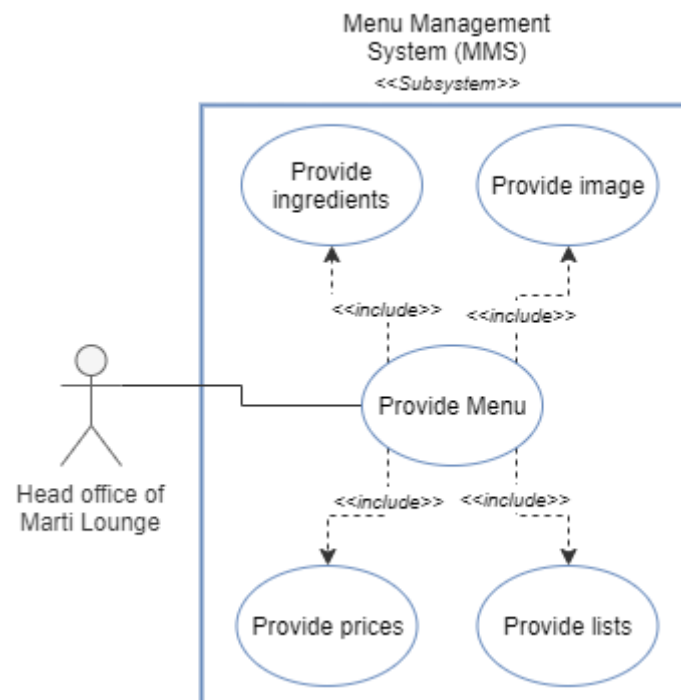
1. Menu Management System
 - The system that keeps the available menu and provides that menu to the Branch Management System.
2. Order Management System
 - The system can take orders from costumer, from waiter and then, inform the chefs. Also, chefs can change the status of order in this subsystem.
3. Branch Management System
 - The system that gives opportunity to the branches update their menus

- Use Case Model-1

Tabular description of the defining menu items

AOMS: Definition of menu items	
Use Case	The Head office of Marti Lounge can provide available menu items to the Automated Order Management System through the Menu Management System.
Actors	Head office of Marti Lounge, Menu Management System
Data	Images, Ingredients, Lists, Prices
Stimulus	User command issued by head office of Marti Lounge
Response	Confirmation of new menu items are provided
Comments	Head office must have a special permission to be able to provide available menu.

Use case diagram of the defining menu items

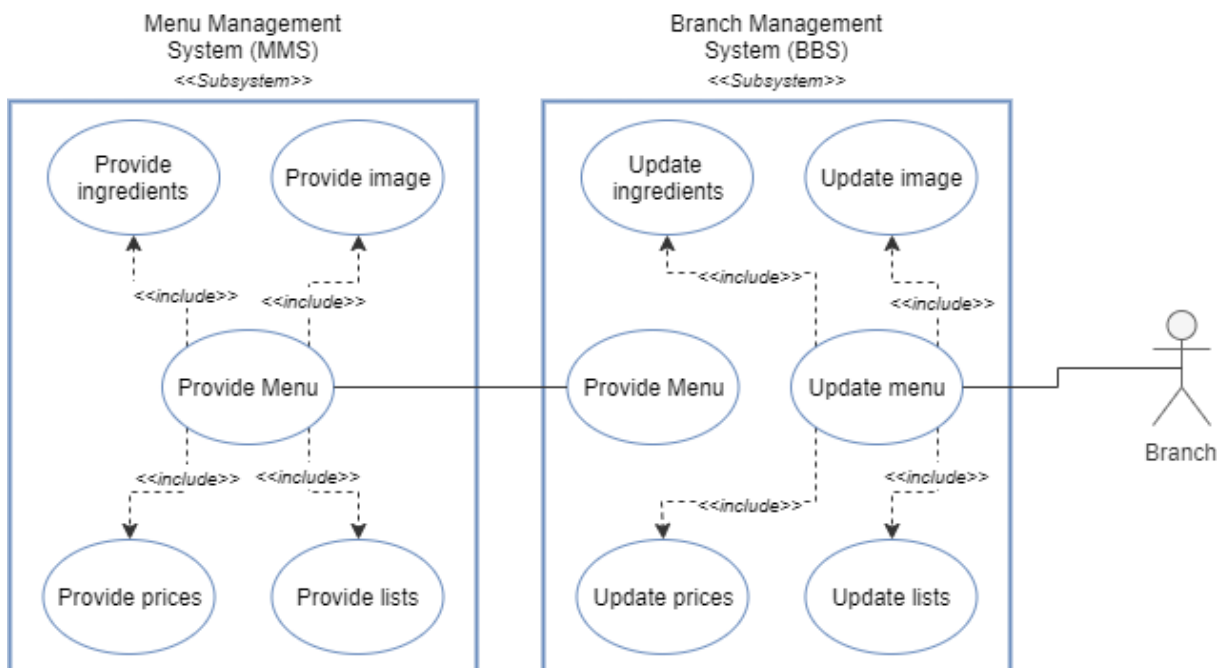


- Use Case Model-2

Tabular description of the updating branch menus

AOMS: Update branch menu	
Use Case	Branches can update their available menus with new menus that provided by menu management system to the branch management system.
Actors	Branch, Menu Management System, Branch Management System
Data	Images, Ingredients, Lists, Prices
Stimulus	User command issued by branch.
Response	Confirmation that menu is changed
Comments	Menu management system, provides the menu items to the to the branches via branch management system then branches will be able to change their menus according to data provided by that subsystem.

Use case diagram of the updating branch menus

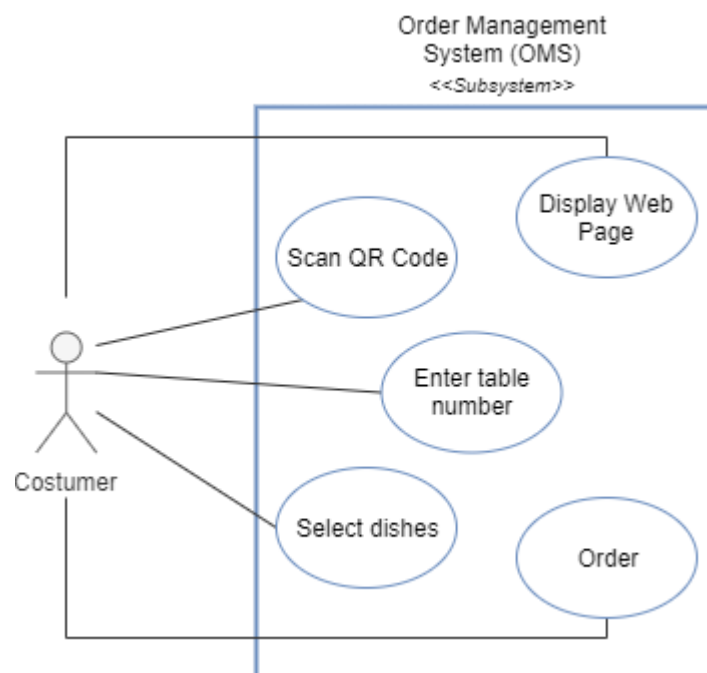


- Use Case Model-3

Tabular description of the costumer gives order via QR Code and web page

AOMS: Order via web page	
Use Case	A costumer can open the web page via QR Code then have an order from order management system.
Actors	Costumer, Order Management System
Data	The order
Stimulus	User command issued by costumer
Response	Confirmation that order received successfully
Comments	The costumer can give an order from Marti Lounge's web page. It scans the QR Code then, navigates the orders page. Then gives an order.

Use case diagram of the costumer gives order via QR Code and web page

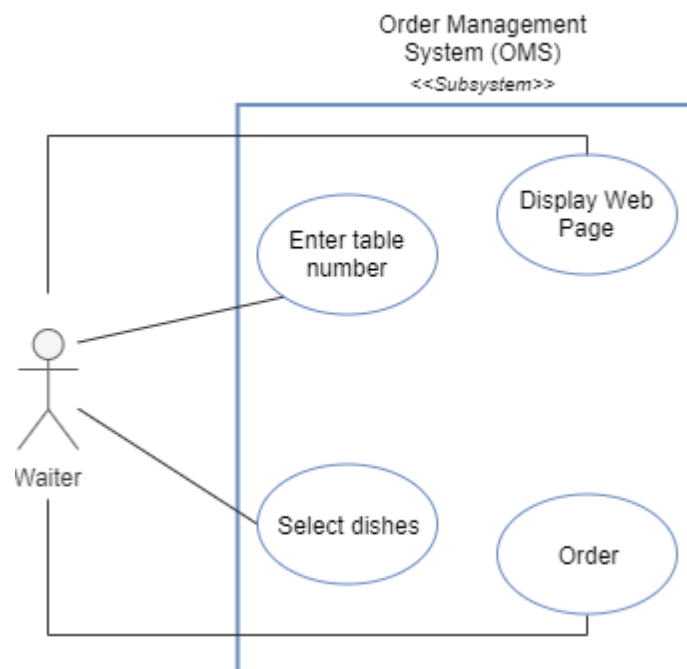


- Use Case Model-4

Tabular description of the waiter taking and creating orders

AOMS: Order via waiter	
Use Case	A waiter creates an order via Order Management System.
Actors	Waiter, Order Management System
Data	The order
Stimulus	User command issued by waiter
Response	Confirmation that order received successfully
Comments	The costumer can give an order by a waiter. The waiter creates the order through the Order Management System.

Use case diagram of the waiter taking and creating orders

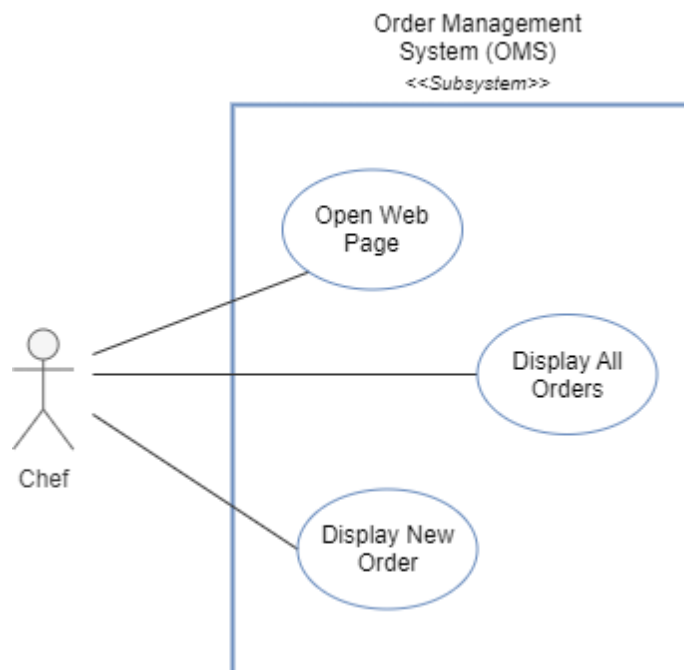


- Use Case Model-5

Tabular description of the informing chef with new order

AOMS: Inform chef	
Use Case	Chef will be informed with new order, after chef controls the new order by displaying it with website.
Actors	Chef, Order Management System
Data	The order
Stimulus	Waiter or costumer orders.
Response	A bell rings.
Comments	After costumer or waiter orders, a bell will be ring and the chef will be informed the new order.

Use case diagram of the informing chef with new order

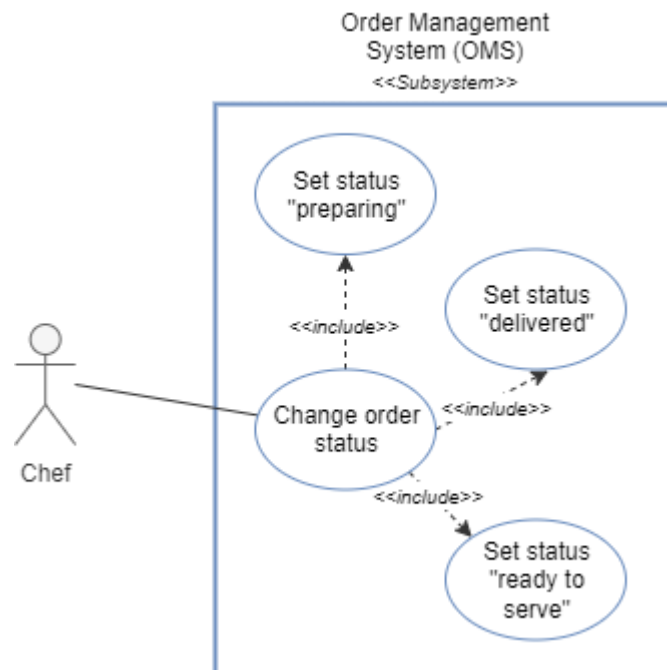


- Use Case Model-6

Tabular description of the chef changes order status

AOMS: Change order status	
Use Case	After new order receives to the chef, then it can change order status preparing, ready to serve, delivered.
Actors	Chef, Order Management System
Data	The order
Stimulus	User command issued by chef
Response	Order status successfully changed
Comments	Chef changes the order status.

Use case diagram of the informing chef with new order



Evaluation:

- 1- Not all cases are important for the creation of the system, the system can be created without some cases, a few cases are much more important than the others. For example: Taking the order and delivering it to the kitchen.
- 2- Each case should be evaluated separately.
- 3- No explanation about difficulties is provided.

