Use Cases

System use cases:

I.1:

Title	Initialize system
Actors	System Manager
Preconditions	None
Postconditions	None
Parameters	External Services
Expected result	The system is initialized and loaded.
Actions	• System manager initializes the system.

I.2:

Title	Change/replace/insert a connection with external services.
Actors	System manager
Preconditions	External services exists
Postconditions	None
Parameters	The external service
Expected result	The changes admitted – the external service is connected to the system successfully .
Actions	• The system manager connect change/replace/insert the external service. • The system approves the manager's action . • The system completes its activities as usual.

I.3:

Title	Payment
Actors	User
Preconditions	• Payment service exists. • The user is agree with the payment policy.
Postconditions	Backing to the previous state if the request denied.
Parameters	The deals details
Expected result	The payment is Approved/denied
Actions	• The user completes the payment process. • The system sends a payment request to the payment service

	• The payment service sends back the result with is an approval or deny.
	• The system sends to the user the result of the payment service .

I.4:

Title	Supplying request
Actors	1- Store founder 2- Store owner 3- Store manager
Preconditions	1- Supplier exists in the Supplying system. 2- Each actor must action under the permission that he has.
Postconditions	None
Parameters	Costumer details and package details.
Expected result	The request approved/denied
Actions	• the actor puts the details of the package in the system. • The system sends a supplying request to the external supplying system. • The Supplying service sends back the result of the request which is approval or deny. • The system sends to the actor the result back from the Supplying service.

I.5:

Title	Real time notification
Actors	Market
Preconditions	• The user exists in the system. • The user is member. • The user is active.
Postconditions	None
Parameters	Message details and user details
Expected result	The user gets the message successfully at real time
Actions	• An event occurs that leads to a member to get notification about it during his connection. • Checking if the user is connected. • Sends the message to the user.

I.6:

Title	Pending notification
Actors	Market
Preconditions	• The user exists in the system. • The user is member. • The user is offline
Postconditions	None
Parameters	Message details and user details
Expected result	The user gets the message successfully at the next first time he logged in to the system.
Actions	• An event occurs that leads to a member to get notification about it. • Checking that the user is offline. • Save the notification that the user should get until he connects. • The user connects and gets the message succesfuly.

User use cases:

II.1.1:

Title	Entering to the system
Actors	User
Preconditions	None
Postconditions	The user gets an empty Cart
Parameters	None
Expected result	• The user gets in to the system successfully. • The user get an empty cart that he could buy what ever he wants an available.
Actions	• The user opens the system. • The system gives the user a cart. • The system shows the user a page to activate like a gust.

II.1.2:

Title	Exiting from the system
Actors	User
Preconditions	None
Postconditions	• If the user is gust: the system removes his cart • If the user is member: the system saves his cart.

Parameters	None
Expected result	The user is no longer activated in the system and the "post conditions" occurred successfully.
Actions	• The user quit the system. • If the user is guest: the system clear his cart and removes it. • If the user is member: the system saves his cart state.

II.1.3:

Title	Registration to the system
Actors	Guest
Preconditions	The details are not exists in the system
Postconditions	The system adds the user to the member list
Parameters	User details
Expected result	The user is added to the system as a member
Actions	• The gust asks to register to the system. • The system asks for a unique details. • The guest enters the details. • The system adds the guest as a member to the system.

II.1.4:

Title	logging in to the system
Actors	User
Preconditions	The user exists in the system
Postconditions	The user logged in
Parameters	User details
Expected result	The user logged in successfully
Actions	• The user asks to log in. • The system asks the user to insert his details. • The user enters the details. • The system check if the details are correct, if they are correct the user enters to the system as a member. • If the details are wrong the system shows a message that the user with this specific details is not exist.

II.2.1:

Title	Information about stores and products
Actors	User
Preconditions	Store exist
Postconditions	None
Parameters	• Store id/name • Product id/name
Expected result	The system display the relevant asked info .
Actions	• The user asks about a store/product. • The system display the relevant data to the user.

II.2.2:

Title	Search for product
Actors	User
Preconditions	None
Postconditions	None
Parameters	One of the following at least: • Product name. • Product category. • Key words.
Expected result	Displaying a relevant products
Actions	• The user search for a product. • The system shows a relevant products. • The user could filter the result according to different features.

II.2.3:

Title	Saving the products into the bag
Actors	User
Preconditions	Products are added to the bag.
Postconditions	The system remembers the product in the saved bag for some store
Parameters	Products
Expected result	The products for a store are saved in the bag.
Actions	• The user choose the products that he wants to save in the store bag.

	• The system saves these product in the bag.

II.2.4:

Title	Cart checking and changing
Actors	User
Preconditions	None
Postconditions	None
Parameters	Cart
Expected result	The changes are saved in the system
Actions	• The user asks for his cart. • The system display for the user the cart. • The user can make changes in the cart. • If the user makes change – the system save the changes that the user did.

II.2.5:

Title	Cart purchase
Actors	User
Preconditions	None Empty Cart
Postconditions	Relevant message from the system the contain approval or denying the purchasing process.
Parameters	Cart and payment details
Expected result	The purchase done successfully and saved in the purchasing history

Actions	• The user asks to complete his purchase.
	• The Store executes this tasks:
	  1- Checks the payment policy – Use case II.2.5.1 .
	  2- Checks the discount policy – Use case II.2.5.2.
	• The system sends the relevant credit cart parameters and date to the external payment service.
	• The system sends the relevant shipment date to the external shipment service.
	• Purchase is completed and saved in the history.
	• The user gets a relevant message about the purchase if succeeded or failed.

II.2.5.1:

Title	Purchase policy checker
Actors	Store
Preconditions	User asks to purchase
Postconditions	Completing the purchase process if every thing is okey.
Parameters	Cart and payment details and buyer details
Expected result	The purchase policy approved/denied
Actions	• The user asks to complete his purchase. • User case II.2.5.1.1 executed via the store • The store checks the cart. • If the purchase policy satisfied , the store approves the purchase , else an error message sent to the user with relative data.

II.2.5.1.1:

Title	Within stock checker
Actors	Store
Preconditions	User asks to purchase
Postconditions	Completing the purchase process if every thing is okey.
Parameters	Cart
Expected result	Products approved/denied
Actions	• The user asks to complete his purchase. • The store checks that every product in the cart has an enough amount in the stock, if so the store complete the process, else an error message sent to the user with relative data.

II.2.5.2:

Title	discount policy checker
Actors	Store
Preconditions	User asks to purchase
Postconditions	Completing the purchase process if every thing is okey.
Parameters	Cart and buyer details
Expected result	Price is updated/stays as past.
Actions	• The user asks to complete his purchase. • The store checks the cart.

	• If the user is member, the following steps will be executed: 1- The store checks for a member discount. 2- If there is a discount, anew price would be calculated and the cart price will be updated. • If the user is gust, the store checks for a discount , if there is , anew price would be calculated and the cart price will be updated.

II.3.1:

Title	Logout
Actors	Member
Preconditions	Member is logged in
Postconditions	The cart is saved
Parameters	None
Expected result	The user state changed to guest
Actions	• The member asks to logout • The system removes the user from the "activated" users. • The system changes the user to guest state.

II.3.2:

Title	Store opening
Actors	Member
Preconditions	Unique details of the new store
Postconditions	• Relevant message to the user either if it is successful opening or fail opening. • The store appears for each user so he could search for it. • The member gets "founder" role for this store
Parameters	Store details
Expected result	The store is added to the system successfully and the member assigned as a founder for this store
Actions	• The user asks to open a store. • The system asks the user to enter store details. • The user enters the details. • The system verify that the details are unique. • The system adds the store and sends a message to the user that the store added successfully. • The system assign the member as a "founder" for the store.

Store owner use cases:

II.4.1.1:

Title	Adding product to store's stock
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	Product does not exist in the stock
Postconditions	Relevant message to the store owner either if it is successful adding or fail adding.
Parameters	Product details Store details
Expected result	The product is added to the stock
Actions	• Store owner accesses his own store. • Store owner requests to add new product to the stock and enters the product details. • The system adds the product to the stock if does not exist, otherwise, system sends error message.

II.4.1.2:

Title	Deleting product from store's stock
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	Product exists in the stock
Postconditions	Relevant message to the store owner either if it is successful deleting or fail deleting.
Parameters	Product details Store details
Expected result	The product is deleted from the stock
Actions	• Store owner accesses his own store. • Store owner requests to delete a product from the stock and enters the product details. • The system searches and deletes the product from the stock if exists, otherwise, system sends error message.

II.4.1.3:

Title	Change product details in store's stock
Actors	1. Store owner 2. Store manager (with relevant permission)

Preconditions	Product exists in the stock
Postconditions	Relevant message to the store owner either if it is successful changing or fail changing.
Parameters	New product details Store details
Expected result	The new product details are saved
Actions	• Store owner accesses his own store. • Store owner requests to change a product details from the stock and enters the product details. • The system searches and changes the product details from the stock if exists, otherwise, system sends error message.

II.4.2.1:

Title	Change payment policy
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	The owner owns this store.
Postconditions	Payment policy is changed if they do no conflict with the consistency constraints were defined by the founder, otherwise system sends error message.
Parameters	New payment policy details Store details
Expected result	The new payment policy is saved
Actions	• Store owner accesses his own store. • Store owner requests to change the payment policy. • Store owner enters the new payment policy details. • The system changes the payment policy if they are valid, otherwise, system sends error message.

II.4.2.2:

Title	Change discount policy
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	Product exists The owner owns this store
Postconditions	Discount policy is updated if they do no conflict with the consistency constraints were defined by the founder, otherwise system sends error message.

Parameters	Product details New discount policy Store details
Expected result	The new discount policy is saved
Actions	• Store owner accesses his own store. • Store owner requests to update the discount policy for the product. • Store owner enters the updated discount policy details. • The system updates the discount policy for the product if they are valid, otherwise, system sends error message.

II.4.4:

Title	Store owner appointment
Actors	Store owner
Preconditions	He is a member (not a guest). He is not a founder or manager or owner of this store
Postconditions	The new owner appointment is saved in the system if it was done successfully, otherwise system sends error message.
Parameters	Member details Store details
Expected result	The member has become a store owner
Actions	• Store owner accesses his own store. • Store owner requests to add a new owner. • Store owner enters the member details. • The system defines the member as an owner if he is not a founder or manager or owner of the specified store, otherwise, system sends error message.

II.4.6:

Title	Store manager appointment
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	He is a member (not a guest). He is not a founder or manager or owner of this store.
Postconditions	The new manager appointment is saved in the system if it was done successfully, otherwise system sends error message. The new manager only has permissions to receive information – use cases 4.12, 4.13
Parameters	Member details

	Store details
Expected result	The member has become a store manager
Actions	• Store owner accesses his own store. • Store owner requests to add a new manager. • Store owner enters the member details. • The system defines the member as a manager if he is not a founder or manager or owner of the specified store, otherwise, system sends error message.

II.4.7:

Title	Change store manager permissions
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	The owner appointed the specified manager
Postconditions	The new permissions are saved in the system if they are valid, otherwise system sends error message.
Parameters	Manager details Store details New permissions
Expected result	The permissions are changed successfully.
Actions	• Store owner accesses his own store. • Store owner requests to change the permissions of a specified manager. • Store owner enters the member details and the new permissions. • The system searches for the manager and changes the permissions, otherwise, system sends error message.

II.4.9:

Title	Closing store
Actors	Store founder (he is also a store owner)
Preconditions	The founder founded this store.
Postconditions	• The store becomes inactive (closed). • The member who is not an owner or system manager can't receive information about this closed store. • Store owners and managers get notified but they still owners and managers. • The store products will not appear in the search.
Parameters	Store details

Expected result	The Store is closed.
Actions	• Store founder accesses his own store. • Store founder requests to close the store. • The system saves the roles. • The system defines the store as an inactive (closed). • The system notifies the owners and managers of the store. • The system does not show the products in search.

II.4.11:

Title	Request roles' information
Actors	1. Store owner 2. Store manager (with relevant permission)
Preconditions	The owner owns this store The member is an owner or manager of this store.
Postconditions	None
Parameters	Store details Member details
Expected result	The system will give the owner the information about the member, if the member is a manager, the system will also give him his permissions.
Actions	• Store owner accesses his own store. • Store owner requests information about a member (owner or manager) • Store owner enters the member details. • The system searches for the member, if he is an owner or manager of this store, the system will show the information about him and if he is a manager, the system will also show his permissions, otherwise, system sends error message.

II.4.13 + II.6.4:

Title	Request store purchase history
Actors	1. Store owner 2. Store manager (with relevant permission) 3. System manager
Preconditions	The store owner owns this store / the store manager manages this store.
Postconditions	None
Parameters	Store details
Expected result	The system will show the purchase history

Actions	- The actor accesses the store. - The actor requests the store purchase history. - The system will show the purchase history to the actor, otherwise, system sends error message.