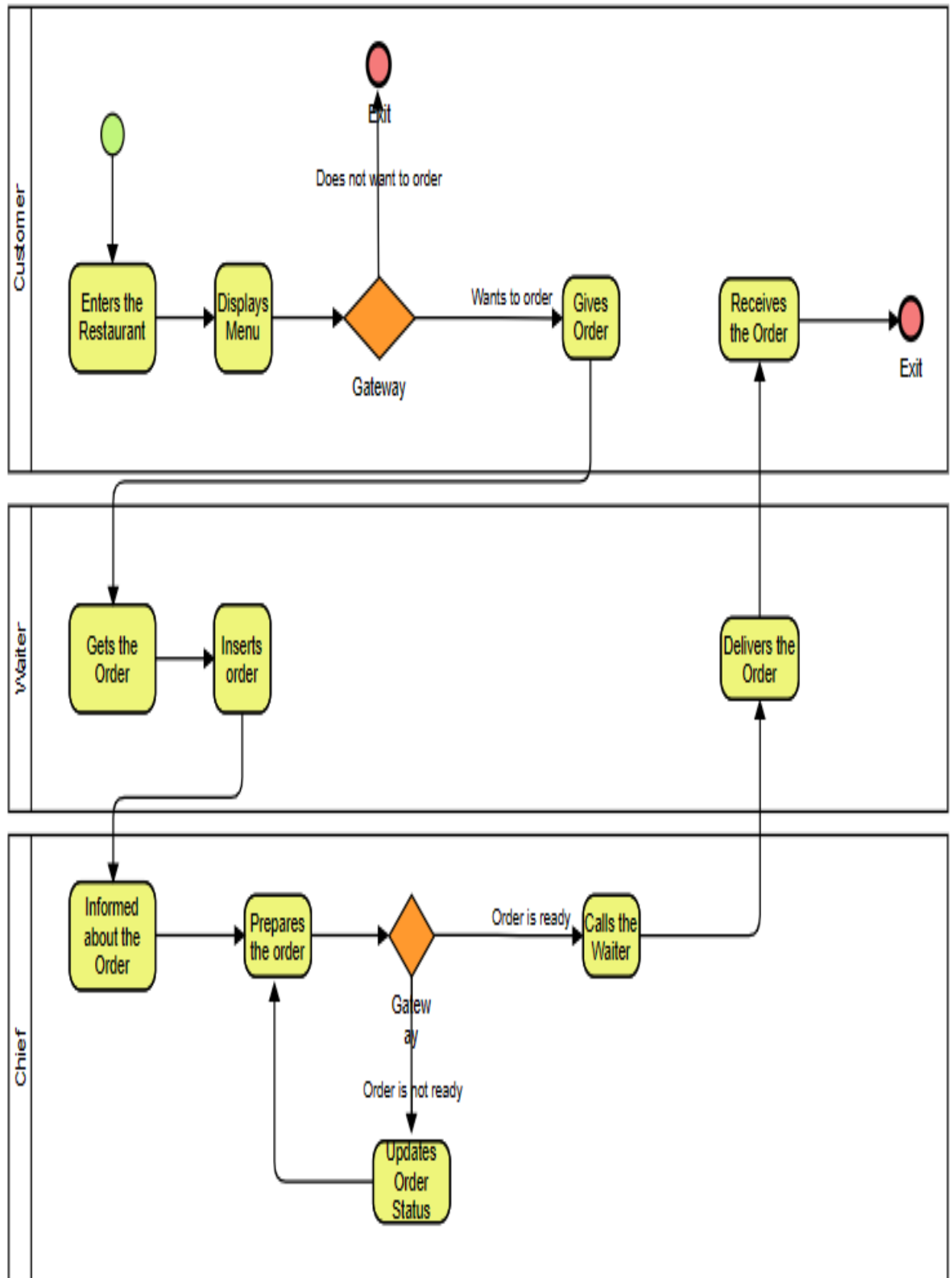


SYSTEM MODEL

1) Process Models



2) Use Case Diagrams

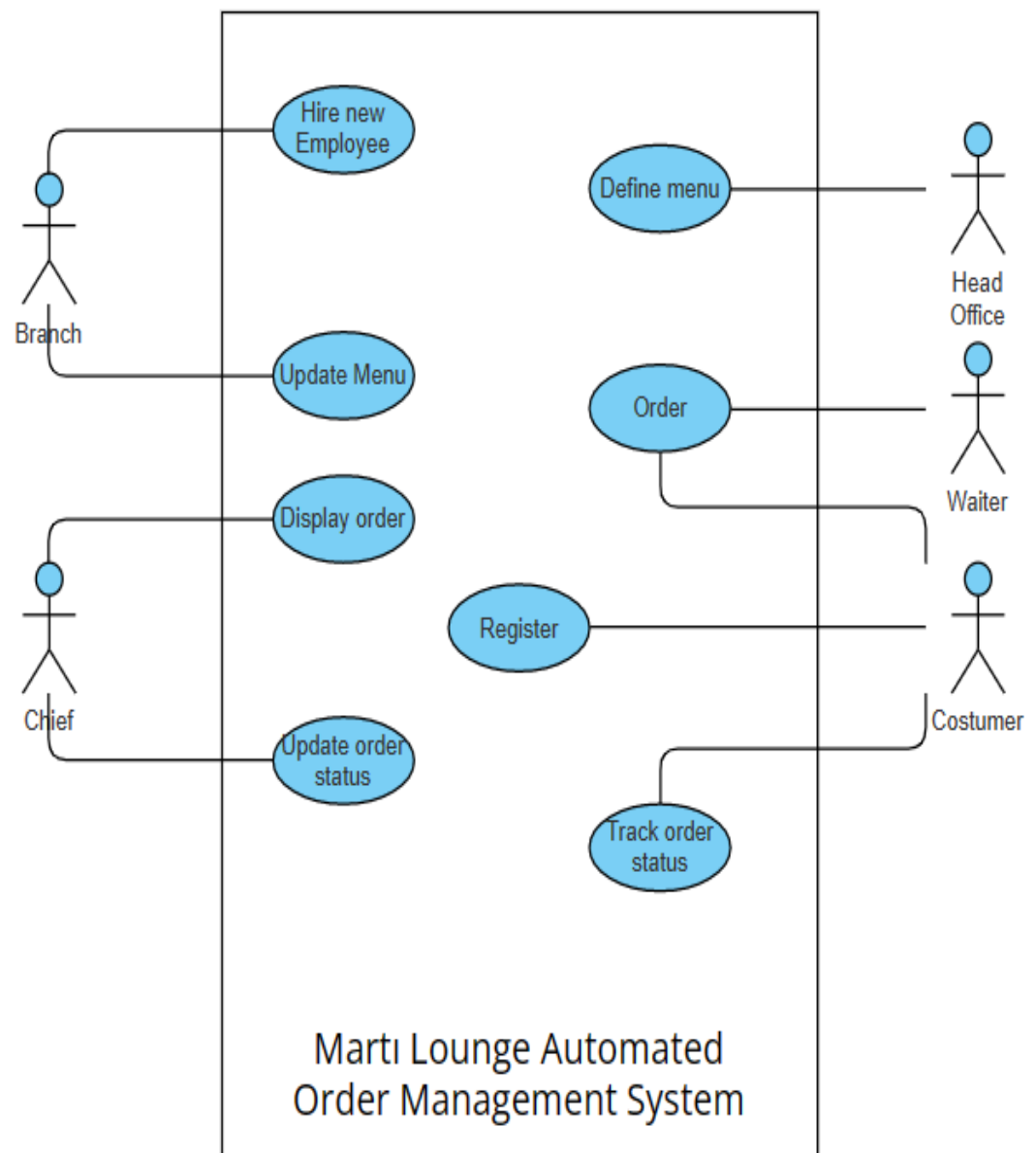
a. List of Stakeholders and Their Roles

- i. IT Staff who are responsible for development and sustainability of the system
- ii. A manager who inspects ingredients of the food, drinks, etc.
- iii. A manager who works with government to check the price of the food, drinks, etc.
- iv. Users (their roles are defined below)

b. Users, Their Roles, and Requirements

- i. Customer who can give an order and track the status of the order.
 - 1. Customer shall register to the system.
 - 2. Customer shall give an order.
 - 3. Customer shall track the order status.
- ii. Chief who manages the kitchen, its staff and order.
 - 1. Chief shall update the status of the order.
 - 2. Chief shall display the order.
- iii. Waiter who gets order from the customer.
 - 1. Waiter shall get order from the customer.
 - 2. Waiter shall add order to the system.
 - 3. Waiter shall deliver the order.
- iv. Head Office who has full authority over the system. It also manages the branches.
 - 1. Head Office shall define the menu of all branches.
- v. Branch who manages the restaurant and its staff.
 - 1. Branch shall update the menu for own restaurant.
 - 2. Branch shall hire new employees for own restaurant.

c. Use case Diagram



d. Use case Descriptions

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Order</i>
<i>Actors</i>	<i>Waiter, Customer, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>Order of the customer such as name of the food, drinks, etc.</i>
<i>Stimulus</i>	<i>When the customer calls the waiter, or customer scans the QR code; waiter, or web page request to get order.</i>
<i>Response</i>	<i>The data is inserted into the system by waiter or automatically, and it became displayable.</i>
<i>Comments</i>	<i>In this way, waiter does not have to go to kitchen to announce the customer order.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Track Order Status</i>
<i>Actors</i>	<i>Customer, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>The status of the order such as preparing, ready, etc.</i>
<i>Stimulus</i>	<i>When the customer gives the order, the system request the data which is set by chief.</i>
<i>Response</i>	<i>The data displays on the web page.</i>
<i>Comments</i>	<i>In this way, the system makes customer well-informed.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Register</i>
<i>Actors</i>	<i>Customer, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>Some information about the customer such as name, password, etc.</i>
<i>Stimulus</i>	<i>When the customer opens the system, system request to customer to register to the system.</i>
<i>Response</i>	<i>Data is sent to the system and gives some functionality to customer such as giving order, track the order status, etc.</i>
<i>Comments</i>	<i>The other user of the system except the customer must get the specific IDs and passwords according to their authorization level.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Define Menu</i>
<i>Actors</i>	<i>Head Office, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>Images, ingredients, lists, and prices of menu which is defined by head office.</i>
<i>Stimulus</i>	<i>The system requests the menu to be defined when it starts.</i>
<i>Response</i>	<i>The data is sent to the system by head office.</i>
<i>Comments</i>	<i>The menu is defined firstly when the system is started, after that the branch takes the control.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Update Menu</i>
<i>Actors</i>	<i>Branch, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>New images, new ingredients, new lists, and new prices of menu which is updated by branch.</i>
<i>Stimulus</i>	<i>The system requests new version of the menu from branch when the branch wants to make an update.</i>
<i>Response</i>	<i>The menu is updated in system with the data which is sent by branch.</i>
<i>Comments</i>	<i>After the head office defined the menu, all control over contents of the menu is taken by branch.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Hire new Employee</i>
<i>Actors</i>	<i>Branch, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>The information of the new employee such as name, password, age, etc.</i>
<i>Stimulus</i>	<i>When the branch wants to hire new employee, web page requests the information of the new employee.</i>
<i>Response</i>	<i>The data is saved to system and new account is created for the new employee.</i>
<i>Comments</i>	<i>Hiring new employee is set the duty of the branch but it can be changed to the duty of the Head Office.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Display Order</i>
<i>Actors</i>	<i>Chief, Customer, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>Order of the customer such as name of the food, drinks, etc.</i>
<i>Stimulus</i>	<i>When the new order is inserted into the system, the data is sent to the screen in the kitchen.</i>
<i>Response</i>	<i>The data is displayed on the screen.</i>
<i>Comments</i>	<i>In this way, Chief manages the preparation of food according to number of orders.</i>

<i>System</i>	<i>Martı Lounge Automated Order Management System</i>
<i>Use Case</i>	<i>Update Order Status</i>
<i>Actors</i>	<i>Chief, Customer, Martı Lounge Automated Order Management System</i>
<i>Data</i>	<i>The status of the order such as preparing, ready, etc.</i>
<i>Stimulus</i>	<i>When the status of the order changed, web page request to new status of the order.</i>
<i>Response</i>	<i>The data is updated by chief, and it became displayable on customers' page.</i>
<i>Comments</i>	<i>After each step of the preparation of order, chief updates the status of the order to make customer well-informed.</i>

e. Challenges

It is hard to understand that the elements such as web page, web panel, screen are stakeholder for the system or not. Also, where to place some elements such as scanning QR code or opening web panel is confusing. Also, consider the allocation the staff statement is so ambiguous, the other staff which is system contains except than chief and waiter is only known by owner of the system. The way that transferring the order which is got by waiter is not well-defined. For example, there is no statement such as waiter gets the order and transfer the order to the system.

f. Changes

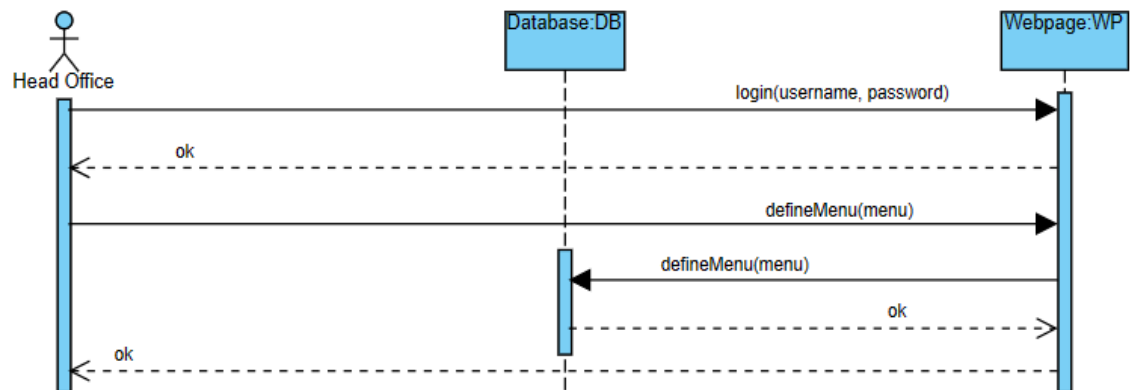
Use cases were made more generic. For example, give order by web page, give order via waiter, and get order use cases were removed, and they are all gathered as Order. Specific information about order use case is given in the use case descriptions.

Register use case was added to the use case diagram. Although it is not given in the system description, it was thought as necessary.

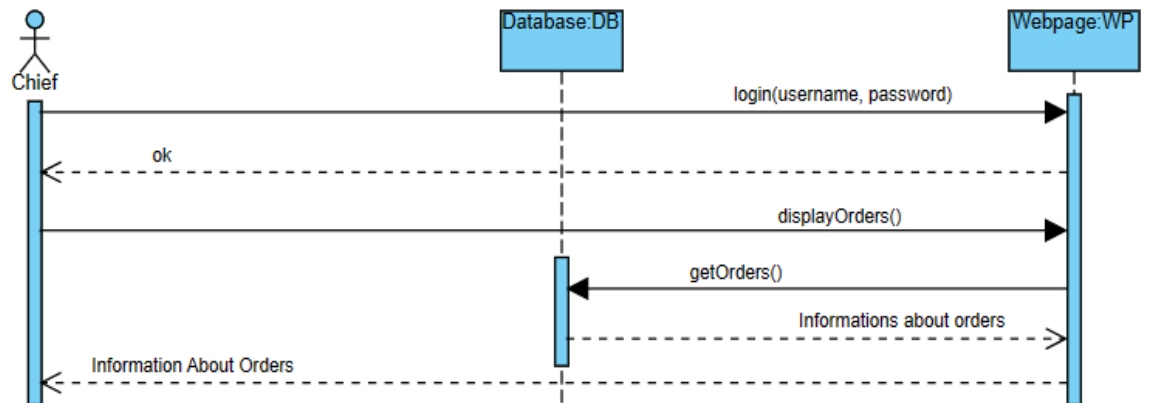
Stakeholders of the system were expanded, and requirements of the users were added according to the feedback of the previous homework.

Sequence Diagrams

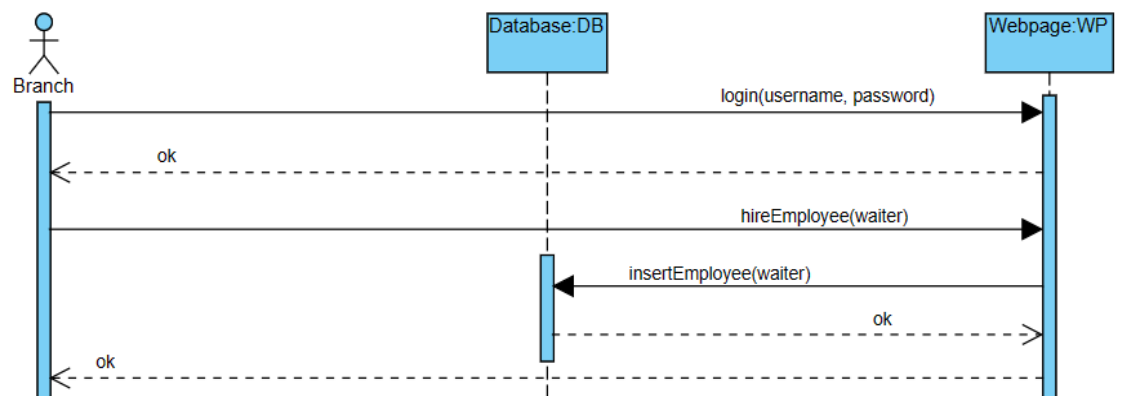
a. Define Menu



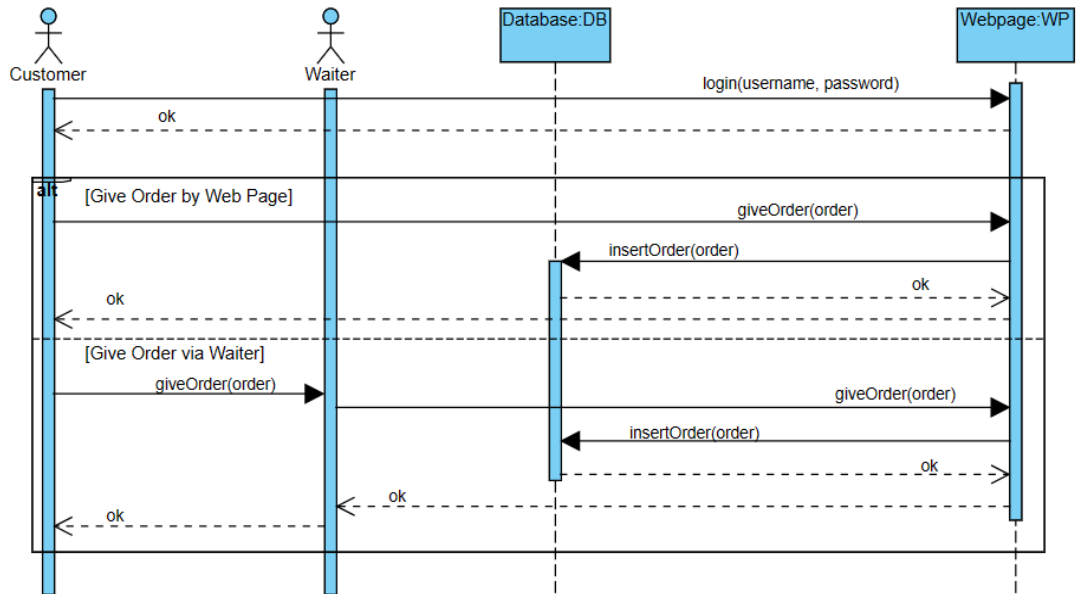
b. Display Orders



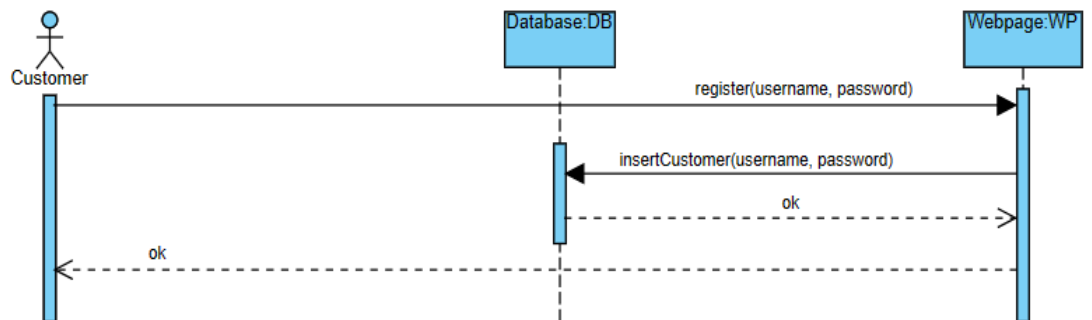
c. Hire new Employee



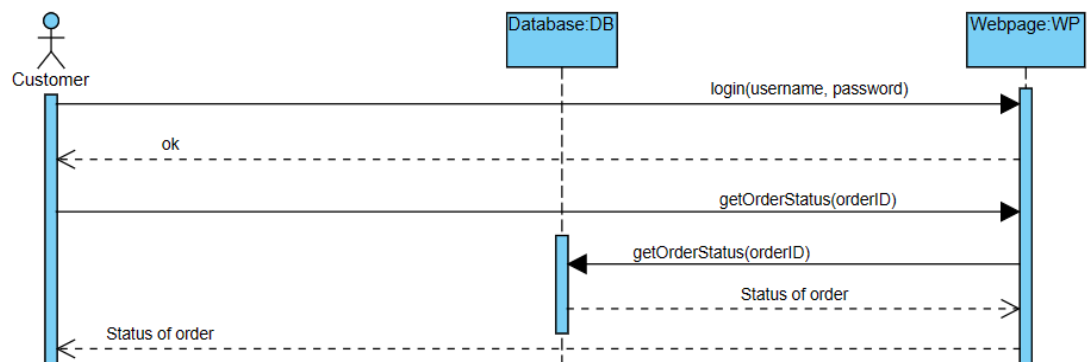
d. Order



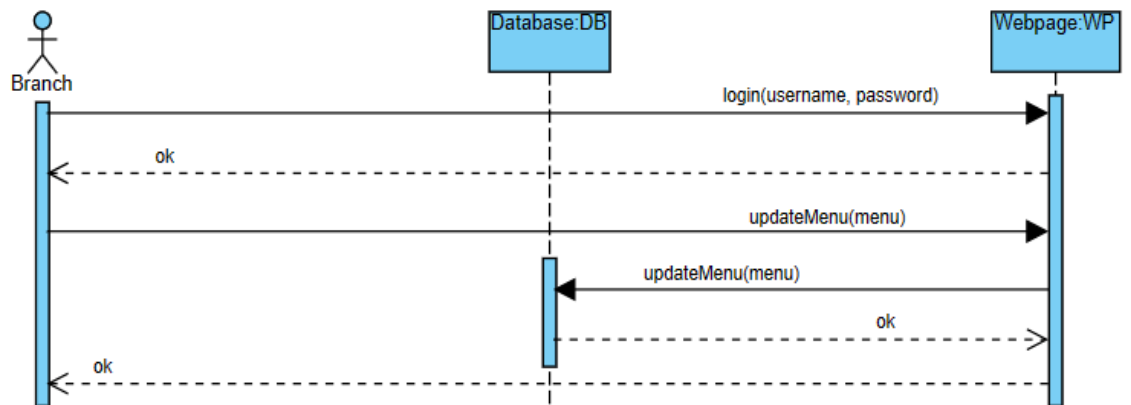
e. Register



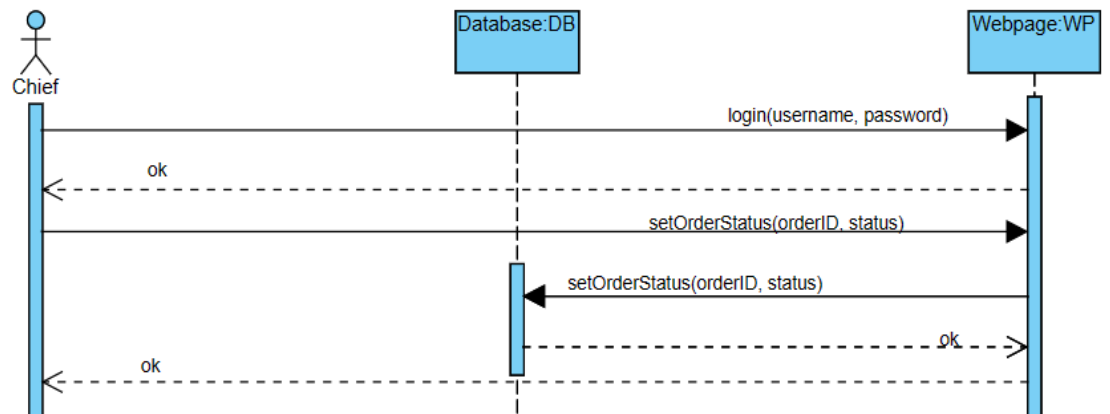
f. Track Order Status



g. Update Menu



h. Update Order Status



3) Class Diagrams

