

## Use-Cases - 2020

### Content

1. System	2
#1.1 System initiation	3
2. Guest User	4
#2.2 Registration to the system	5
#2.3 User Login to the system	6
#2.4 View information of store and the products of the store	7
#2.5.a Browse for products by different options	8
#2.5.b Filter results according to characteristics	10
#2.6 Saving products in User's basket for specific store	12
#2.7 View and edit shopping cart	13
#2.8.a Purchase products according to the types of purchase	15
#2.8.b Purchase products according to discount types	17
3. Registered User	19
#3.1 Logout	19
#3.2 Open store	20
#3.7 Purchase history	21
4. Store Owner	22
#4.1 StorageManaging	22
#4.2 Applying and editing store policies and discounts	22
#4.3 Add new StoreOwner.	22
#4.5 Add new StoreManager.	23
#4.6 Change StoreManager permissions.	24
#4.7 Delete StoreManager	25
#4.10 Watch Store purchase history	26
5. Store Manager	26
#5.1 Manage Store	26
6. Admin	27
#6.4 View Purchase History	27
#6.5 View system data	28

#7 Payment Collection	29
#8 Package Shipment	30
#10 Real time notifications	32

## 1.System

Use case name	#1.1 System initiation
Actors	SystemInitializer
Pre-conditions	Admin details.
Post-conditions	<ol style="list-style-type: none"> <li>1. Admin exists with admin username and password</li> <li>2. 1 UserManager was created</li> <li>3. 1 Admin was created</li> <li>4. 1 Purchase was created</li> <li>5. There is communications with the Shipment system</li> <li>6. There is communications with the Payment system</li> </ol>
Input Parameters	1. Admin details.
Main success scenario	<ol style="list-style-type: none"> <li>1. Creates new UsersManagerInterface object.</li> <li>2. Creates new StoresManagerInterface object.</li> <li>3. Creates new PurchaseManager object.</li> <li>4. Creates Publisher object.</li> <li>5. Init instances according to "init.txt" file.</li> </ol>
Alternatives/Extensions	
Trigger	SystemInitializer get the order to open the trade system

Action	Data	Expected Result
#1.1 - (AT1) System initiation (external systems communication)	Insert Valid communication details with Payment and Shipment external systems	Success: Trading system activated. Allows transactions including payment and shipping
	Insert invalid communication details with Payment and Shipment external systems	Failure: receive an error message that the system could not be open due to communication with the external systems.

Action	Data	Expected Result
#1.1 - (AT2) System initiation (Creates Admin user)	Valid User details	Success: The User is created and then becomes Admin
	Invalid User details	Failure: No User and Admin are created
	Missing User details	Failure: No User and Admin are created

## 2. Guest User

Use case name	#2.2 Registration to the system
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1
Post-conditions	1. The User successfully registered to the system
Input Parameters	Registration details
Main success scenario	1. <b>User:</b> Enter username and password 2. <b>TradeSystem:</b> If the information provided by the User is correct and complete, the system registers the user.
Alternatives/Extensions	~2. Registration failed - Error message presented.
Trigger	User requests to register to the system.

Action	Data	Expected Result
#2.2 - (AT1) Registration to the system	Valid registration details that do not yet exist in the system.	Success: the registration successfully completed. The user is registered with his provided details.
	Missing registration details.	Failure: The system registration was unsuccessful, no new user was added to the system
	Existing user details.	Failure: The system registration was unsuccessful, no new user was added to the system
	Invalid user details	Failure: The system registration was unsuccessful, no new user was added to the system

Use case name	#2.3 User Login to the system
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1
Post-conditions	1. The user is no longer in guest mode
Input Parameters	Login details.
Main success scenario	1. <b>User:</b> Requests to login to the system. 2. <b>User:</b> Enter username and password. 2. <b>TradeSystem:</b> If the details provided by the user are complete, proper and existing in the system, the user is logged in
Alternatives/Extensions	~2. Login failed
Trigger	GuestUser requests to login to the system

Action	Data	Expected Result
#2.3 - (AT1) User Login to the system	Valid login details that exist in the system.	Success: The system connects the user. The user is no longer in guest mode.
	Missing registration details.	Failure: User should provide all login details
	User details that does not exist in the system	Failure: The login was unsuccessful, The user stays in guest mode.
	Invalid user details.	Failure: The login was unsuccessful, The user stays in guest mode.

Use case name	#2.4 View information of store and the products of the store
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1
Post-conditions	None.
Input Parameters	Requested store details
Main success scenario	1. <b>User</b> : provides the requested store details. 3. <b>TradeSystem</b> : If the requested store exists in the system 3.a <b>TradeSystem</b> : Returns information about the store and its products.
Alternatives/Extensions	~3. The system will return an error / message about incorrect or missing existing store information.
Trigger	A User wants to see details about a store and its products.

Action	Data	Expected Result
#2.4 (AT1) - Search a store and view its details and products	Details of a store that exists in the system.	Success: The system returns store details and store product details.
	Missing store details.	Failure: User should provide all store details.
	User details that do not exist in the system.	Failure: The store search failed, does not return results.
	Invalid user details.	Failure: Returns error object

\*System sequence diagram of 2.5 UC attached separately.

Use case name	#2.5.a Browse for products by different options
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1
Post-conditions	All the products that are presented are compatible with the chosen option.
Input Parameters	Search options, search text
Main success scenario	<p>1. <b>User</b>: Selects what to look for in the trading system and delivers the keywords according to the option.</p> <p>2.1 <b>User</b>: If User selects: by product name</p> <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: Checks if the text that was inserted is valid</li> <li>b. <b>TradeSystem</b>: Returns a list of products whose name is related to the search words</li> </ul> <p>2.2 <b>User</b>: if User selects by product category:</p> <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: Checks if the text that was inserted is valid</li> <li>b. <b>TradeSystem</b>: Returns a list of products that belong to the same category the user provided.</li> </ul> <p>2.3 <b>User</b>: if User selects by product keywords:</p> <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: Checks if the text that was inserted is valid</li> <li>b. <b>TradeSystem</b>: Returns a list of products that belong to the same category the user provided.</li> </ul>
Alternatives/Extensions	<p>~2.1.a returns an empty list</p> <p>~2.2.a returns an empty list</p> <p>~2.3.a returns an empty list</p>
Trigger	User ask to browse for products related to different options.

Action	Data	Expected Result
#2.5.a (AT1) Browse for products by product name	Product name that exists in the system, proper and legal.	Success: Products that are related with their names for the user's input name.
	Empty input.	Failure: User should provide a non-empty keyword.
	Keywords that do not exist in the name of any product in the system.	Failure: returns empty set of products
#2.5.a (AT2) Browse for products by category	Product category that exists in the system, proper and legal.	Success: Products that are related with their category for the user's input.
	Empty input.	Failure: User should provide a non-empty keyword.
	Keywords that do not exist in the name of any product in the system.	Failure: returns empty set of products
#2.5.a (AT3) Browse for products by keywords	Product category that exists in the system, proper and legal.	Success: Products that are related with their keywords for the user's input.
	Keywords that do not exist in the name of any product in the system.	Failure: returns empty set of products

Action	Data	Expected Result
#2.5.a (AT4) Browse for products by Spelled wrong keywords	Inserts words with grammatical or letter errors	Success: find products according to similar words.
	Inserts incorrect, missing, or nonexistent keywords.	Failure: An error message is displayed according to the type of error (incorrect or missing details or keyword does not exist).



Use case name	#2.5.b Filter results according to characteristics
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.5.a
Post-conditions	1. List of products according to the user's filtering characteristics
Input Parameters	(2.5.a) products list, filters list
Main success scenario	<p>1. <b>User:</b> Chooses the option by which he wants to filter the results.</p> <p>2.1 <b>User:</b> If User selects to filter by price range:</p> <ol style="list-style-type: none"> <li><b>TradeSystem:</b> Checks if the input that was inserted is valid</li> <li><b>TradeSystem:</b> Returns a list of products that are in the price range entered as input.</li> </ol> <p>2.2 <b>User:</b> If User selects to filter by product rating:</p> <ol style="list-style-type: none"> <li><b>TradeSystem:</b> Checks if the text that was inserted is valid</li> <li><b>TradeSystem:</b> Returns a list of products that are in the rating entered as input and above.</li> </ol> <p>2.3 <b>User:</b> If User selects to filter by category:</p> <ol style="list-style-type: none"> <li><b>TradeSystem:</b> Checks if the text that was inserted is valid</li> <li><b>TradeSystem:</b> Returns a list of products that are in the category entered as input.</li> </ol> <p>. .         .          (Could be more filters and combinations of them)</p>
Alternatives/Extensions	<p>~2.1.a returns an empty list.</p> <p>~2.2.a returns an empty list.</p> <p>~2.3.a returns an empty list.</p>
Trigger	GuestUser ask to filter results (from 2.5.a) by different characteristics.

Action	Data	Expected Result
#2.5.b (AT1) Filter results by Price Range	Price range and products list when at least some of the products in the list are within the range entered.	Success: Returns a product list that includes only products that are in range.
	Price range and product list when none of the products in the list are within the range entered.	Failure: Returns an empty list.
	Empty list	Failure: User should provide a non-empty list of products.
#2.5.b (AT2) Filter results by Rating	Rating and products list when at least some of the products have ratings like the input and above.	Success: Returns a product list that includes only products that are in the rating and above.
	Rating and products list when none of the products have ratings like the input and above.	Failure: Returns an empty list.
	Empty list	Failure: User should provide a non-empty list of products.
#2.5.b (AT3) Filter results by category	Category and products list when at least some of the products in the list are within the category.	Success: Returns a product list that includes only products that are in range.
	Category and products list when none of the products are in the same category.	Failure: Returns an empty list.
	Empty list	Failure: User should provide a non-empty list of products.

\*There are also different combinations for the filters and all tests will look similar.

Use case name	#2.6 Saving products in User's basket for specific store
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.5
Post-conditions	1. User has a basket with saved products.
Input Parameters	Products list.
Main success scenario	1. <b>User</b> : Choose product from products list to add to the basket 2. <b>TradeSystem</b> : returns product's page 3. <b>User</b> : if the User choose to add the product to the basket: <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: adds to the user's-store basket the chosen product</li> <li>b. Go back to step 1 (for more products)</li> </ul>
Alternatives/Extensions	~3. Returns products list.
Trigger	GuestUser choose product from the products list.

Action	Data	Expected Result
#2.6 Saving products in User's basket for specific store	Selects and saves a product/s to a specific store's basket	Success: The product is stored in the user-store basket during the user's current visit.
	Select product that currently not available and tries to add it to the basket	Failure: The basket remains unchanged.
	No product is selected	Failure: User should choose at least one product.

Use case name	#2.7 View and edit shopping cart
---------------	----------------------------------

Actors	User
Pre-conditions	The current situation is according to Use-Case 2.1.
Post-conditions	1. User's cart edited according to his actions
Input Parameters	None.
Main success scenario	1. <b>User</b> : The user wants to view the shopping cart 2. <b>TradeSystem</b> : returns the shopping cart of the user. 3 <b>User</b> : If User selects to edit the cart: <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: returns the edit options (delete, change quantity, and more)</li> <li>b. <b>User</b>: Choose products to edit, and how to edit them</li> <li>c. <b>TradeSystem</b>: The system makes the changes requested by the User.</li> </ul>
Alternatives/Extensions	~3. Cart remains unchanged.
Trigger	User ask to edit his shopping cart

Action	Data	Expected Result
#2.7 - (AT1) Delete product from shopping cart	Products(>=1) from the cart.	Success: The selected products are deleted from the cart and no longer appear in it.
	No products selected.	Failure: User should choose at least one product.
#2.7 - (AT2) Change quantity product from shopping cart	Product from the cart.	Success: The quantity of the product selected in the cart was changed.
	No products selected.	Failure: User should choose some product.
	Products(>1) from the cart.	Failure: User should choose maximum one product.

\*System sequence diagram of 2.8 UC attached separately.

Use case name	#2.8.a Purchase products according to the types of purchase
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1 2. User has a products list from Use-Case 2.5.
Post-conditions	1. The store received payment from the user for the product. 2. The user received the product for which he paid.
Input Parameters	Products list
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>User:</b> Asks to buy a product from the productsList</li> <li>2. <b>User:</b> Choose : <ol style="list-style-type: none"> <li>2.1. If the User choose to buy a product in immediate purchase: <ol style="list-style-type: none"> <li>a. <b>TradeSystem:</b> If the user can buy the product according to the store's purchase policy: <ol style="list-style-type: none"> <li>1. <b>TradeSystem:</b> If the product is sold immediately: <ol style="list-style-type: none"> <li>a. <b>TradeSystem:</b> If the product is in stock:</li> <li>b. <b>TradeSystem:</b> Asks User's payments details and shipping address.</li> <li>c. <b>User:</b> Provides payment and shipping details.</li> <li>d. <b>TradeSystem:</b> Sends the payment details to the payment system.</li> <li>e. <b>Payment:</b> If the user have enough money</li> <li>f. <b>TradeSystem:</b> Sends the shipping details to the shipment system.</li> <li>g. <b>Shipment:</b></li> </ol> </li> </ol> </li> </ol> </li> </ol> </li> </ol>
Alternatives/Extensions	~2.1.a The buying process has stopped. ~2.1.a.1 The buying process has stopped.
Trigger	User ask to buy a product in immediate purchase.

Action	Data	Expected Result
#2.8.a (AT1) Immediate Purchase	<p>A product that is sold in immediate purchase, is in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	Success: The transaction took place, the inventory in the store was updated, the money went from the buyer to the store, the product went from the store to the buyer.
	<p>A product that is sold in immediate purchase, is <b>not</b> in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	Failure: The shopping process has stopped and continues as long as the product inventory in the store has not been updated.
	<p>A product that is sold in immediate purchase, is in stock and does <b>not</b> meet store purchase policy conditions.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	Failure: The shopping process has stopped.
	<p>A product that is sold in immediate purchase, is in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who does <b>not</b> meets the store policy conditions for buying the product and has enough money.</p>	Failure: The shopping process has stopped.

Use case name	#2.8.b Purchase products according to discount types
Actors	User
Pre-conditions	1. The current situation is according to Use-Case 2.1 2. User has a products list from Use-Case 2.5.
Post-conditions	1. The store received payment from the user for the product. 2. The user received the product for which he paid.
Input Parameters	Products list
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>User:</b> Asks to buy a product from the products list</li> <li>2. <b>User:</b> Choose : <ol style="list-style-type: none"> <li>2.1. If the User choose to buy a product with <b>visible discount:</b> <ol style="list-style-type: none"> <li>b. <b>TradeSystem:</b> If the user can buy the product according to the store's purchase discount policies: <ol style="list-style-type: none"> <li>2. <b>TradeSystem:</b> If the product is sold with visible discount: <ol style="list-style-type: none"> <li>h. <b>TradeSystem:</b> If the product is in stock</li> <li>i. <b>TradeSystem:</b> Asks User's payments details and shipping address.</li> <li>j. <b>User:</b> Provides payment and shipping details.</li> <li>k. <b>TradeSystem:</b> Sends the payment details to the payment system.</li> <li>l. <b>TradeSystem:</b> Sends the shipping details to the shipment system.</li> </ol> </li> </ol> </li> </ol> </li> </ol> </li> </ol>
Alternatives/Extensions	~2.1.a The buying process has stopped. ~2.1.a.1 The buying process has stopped.
Trigger	User ask to buy a product with visible discount

Action	Data	Expected Result
#2.8.b (AT1) Visible Discount	<p>A product that is sold at a visible discount, is in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	<p>Success: The transaction took place, the inventory in the store was updated, the money went from the buyer to the store, the product went from the store to the buyer.</p>
	<p>A product that is sold at a visible discount, is <b>not</b> in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	<p>Failure: The shopping process has stopped and continues as long as the product inventory in the store has not been updated.</p>
	<p>A product that is sold at a visible discount, is in stock and does <b>not</b> meet store purchase policy conditions.</p> <p>A user who meets the store policy conditions for buying the product and has enough money.</p>	<p>Failure: The shopping process has stopped.</p>
	<p>A product that is sold at a visible discount, is in stock and meets the store's purchase policy from which it is sold to the user.</p> <p>A user who does <b>not</b> meets the store policy conditions for buying the product and has enough money.</p>	<p>Failure: The shopping process has stopped.</p>



### Differences between GuestUser and RegisteredUser.

Use Case **2.4** performs the same for RegisteredUser.

Use Case **2.5** performs the same for RegisteredUser.

Use Case **2.6** performs differently for RegisteredUser: the Basket and the cart has been saved in his watch list for later date.

Use Case **2.7** performs the same for RegisteredUser.

Use Case **2.8** performs the same for RegisteredUser.

### 3.Registered User

Use case name	#3.1 Logout
Actors	RegisteredUser
Pre-conditions	Have valid registration, User state- Logged in.
Post-conditions	User state become GuestUser
Input Parameters	None.
Main success scenario	1. <b>TradeSystem</b> ask: "are you sure" If you press yes, the system logs out the <b>RegisteredUser</b> , the <b>RegisteredUser</b> becomes unlogged.
Alternatives/Extensions	User press cancel, the RegisteredUser stays logged in.
Trigger	The RegisteredUser wanted to logout.

Action	Data	Expected Result
#3.1 AT - Logout	None	User Logged out
	None	

Use case name	#3.2 Open store
Actors	RegisteredUser
Pre-conditions	<ol style="list-style-type: none"> <li>1. Begin logged in.</li> <li>2. Store name doesn't exist.</li> </ol>
Post-conditions	<ol style="list-style-type: none"> <li>1. New store opens to buy the RegisteredUser.</li> <li>2. Registered RegisteredUser become the main StoreOwner.</li> </ol>
Input Parameters	<ol style="list-style-type: none"> <li>1. Store name.</li> </ol>
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>RegisteredUser</b>: enter new store name</li> <li>2. <b>TradeSystem</b>: checks Store name doesn't exist. <ol style="list-style-type: none"> <li>2.1 <b>TradeSystem</b>: asks RegisteredUser's identifications .</li> <li>2.2 <b>RegisteredUser</b>: enter the identifications.</li> </ol> </li> <li>3. New Store opens in the system</li> <li>4. <b>RegisteredUser</b> becomes a StoreOwner in this store.</li> </ol>
Alternatives/Extensions	<ol style="list-style-type: none"> <li>1. <b>RegisteredUser</b>: enter same StoreName that exists already <ol style="list-style-type: none"> <li>1.1 <b>TradeSystem</b>: Display Error ("Store name already exists")</li> <li>1.2 <b>TradeSystem</b> asks RegisteredUser for new store name.</li> </ol> </li> </ol>
Trigger	RegisteredUser want to open a store.

Action	Data	Expected Result
#3.2 AT - Open Store	Valid details are inserted	New Store opens with the chosen name and unique store id
	Missing name is inserted	Failure: open store process has stopped.
	The user that wanted to open the store.	Failure: open store process has stopped.

Use case name	#3.7 Purchase history
Actors	RegisteredUser
Pre-conditions	None.
Post-conditions	None.
Input Parameters	RegisteredUserID, specific dates of purchase history
Main success scenario	1. <b>RegisteredUser</b> asks the system his purchase history. 2. <b>TradeSystem</b> displays the user's purchase history.
Alternatives/Extensions	1. <b>RegisteredUser</b> purchase history is empty.
Trigger	RegisteredUser asks to view his own purchase history.

Action	Data	Expected Result
#3.7 AT - Purchase history	Valid user's purchase history	Display Purchase history
	User is a Guest User	Failure: Guest User can't watch is purchase history

#### 4.Store Owner

Use case name	#4.1 Inventory Managing
Actors	Store Owner
Pre-conditions	None.
Post-conditions	Store Storage changes.
Input Parameters	1. StoreOwner
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>StoreOwner</b> Add new product to store.</li> <li>2. <b>StoreOwner</b> Delete exists product from the store.</li> <li>3. <b>StoreOwner</b> Edit product details.</li> </ol>
Alternatives/Extensions	<ol style="list-style-type: none"> <li>1. There are no items to delete.</li> <li>2. The store is empty, no items to edit.</li> </ol>

Action	Data	Expected Result
#4.1 AT - Inventory Managing	Edit an exist item in store  The user is the owner of the store	Item successfully added
	Wrong store id input	Failure: error message
	User is not signed in	Failure: Guest User can't watch is purchase history

Use case name	#4.2 Applying and editing store policies and discounts
Actors	Store Owner
Pre-conditions	None.
Post-conditions	Store policies or store discount changed ,added or deleted.
Input Parameters	1. Policy id 2. Discount id
Main success scenario	1. <b>StoreOwner</b> added new policy 1.1 if new policy is legal 1.1.1 new policy added 2. <b>StoreOwner</b> added new discount 2.1 <b>Storeowner</b> choose between visible,composite or Conditional 2.1.1 if Visible 2.1.1.1 Visible discount added 2.1.2 if Conditional 2.1.2.1 Conditional discount added 2.1.3 if composite 2.1.3.1 choose operator

	2.1.3.1.1 composite discount added
Alternatives/Extensions	<ol style="list-style-type: none"> <li>1. <b>StoreOwner</b> have no permission to edit the policy that his pre-successor added</li> <li>2. <b>StoreOwner</b> have no permission to edit the discount his pre-successor added</li> </ol>

Action	Data	Expected Result
#4.2 Applying and editing store policies and discounts	Apply valid discount	Success: new discount added
	New discount contradicts existing store policy	Failure: new discount was not added
	The store does not exist in the system.	Failure: Appoint store owner process stopped
	The user is a Guest	Failure: Guest user Cannot see this option

Use case name	#4.3 Add new Store Owner.
Actors	StoreOwner
Pre-conditions	The StoreOwner should be StoreOwner in his Store.
Post-conditions	An exist RegistertUser become StoreOwner.

Input Parameters	Store owner, RegisteredUserID of the new StoreOwner.
Main success scenario	1. <b>StoreOwner</b> : enter the user's details. 2. <b>RegisteredUser</b> : become StoreOwner.
Alternatives/Extensions	1.The User is already StoreOwner.
Trigger	StoreOwner asks to change an RegisteredUser to StoreOwner.

Use case name	#4.4 Remove StoreOwner
Actors	StoreOwner
Pre-conditions	A Store must have at least two Storeowners
Post-conditions	A StoreOwner being removed and and all the StoreOwner he appointed
Input Parameters	StoreOwner ID , StoreOwner ID to remove
Main success scenario	1. <b>StoreOwner</b> : enter the user's the StoreOwner to be removed id 1.1 <b>StoreOwner</b> removed the user . the user that was removed , the <b>Storeowner</b> also remove his storeowner was appointed buy the deleted Storeowner
Alternatives/Extensions	1. <b>StoreOwner</b> try to remove other storeowner that was appointed before him. Request rejected
Trigger	StoreOwner wants to remove other storeowner that was appointed by him

Action	Data	Expected Result
#4.4 Remove StoreOwner Happy	StoreOwner id that was appointed by the StoreOwner who requested the action	Success: StoreOwner was removed and all his appointed storeowners
Sad	The StoreOwner try to remove his pre-successor StoreOwner	Failure: No a storeowner was removed
bad	Non valid User details	Failure: provided details must be valid

Use case name	#4.5 Add new StoreManager.
Actors	StoreOwner
Pre-conditions	The user should be StoreOwner in his Store.
Post-conditions	An exist RegisteredUser become StoreManager.
Input Parameters	Store owner and RegisteredUserID of the new StoreManager.
Main success scenario	1. <b>StoreOwner</b> enter the RegisteredUser's details. 2. <b>RegisteredUser</b> become StoreManager.
Alternatives/Extensions	1.The User is already StoreManager
Trigger	StoreOwner asks to change an RegisteredUser to StoreManager.

Action	Data	Expected Result
--------	------	-----------------



#4.5 AT- add new store manager	An existing user in the system that is not already an owner or a manager and an existing store.	Success: The user is now a store's owner.
	The user does not exist in the system.	Failure: Appoint store manager process stopped
	The store does not exist in the system.	Failure: Appoint store manager process stopped
	The user is a Guest	Failure: Guest user Cannot see this option

Use case name	#4.6 Change StoreManager permissions.
Actors	StoreOwner
Pre-conditions	StoreManger exists.
Post-conditions	StoreManager permissions changed.
Input Parameters	StoreManagerId, Store owner, New permissions to add, permissions to delete.
Main success scenario	1. <b>StoreOwner</b> Enter StoreManagerID. 1.1 <b>StoreOwner</b> Adds permissions 1.2 <b>StoreOwner</b> Deletes permissions.
Alternatives/Extensions	1. There is no StoreManager in the store. 1.1 Display Error("No manager found")
Trigger	StoreOwner asks to change the StoreManager permissions.

Action	Data	Expected Result
--------	------	-----------------

#4.6 AT - Add store's permissions to manager.	Store owner and store manager that he appointed a valid permission that is not part of the user's manager permissions	Success: New permissions added to the StoreManager.
	Store owner does not exist	Failure: Add permission to manager process is stopped
	Store manager does not exist.	Failure: Add permission to manager process is stopped
	The user is a Guest user	Failure: Guest user Cannot see this option

Use case name	#4.7 Remove StoreManager
Actors	StoreOwner
Pre-conditions	At least 1 Store manager in the store.
Post-conditions	StoreManager becomes RegisteredUser.
Input Parameters	StoreManagerID, Store owner.
Main success scenario	1. <b>StoreOwner</b> Enter StoreManagerID 1.1 <b>StoreOwner</b> deletes <b>RegisteredUser</b> .
Alternatives/Extensions	1. The StoreManager is not created by this StoreOwner
Trigger	StoreOwner asks to delete a StoreManger from his store.

Action	Data	Expected Result
#4.7 AT - Remove StoreManager	Store owner and Store manager that was appointed by the store owner.	Store manager is no longer one of the managers of the store .
	Store owner does not exist.	Failure: Add permission to manager process is stopped.
	Store manager does not exist.	Failure: Add permission to manager process is stopped
	The user is a Guest user	Failure: Guest user Cannot see this option

Use case name	#4.10 Watch Store purchase history
Actors	StoreOwner
Pre-conditions	None
Post-conditions	None
Input Parameters	None
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>TradeSystem</b>: show a list of all purchase history</li> <li>2. <b>StoreOwner</b>: choose to see all history or part of it.</li> </ol>
Alternatives/Extensions	<ol style="list-style-type: none"> <li>1. <b>StoreOwner</b> have no purchase history.</li> <li>2. <b>StoreOwner</b>: choose specific time to view <ol style="list-style-type: none"> <li>2.1 <b>TradeSystem</b> Display Error("no purchase history")</li> </ol> </li> </ol>

Trigger	StoreOwner asks to view the purchase history in his own store.
---------	--

Action	Data	Expected Result
#4.10 AT - Watch Store purchase history	History of specific exist date	Display the purchase history of the store on the specific date
	History of specific non exists date	Failure: an error message about invalid Specific date to view.

## 5.Store Manager

Use case name	#5.1 Manage Store
Actors	User

Pre-conditions	1. User was appointed in use-case 4.5 2. User was given permission in use-case 4.6
Post-conditions	None
Input Parameters	None
Main success scenario	1. <b>User</b> carries out management action. 2. Store is successfully updated
Alternatives/Extensions	~1. <b>User is</b> not authorized to carry out management action.
Trigger	Appointed User attempts to update store

Action	Data	Expected Result
#5.1 Manage Store	User attempts to carry out management action he is authorized to do	Success: Action is carried out
	User attempts to carry out management action he is not authorized to do	Failure: an error message about attempting unauthorized action..
	User is not a manager	Failure: an error message about attempting unauthorized action..

## 6.Admin

Use case name	#6.4 View Purchase History
Actors	Admin
Pre-conditions	1. User appointed in use-case 1.1

Post-conditions	1. Purchase history is displayed
Input Parameters	StoreID or Username
Main success scenario	1.1 If <b>Admin</b> provides storeID <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: checks if the storeID exists</li> <li>b. <b>TradeSystem</b>: Displays store's purchase history</li> </ul> 1.2 If <b>Admin</b> provides Username <ul style="list-style-type: none"> <li>a. <b>TradeSystem</b>: checks if the Username exists</li> <li>b. <b>TradeSystem</b>: Displays user's purchase history</li> </ul>
Alternatives/Extensions	Purchase history is not displayed ~1.1.a. StoreID not found ~1.2.a. Username not found
Trigger	User looks up purchase history

Action	Data	Expected Result
#6.4 View Purchase History using Username	Valid Username	Display User's purchase history
	Invalid Username	Failure: an error message about invalid Username.
#6.4 View Purchase History using StoreID	Valid StoreID	Display store's purchase history

	Invalid StoreID	Failure: an error message about invalid StoreID.
#6.4 View Purchase History	Null	Failure: an error message about invalud input.

Use case name	#6.5 View System data
Actors	Admin
Pre-conditions	1. User appointed in use-case 1.1
Post-conditions	1. Chart of asked data being displayed
Input Parameters	Start date, end date.

Main success scenario	<b>1. Admin</b> enter start date ,end date. <b>TradeSystem</b> displays the current statistics of the tradesystem to the current chosen days.
Alternatives/Extensions	<b>1. Admin</b> enter invalid dates <b>TradeSystem</b> doesn't display anything
Trigger	<b>Admin</b> want to see <b>TradeSystem</b> statistics.

Action	Data	Expected Result
#6.5 View System data	Valid dates	TradeSystem statistics shown by the dates
sad	Invalid dates	Failure: Stare date and end date must be valid, and date must be larger than stardate
bad	Non-admin user requset	Failure: User must be admin
bad	External system crashed during transaction	Failure: transaction cannot be fulfilled and must be canceled



Use case name	#7 Payment Collection
Actors	PaymentCollection
Pre-conditions	1. Transaction details are valid
Post-conditions	1. Payment processed for exact amount written in transaction details
Input Parameters	Transaction details
Main success scenario	1. <b>PaymentCollection</b> charges user's account 2. <b>PaymentCollection</b> returns confirmation of payment.
Alternatives/Extensions	~1. Payment cannot be processed due to: ~ Transaction details are invalid
Trigger	A Transaction has taken place, need to charge user

Action	Data	Expected Result
#7 Payment Collection happy	Valid Transaction details	Confirmation that package shipment request was received by Shipment
sad	Invalid Transaction details	Failure: an error message about invalid Transaction details.
bad	External system is not connected	Failure: transaction cannot be fulfilled and must be canceled

bad	External system crashed during transaction	Failure: transaction cannot be fulfilled and must be canceled
-----	--	---

Use case name	#8 Package Shipment
Actors	Shipment
Pre-conditions	<ol style="list-style-type: none"> <li>1. Package details are valid</li> <li>2. User details are valid</li> </ol>
Post-conditions	none
Input Parameters	Package details, User details
Main success scenario	<ol style="list-style-type: none"> <li>1. <b>Shipment</b> verifies package and user details.</li> <li>2. <b>Shipment</b> returns confirmation that shipment request has been accepted.</li> </ol>
Alternatives/Extensions	~1.:Shipment process is canceled ~ User's info is incorrect ~ Package details are insufficient
Trigger	A transaction has taken place need to ship package to user

Action	Data	Expected Result
#8 Package Shipment happy	Valid User and Package details	Confirmation that package shipment request was received by Shipment

sad	Invalid User details and valid package details	Failure: an error message about invalid User details.
sad	Valid User details and invalid package details	Failure: an error message about invalid Package details.
bad	External system is not connected	Failure: transaction cannot be fulfilled and must be canceled
bad	External system crashed during transaction	Failure: transaction cannot be fulfilled and must be canceled

Use case name	#10 Real time notifications
Actors	user
Pre-conditions	1.The current situation is according to Use-Case 2.8
Post-conditions	<b>StoreOwner</b> receive notification
Input Parameters	None
Main success scenario	<ol style="list-style-type: none"> <li>1. User makes a purchase <ol style="list-style-type: none"> <li>1.1 purchase being approved buy payment system</li> </ol> </li> <li><b>2. StoreOwner</b> receives notification</li> </ol>
Alternatives/Extensions	<ol style="list-style-type: none"> <li>1. User makes a purchase <ol style="list-style-type: none"> <li>1.1 purchase being declined buy payment system</li> </ol> </li> <li>2. Non real time notification received</li> </ol>

Action	Data	Expected Result
--------	------	-----------------

#10 Real time notifications happy	Valid purchase	Confirmation that purchase was applied in the Store and a notification to the Store owners.
sad	Purchase was rejected buy payment system	Failure no notification got received .
bad	Socket was closed	Failure: Storeowner receive the notification when he will login again.