**System dictionary:**

**Trading system- a system that enables operating a trading network between sellers and buyers. The system consists of a collection of stores.**

**Purchase- the act of buying a product sold by a specific store.**

**Purchase history- A list of all the previous purchases.**

**Trading- purchasing or offering a product for sale.**

**User – An individual operating the system for any reason in order to accomplish a task.**

**Subscribed user- a user that is registered to the system.**

**System manager- a subscribed user whose job is to address buyers and sellers’ requests, maintain fair and legal commerce through the system and ensure proper system operation.**

**Store- contains products that have different properties and identifications.**

**Store inventory- specifies the list of products and their amount available for purchase at the store.**

**Store owner- a subscribed user that opened the store or was appointed as owner by another store owner.**

**Store manager- a subscribed user that has been appointed by a store owner to manage his store. A store manager has specific managing permissions given to him by the store owner.**

**Product- an item or a service that has different attributes and a price.**

**Seller- a subscribed user that offers products for sale in a specific store.**

**Buyer- a subscribed user that purchases a product from a specific store.**

**Visitor- a user that visit the system but isn't registered in it.**

**Discount- an option for the buyer to purchase a product at reduced cost on specific terms specified by one of the store owners.**

**Shopping bag- a list of products selected by a specific buyer in a specific store.**

**Shopping cart- a list of products selected by a specific buyer from all the stores.**

**Use case: Register the system as a guest (2.2)**

Actor: User

Preconditions: The user isn't already registered.

Parameters: Username, password.

Actions:

1. System presents the visitor’s home page while "Register" and "Login" options are presented at the top.
2. The user selects "Register", the system presents a page with text boxes for username and password with the options "Register" and "Login" presented.
3. The user enters username and password and then selects "Register".
4. System checks if the username and password are valid.
5. If valid:
   1. The system registers the user.
   2. The system presents the same page when the text boxes for username and password are empty.
6. If not valid:
   1. A pop up appears with the message "username or password invalid".

**Use case: Login to the system (2.3)**

Actor: User

Preconditions: The user isn't already logged in.

Parameters: Username, password.

Actions:

1. System presents the visitor’s home page while "Register" and "Login" options are presented at the top.
2. The user selects "Login", the system presents a page with text boxes for username and password with options "Register" and "Login" presented.
3. The user enters username and password and then selects "Login".
4. System checks if the user is registered.
5. If registered:
   1. The user is logged in to the system.
   2. The system presents the user's home page.
6. If not registered:
   1. A pop up appears with the message "user doesn't exist in the system".

**Use case: Search items and add them to shopping cart (2.5, 2.6)**

Actor: User

Preconditions: none

Parameter: product name/ product category/ description key words

Actions:

1. The system presents registered users home page with a part dedicated for searching items. Includes text boxes for product name, product category and description key words.
2. The user enters one of the above.
3. The user enters a product name.
4. The system presents a list of all the relevant items and info about them (price, the store that sells them etc.).
5. At the top of the list appear text boxes for filtering the items according to price rates, product rating, category, store rating etc. with "Filter" button next to it.
6. The user chooses to filter the items according to price rates.
7. The user chooses an item from the list and add it to his shopping cart.

**Use case: View and edit shopping cart (2.7)**

Actor: User

Preconditions: none

Parameters: none

Actions:

1. The user press shopping cart icon that appears at the top of each page.
2. Page of the current shopping cart of the user appears with options to edit each item in the list.
3. The user removes one item from the list.

**Use case: View store info and buy products (2.4, 2.8)**

Actor: User

Preconditions: none

Parameters: store, product

Actions:

1. The system presents a page for searching items with text boxes for product name, product category and description key words.
2. The user enters a product name.
3. The system presents a list of all the relevant items and info about them (price, the store that sells them etc.).
4. The user klicks on one of the items in the list.
5. The user enters the store who sells the item and view its info and rating.
6. The store presents a "Buy 1 get 1 free" discount.
7. The user press "Add item to bag".
8. The system checks if the product is available according to the store inventory.
9. If 2 items of the requested product are available:
   1. The system adds the items to the client's shopping bag.
10. If at least one of the items is unavailable:
    1. The system presents a message to the client accordingly- "One of the items is missing".

**Use case: Viewing purchasing history, opening a new store and logging out of the system (3.1, 3.2, 3.7)**

Actor: Subscribed user

Preconditions: The user is already logged in to the system.

Parameters: store information

Actions:

1. The system presents the registered user’s home page with a part dedicated for viewing purchase history.
2. The user views his purchase history.
3. The system presents the subscribed user’s home page with a part dedicated for opening a new store, includes text boxes for store information.
4. The user enters his new store name and description.
5. The system checks if a store with the same name already exists in the database.
6. If doesn't exist:
   1. The system creates the new store and adds it to the database.
   2. The system adds the new store to the user's list of owned stores.
7. If exist:
   1. The systems present an error message "The name of the store you want to add already exists".
8. The user presses the "Log out" button that appears at the top of each page.
9. The system logs the user out.

**Use case: Manage store supply and view store purchasing history (4.1, 4.10, 5.1)**

Actor: Subscribed user

Preconditions: The user is already logged in to the system and has permission to edit supply.

Parameters: product to add to the inventory

Actions:

1. The system presents the subscribed user’s home page with a part dedicated for relevant stores.
2. The user chooses a store he where he has inventory editing permissions.
3. A pop up appears with five options: "View purchasing history", "Edit inventory", "Add manager", "Update manager permissions" and "Add owner".
4. The user chooses "View purchasing history" and views the store purchasing history.
5. The user returns to the former window.
6. The user chooses "Edit inventory".
7. The user adds the product to the store inventory.

**Use case: Add store owner and store manager (4.3, 4.5)**

Actor: Subscribed user

Preconditions: The user is already logged in to the system and owns a store.

Parameters: A user that will be the store owner and a user that will be the store manager.

Actions:

1. The system presents the subscribed user’s home page with a part dedicated for relevant stores.
2. The user chooses a store he owns.
3. A pop up appears with five options: "View purchasing history", "Edit inventory", "Add manager", "Update manager permissions" and "Add owner".
4. The user chooses "Add manager".
5. The user enters the details of the user he wants to make the manager.
6. The user returns to the former window.
7. The user chooses "Add owner".
8. The user enters the details of the user he wants to make the owner.

**Use case: Update store manager permissions and remove store manager (4.6, 4.7)**

Actor: Subscribed user

Preconditions: The user is already logged in to the system and is a store owner.

Parameters: A store manager previously appointed by the user and permissions the manager already has.

Actions:

1. The system presents the subscribed user’s home page with a part dedicated for relevant stores.
2. The user chooses a store he owns.
3. A pop up appears with five options: "View purchasing history", "Edit inventory", "Add manager", “Update manager permissions” and "Add owner".
4. The user chooses “Update manager permissions”.
5. The user chooses the manager from the list of all the managers appointed by him.
6. The user removes the permissions he wishes to block from the manager.
7. The user removes the manager from being a store manager.

**Use case: System manager views purchasing history (6.4)**

Actor: Subscribed user

Preconditions: The user is already logged in to the system.

Parameters: none

Actions:

1. The system presents the system manager’s home page with a part dedicated for purchasing history.
2. The system manager views the purchasing history.