

**Question 1: identify stakeholder and actors (5-10)**

*Actors: people that interact with the system.*

*Stakeholders: people that are interested in the output of the use case.*

*A use case must have at least 1 stakeholder. And at least 1 stakeholder must be an actor.*

Stakeholder/actors

Fatima's Pizza shop	
Sales revenue registration: Domain Dictionary	
Type: Roles	
Name	Description
Owner	Processes orders, manages menu items, and is solely allowed for viewing sales details.
Waiting staff	Processes in-house orders of customers.
Cook	Manages menu items available at the restaurant.
Delivery person	Delivers the finished product to the customer.
Customer	Places orders, and provides credit card details if required.
Bank	The banking system is responsible for validating the credit card details provided by customer's of Fatima's pizza store.

**Question 2: make a list of use cases for the pizza store**Use cases

1. Add order to information system
2. Make in-house order
3. Make take-out order
4. Make delivery order
5. Validate credit card
6. Add menu items to information system
7. Remove menu items from information system
8. Create sales revenue overview

**Question 3: identity the scope of each use case**Add order to information system

The actor should add the order in the system, so that the system can keep track of it. It is important that only actors like owner and waitress should be able to perform this action. Other actors are not allowed to this. Furthermore, it is expected that the actor fills in the information of the order in correspondence with the given information by an actor like customer and the desired information of an order by the information system.

Make in-house order

This case should be performed in case an actor like customer intends to it. This actor can do this only by visiting the store. This actor will get a 5% service charge and receive the desired in-house order. The desired in-house order must be added to the information system.

Make take-out order

This case should be performed in case an actor like customer intends to it. This actor can do this via phone or by visiting the store. This actor must be able to pick up their desired take-out order within 20 to 30 minutes at no additional charge after the order has been made. The desired take-out order must be added to the information system.

Make delivery order

This case should be performed in case an actor like customer intends to it. The credit card of this actor must be validated. This actor will get a 3-euro delivery charge and receive the desired delivery order. The desired delivery order must be added to the information system.

Validate credit card

This action can only be performed by actors like owner and waitress. The credit card information can only be validated by the actor bank. It is expected that the given credit card information to the bank is in correspondence with the given credit card information of the customer for a fair validation.

Add menu items to information system

This action can only be performed by actors like owner, cook and waitress. It is expected that correct information is given about the new menu item. Also, it is not allowed to add the new menu item if this new menu items is already in the information system.

Remove menu items from information system

This action can only be performed by actors like owner, cook and waitress. It is expected from the actor to know what he/she is about to do. Only menu items that are in the information system can be removed from the information system.

Create sales revenue overview

This action can be performed solely by the owner. By navigating to this overview, the owner of the pizza store is able to view details about sales revenue per customer-order type.

**Question 4: identify a goal for each use case**Add order to information system

A new order is added successfully to the system.

Make in-house order

A new order is added successfully to the system, the actor is charged an additional 5% service fee and the actor gets his food.

Make take-out order

A new order is added successfully to the system and picked up within 20 to 30 minutes.

Make delivery order

A new order is added successfully to the system, the actor's credit card is validated, and he is charged an additional 3\$ service fee.

Validate credit card

The person who owns the credit card is identified.

Add menu items to information system

A new menu item is added to the system successfully.

Remove menu items from information system

An already existing menu item is successfully removed from the system.

Create sales revenue overview

An overview is generated and presented on screen, providing details of sales revenue per order type to the user that requested it.

**Question 5: short scenarios for use cases**Add order to information system

The waitress receives a new order from a customer. She enters the order details and what kind of customer placed the order into the system. The system calculates how much the customer has to pay in total and adds the order to its database.

Make in-house order

A customer enters the restaurant and places his order. The order is entered into the system by a waitress. The system automatically adds 5% service fee to the cost of the order. The customer pays with cash and waits for his food. His food is prepared and given to him and the customer leaves.  
Alternative: The customer pays by card and is charged an additional fee.

Make take-out order

A customer calls the restaurant and places an order. His credit card is validated and the customer chooses that he will pay by cash. The order is entered into the system. The food is prepared and the customer comes to the restaurant within 20-30 minutes. The customer pays with cash and receives his order.  
Alternative: The customer pays by card and an additional fee is added by the system.

Make delivery order

A customer calls the restaurant and places an order. The customer's credit card is validated via the bank. If the credit card information is valid, the order is entered into the system as delivery order. The customer will be charged the costs of the order plus an additional delivery charge, and the order will be processed/finalized by the pizza store.

Validate credit card

The customer enters his credit card details. The details are sent to the bank who check if the details match. If the details match, the bank responds positively and the ordering can proceed. If the details don't match the bank responds negatively and the ordering process is interrupted.

Add menu items to information system

The cook enters the details of a new menu item into the system. When he clicks on "add item" the system checks if the item already exists. If the item does not exist, the system adds the item and displays an affirming message to the cook.  
Alternative: If the item already exists, the system does not enter the item into the system and displays a message that informs the cook of this.

Remove menu item

The cook or owner navigates to an overview that provides a listing of all existing menu items. The user selects one of the items and is prompted to confirm removal of the selected menu item. The user either confirms removal or cancels removal of the selected menu item. If the user selected to remove the menu item, s/he will receive a confirmation of removal in a display box.

Create sales revenue overview

Under the pre-condition that the person logged in is the owner of the pizza shop.

The owner navigates to the sales revenue overview. The system provides the owner with an option to generate the sales revenue overview. The owner confirms to the system that s/he wants to generate the overview. The system generates and displays the overview to the owner on screen.

**Question 6: Use case summary**

Fatima's Pizza shop			
Sales revenue registration: Use Case Summary			
Id	Name	Description	Actors
1	Add order	Waiting staff receives an order and adds the order information into the system.	Owner/waiting staff
2	Make in-house order	Upon receiving an order in the pizza shop, the order is processed according to payment type, and the sales revenue is added to the in-house type.	Owner/waiting staff
3	Make take-out order	Upon receiving a take-out order, either by phone or in the pizza shop, the order is processed according to payment type (cash or credit card), and the sales revenue is added to the take-out type.	Owner/waiting staff
4	Make delivery order	Upon receiving a delivery order, credit card details are validated. If the details are correct, the order is processed and sales revenue is added to the delivery type.	Owner/waiting staff
5	Validate credit card details	Upon receiving an order the credit card details are forwarded by the system to a banking system that verifies the credit card details and sends an appropriate response back.	Bank
6	Add menu items	The cook enters a new menu item into the system.	Owner/cook
7	Remove menu items	The cook removes an existing menu item from the system.	Owner/cook
8	Create sales revenue overview	On request of the owner, the system will generate an overview presenting details about sales revenue per customer/order type.	Owner

**Question 7: Context diagram**

