GUI Requirements:

1. INTREDUCTION

Users shall be defined by 4 types:

- Guest visit the website and can purchase products.
- Subscribed Can perform various actions such as: purchase products, open new store, view his purchase history and more.
- Store owner is a subscribed user (can perform all the subscribed user actions) and also have multiple actions regarding to the store he owns such as: manage store's inventory, appoint new owners/managers, add discounts and more.
- Store manager is also a subscribed user and can perform actions on the store he manages according to what is set by the store owner who appointed him.

2. USER INTERFACE DISPLAY REQUIREMENTS

This section describes required icons and the required functionality of the icons:

- Links to other areas of the system should be prominent by their emphasis and appearance as click button.
- When we display a success message a popup will be displayed to the
 user. The popup will display the successful action message in
 prominently colors and will use an animation to illustrate the
 success. We will make sure the user saw the message by forcing him
 to close the window by pressing a button.
- When we display an error a popup error will be displayed to the user.
 The popup will display the error message in prominently colors and
 will use an animation to illustrate the error. We will make sure the
 user saw the message by forcing him to close the window by pressing
 a button.
- When we display a notification to the user we will use a popup that will display the notification message a prominently way. We will make sure the user saw the message by forcing him to close the window by pressing a button.

- In order to remove a product from a shopping cart or from the store's inventory we will use a button that will be represented with an (x) symbol in order to connect to the user's emotional model.
- When we show the user a large number of items (such as products in the shopping cart or purchases from purchase history), we do this with a clear separation between items in a convenient way. In addition, we will add an inner scroll bar to be able to easily navigate through the items.

3. USER INTERFACE FUNCTIONAL REQUIREMENTS

This section describes required functionality in each window:

- The following action will be accessible in each window before signing in:
 - a. Home page.
 - b. Shopping cart page.
 - c. Login/Register page.
- The following actions will also be accessible in each window after signing in:
 - a. Home page.
 - b. Shopping Cart page.
 - c. Logout.
 - d. Purchase History page.
 - e. Manage Stores page.

3.1. HOME PAGE

- The main functionality in the home page is to search and filter products in the trading system.
- The user can search for different products according to their name, category and key words. The options of name and key word will be displayed to the user using fields the user can fill. The role of each field will be represented by the default. The category option will be displayed using a combo box.
- The user can filter the shown products by min price, max price or their category. The category will be shown using combo box and the

prices will be filled and can be decreased and increased using arrows buttons (notice the price can't be negative).

3.2. LOGIN/REGISTER PAGE

- In this page the user can register to the trading system in order to become a subscribed user and can also login to the system if he is already a subscribed user.
- The fields that need to filled are user name and password. The buttons of register and log in will be colored in a prominently colors and the role of the fields will be represented by the default value.
- In order to log in as an admin, the system will represent a check box with the headline "Admin Mode".

3.3. SHOPPING CART PAGE

- In this page the user can view the products in his cart, edit and purchase the cart. The user can navigate throw the products using a scroll bar.
- The total price of the cart will be represented to the user in a bold way. The options to edit the cart and purchase it will be shown using two prominent color buttons.
- By pressing the edit button a popup will pop and the user will be able to edit his shopping cart by filling the relevant fields.

3.4. MANAGE STORE PAGE

 This page will be identical to the regular home page except 2 options that will be accessible to the user- Manage Stores and Purchase History.

3.5. MANAGE STORE PAGE

- In this page the user can view the store he owns/manage, perform the actions he is allow to do and open new stores.
- The store will be displayed in neat and separate manner so that the
 user will know for his role in each store. For each store the allowed
 actions will be shown using a combo box. By pressing each action, a
 popup will be shown and the user will fill the relevant fields.

 In order to open a new store, the user will need to press a bold and colored button and a popup with the relevant fields will be shown to him.

3.6. ADMIN PAGE

- In this page the admin can perform the related actions: adding another admin and view customer and store purchase history.
- Each option will show an explanation of the action. and will be accessible by pressing a button and filling the relevant fields in a popup.

3.7. PURCHASE HISTORY PAGE

• In this page the purchase history of the user will be displayed. The purchases will be displayed in a neat and organized way, showing the relevant information.

3.7. ADD DISCOUNT HISTORY PAGE

- In this page the store owner/manager can add a new discount to his store.
- There are different types and subtypes of discount. The page will
 display the type/subtypes buttons in a bold color. For each choice
 only the relevant fields will be displayed and the user will have to fill
 them and add the discount by pressing another button.

3.8. ADD DISCOUNT POLICY HISTORY PAGE

- In this page the store owner/manager can add a new discount policy to his store.
- There are different 2 types of discount policy. The page will display
 the types buttons in a bold color. For each choice only the relevant
 fields will be displayed and the options for the value of each one will
 be displayed using a combo box. After selecting each field value, the
 user will add the new discount policy by pressing another bold
 colored button.