

Eastern Mediterranean University

School of Computing and Technology

Department of Information Technology

Software Engineering [ITEC 316]

2022/2023 Fall Term **Project Report**

ONLINE SHOPPING APP (<https://www.ubuy.com.tr/en/>)

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PHASE 1

INTRODUCTION

Ubuy is made to offer clients a simple and practical way to shop online for a large range of goods. Customers may explore products, add items to their cart, secure their transaction, and provide feedback for products they've purchased with just a few clicks.

PURPOSE

The purpose of Ubuy is to provide a convenient and easy way for customers to shop online. It aims to offer a wide selection of products at competitive prices, and to make the shopping experience as seamless as possible for our customers. The website also aims to make international shopping easier to its customers.

SCOPE

Ubuy offers a range of products in various categories, such as electronics, home goods, clothing, and more. Customers will be able to search for specific items or browse through various categories to find what they are looking for. They will also have the option to create an account, save items to their wishlist, and track their orders.

PROCESS FLOW

For the development of this project, we will be using the Agile process flow model. This involves iterative development and frequent delivery of small increments of functionality, allowing us to quickly respond to changing requirements and incorporate feedback from users.

PROCESS PATTERN

For the development of this project, we will be using the Model-View-Controller (MVC) pattern. This pattern separates the representation of information from the user's interaction with it, making it easier to maintain and expand the website over time.

SCENARIO

A scenario for the website might involve a user browsing the homepage, searching for a specific product, and adding it to their shopping cart. They may then proceed to the checkout page, where they enter their billing and shipping information and complete the purchase using the payment gateway. After the purchase is complete, the user receives a confirmation email and can view their order history in their user account.

SYSTEM REQUIREMENTS

1.1.1 Create account

- 1.1.1.1 A create account button will be displayed across all the website's pages
- 1.1.1.2 User will click on the create account button
- 1.1.1.3 System will display the create account form
- 1.1.1.4 User will fill in the form information
- 1.1.1.5 User will confirm submission
- 1.1.1.6 System will verify password weakness and email validity.
- 1.1.1.7 System will check if email already exists in the database.
- 1.1.1.8 System will send sign up verification to the user's email address.
- 1.1.1.9 User clicks on email verification link.
- 1.1.1.10 System adds user data to the database.

1.1.2 Login

- 1.1.2.1 A login button will be displayed across all of the website's pages.
- 1.1.2.2 User clicks on login button.
- 1.1.2.3 System displays login form.
- 1.1.2.4 User fills in login form.
- 1.1.2.5 System checks if the user exists.
- 1.1.2.6 System checks if the password matches the user's data.
- 1.1.2.7 System allows the user into their account on the website.
- 1.1.2.8 System saves the user's login session.

1.1.3 Logout

- 1.1.3.1 User clicks on logout button.
- 1.1.3.2 System requests for logout confirmation from the user.
- 1.1.3.3 User responds to the request.
- 1.1.3.4 System ends the user's login session.
- 1.1.3.5 System re-direct user to normal main page.

1.1.4 Search for product

- 1.1.4.1 System will display the search bar.
- 1.1.4.2 User will enter search keyword.
- 1.1.4.3 System will retrieve the results matching the keywords searched by the user.
- 1.1.4.4 System will display the results of the available products.

1.1.5 Sort search results

- 1.1.5.1 System will display sort results button.
- 1.1.5.2 User will click on the button.
- 1.1.5.3 System will display sorting options.
- 1.1.5.4 User will select the sorting method.
- 1.1.5.5 System will display results depending on the sorting method.

1.1.6 Filter search results

- 1.1.6.1 System will display the filtering results options.
- 1.1.6.2 User will choose an option to filter the results.
- 1.1.6.3 System will display the new results depending on the filtering method.

1.1.7 View product

- 1.1.7.1 User will click on the product.
- 1.1.7.2 System will retrieve the product's details from the database.
- 1.1.7.3 System will display the product's information to the user.

1.1.8 Add product to cart

- 1.1.8.1 System will display an add to cart button in the product's page.
- 1.1.8.2 User will click on the button.
- 1.1.8.3 System will re-check for the product's availability.
- 1.1.8.4 System adds the product to the user's cart in the database.

1.1.9 View shopping cart

- 1.1.9.1 User clicks on the shopping cart button.
- 1.1.9.2 System retrieves the user's shopping cart list from the database.
- 1.1.9.3 System checks if the cart is empty or not.
- 1.1.9.4 System displays results.

1.1.10 Remove product from cart

- 1.1.10.1 User will click on remove product button.
- 1.1.10.2 System asks the user to confirm product removal.
- 1.1.10.3 User confirms removal.
- 1.1.10.4 System deletes the product from the user's shopping cart in the database.

1.1.11 Complete order purchase

- 1.1.11.1 User requests for order checkout.

- 1.1.11.2 System request confirmation for the user's delivery address.
- 1.1.11.3 User confirms address details.
- 1.1.11.4 System request payment detail from bank.
- 1.1.11.5 System receives request from bank.
- 1.1.11.6 System requests user to enter payment checkout code.
- 1.1.11.7 User enters the code.
- 1.1.11.8 System checks if the code matches.
- 1.1.11.9 System confirms the user's order.
- 1.1.11.10 System adds order to the user's order history in the database.

1.1.12 View order history

- 1.1.12.1 User clicks on view order history button.
- 1.1.12.2 System checks if the user has any orders.
- 1.1.12.3 System display results.

1.1.13 Track order

- 1.1.13.1 System display order id input field.
- 1.1.13.2 User enters order id.
- 1.1.13.3 System checks if the order id is valid.
- 1.1.13.4 System displays the order's status.

1.1.14 View wishlist

- 1.1.14.1 User clicks on view wishlist button.
- 1.1.14.2 System checks if the user has added any product to their list.
- 1.1.14.3 System display results.

1.1.15 Add item to wishlist

- 1.1.15.1 System will display an add to wishlist button in the product's page.
- 1.1.15.2 User will click on the button.
- 1.1.15.3 System adds the product to the user's wishlist in the database.

1.1.16 Remove from wishlist

- 1.1.16.1 User will click on remove product from wishlist button.
- 1.1.16.2 System asks the user to confirm product removal.
- 1.1.16.3 User confirms removal.
- 1.1.16.4 System deletes the product from the user's wishlist in the database.

1.1.17 Place product review

- 1.1.17.1 User click on place review button on the product.
- 1.1.17.2 System display product review form.
- 1.1.17.3 User will fill in the product review form.
- 1.1.17.4 System adds product review from the user's product review history.
- 1.1.17.5 System will add the product review to the product's page.

1.1.18 Add payment method

- 1.1.18.1 User will request to enter a new payment method.
- 1.1.18.2 System will display the add payment method form.
- 1.1.18.3 User will enter the payment method data.
- 1.1.18.4 System will validate the data.
- 1.1.18.5 System adds payment method to the user's account.

1.1.19 Update payment method

- 1.1.19.1 User will request to update the selected payment method.
- 1.1.19.2 System will display the payment method update form.
- 1.1.19.3 User will enter the updated payment method data.
- 1.1.19.4 System will validate and filter the newly entered data.
- 1.1.19.5 System updates the payment method of the user.

1.1.20 Remove payment method

- 1.1.20.1 User will request to remove the selected payment method

1.1.20.2 System will prompt for user to confirm the removal

1.1.20.3 User will respond to the prompt.

1.1.20.4 System removes payment method from the user.

1.1.21 Edit account

1.1.21.1 User clicks on edit account button.

1.1.21.2 System retrieves the user's current information.

1.1.21.3 System displays the user's data.

1.1.21.4 System prompts the user to apply changes.

1.1.21.5 User responds to request.

1.1.21.6 System checks if any changes have been done.

1.1.21.7 System requests user to confirm the changes.

1.1.21.8 User responds to request.

1.1.21.9 System replaces the old data with the new data in the database.

1.1.21.10 System confirms to the user that's changes have been made.

1.1.22 Change language

1.1.22.1 User will click on change language button.

1.1.22.2 System will display a list of available languages.

1.1.22.3 User will choose a language.

1.1.22.4 System re-displays the website's data according to the language selected.

1.1.23 Change region

1.1.23.1 User clicks on change the region button.

1.1.23.2 System displays a list of supported regions.

1.1.23.3 User selects a region.

1.1.23.4 System asks the user to confirm change.

1.1.23.5 User responds to the request.

1.1.23.6 System retrieves the respective products according to the selected region.

1.1.23.7 System displays the retrieved products on the main page.

1.1.24 Add product to category – admin

1.1.24.1 Admin clicks on create product button.

1.1.24.2 System displays the product creation form.

1.1.24.3 Admin fills in the product creation form.

1.1.24.4 System checks if product is already in the database.

1.1.24.5 System requests admin to confirm product creations.

1.1.24.6 Admin responds to the request.

1.1.24.7 System adds the product to the database.

1.1.24.8 System displays the product on the website.

1.1.25 Remove product from category – admin

1.1.25.1 Admin clicks on remove product button.

1.1.25.2 System requests admin to confirm product removal.

1.1.25.3 Admin responds to the request.

1.1.25.4 System removes the product from the database.

1.1.25.5 System displays the product has been removed on the website.

1.1.26 Update product details - admin

1.1.26.1 Admin clicks on update product button.

1.1.26.2 System displays the product update form.

1.1.26.3 Admin fills in the product update form.

1.1.26.4 System requests admin to confirm product update.

1.1.26.5 Admin responds to the request.

1.1.26.6 System updates the product's details in the database.

1.1.26.7 System displays the product on the website.

1.1.27 Open customer support ticket

- 1.1.27.1 User clicks on open ticket button.
- 1.1.27.2 System displays ticket form.
- 1.1.27.3 User enters the ticket form details.
- 1.1.27.4 System sends ticket number to support & user.
- 1.1.27.5 Support confirms ticket number.
- 1.1.27.6 User contacts the support.

1.1.28 View customer support ticket

- 1.1.28.1 User clicks on view ticket button.
- 1.1.28.2 System checks if the user has opened any tickets.
- 1.1.28.3 System displays results.

1.1.29 Close customer support – support & user

- 1.1.29.1 Actor clicks on close ticket button.
- 1.1.29.2 System requests confirmation from the actor.
- 1.1.29.3 Actor responds to the request.
- 1.1.29.4 System closes the ticket.

PHASE 2

EVENT LIST

- 2.1.1 Create an account for the website
- 2.1.2 Log-in into the website
- 2.1.3 Log-out from the website
- 2.1.4 Search for a product
- 2.1.5 Sort your search
- 2.1.6 Filter your search
- 2.1.7 Request to view a product
- 2.1.8 Add product to the cart
- 2.1.9 Request to view shopping cart
- 2.1.10 Remove the product from the cart
- 2.1.11 Complete the order purchase
- 2.1.12 Add payment method
- 2.1.13 Remove payment method
- 2.1.14 Update payment method
- 2.1.15 Request to view order history
- 2.1.16 view tracking order
- 2.1.17 Request to view wish list
- 2.1.18 Add an item to wish list
- 2.1.19 Remove the item from wish list
- 2.1.20 Add product review
- 2.1.21 Update account
- 2.1.22 Change website language
- 2.1.23 Update region
- 2.1.24 Add product to category

2.1.25 Remove product from category

2.1.26 Update product details

2.1.27 Request to open customer support ticket

2.1.28 Request to view customer support ticket

2.1.29 Request to close customer support ticket

EVENT TABLE

Event	Trigger	Response	Destination	Source	Use Case
Create account	A customer request to buy a product	System check if the username and password valid or not.	User	User	Create account
Log in	Initiate a log in request after form is filled	System checks if the username and password are found	User	User	Log in
Log out	Initiate a log out request	The user's local storage is cleared and the user is logged out.	user	User	Log out
Search for product	request to see a specific product	Display the specific product	User	User	Search for product
Sort your search	request to search with specific order	Display the products in a sorted way	User	User	Sort your search
Filter your search	request to search with filtered option	Display the products in a filtered way	User	User	Filter your search
Request to view product	Click into product	Display the product	User	User	Request to view product

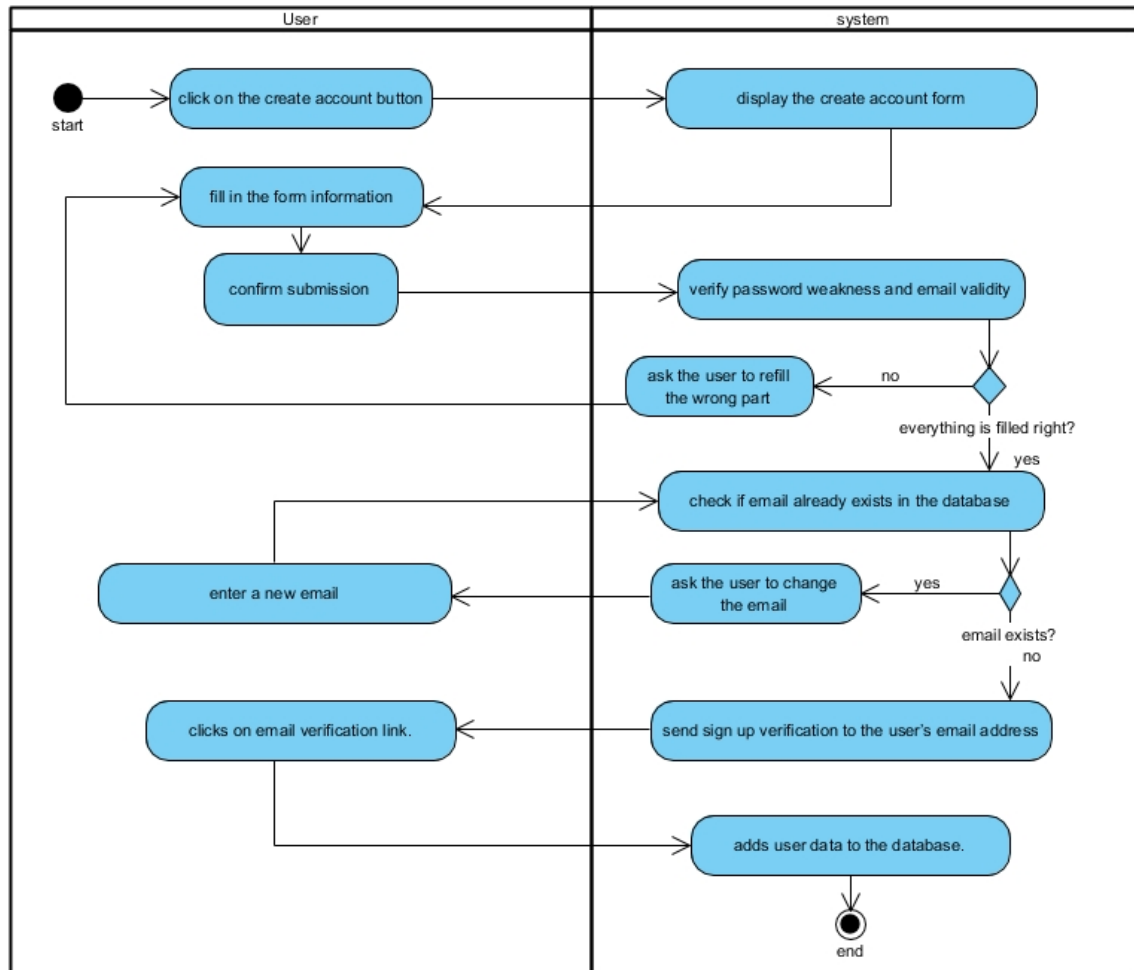
Add product to cart	Clicks on the button “add to cart”	Send product to cart	User	User	Add product to cart
Request to view shopping cart	Click “Shopping Cart” to view shopping cart	Display shopping cart details	User	User	Request to view shopping cart
Remove product from the cart	Clicks on the button “remove product”	Display the updated shopping cart	User	User	Remove product from the cart
Complete the order purchase	Clicks on the button “proceed to checkout”	Display the order details	User	User	Complete the order purchase
Add payment method	Click on “add payment”	Display payment form	User	User	Add payment method
Remove payment method	Click on “remove payment”	Display message about the payment that has been removed	User	User	Remove payment method
Update payment method	Click on “Edit”	Allow to modify the information	User	User	Update payment method

Request to view order history	Clicks on the button “ordering history”	Display the previous orders	User	User	Request to view order history
view tracking order	Clicks on the button “track order”	Display the current location of the order	User	User	Request to view tracking order
Request to view wishlist	Click on “your wishlist” button	Display the product that user selected berfore	User	User	Request to view wishlist
Add an item to wishlist	Click on”heart shape” to add the item	Send the item to wishlist	User	User	Add an item to wishlist
Remove the item from wishlist	Click on”heart shape” to remove the item	Display the updated wishlist page	User	User	Remove the item from wishlist
Add product review	Click on “write a review”	Send the review and update product review	User	User	Add product review
Update account	Enter information and modifies the current information by clicking “update” button	System replaces the old information with the new data	User / Admin	User / Admin	Update account
Change language	Request to change language	Display the website with the chosen language	User / Admin	User / Admin	Change language

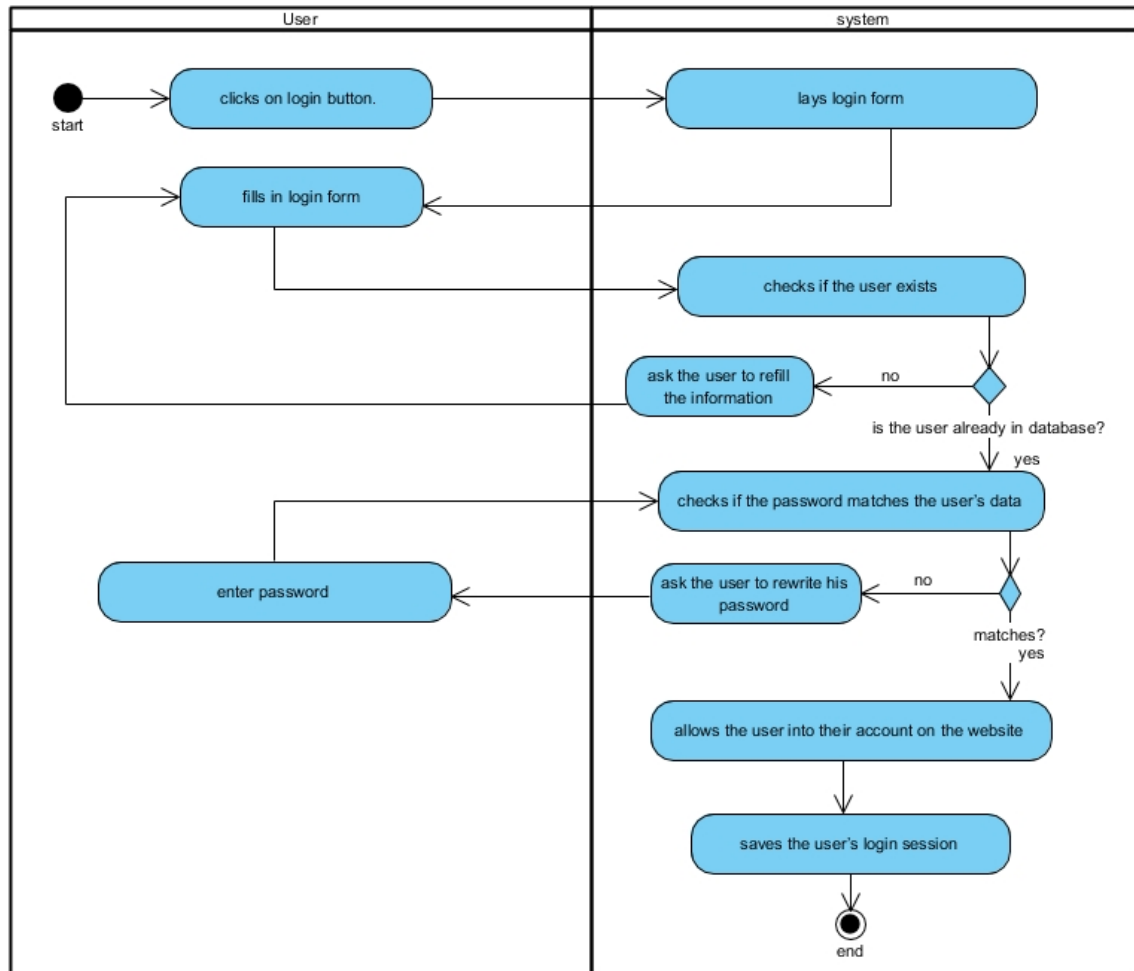
Change region	Request to change your region	Display the website with the chosen region	User / Admin	User / Admin	Change region
Add product to category	Click on “add item”	Send the item and update the system	Admin	Admin	Add product to category
Remove product from category	Click on “remove item”	Display the updated products	Admin	Admin	Remove product from category
Update product details	Enter information and modifies the current information by clicking “update” button	System replaces the old information with the new data	Admin	Admin	Update product details
Open customer support ticket	Click on “open ticket”	Display form of the ticket to fill	User / Admin	User / Admin	Open customer support ticket
view customer support ticket	Request to view ticket	Display the ticket	User / Admin	User / Admin	view customer support ticket
close customer support ticket	Click on “close the ticket”	Display a message	Admin	Admin	close customer support ticket

ACTIVITY DIAGRAMS

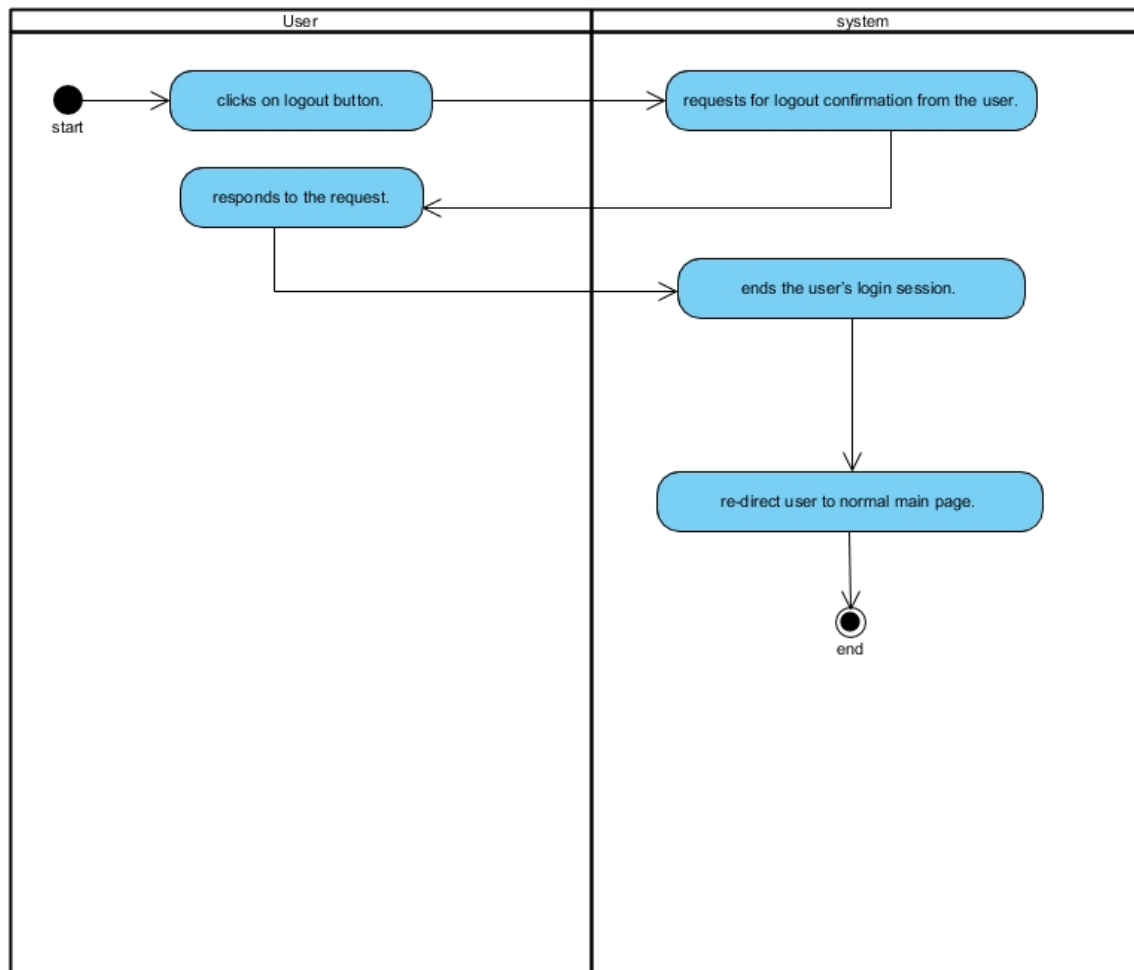
2.3.1. Create account



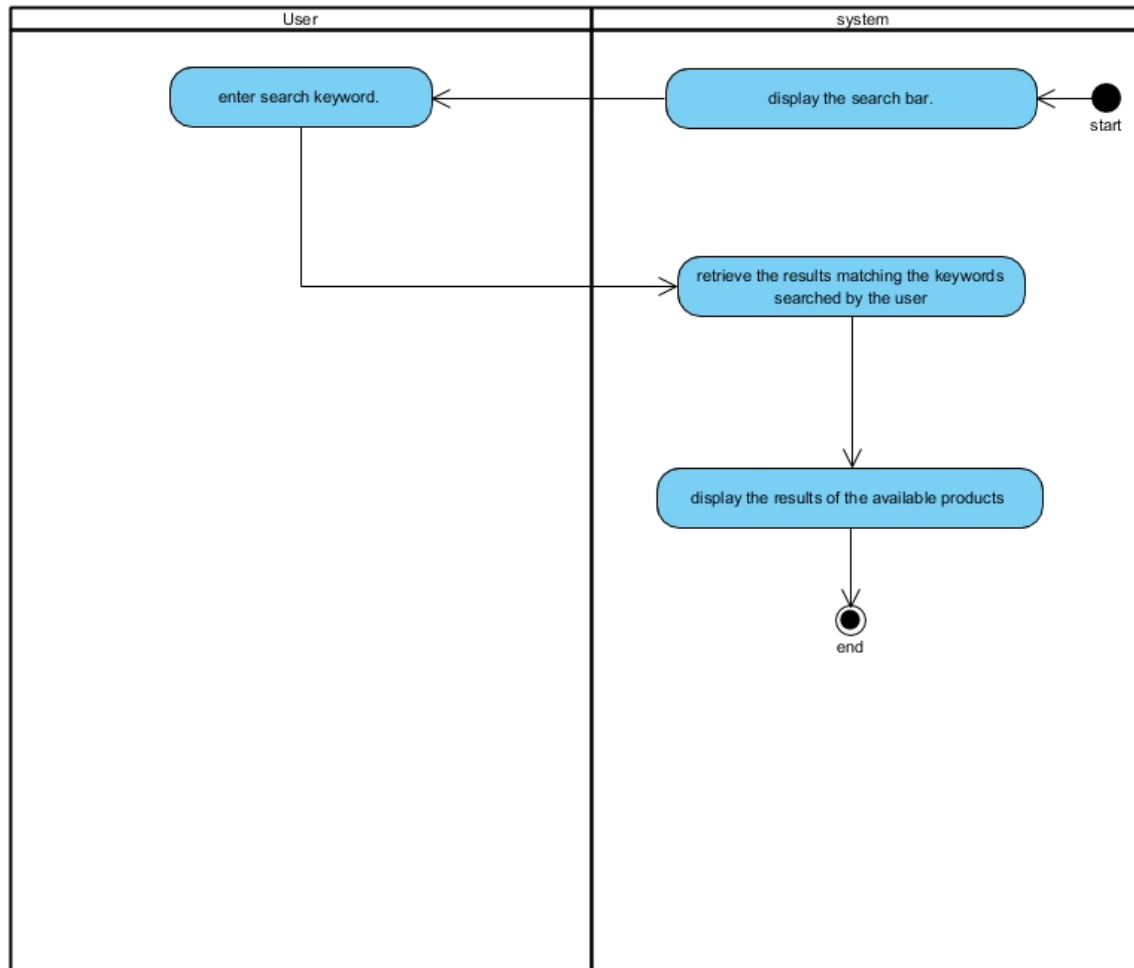
2.3.2. Login



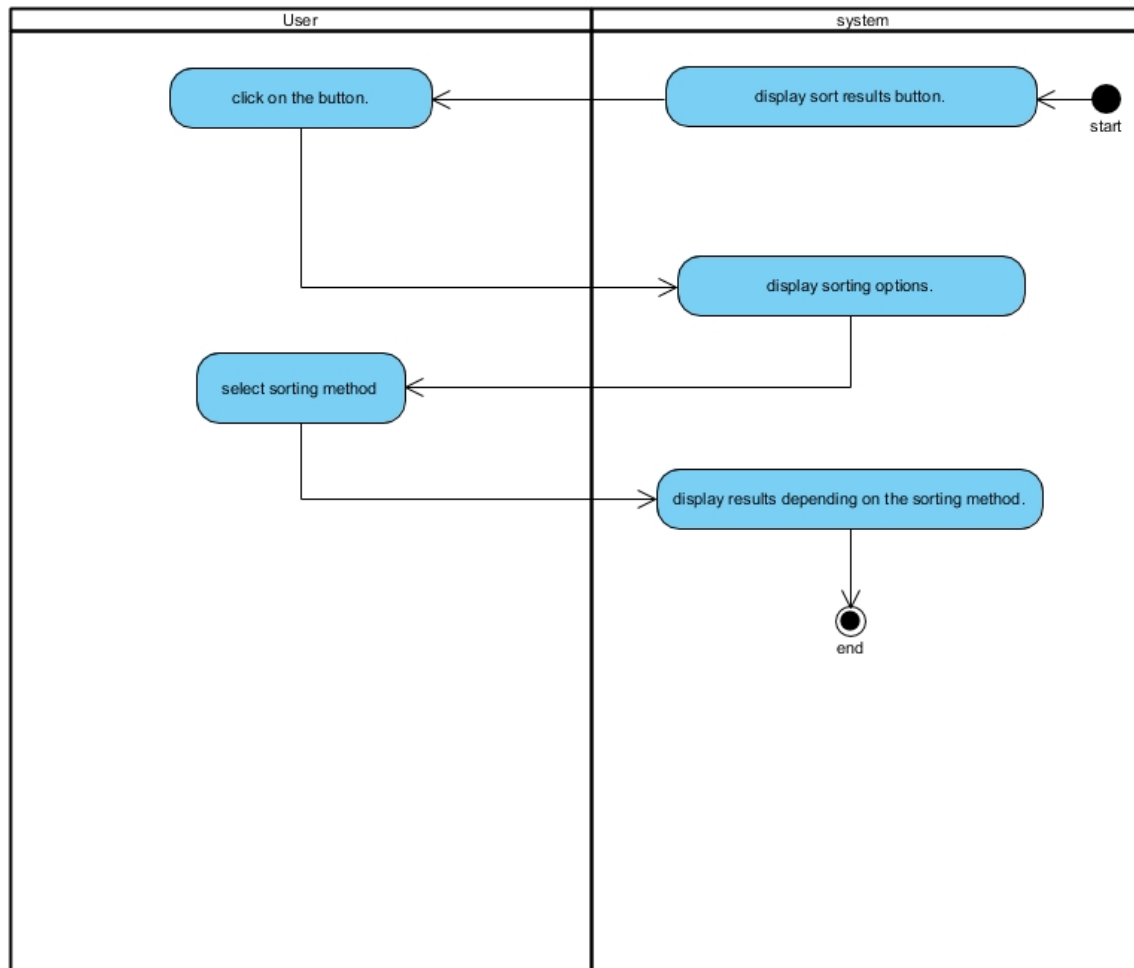
2.3.3. Logout



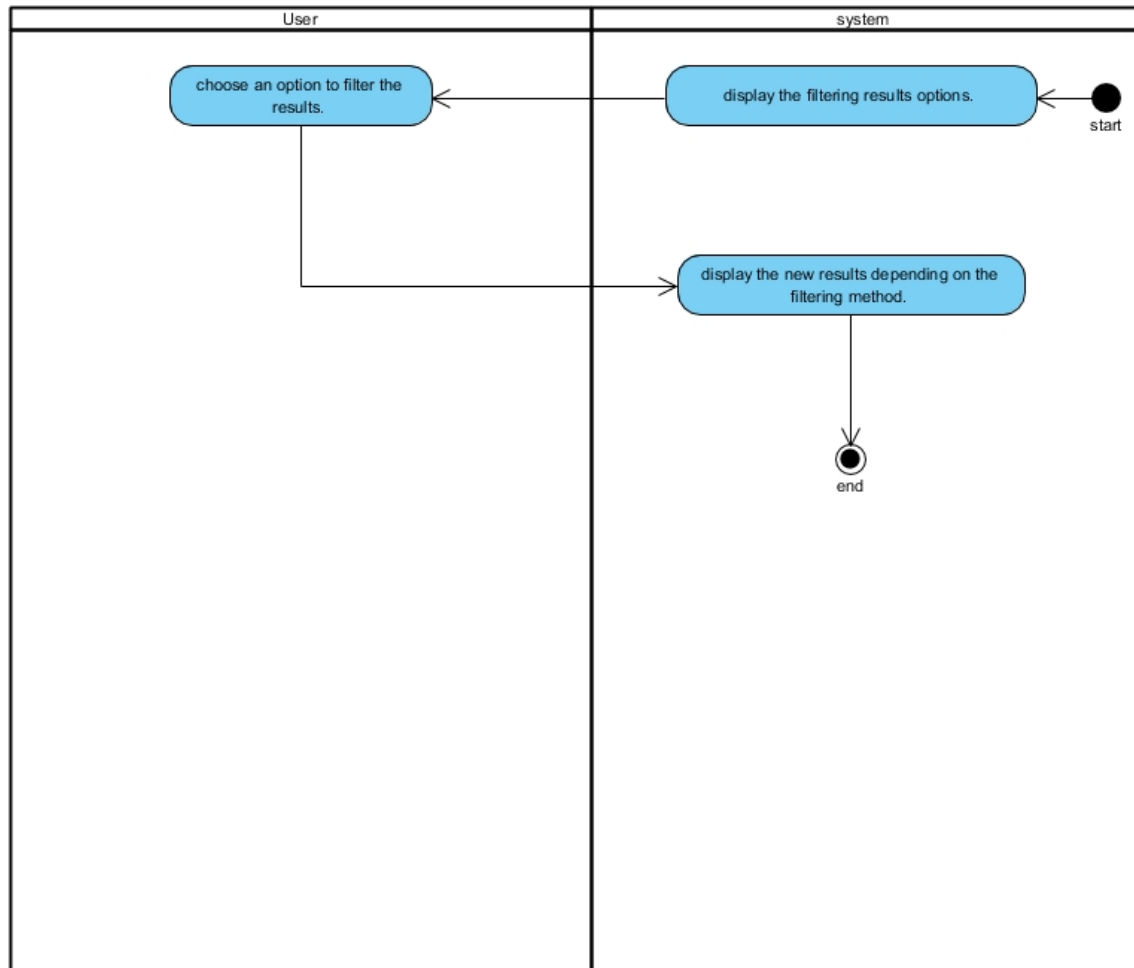
2.3.4. Search for product



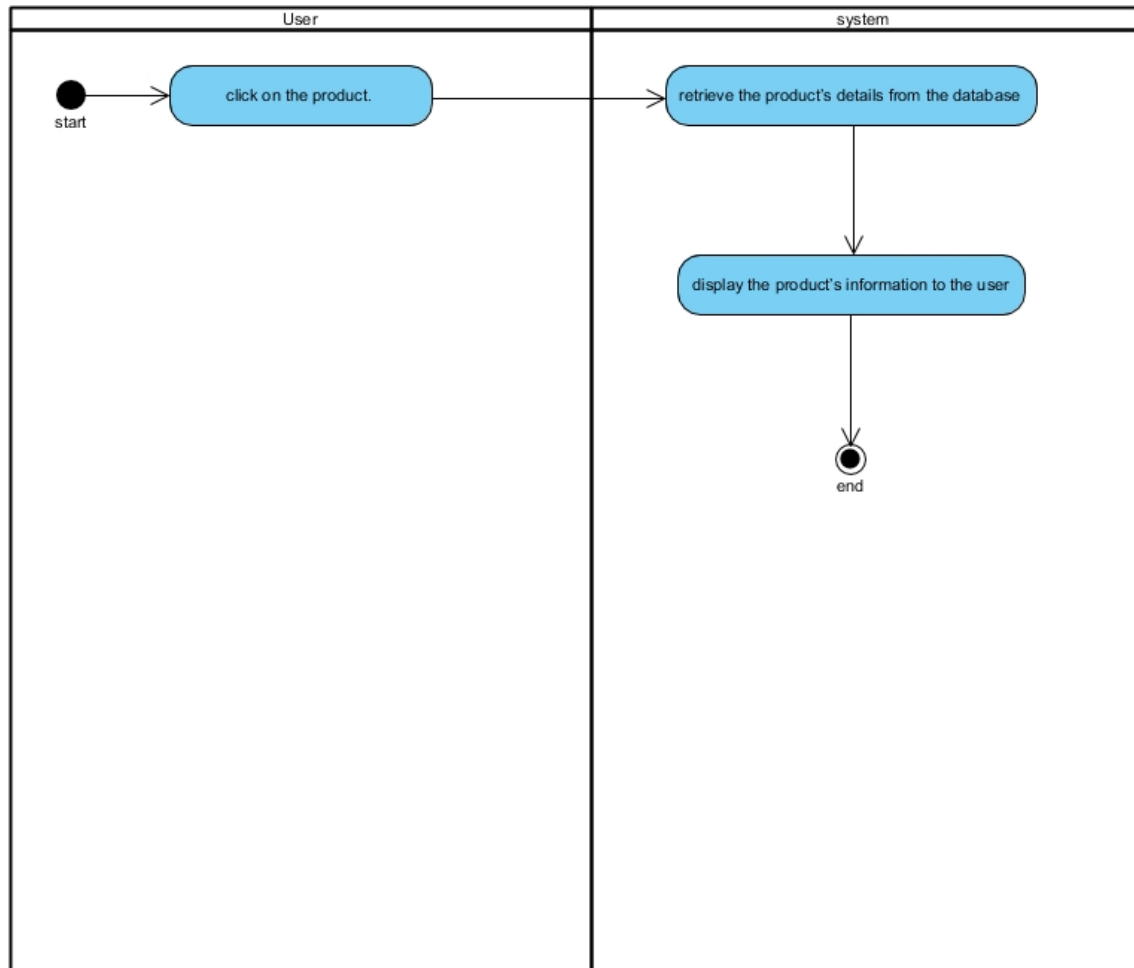
2.3.5. Sort search product



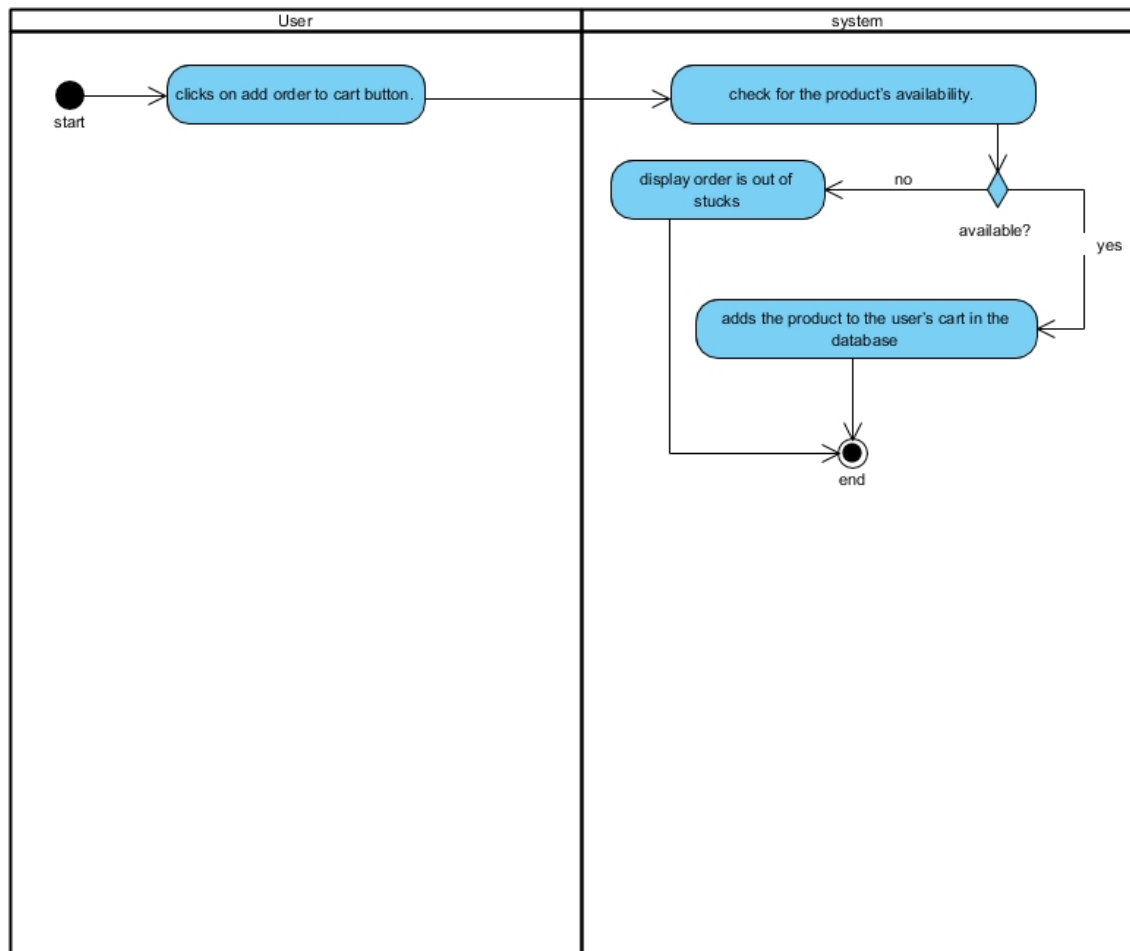
2.3.6. Filter search product



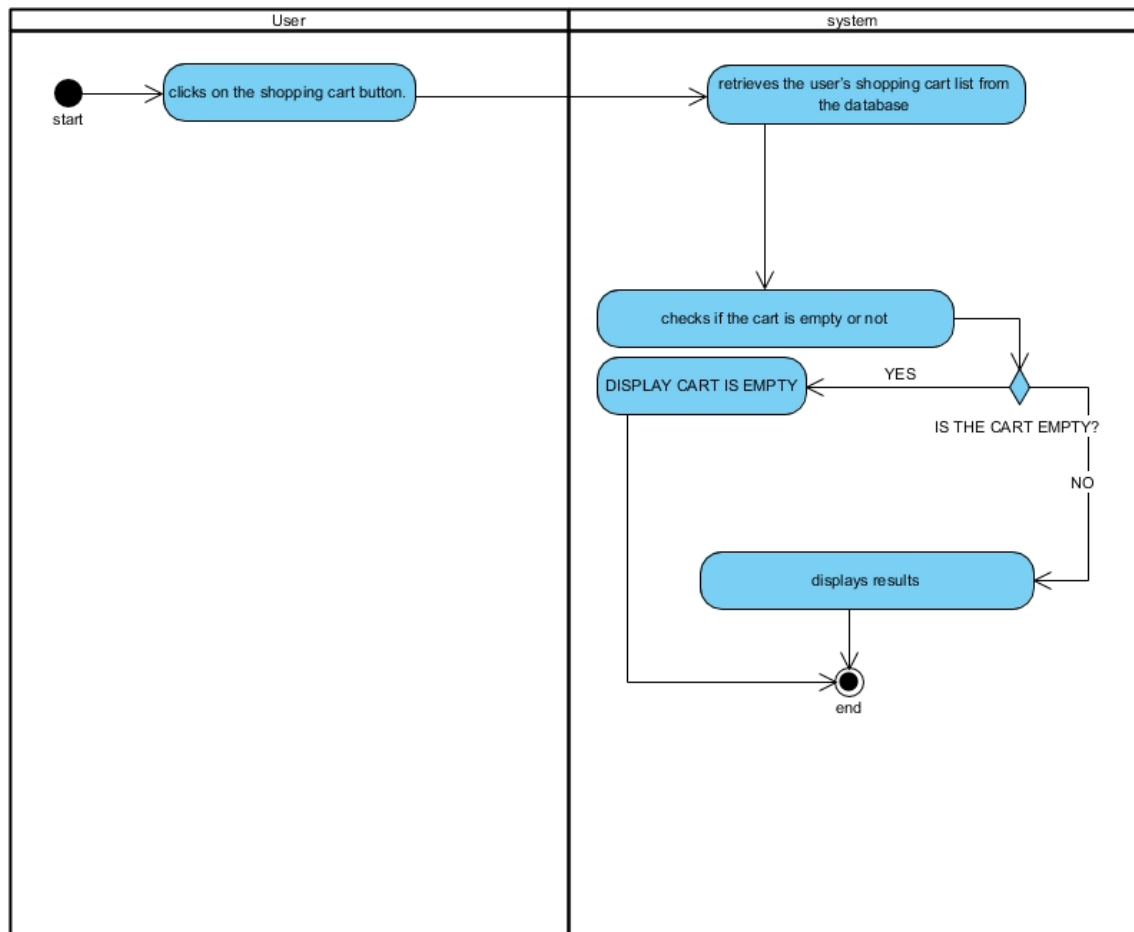
2.3.7. View product



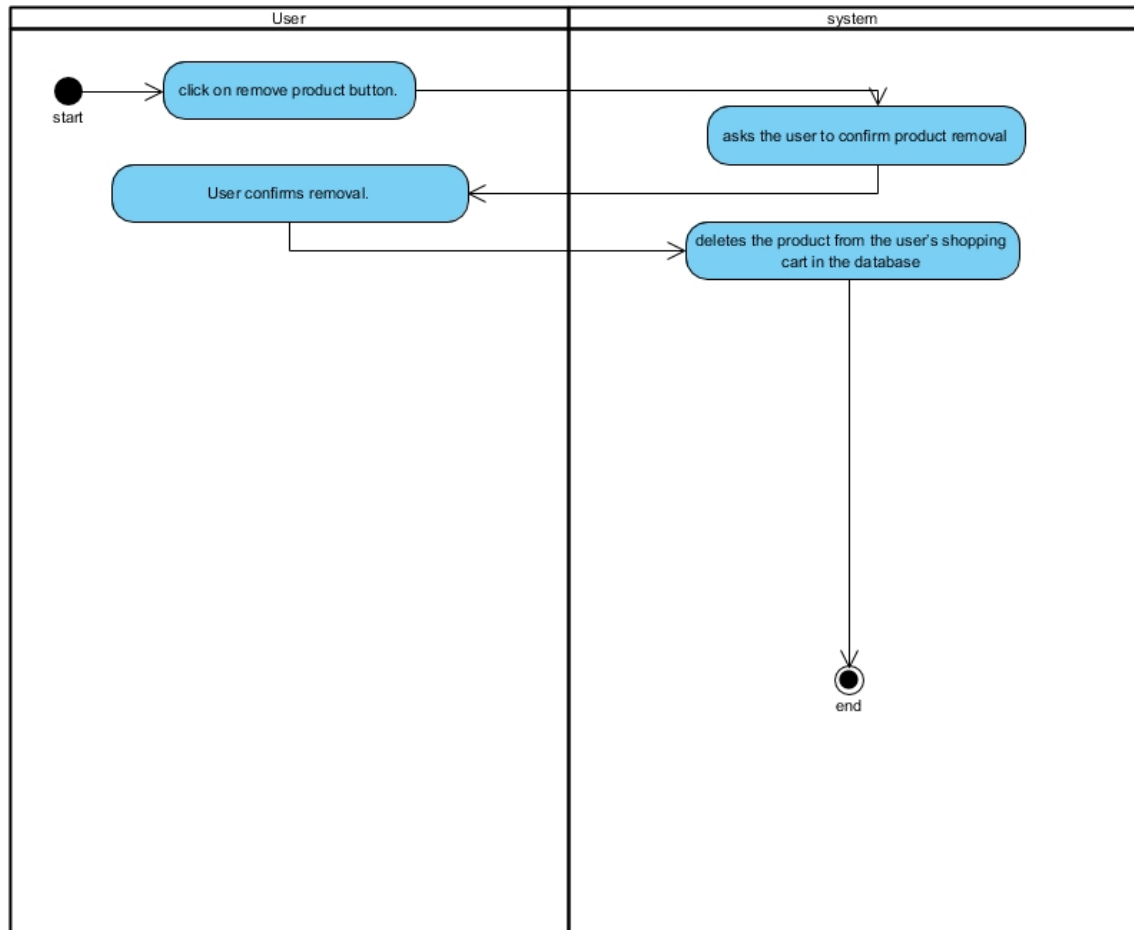
2.3.8. Add product to cart



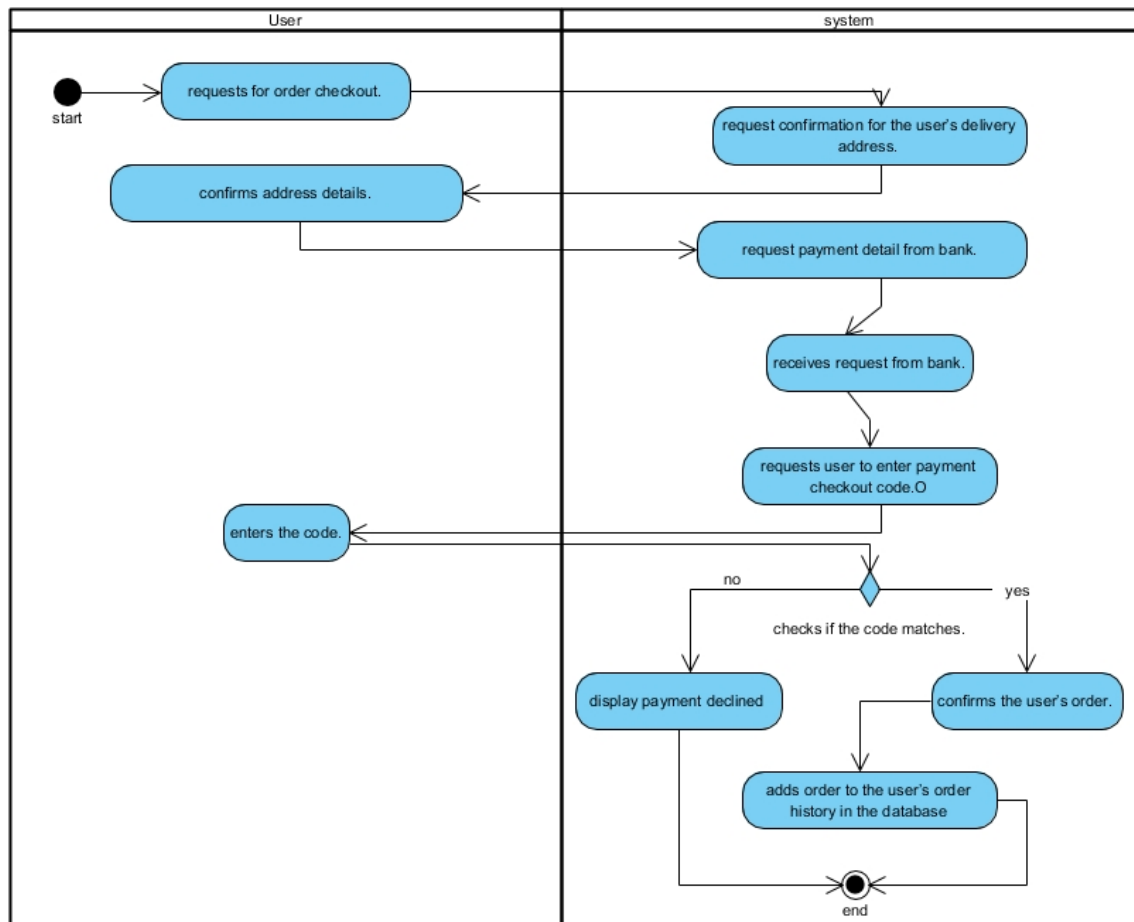
2.3.9. View shopping cart



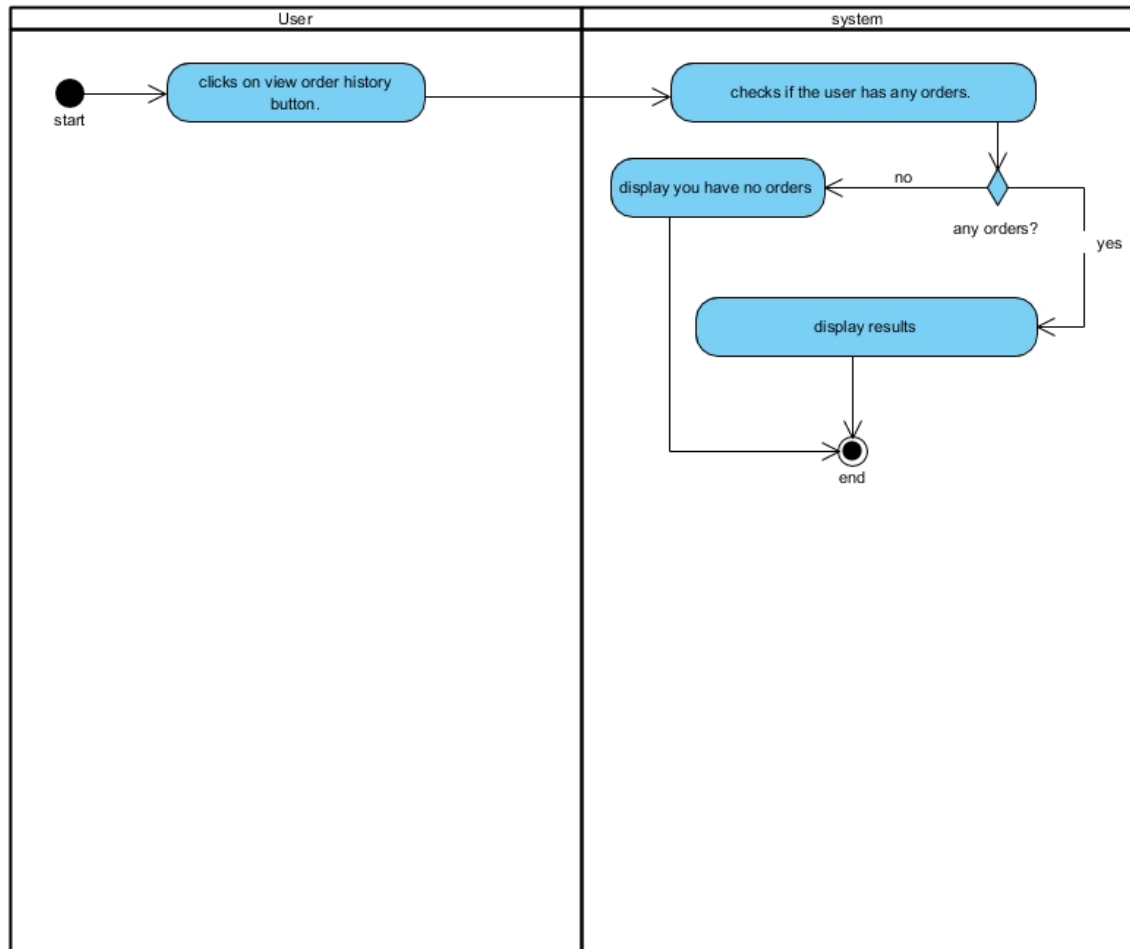
2.3.10. Remove product from cart



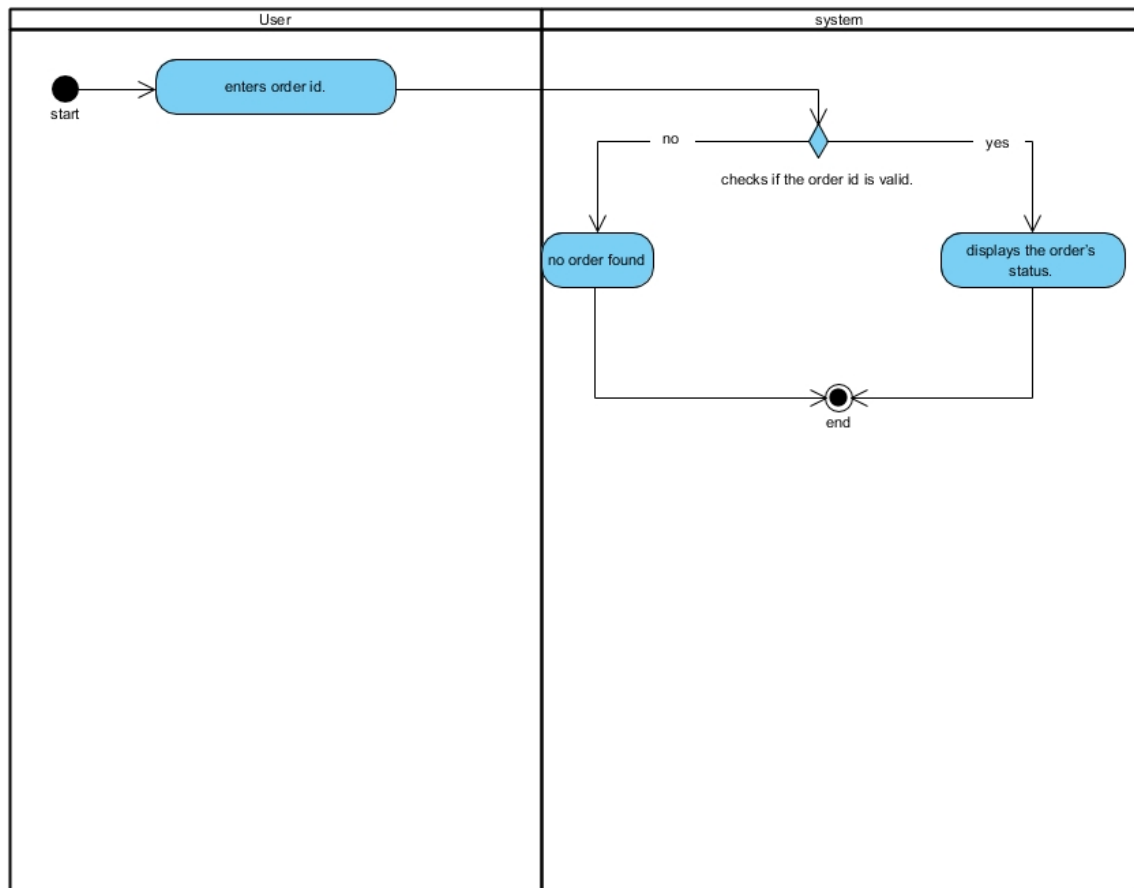
2.3.11. Complete order purchase



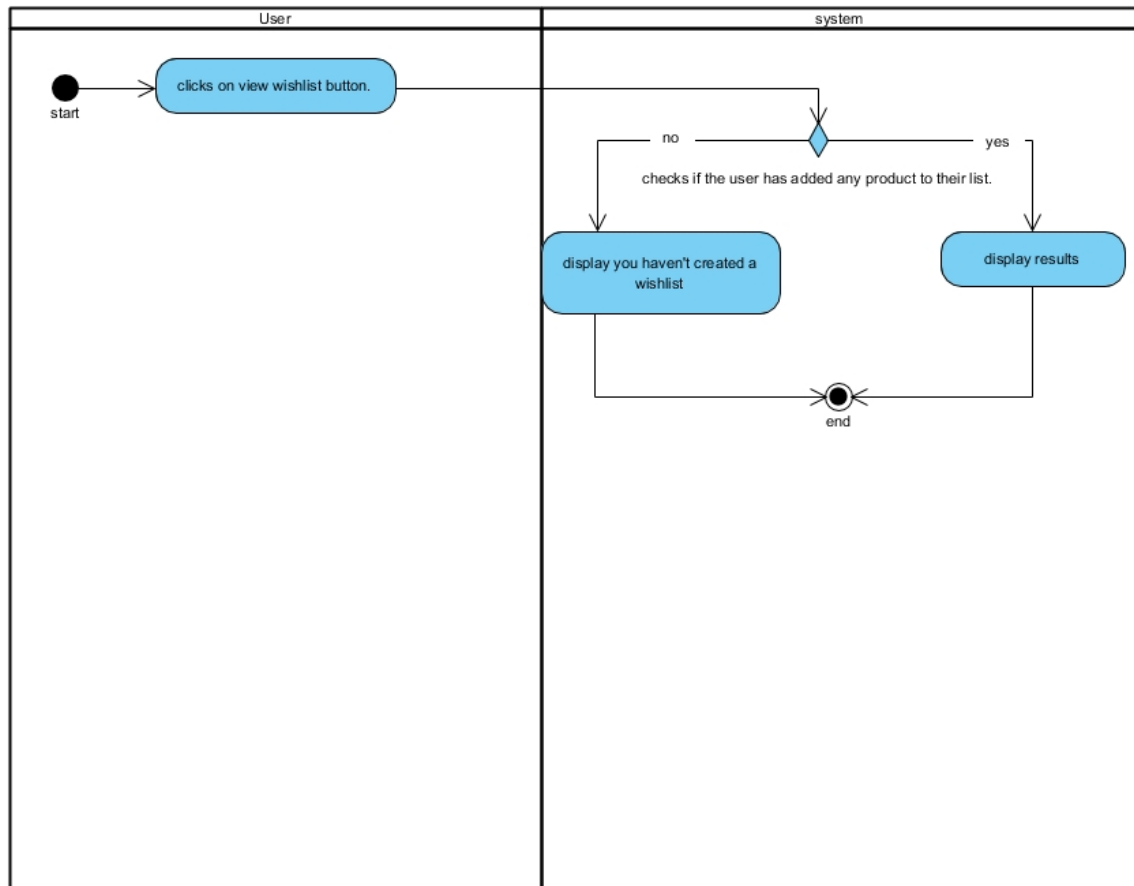
2.3.12. View order history



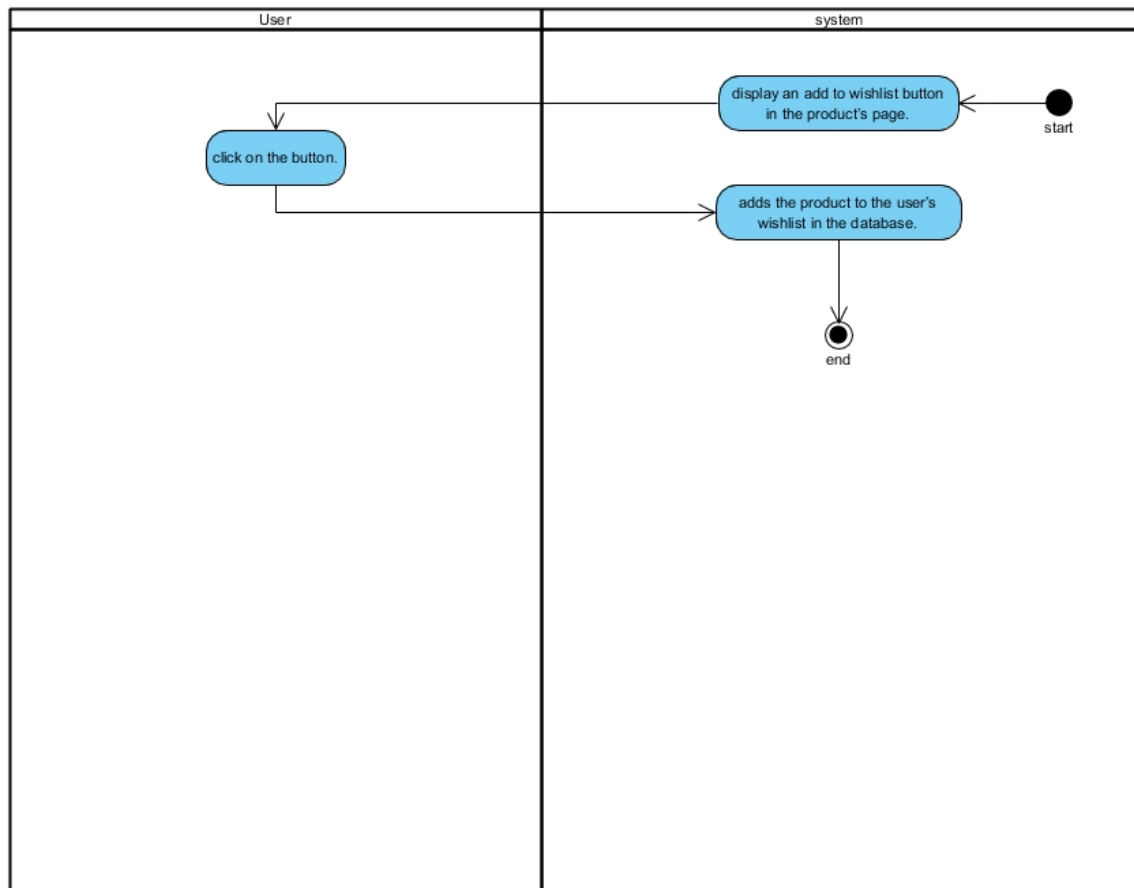
2.3.13. Track order



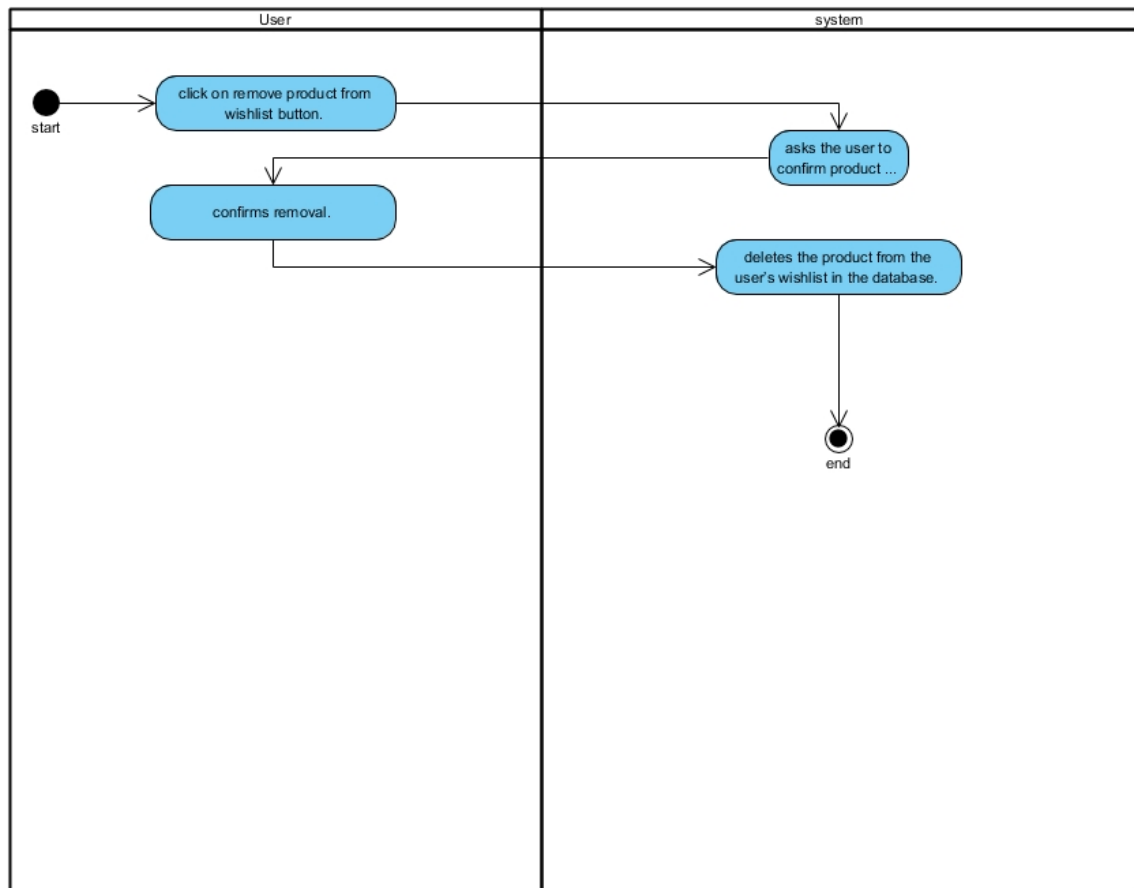
2.3.14. View wish list



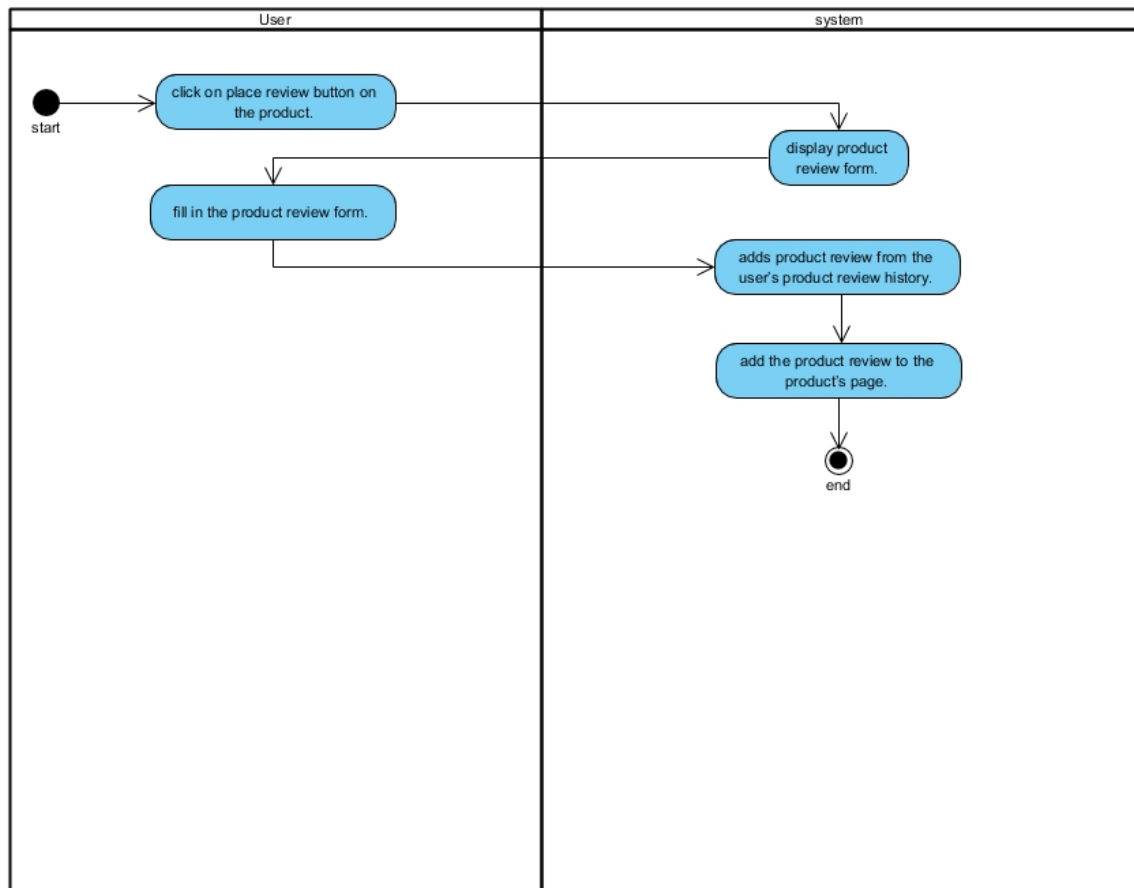
2.3.15. Add item to wish list



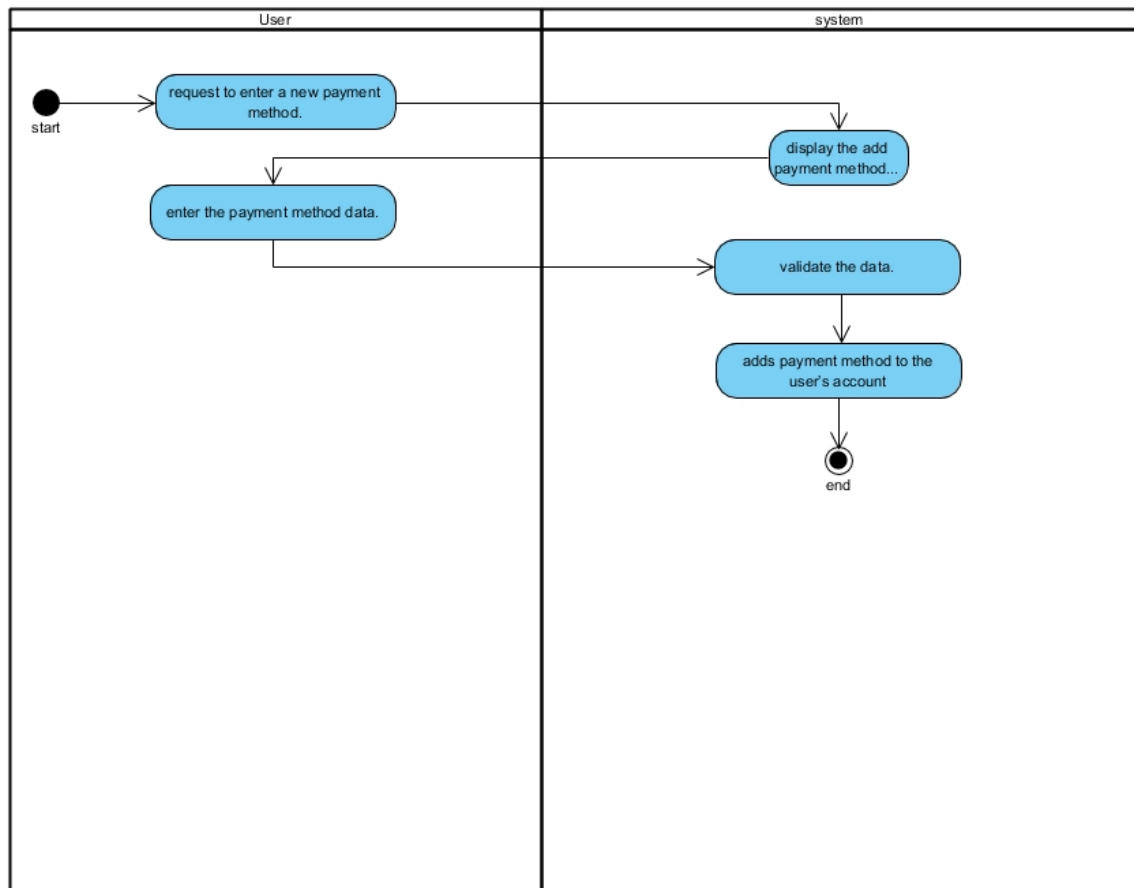
2.3.16. Remove from wish list



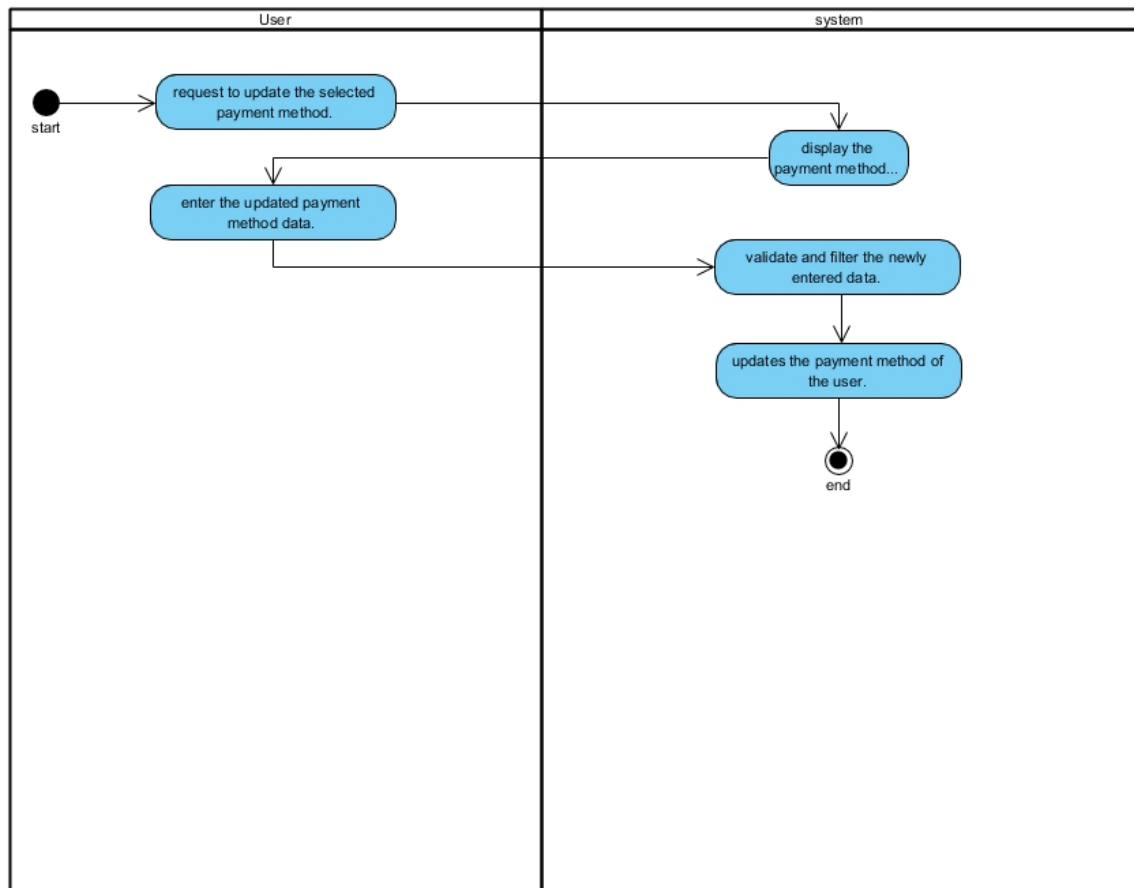
2.3.17. Place product Review



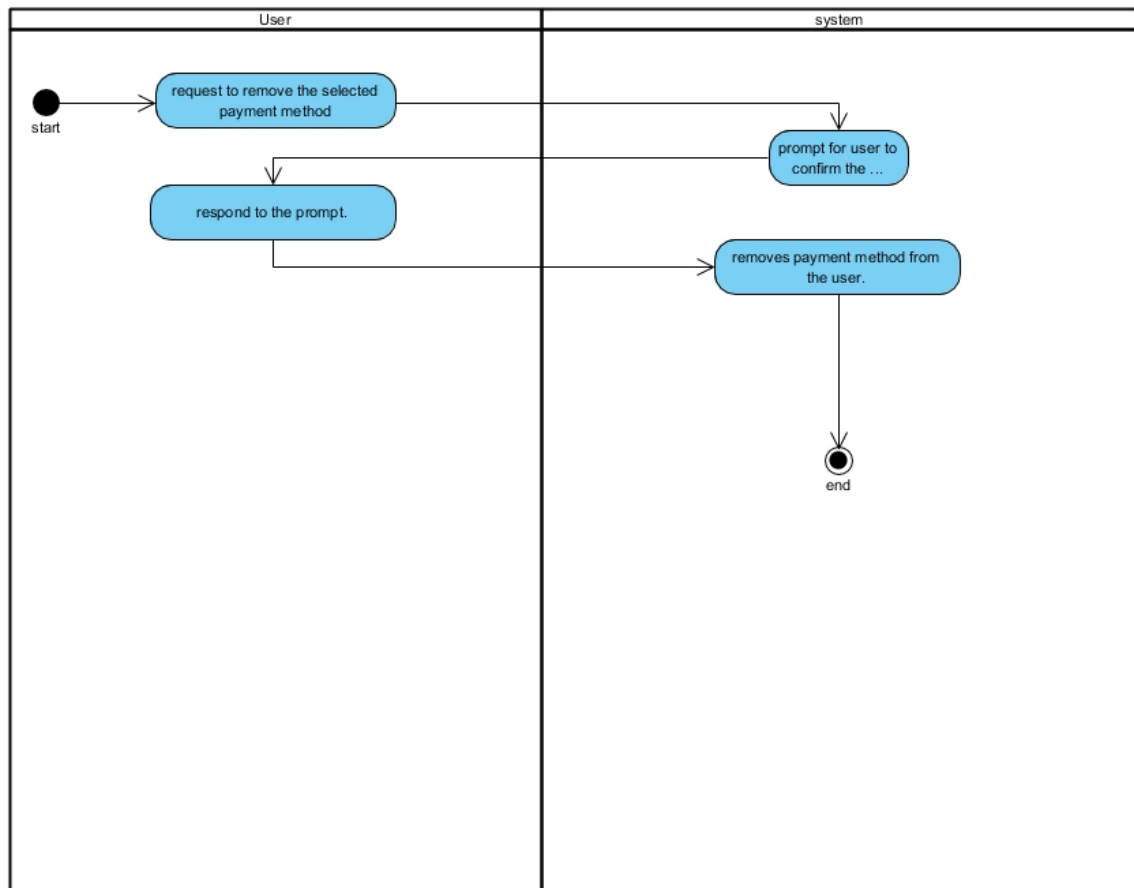
2.3.18. Add payment method



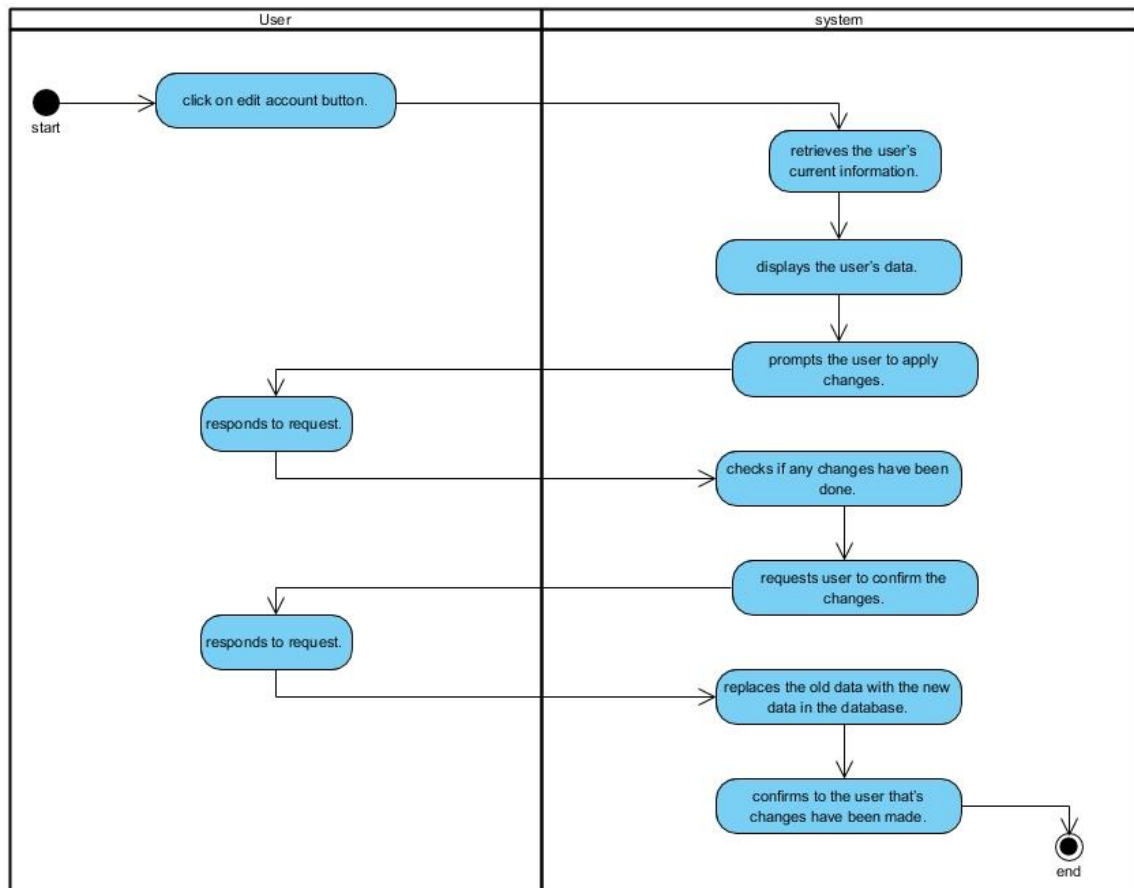
2.3.19. Update payment method



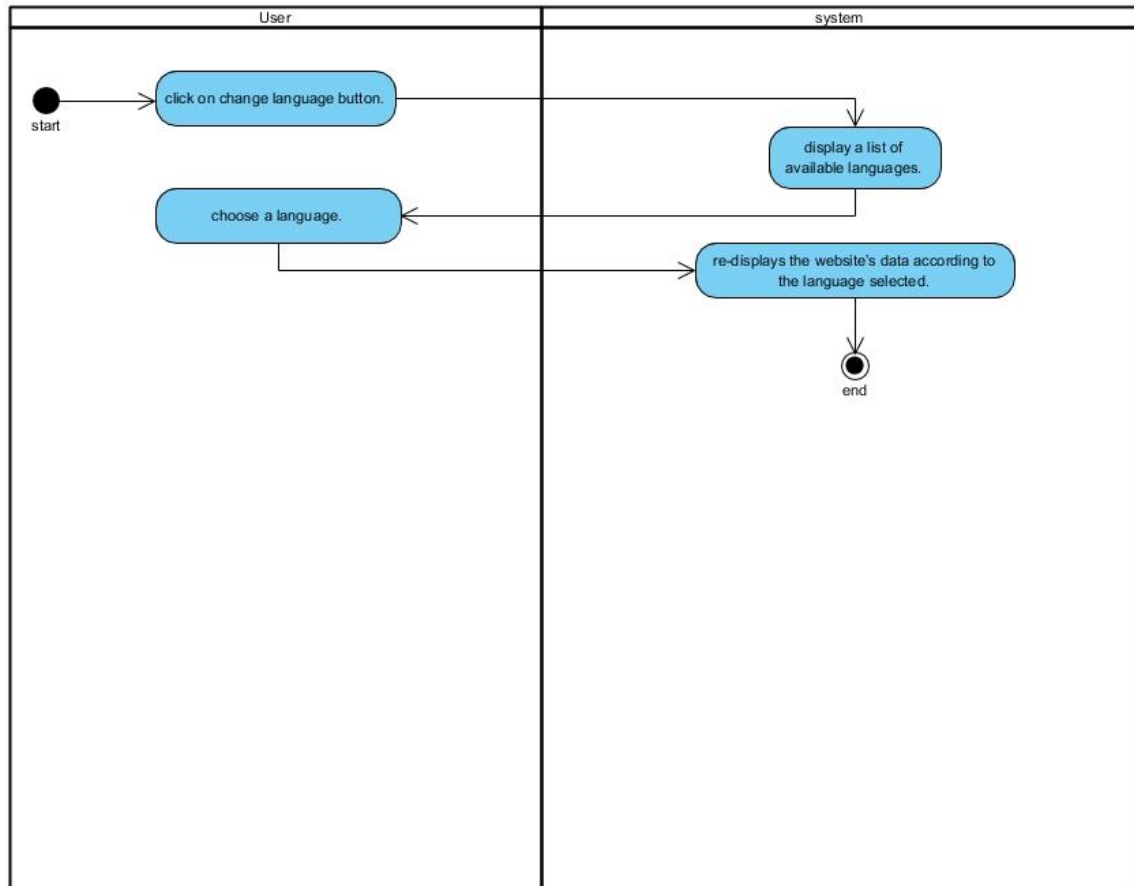
2.3.20. Remove payment method



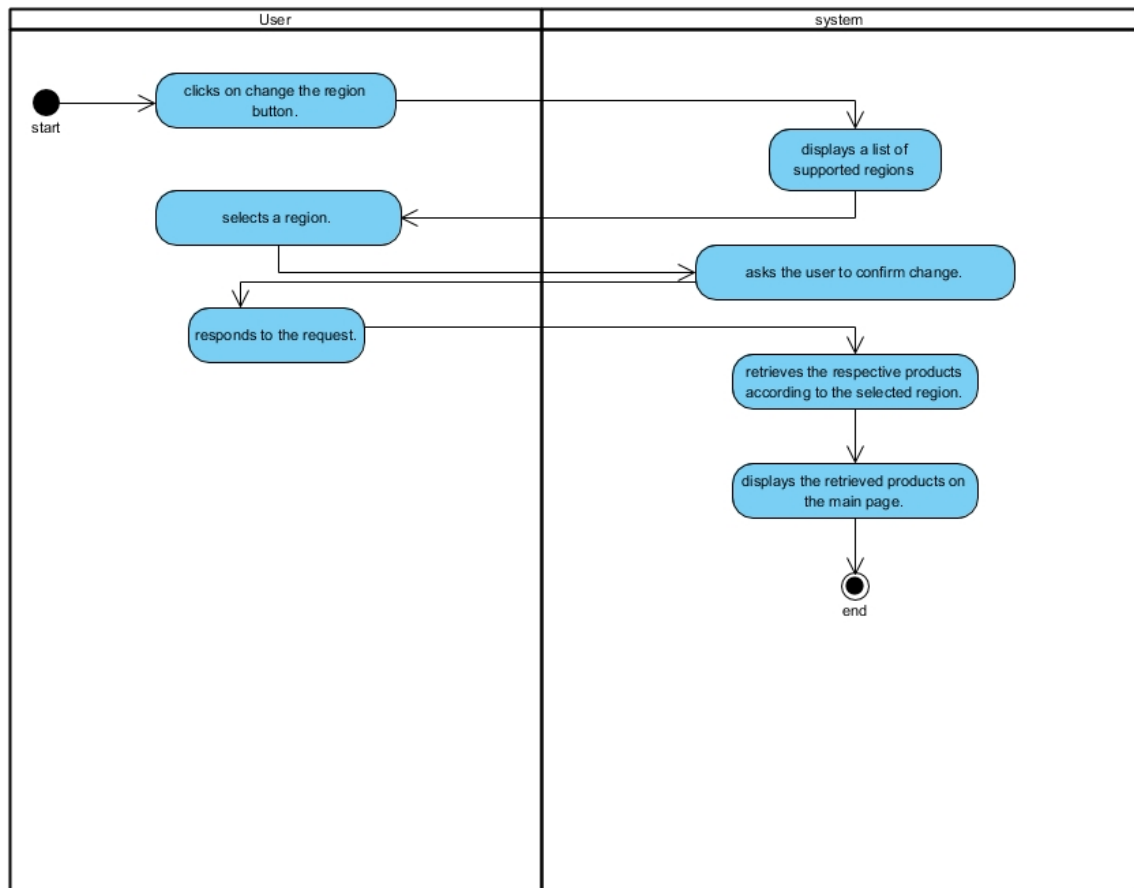
2.3.21. Edit account



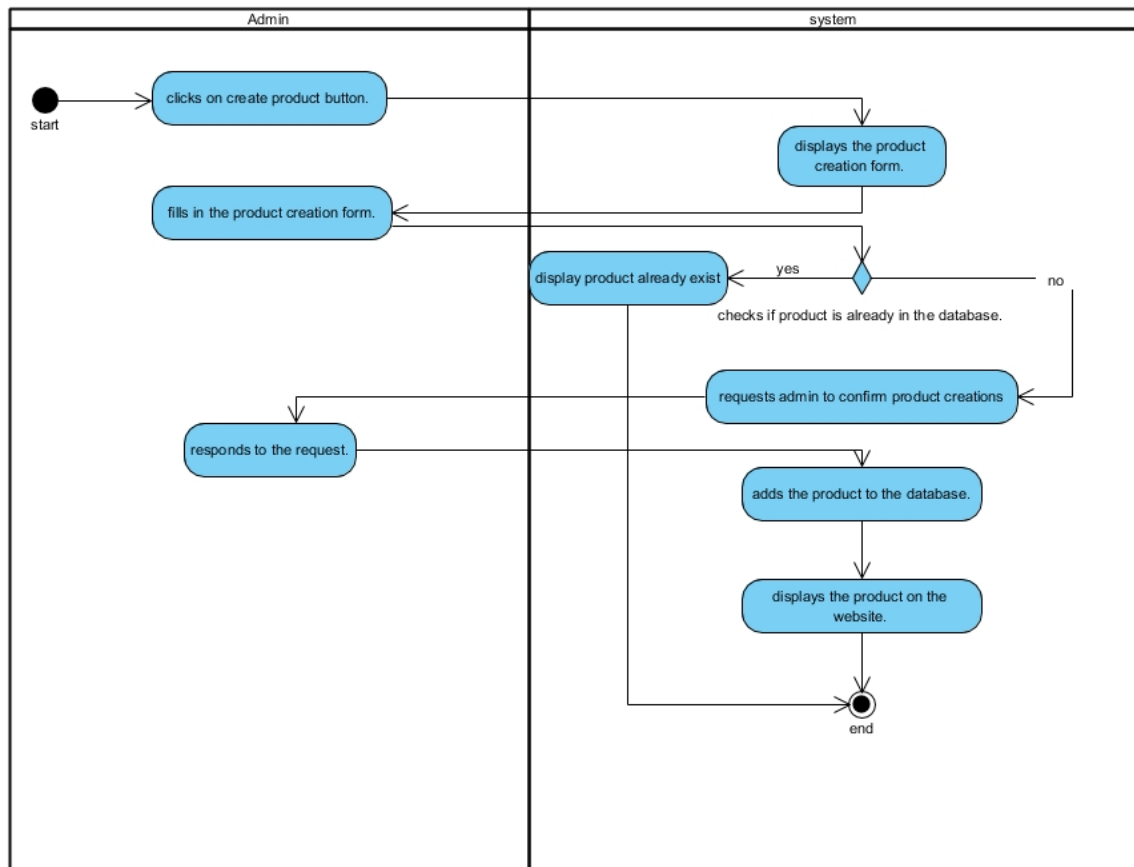
2.3.22. Change Language



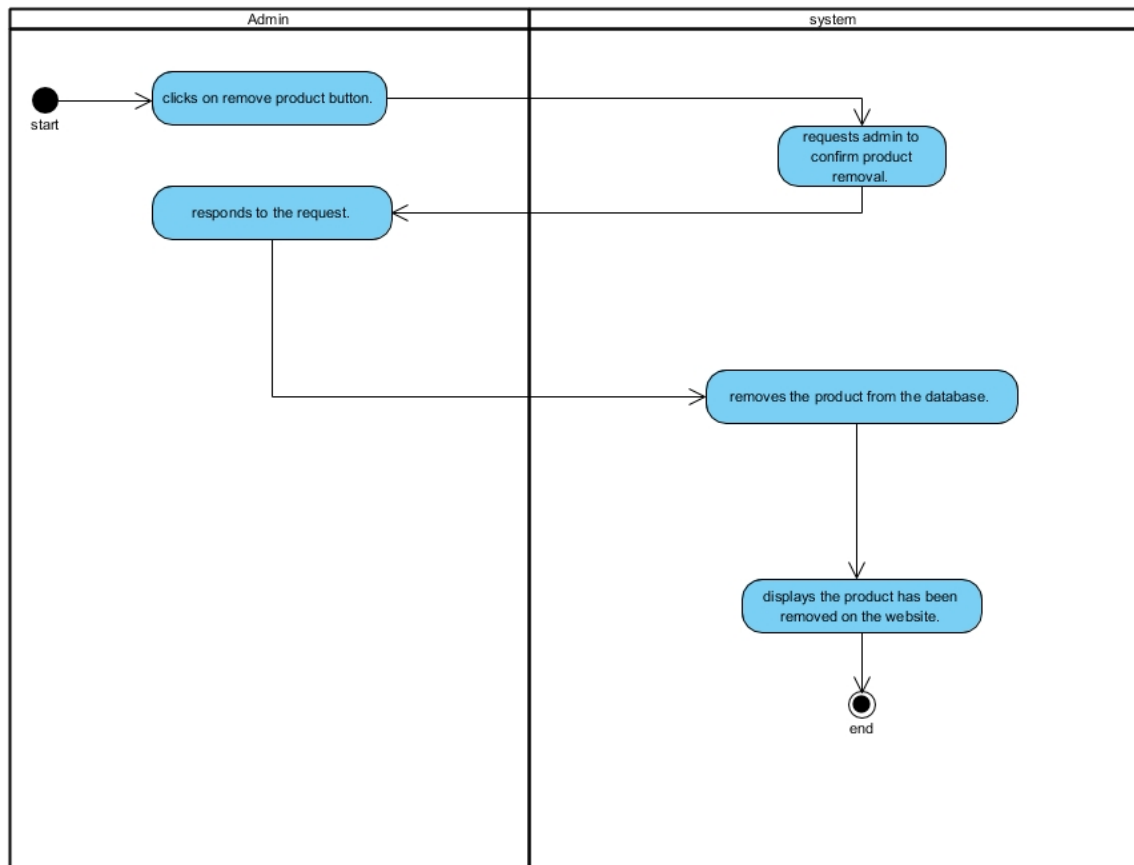
2.3.23. Change Region



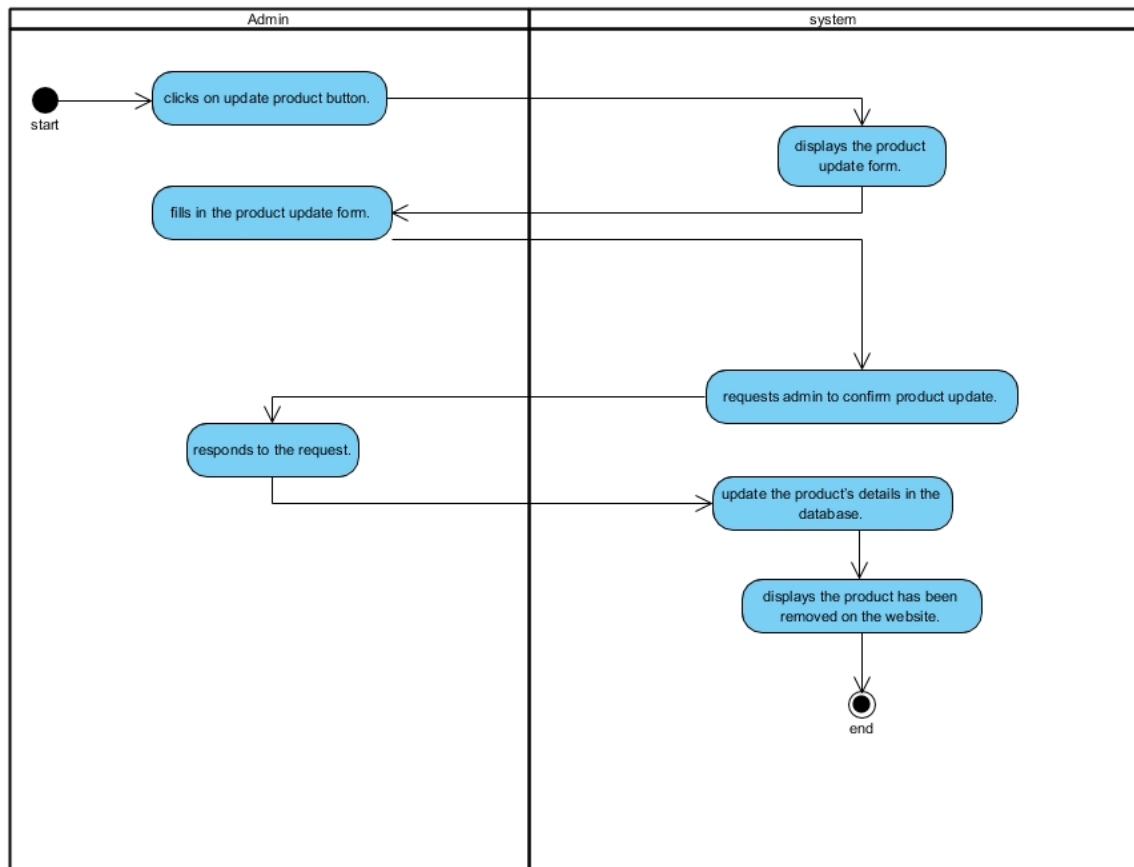
2.3.24. Add product to category



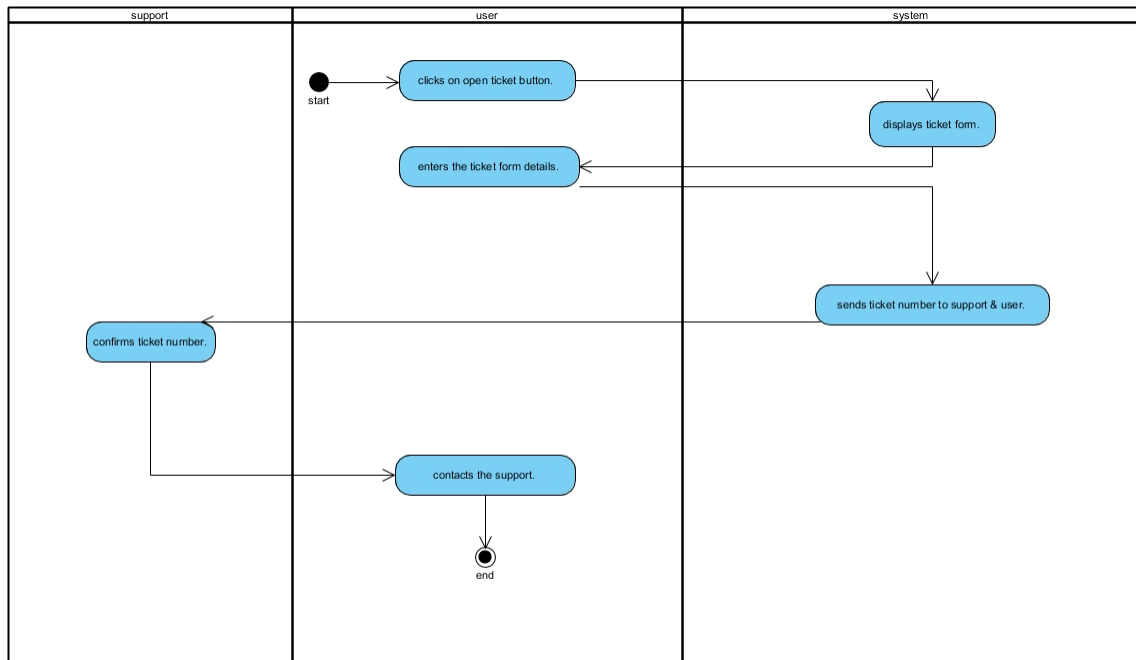
2.3.25. Remove product from category



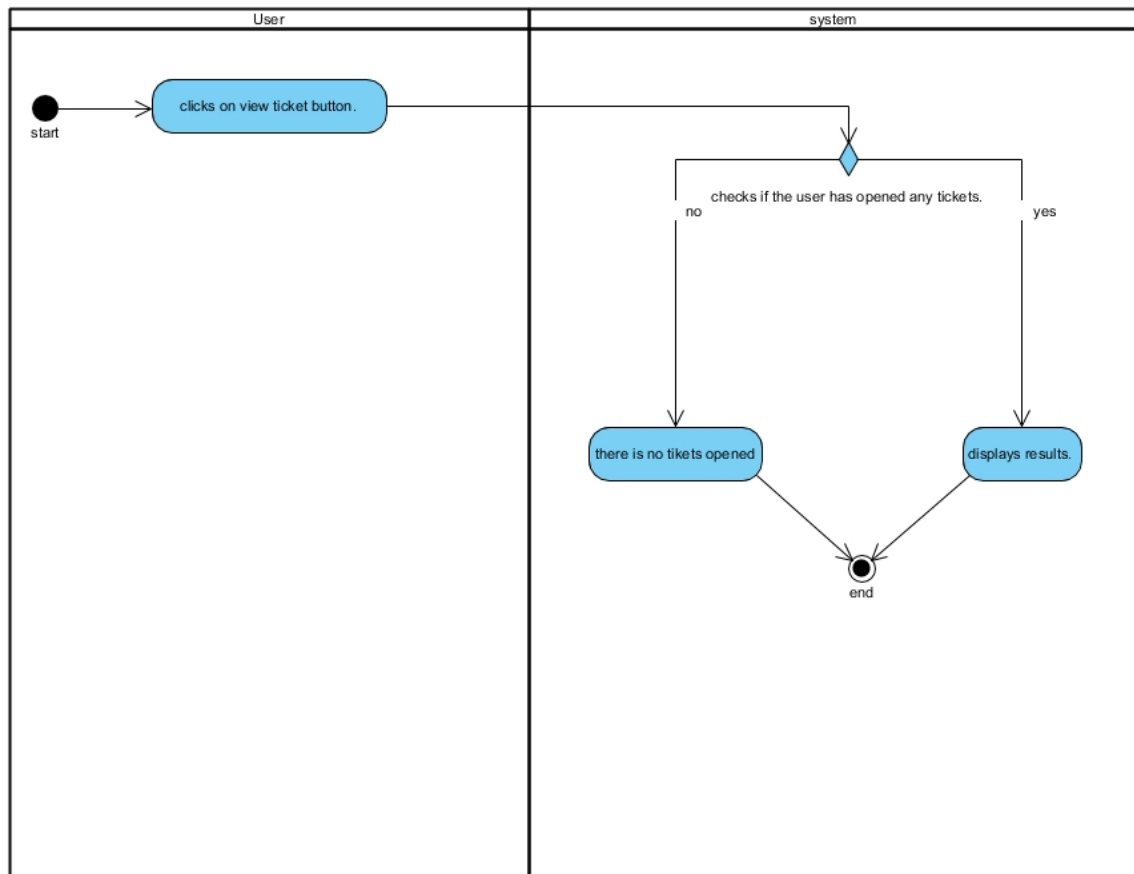
2.3.26. Update product details



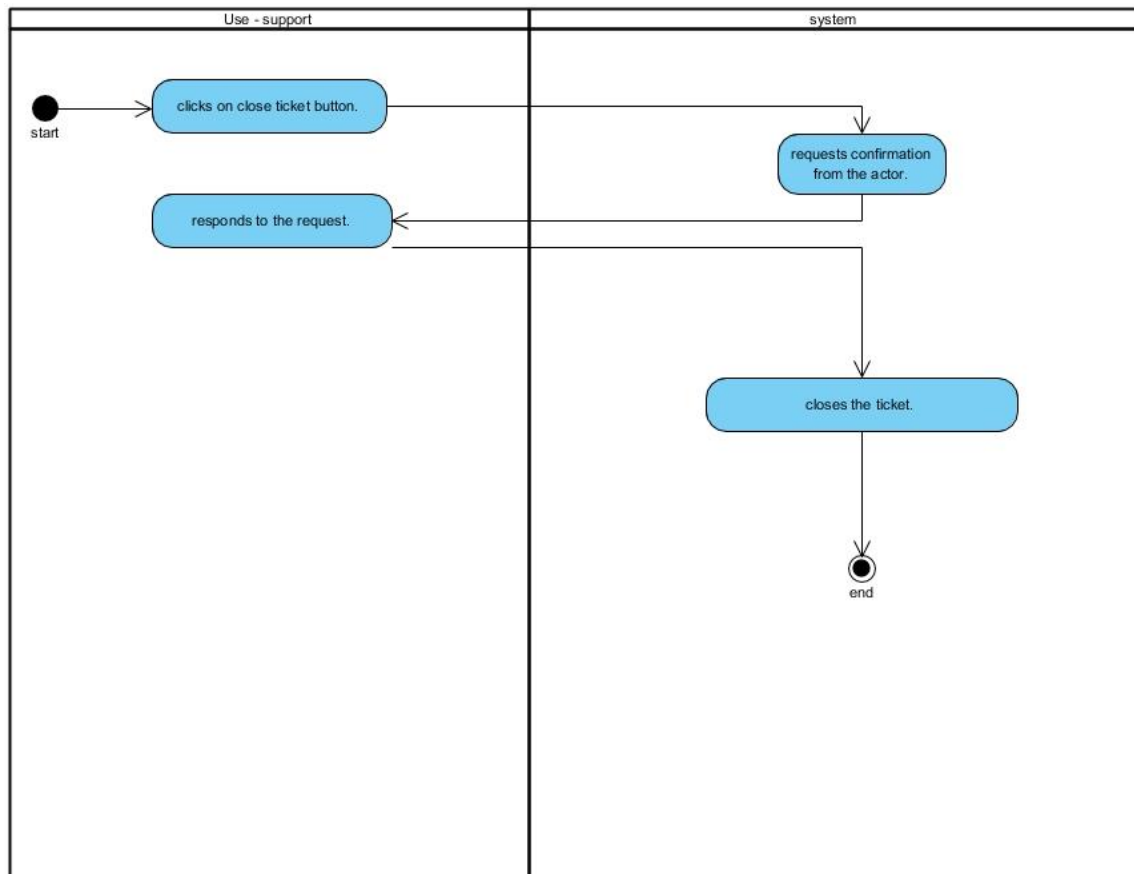
2.3.27. Open customer support ticket



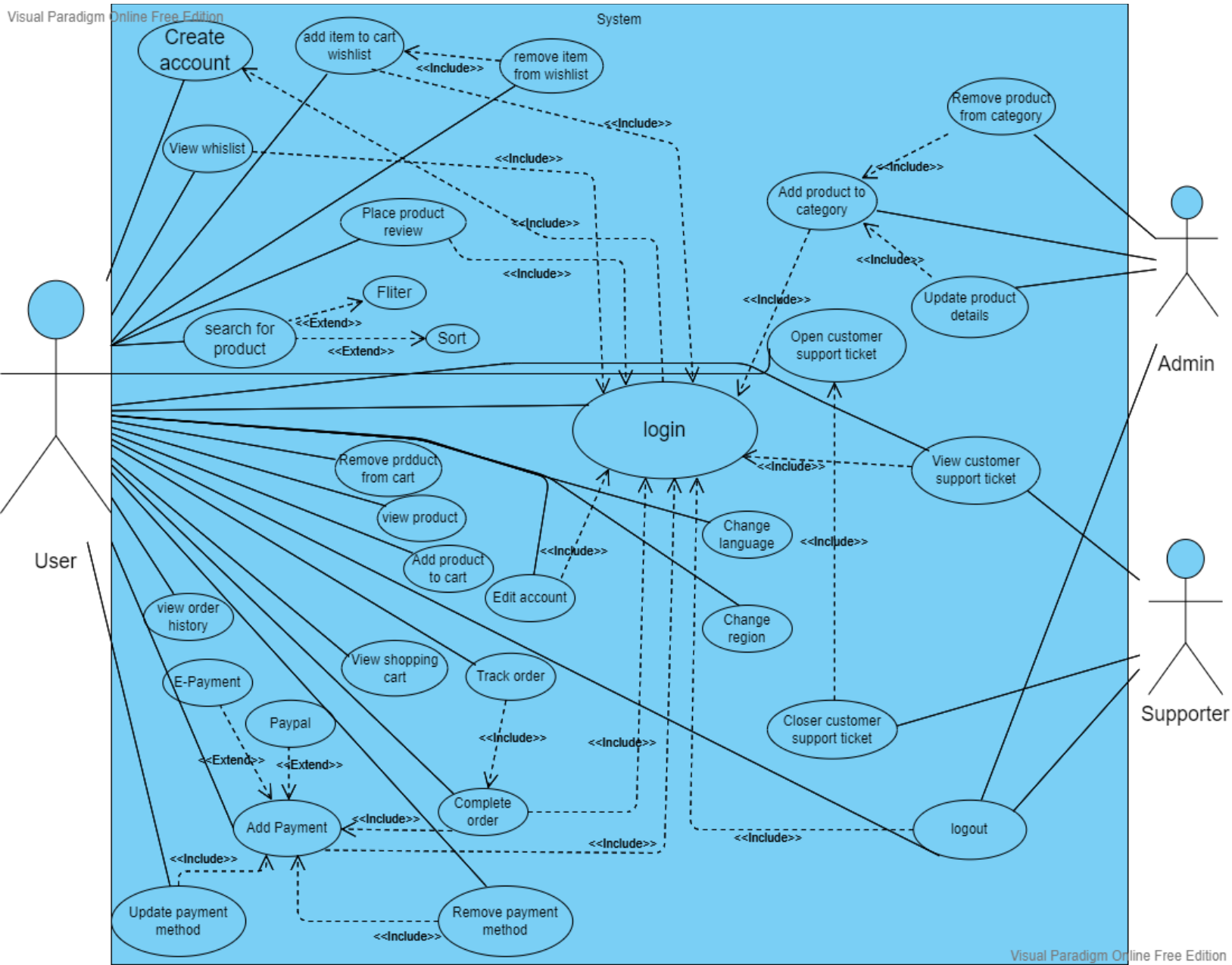
2.3.28. View customer support ticket



2.3.29. Close customer support



USE CASE DIAGRAM



USE CASE SPECIFICATION

Use case name	Create Account	
Scenario	The User open the system to sign up in the website	
Brief description	The User will create account in the website	
Triggering events	A create account button will be displayed across all the website's pages	
Actors	User	
Related use cases	*NONE*	
Preconditions	User should login to the system	
Post conditions	System shall add the data to the database for the website	
Flow of events	Actor	System
	1. click on the create account button 2. User will fill the form 3. User will confirm submission 4. clicks on email verification link	1.1 System will display the create account form 3.1. check if all information are valid 3.2. System will verify password weakness and email validity 4.1. adds user data to the database
Exception conditions	3.1. if information is invalid, display error message 3.2. if password weakness and email invalid, display error message	

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Use case name	Logout	
Scenario	To logout from the system	
Brief description	Allow the user to logout from system	
Triggering events	The system display a logout button	
Actors	Admin / Supporter / Logout	
Related use cases	<<include>>: login	
Preconditions	The user login to the system	
Post conditions	System requests for logout confirmation from the user	
Flow of events	Actor	System
	1. User clicks on logout button 2. User responds to the request	1.1.System requests for logout confirmation from the user 2.1.System ends the user's login session 2.2.System re-direct user to normal main page
Exception conditions	NONE	

Use case name	Search for product	
Scenario	To Search for product in the website	
Brief description	The user enter to search in the search bar	
Triggering events	User will enter search keyword.	
Actors	User	
Related use cases	<<Extend>>:Filter <<Extend>>:Sort	
Preconditions	User enter Search for product	
Post conditions	Display the result for search	
Flow of events	Actor	System
	1. User will enter search keyword	1.1 Retrieve the results matching the keywords searched by the user
Exception conditions	NONE	

Use case name	Sort search results	
Scenario	To Sort the result for the search	
Brief description	The user	
Triggering events	The user enter to sort the search result	
Actors	User	
Related use cases	*None*	
Preconditions	User enter to search for the product	
Post conditions	Display the result for the sorted search	
Flow of events	Actor	System
	1. click on the button 2. select the sorting method	1.1.System will display sorting options 2.1.System will display results depending on the sorting method
Exception conditions	NONE	

Use case name	Filter search results	
Scenario	To filter search	
Brief description	The user allow to filter the result for search	
Triggering events	The user enter to filter the search result	
Actors	User	
Related use cases	NONE	
Preconditions	User enter to search for the product	
Post conditions	Display the result for the filtered search	
Flow of events	Actor	System
	1. User request to view filter 2. User will choose an option to filter the results	2.1 System will display the filtering results options. 2.2 System will display the new results depending on the filtering method
Exception conditions	NONE	

Use case name	View product	
Scenario	To View the product	
Brief description	The user click to view the product details	
Triggering events	The user enter to view the product	
Actors	User	
Related use cases	*NONE*	
Preconditions	User find the specific product	
Post conditions	Display the information for the product	
Flow of events	Actor	System
	1. User will click on the product	1.1 System will retrieve the product's details from the database 1.2 System will display the product's information to the user
Exception conditions	NONE	

Use case name	Add product to card	
Scenario	To add the product that the user choose it to the cart	
Brief description	The user choose his product that want it and add it to product cart	
Triggering events	User enter to click on add to cart button in the product's page	
Actors	User	
Related use cases	*NONE*	
Preconditions	The User modify to view the products that want to buy it	
Post conditions	The product are selected and add it to cart	
Flow of events	Actor	System
	1. User will click on the button	1.1 System will re-check for the product's availability 1.2 System adds the product to the user's cart in the database
Exception conditions	1.1	

Use case name	View shopping cart	
Scenario	To view the shopping cart that the user see it in the cart	
Brief description	The user view his product that add it to cart	
Triggering events	User enter to click on shopping cart button	
Actors	User	
Related use cases	*NONE*	
Preconditions	The User modify to add the products that are selected	
Post conditions	The System display the results for the shopping cart	
Flow of events	Actor	System
	1. User clicks on the shopping cart button	1.1 System retrieves the user's shopping cart list from the database 1.2 System checks if the cart is empty or not
Exception conditions	None	

Use case name	Remove product from card	
Scenario	To remove the product that the user choose it from the cart	
Brief description	The user remove the chosen product that was add it to product cart	
Triggering events	User enter to click on User clicks on the shopping cart button	
Actors	User	
Related use cases	*NONE*	
Preconditions	The User modify to remove the products	
Post conditions	The product remove it from the cart	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User will click on remove product button 2. User confirms removal 	<ol style="list-style-type: none"> 1.1 System asks the user to confirm product removal 2.1 System deletes the product from the user's shopping cart in the database
Exception conditions	NONE	

Use case name	Complete order purchase	
Scenario	To complete the order checkout details	
Brief description	The User completes the steps for the order purchase	
Triggering events	The User enter to the checkout button	
Actors	User	
Related use cases	<<include>>: Login	
Preconditions	User requests for order checkout	
Post conditions	The System shall confirms the user's order	
Flow of events	Actor	System
	1. User confirms address details 2. User enters the code	1.1 System request confirmation for the user's delivery address 1.2 System request payment detail and request from bank 1.3 System requests user to enter payment checkout code 1.4 System adds order to the user's order history in the database 2.1 System checks if the code matches 2.2 System confirms the user's order
Exception conditions	NONE	

Use case name	View order history	
Scenario	To view the history for the order to and check it	
Brief description	The user view the history for the product that the user are buy it	
Triggering events	The User clicks on view order history button	
Actors	User	
Related use cases	*NONE*	
Preconditions	The user should complete the order before view it	
Post conditions	The system shall display the result for order history	
Flow of events	Actor	System
	1. User clicks on view order history button	1.1 System checks if the user has any orders 1.2 System display results
Exception conditions	1.1 if the user has not any orders , display error message	

Use case name	Track order	
Scenario	To allow the users to login in the systems	
Brief description	Allow the user to check the order location	
Triggering events	The User enters the id for the order	
Actors	User	
Related use cases	<<Include>>: complete order	
Preconditions	User should complete the order	
Post conditions	The system shall display the track order status	
Flow of events	Actor	System
	1. User enters order id	1.1 System checks if the order id is valid 1.2 System displays the order's status
Exception conditions	1.1 System checks if the order id is invalid, display error message	

Use case name	View wishlist	
Scenario	To view the wishlist for the products in website	
Brief description	Allow the user to view the favourite product from wishlist	
Triggering events	The User clicks on view wishlist button	
Actors	User	
Related use cases	<<Include>>: login	
Preconditions	The user should login to the system to view the wishlist	
Post conditions	The system shall display results for the wishlist	
Flow of events	Actor	System
	1. User clicks on view wishlist button	1.1 System checks if the user has added any product to their list 1.2 System display results
Exception conditions	1.1 System checks if the user has not added any product to their list, display error message	

Use case name	Add item to wishlist	
Scenario	To add the items in wishlist for the products in website	
Brief description	Allow the user to add the favourite product to wishlist	
Triggering events	The User clicks on add to wishlist button	
Actors	User	
Related use cases	<<Include>>: login	
Preconditions	The user should login to the system to view the wishlist	
Post conditions	The system shall add the product to wishlist	
Flow of events	Actor	System
	1. User will click on the button(Add)	1.1 System adds the product to the user's wishlist in the database
Exception conditions	NONE	

Use case name	Remove item from wishlist	
Scenario	To remove the items from wishlist for the products in website	
Brief description	Allow the user to remove the favourite product to wishlist	
Triggering events	The User clicks on remove to wishlist button	
Actors	User	
Related use cases	<<Include>>: Add item to wishlist	
Preconditions	The user should add items to remove it	
Post conditions	The system shall remove the product to wishlist	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User will click on remove product from wishlist button 2. User confirms removal 	<ol style="list-style-type: none"> 1.1 System asks the user to confirm product removal 2.1 System deletes the product from the user's wishlist in the database
Exception conditions	NONE	

Use case name	Place product review	
Scenario	To place review for the product in the website	
Brief description	The User add the review for feedback for the products	
Triggering events	User click on review button on the product	
Actors	User	
Related use cases	<<Include>>: login	
Preconditions	The user should login to the system	
Post conditions	The system shall add the product review	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User click on place review button on the product 2. User will fill in the product review form 	<ol style="list-style-type: none"> 1.1 System display product review form 2.1 System adds product review from the user's product review history 1.2 System will add the product review to the product's page
Exception conditions	NONE	

Use case name	Add payment method	
Scenario	To add the payment method to buy the products	
Brief description	User allow to add the payment method to get the products	
Triggering events	User will enter "add payment method"	
Actors	User	
Related use cases	<<Include>>: Login	
Preconditions	User should login to the system to add payment	
Post conditions	The system shall adds payment method for the user	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User will request to enter a new payment method 2. User will enter the payment method data 	<ol style="list-style-type: none"> 1.1 System will display the add payment method form 2.1 System will validate the data <p>System adds payment method to the user's account</p>
Exception conditions	NONE	

Use case name	Update payment method	
Scenario	To update the payment method to buy the products	
Brief description	User allow to Update the payment method to get the products	
Triggering events	User will enter "update payment method"	
Actors	User	
Related use cases	<<Include>>: Add payment	
Preconditions	User should add payment method	
Post conditions	The system shall update payment method for the user	
Flow of events	Actor	System
	1. User will request to update the selected payment method 2. User will enter the updated payment method data	1.1 System will display the payment method update form 2.1. System will validate and filter the newly entered data 2.2. System updates the payment method of the user
Exception conditions	NONE	

Use case name	Remove payment method	
Scenario	To remove the payment method for buy the products	
Brief description	User allow to remove the payment method	
Triggering events	User will enter "remove payment method"	
Actors	User	
Related use cases	<<Include>>: add payment method	
Preconditions	User should add payment method to the system	
Post conditions	The system shall remove payment method for the user	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User will request to remove the selected payment method 2. User will respond to the prompt 	<ol style="list-style-type: none"> 1.1 System will prompt for user to confirm the removal 2.1. System removes payment method from the user
Exception conditions	NONE	

Use case name	Edit account	
Scenario	To edit the account information for the user	
Brief description	The User allow to update account information by changing it	
Triggering events	User click on edit account button	
Actors	User	
Related use cases	<<Include>>: Login	
Preconditions	User should login to the system to edit the account	
Post conditions	The system shall confirms to the user that's changes have been made.	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User click on edit account button 2. User responds to request 3. User responds to request 	<ol style="list-style-type: none"> 1.1 System retrieves the user's current information 1.2 System displays the user's data and prompts the user to apply changes 2.1. System checks if any changes have been done and confirm the changes 3.1. System replaces the old data with the new data in the database
Exception conditions	2.1 System checks if any changes have not been done, display error message	

Use case name	Change language	
Scenario	To Change language for the website	
Brief description	The User allow to change the language according user language	
Triggering events	User enter language button	
Actors	User	
Related use cases	*NONE*	
Preconditions	User should enter to the system	
Post conditions	The system shall re-display the website language	
Flow of events	Actor	System
	1. User will click on change language button 2. User will choose a language	1.1 System will display a list of available languages 2.1 System re-displays the website's data according to the language selected
Exception conditions	*NONE*	

Use case name	Change region	
Scenario	To Change region for the website	
Brief description	The User allow to change the region according user region	
Triggering events	User enter region button	
Actors	User	
Related use cases	*NONE*	
Preconditions	User should enter to the system	
Post conditions	The system shall re-display the website region	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User clicks on change the region button 2. User selects a region 3. User responds to the request 	<ol style="list-style-type: none"> 1.1 System displays a list of supported regions 2.1 System asks the user to confirm change 3.1. System retrieves the respective products according to the selected region 3.2. System displays the retrieved products on the main page
Exception conditions	*NONE*	

Use case name	Add product to category	
Scenario	To add the product to category in the system	
Brief description	Allow the admin to add the products to category	
Triggering events	Admin clicks on “create product” button	
Actors	Admin	
Related use cases	<<Include>>: Login	
Preconditions	User should login to add the product to category	
Post conditions	The system shall displays the product on the website	
Flow of events	Actor	System
	<ol style="list-style-type: none"> Admin clicks on create product button Admin fills in the product creation form Admin responds to the request 	<ol style="list-style-type: none"> 1.1 System displays the product creation form 2.1 System checks if product is already in the database 2.2 System requests admin to confirm product creations 3.1 System adds the product to the database 3.2 System displays the product on the website
Exception conditions	2.1 System checks if product is not in the database, display error message	

Use case name	Remove product from category	
Scenario	To remove the product from category in the system	
Brief description	Allow the admin to remove the products from category	
Triggering events	Admin clicks on “remove product” button	
Actors	Admin	
Related use cases	<<Include>>: add product to category	
Preconditions	admin should add product to category before remove	
Post conditions	The system shall display the product has been removed on the website	
Flow of events	Actor	System
	<ol style="list-style-type: none"> Admin clicks on remove product button Admin responds to the request 	<ol style="list-style-type: none"> 1.1 System requests admin to confirm product removal 2.1 System removes the product from the database 2.2 System displays the product has been removed on the website
Exception conditions	*NONE*	

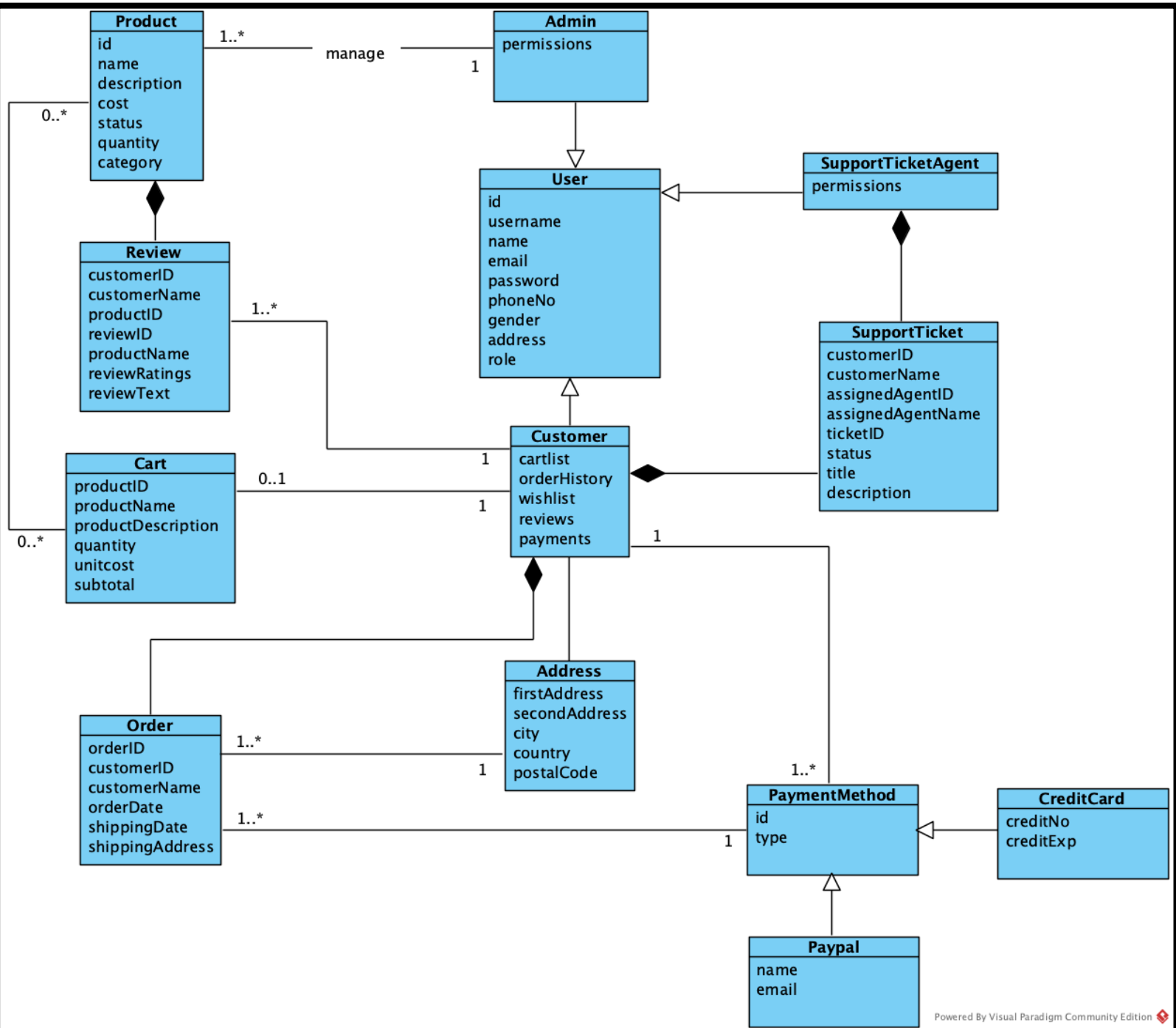
Use case name	Update product details	
Scenario	To update the product from category in the system	
Brief description	Allow the admin to update the products from category	
Triggering events	Admin clicks on “update product” button	
Actors	Admin	
Related use cases	<<Include>>: add product to category	
Preconditions	admin should add product to category before update	
Post conditions	The system shall display the product has been updated on the website	
Flow of events	Actor	System
	1. Admin clicks on update product button 2. Admin responds to the request 3. Admin fills in the product update form	1.1 System displays the product update form 2.1 System requests admin to confirm product update 3.1 System update the product’s details in the database
Exception conditions	*NONE*	

Use case name	Open customer support ticket	
Scenario	To open customer support ticket in the website	
Brief description	Allow the user to open the support ticket for contact with the supporter	
Triggering events	User clicks on “open ticket” button	
Actors	User	
Related use cases	*NONE*	
Preconditions	User should login to the system before open the support	
Post conditions	The system shall sends ticket number to support & user	
Flow of events	Actor	System
	<ol style="list-style-type: none"> 1. User clicks on open ticket button 2. User enters the ticket form details 3. User contacts the support 	<ol style="list-style-type: none"> 1.1 System displays ticket form 2.1 System sends ticket number to support & user 2.2 Support confirms ticket number
Exception conditions	*NONE*	

Use case name	View customer support ticket	
Scenario	To view customer support ticket in the website	
Brief description	Allow the User and Supporter to see the support ticket	
Triggering events	User and Supporter clicks on “view ticket” button	
Actors	User / Supporter	
Related use cases	<<Include>>: Login	
Preconditions	User and supporter should login to the website before view	
Post conditions	The system shall display the support ticket result	
Flow of events	Actor	System
	1. actor clicks on view ticket button	1.1 System checks if the user has opened any tickets 1.2 System displays results
Exception conditions	1.1 System checks if the user has not opened any tickets, display error message	

Use case name	Close customer support ticket	
Scenario	To close customer support ticket in the website	
Brief description	Allow the User and Supporter to close the support ticket	
Triggering events	User and Supporter clicks on “close ticket” button	
Actors	User / Supporter	
Related use cases	<<Include>>: open customer support ticket	
Preconditions	User and supporter should open customer support ticket	
Post conditions	The system shall display the close support ticket	
Flow of events	Actor	System
	1. Actor clicks on close ticket button 2. Actor responds to the request	1.1 System requests confirmation from the actor 2.1 System closes the ticket
Exception conditions	*NONE*	

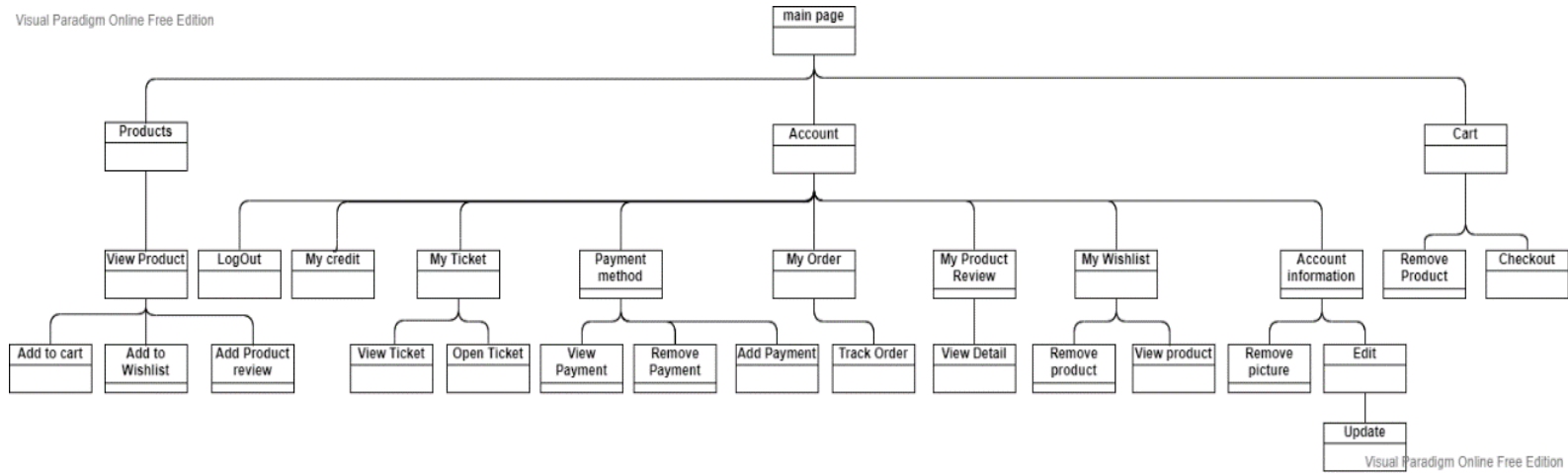
DOMAIN CLASS DIAGRAM



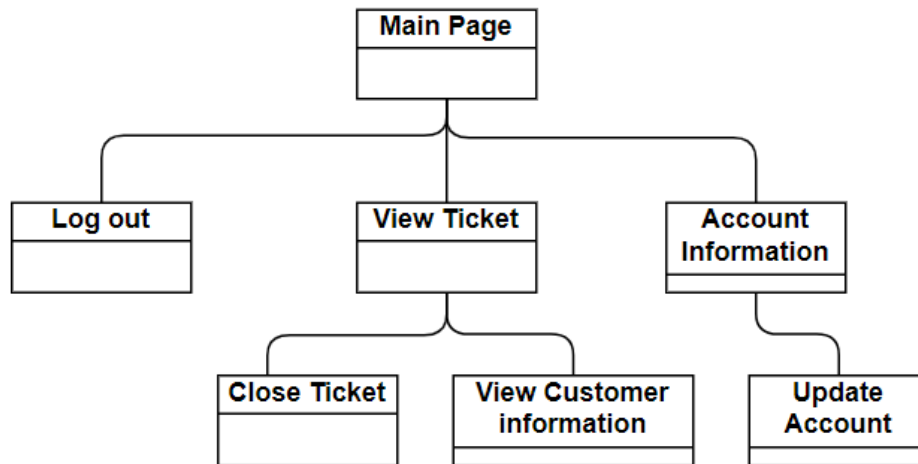
NAVIGATION DIAGRAM

2.7.1. User

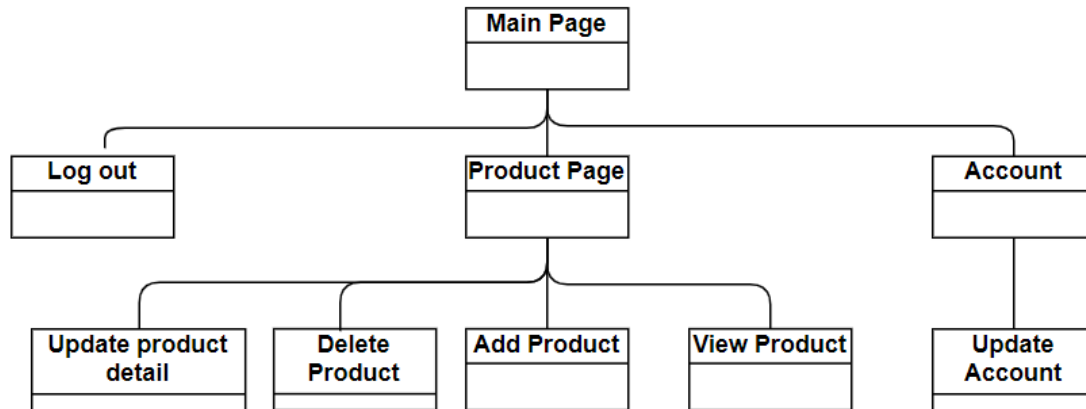
Visual Paradigm Online Free Edition



2.7.2. Supporter



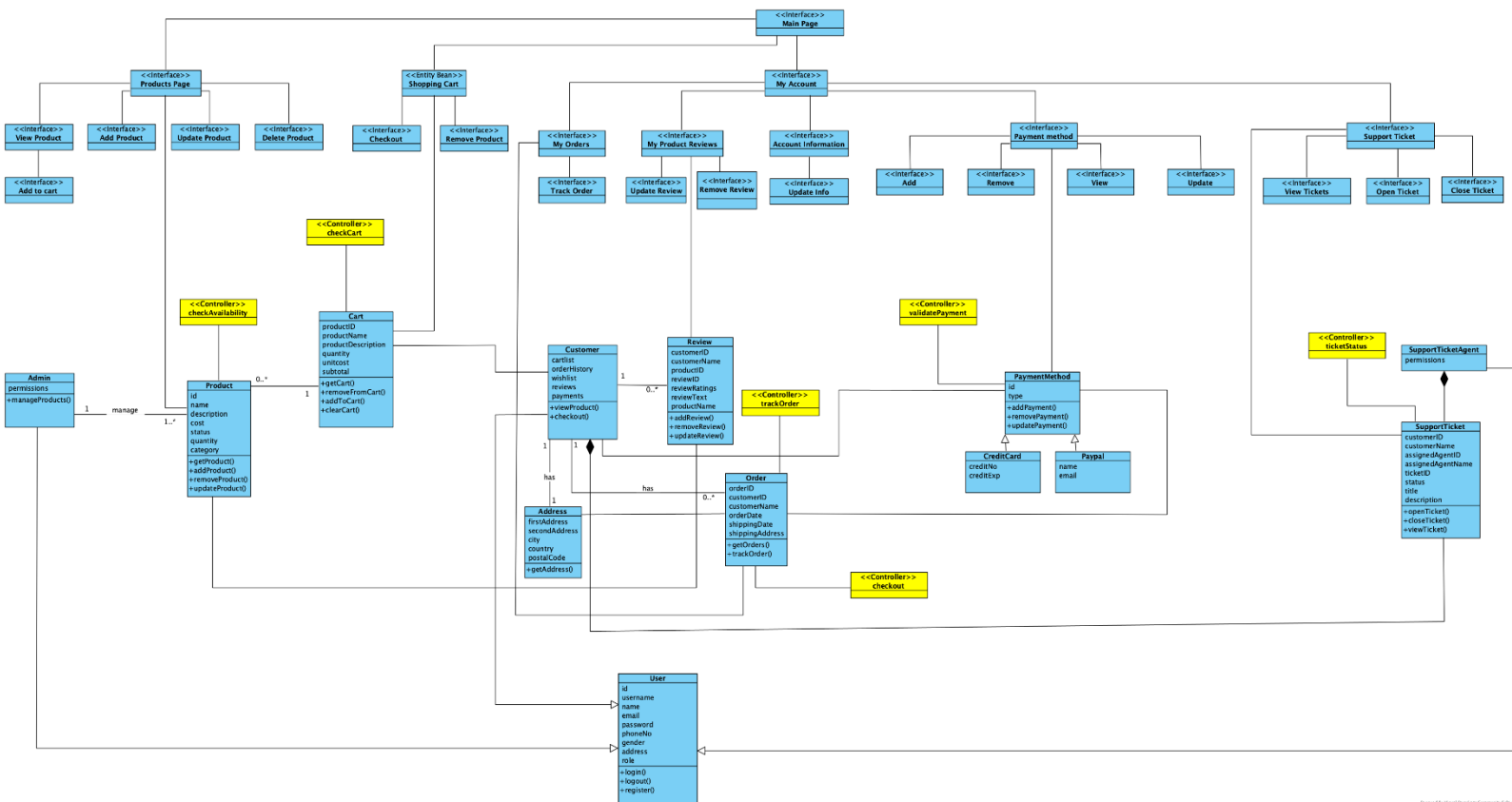
2.7.3. Admin

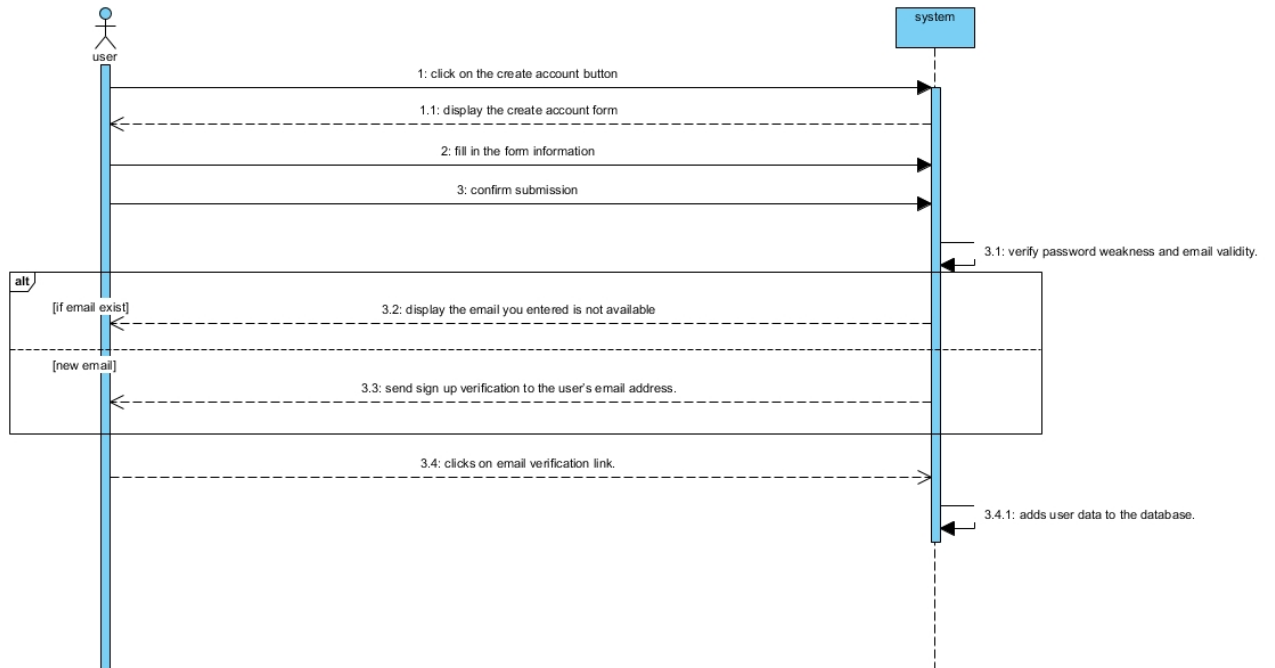


DESIGN CLASS DIAGRAM

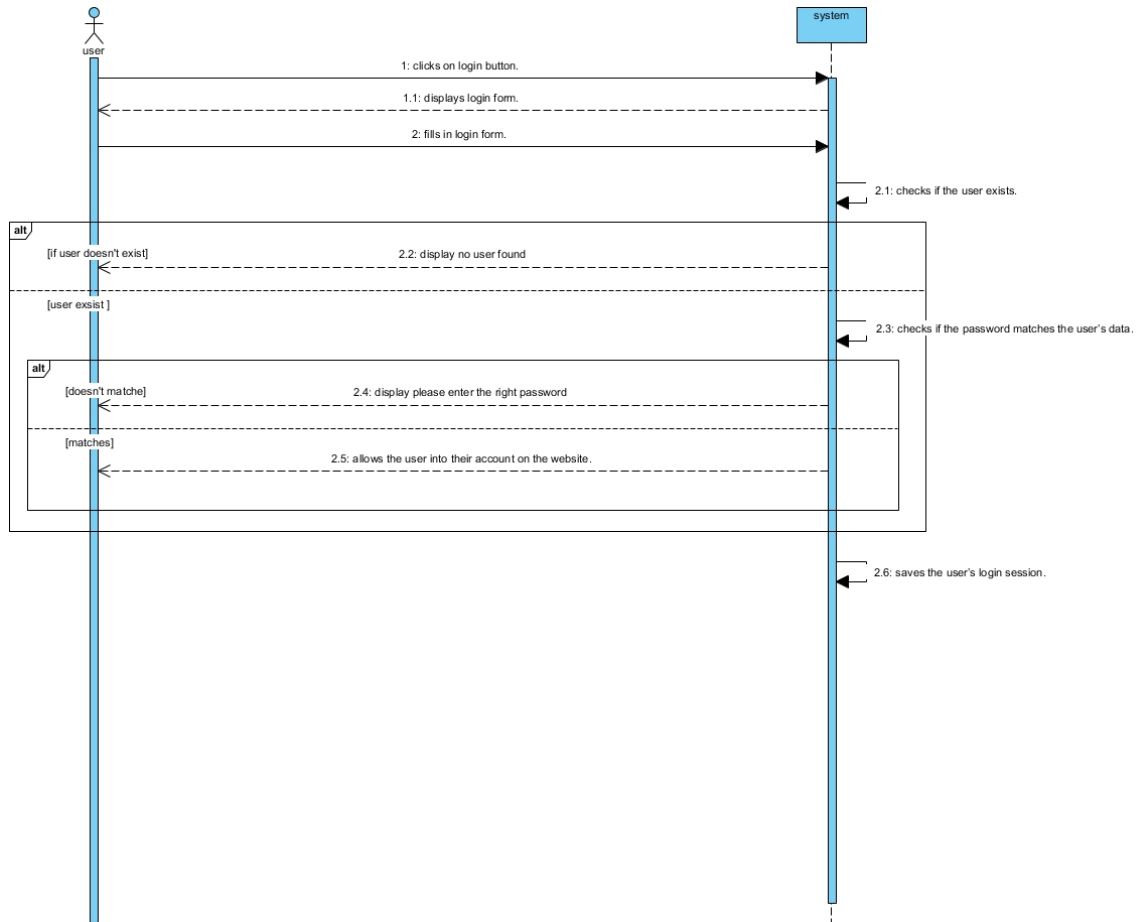
SEQUENCE DIAGRAM

2.9.1. Create account

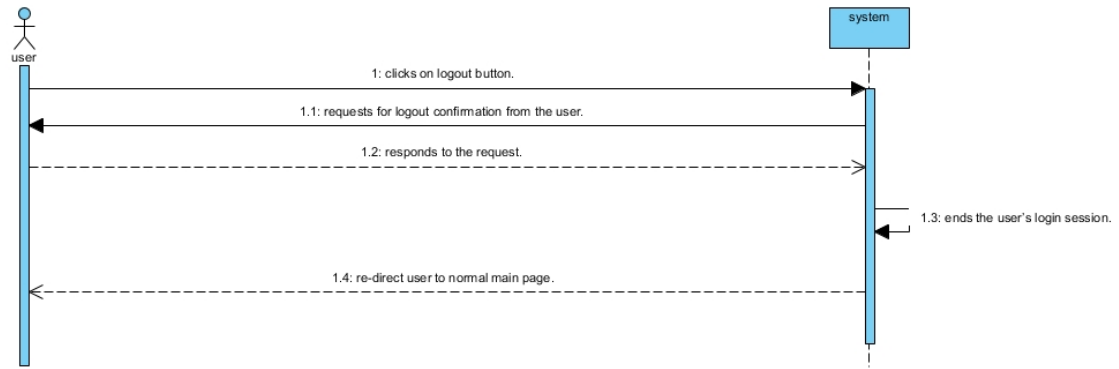




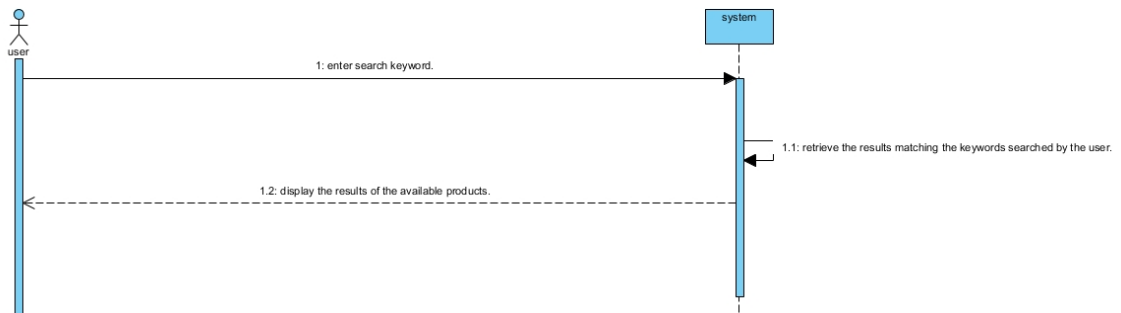
2.9.2. Login



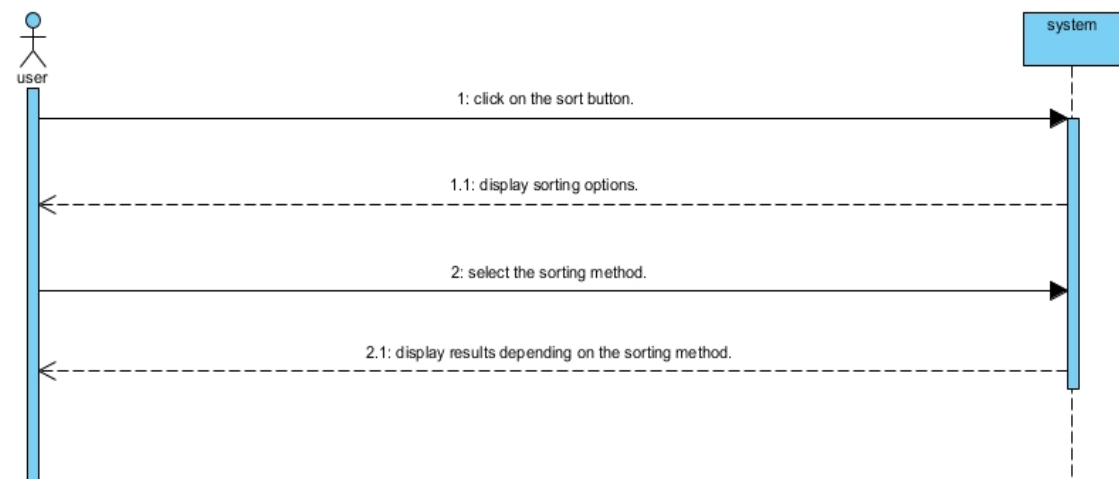
2.9.3. Logout



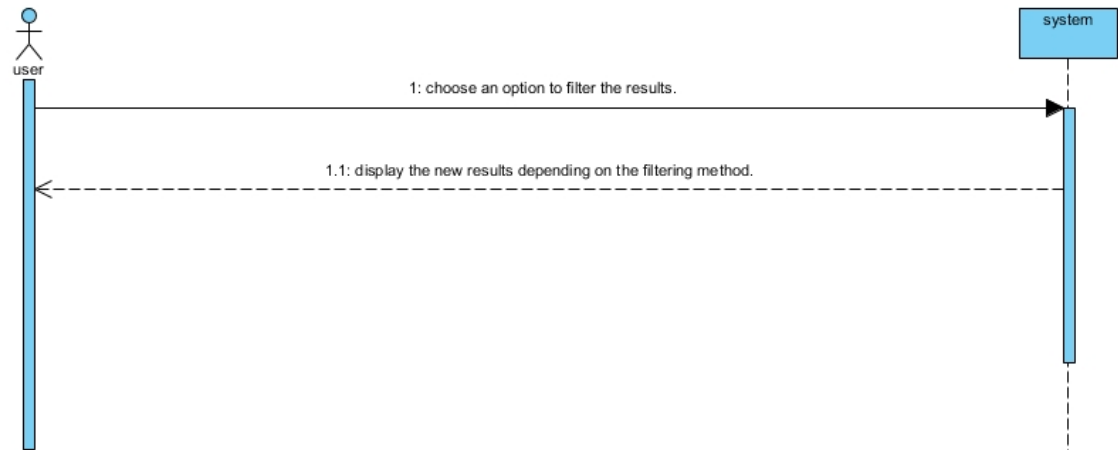
2.9.4. Search for product



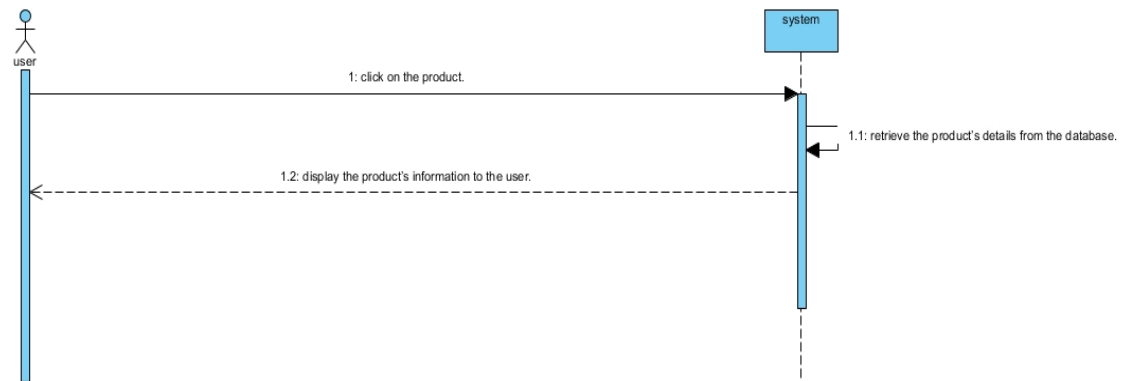
2.9.5. Sort search result



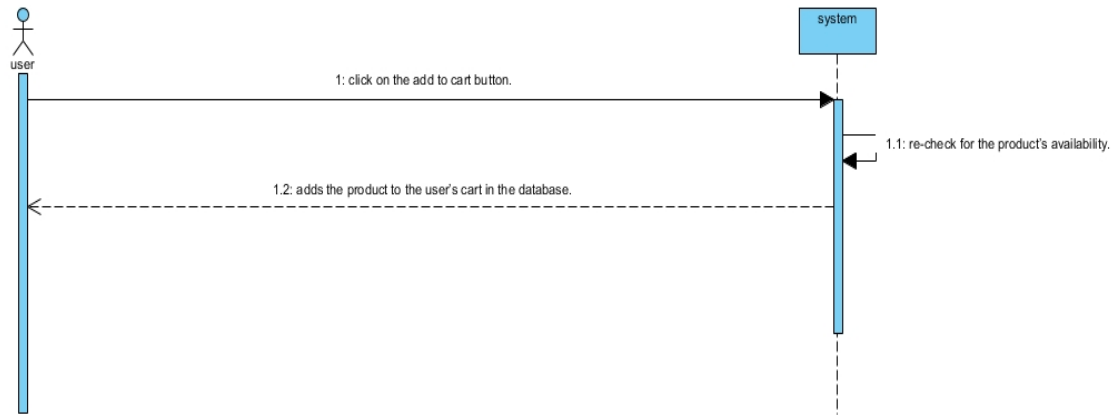
2.9.6. Filter search result



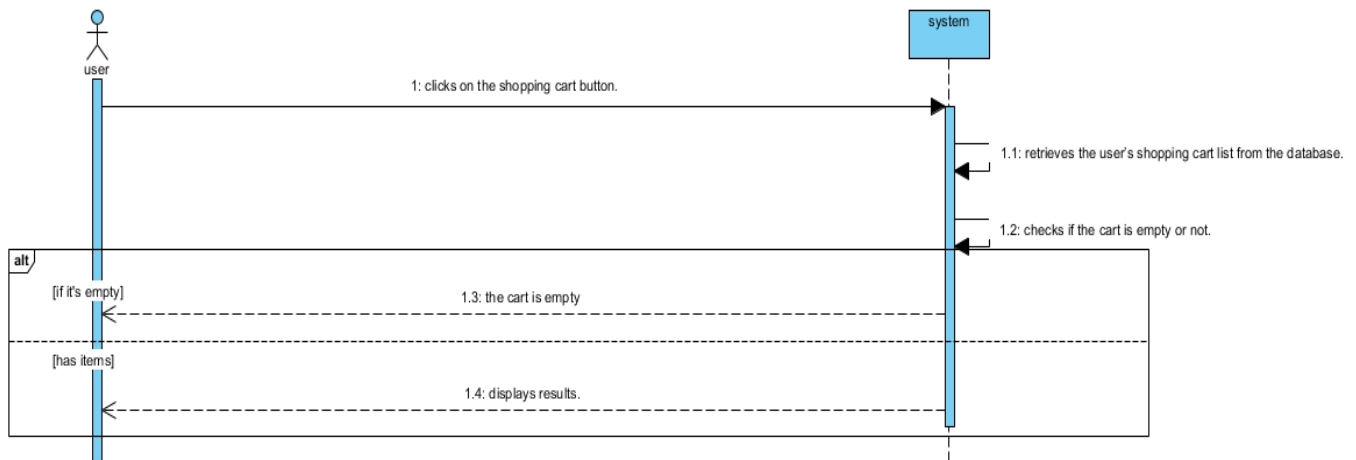
2.9.7. View product



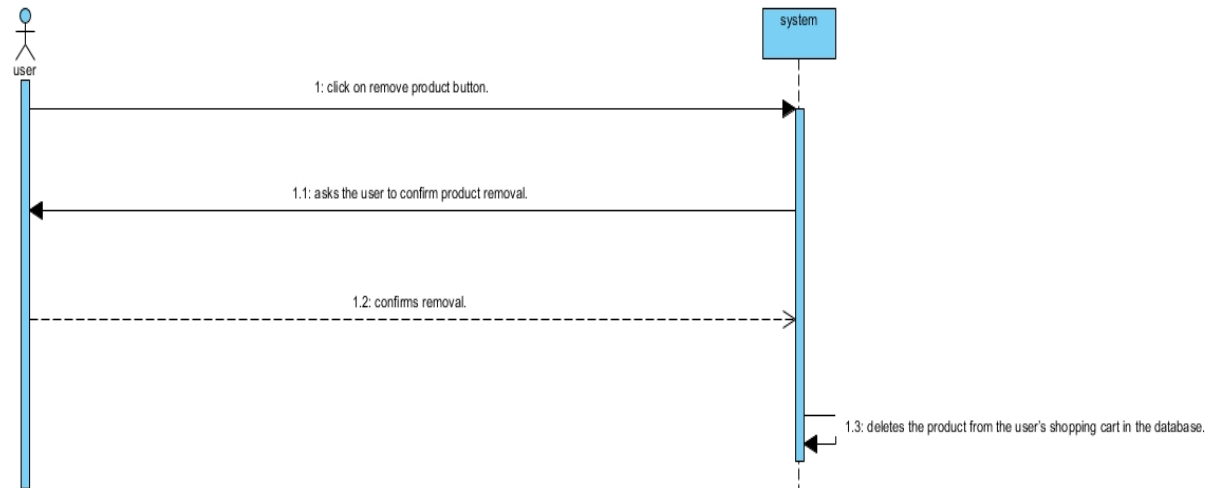
2.9.8. Add product to cart



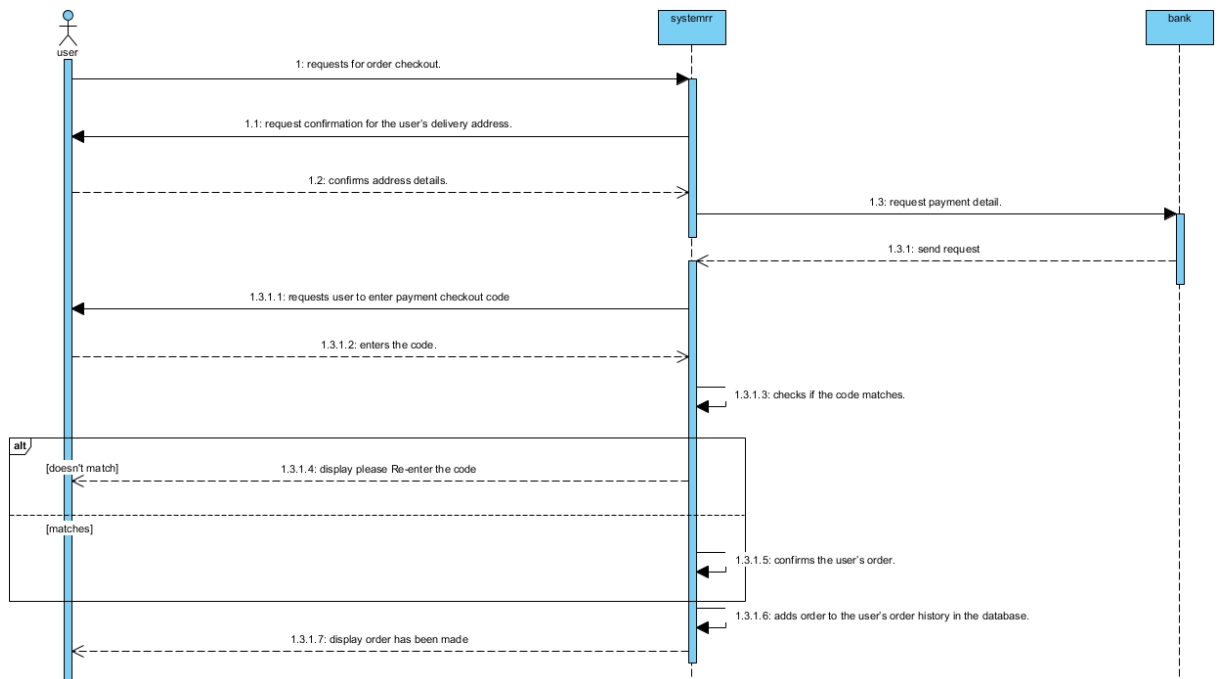
2.9.9. View shopping cart



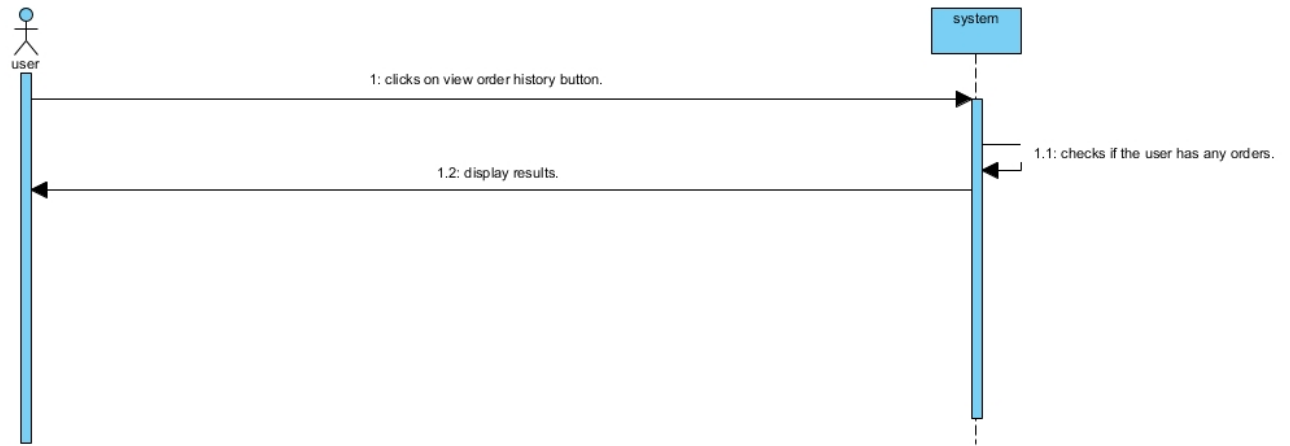
2.9.10. Remove product from cart



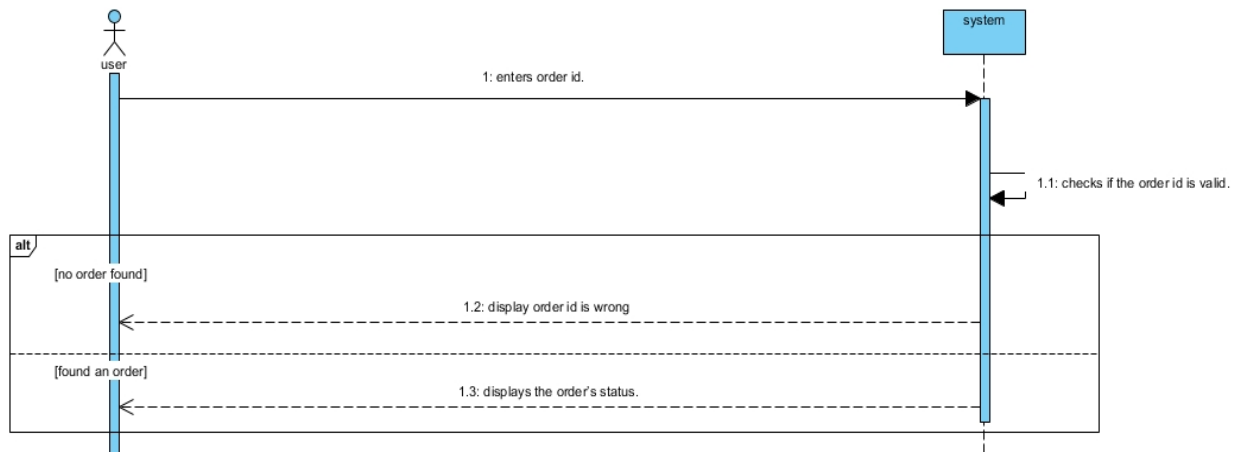
2.9.11. Complete our purchase



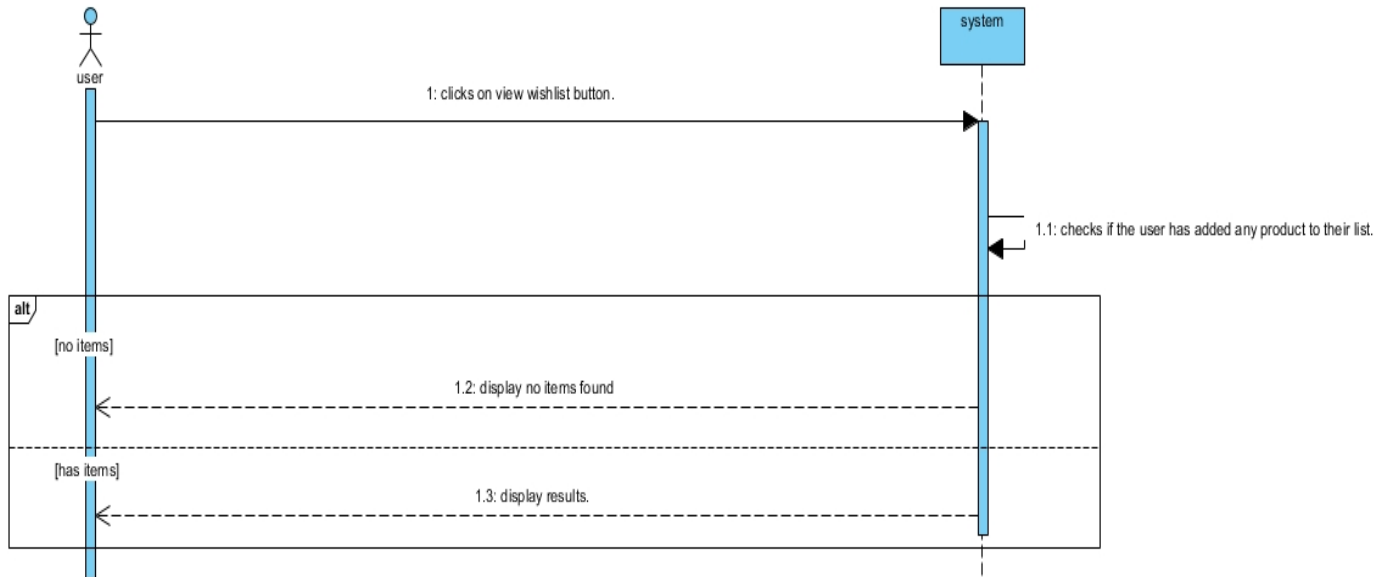
2.9.12. View order history



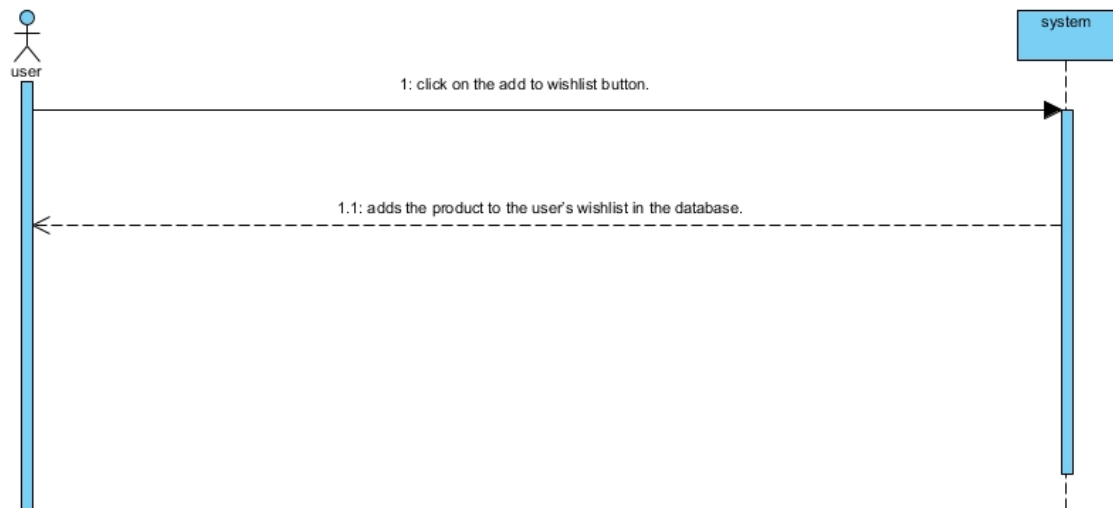
2.9.13. Track order



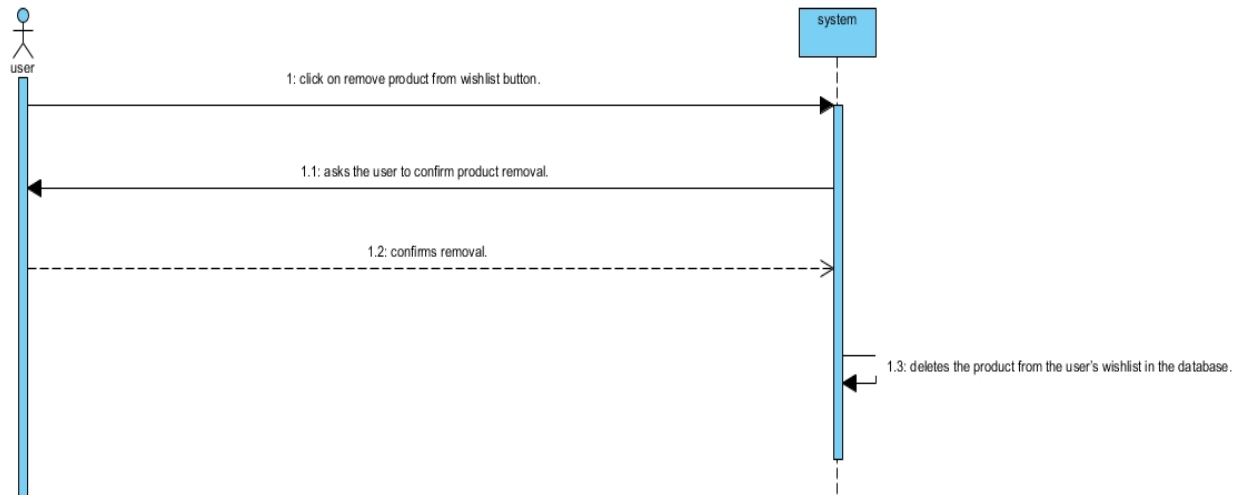
2.9.14. View wish list



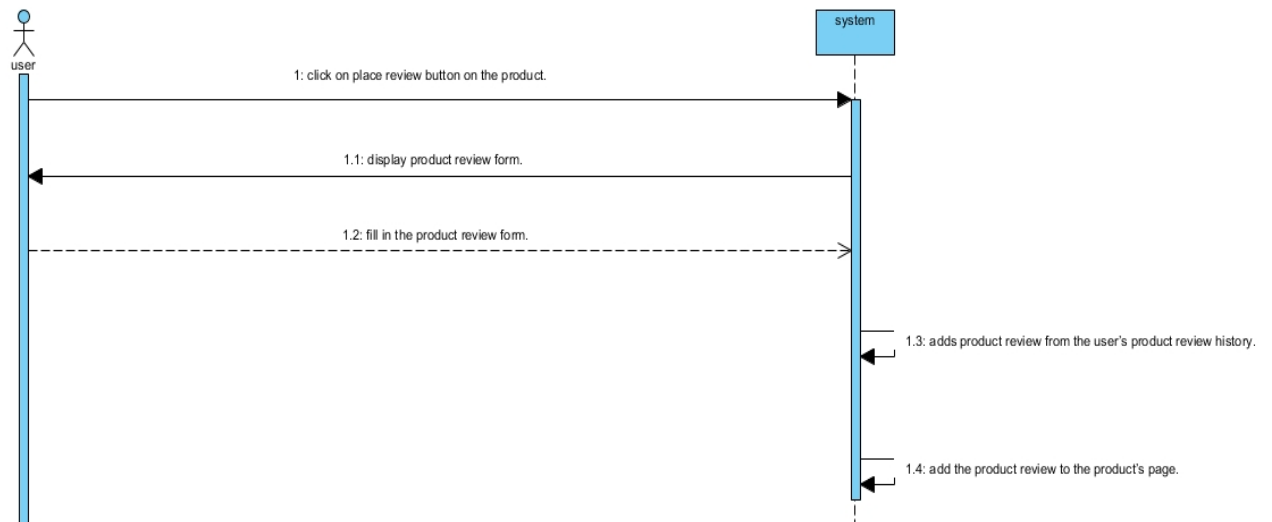
2.9.15. Add item to wish list



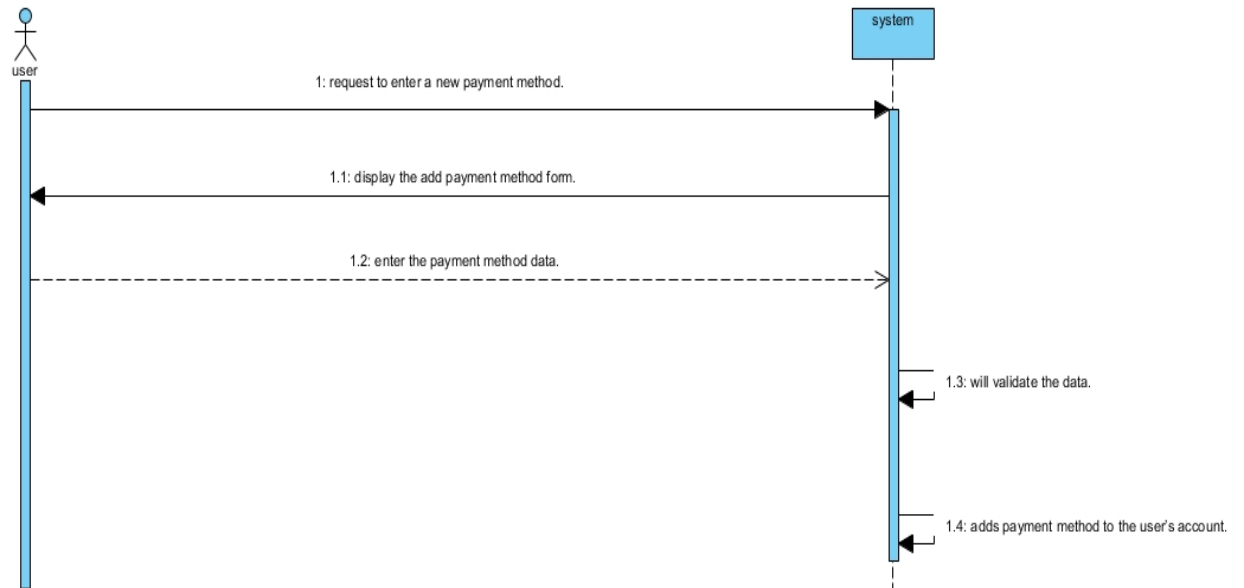
2.9.16. Remove from wish list



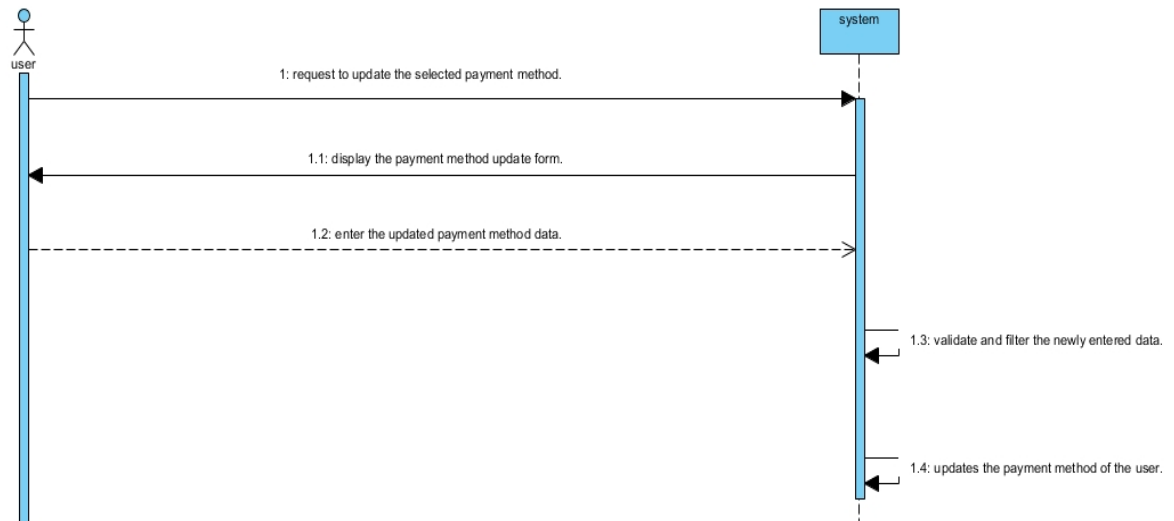
2.9.17. Place product review



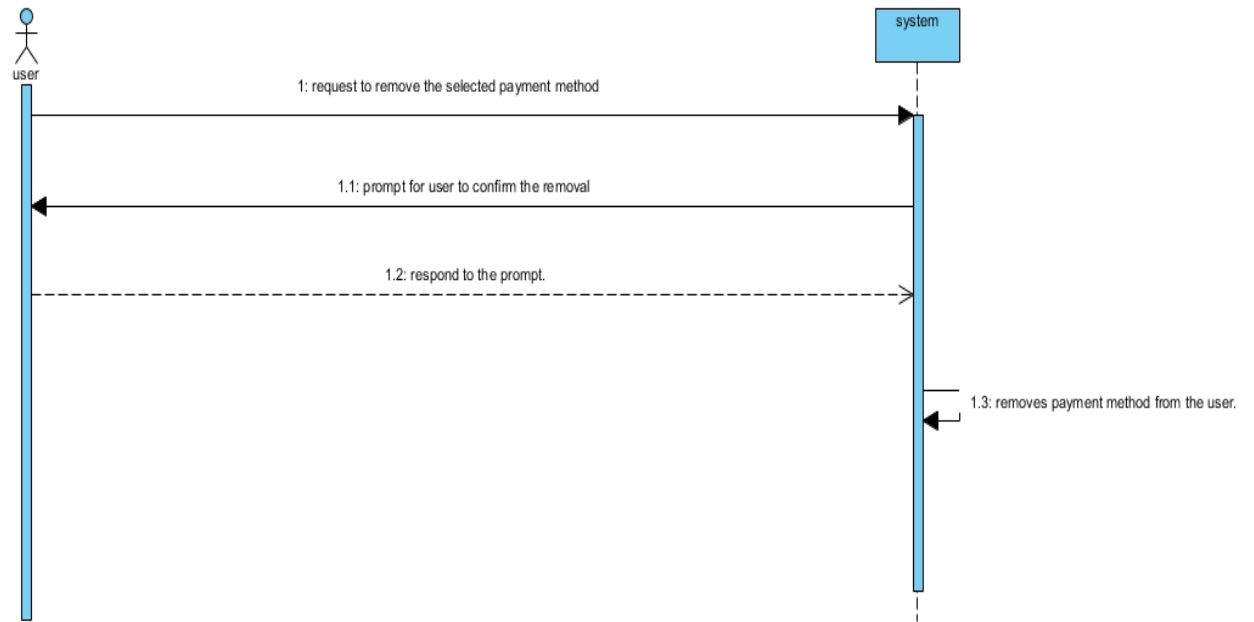
2.9.18. Add payment method



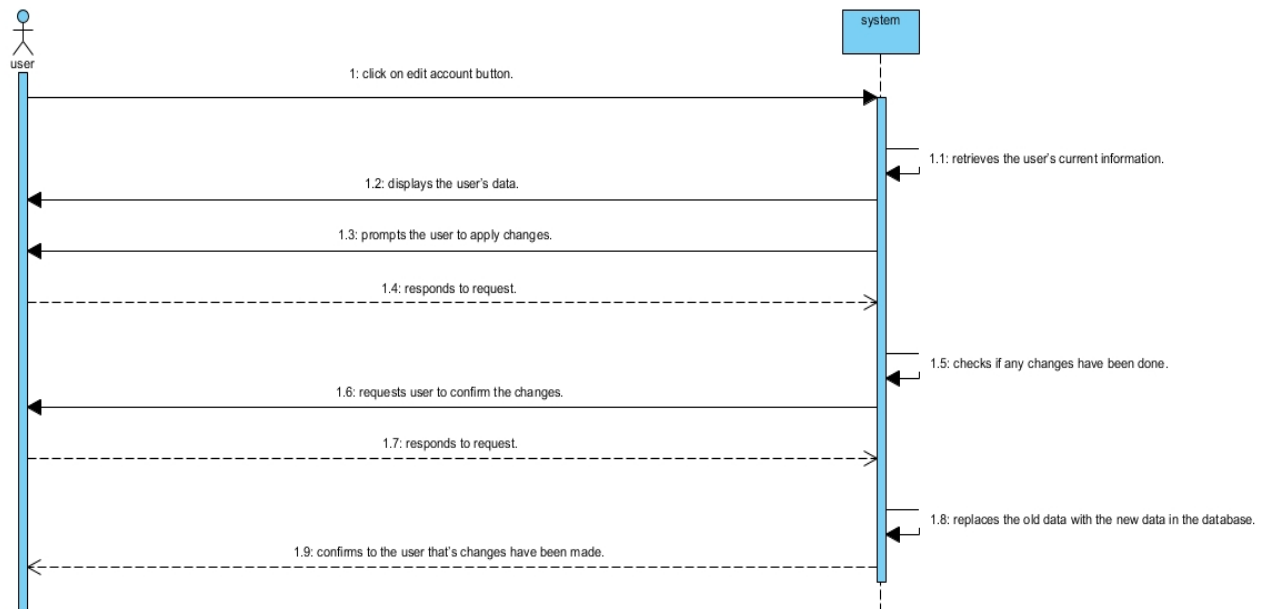
2.9.19. Update payment method



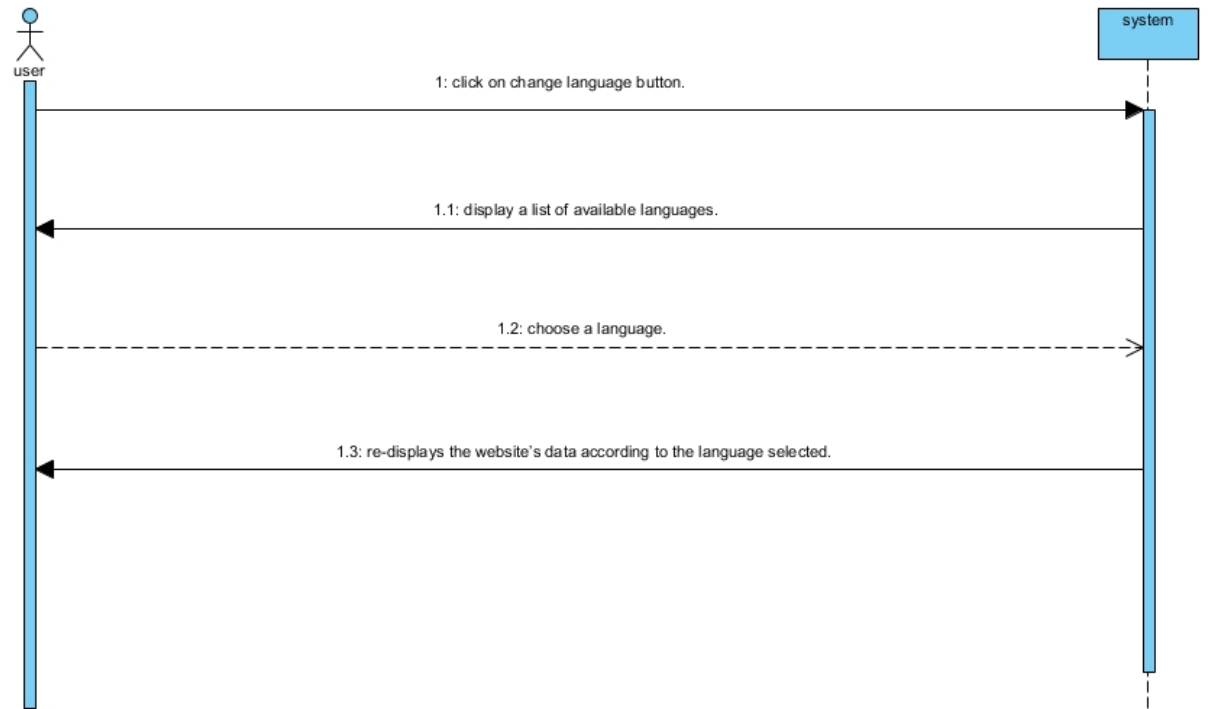
2.9.20. Remove payment method



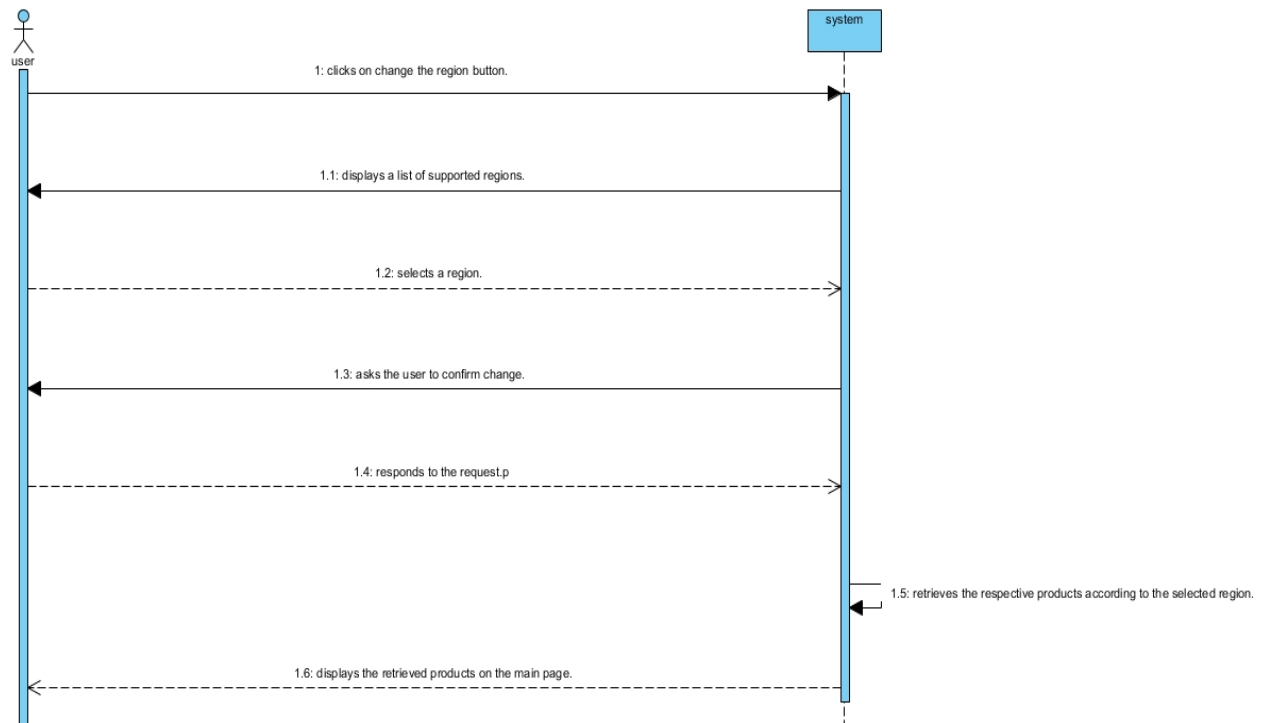
2.9.21. Edit account



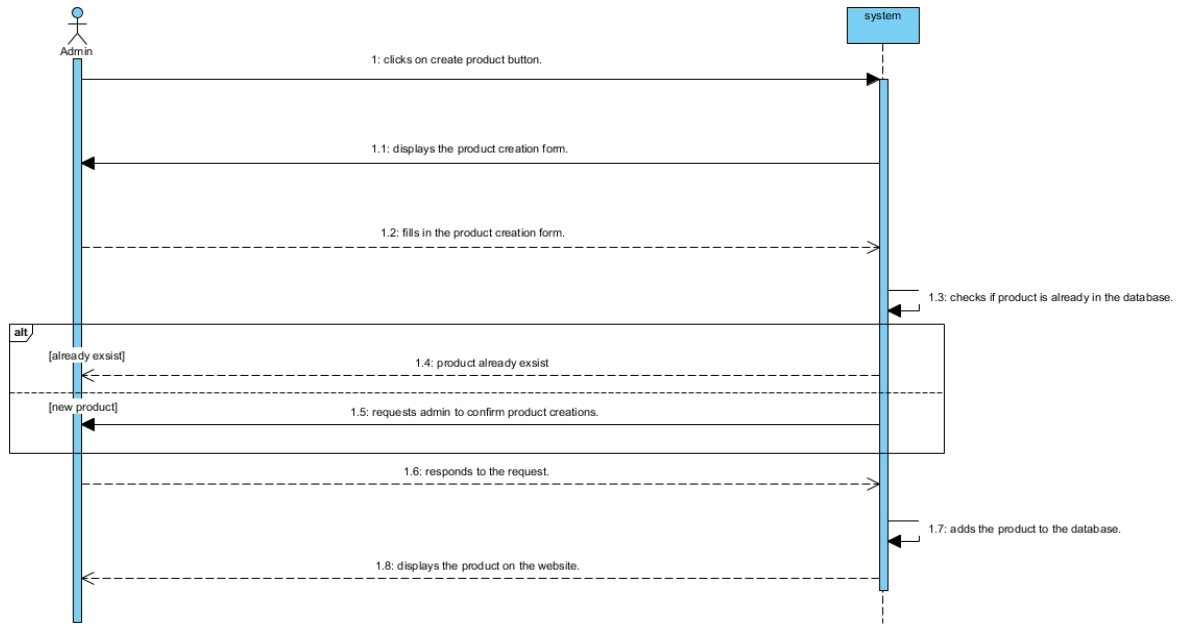
2.9.22. Change Language



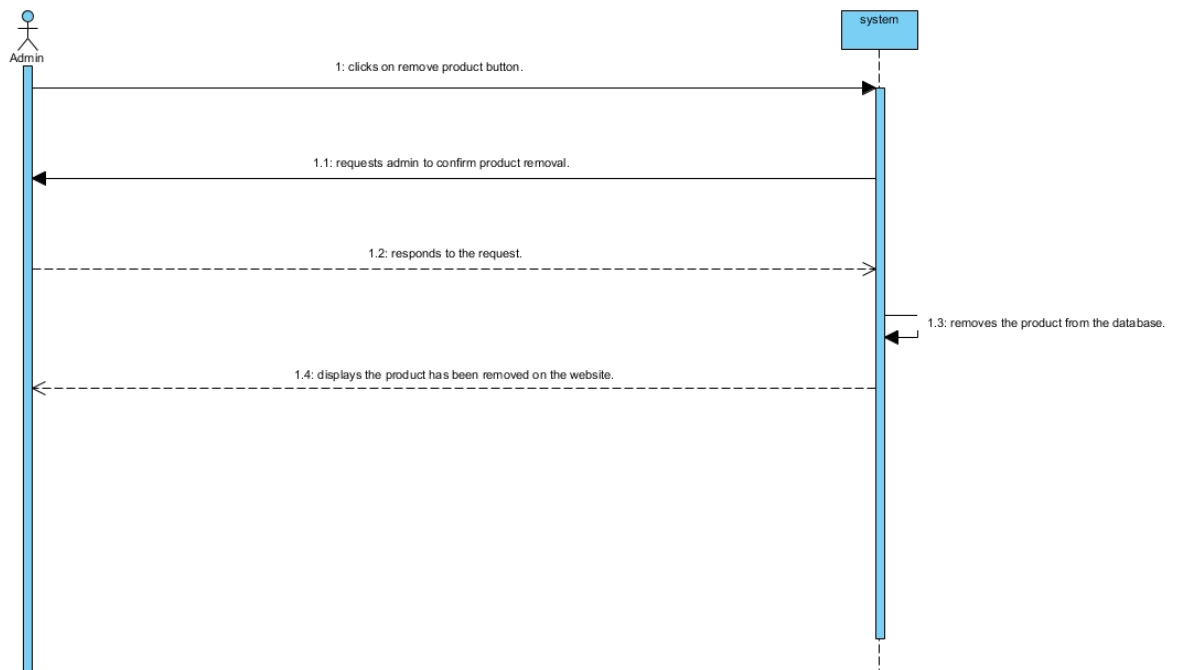
2.9.23. Change region



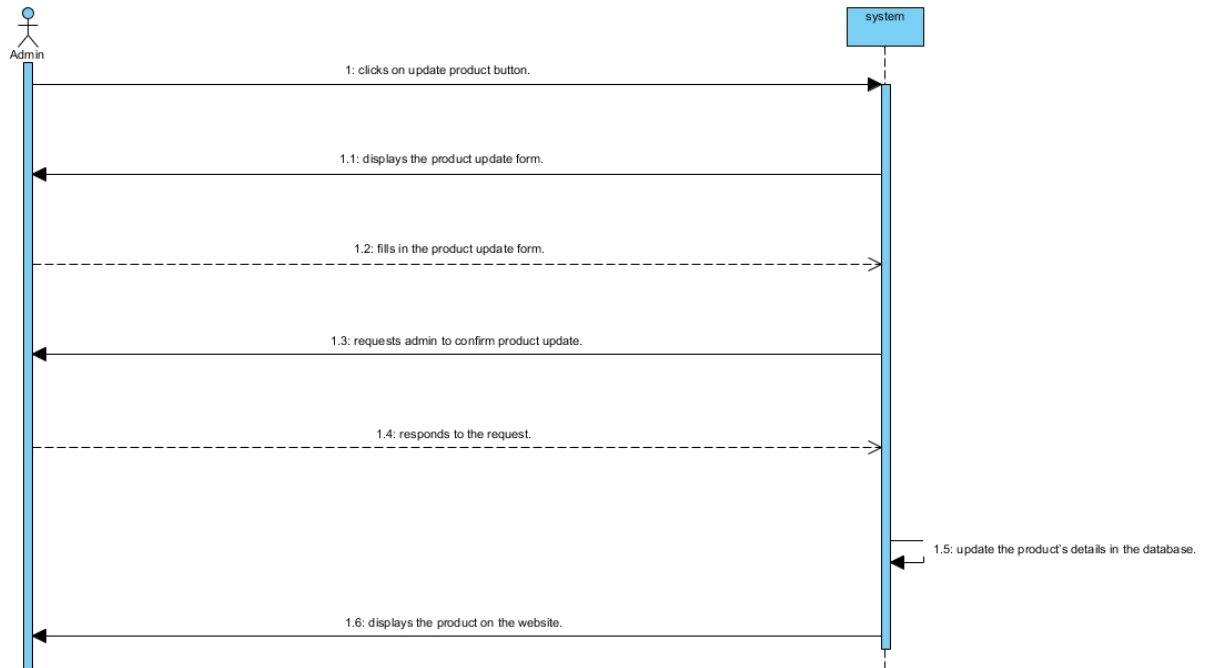
2.9.24. Add product to category



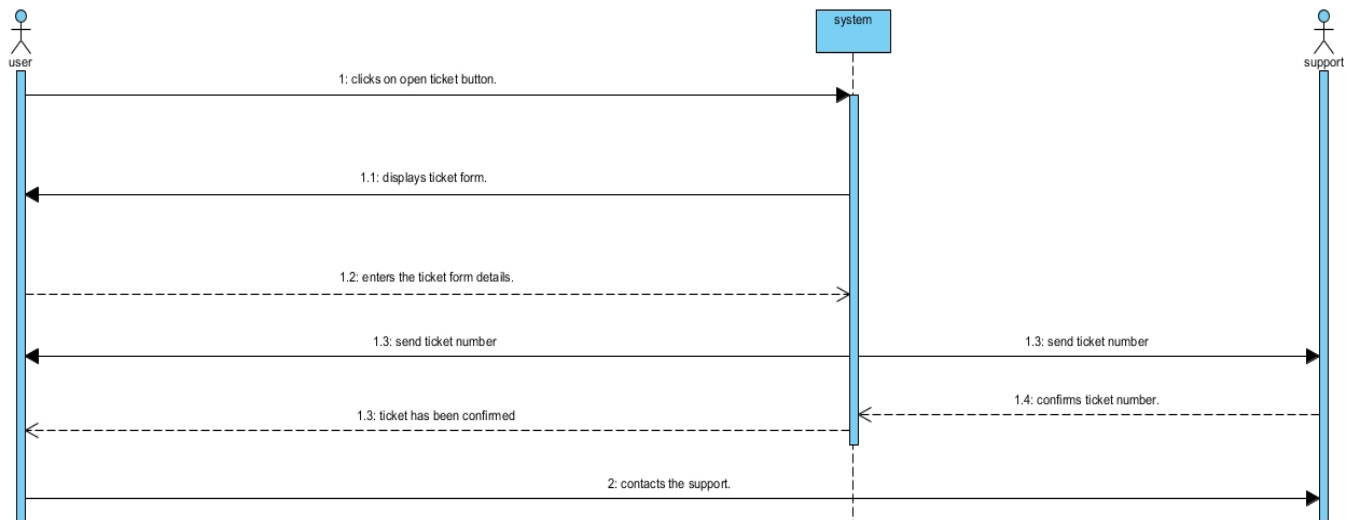
2.9.25. Remove product from category



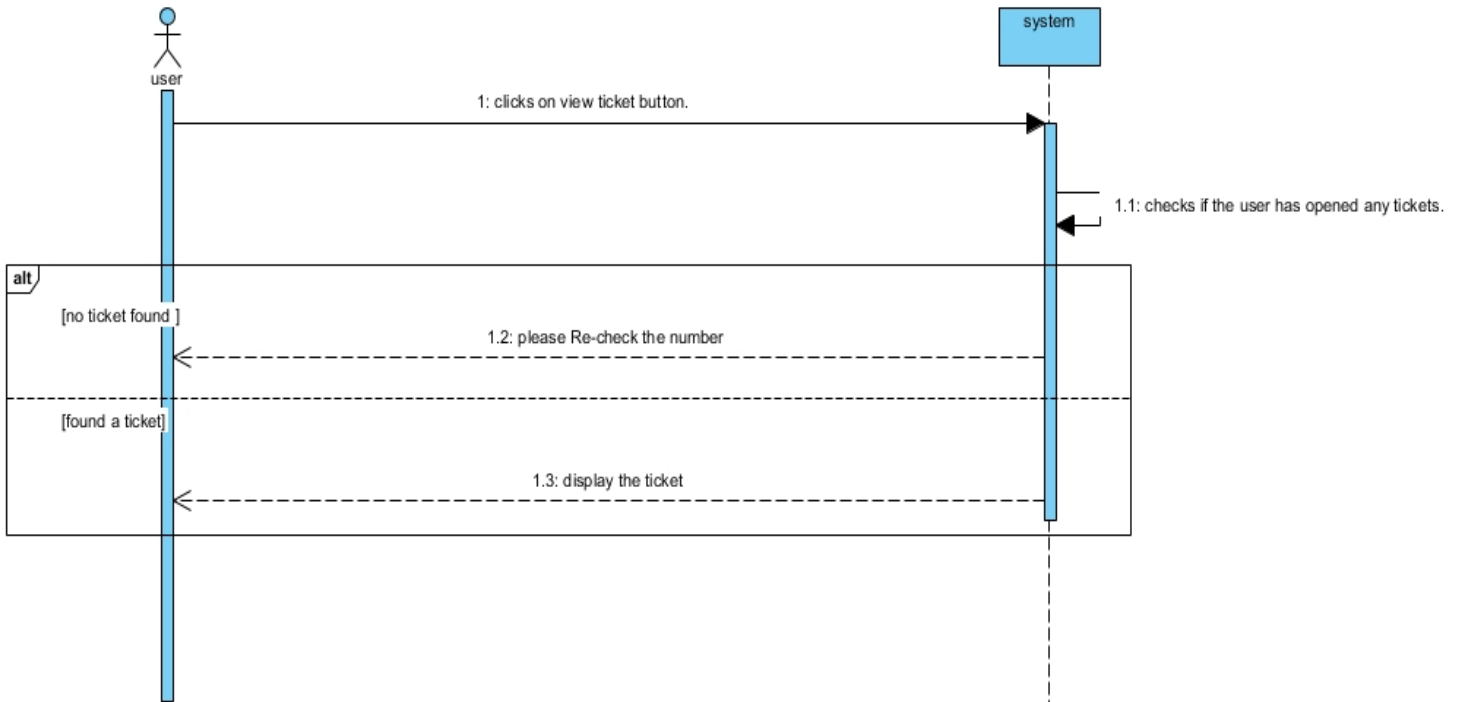
2.9.26. Update product details



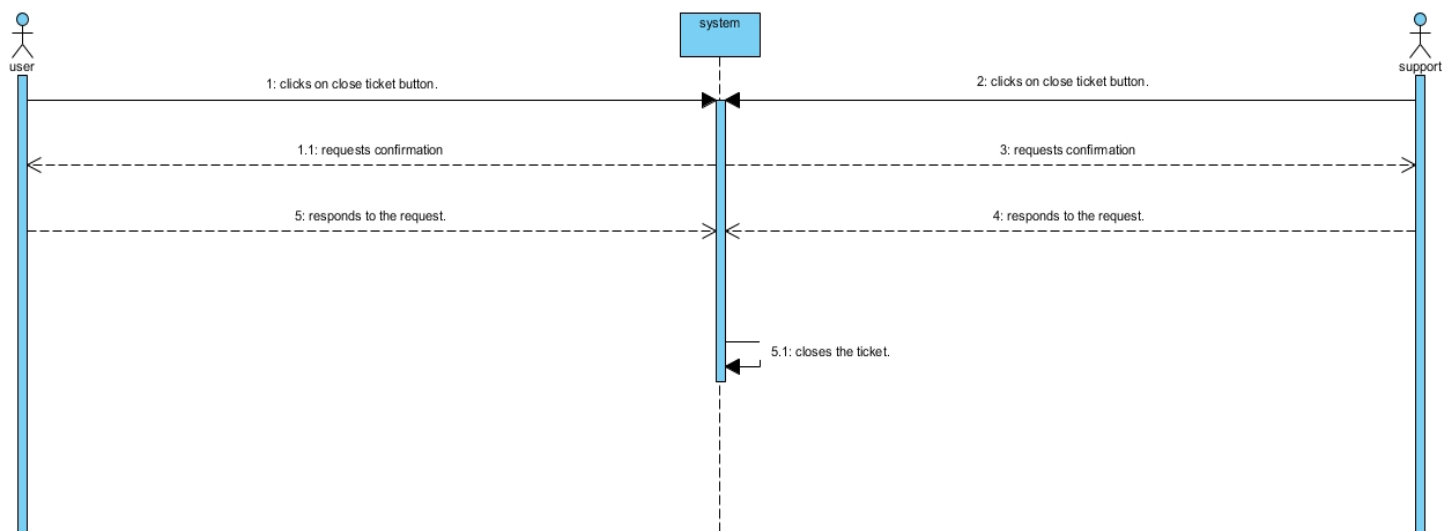
2.9.27. Open customer support ticket



2.9.28. View customer support ticket



2.9.29. Close customer support



PACKAGE DIAGRAM

