

4.1:

Each user can login with their username and password. New user can create an account with information. If there already exist this User Name, it will give a warning.

4.2:

In user profile page, each user can modify their information, like user name, password, email address(security method) and their address. Customer can view and modify their preference store. Each user can delete their account.

4.3:

Manager can't create their account by themselves (Only Administrator can create manager account) and they can add, remove and update the saleList and items from the store they are assigned. If manager didn't assigned yet, it will show a warning on page and tell this manager to connect their administrator. Administrator can do anything that manager can do. Administrator can add and remove store and modify the store information. Administrator, manager and customer can all see the map of the store. The store map here, I assume each store is 50 * 50 matrix and get each item coordinate and category. It can show the store map with these coordinate. Administrator and manager can modify the store map with change the item's category and coordinate. The manager who was removed by administrator has no access to manage store and login the account because it already deleted.

4.4:

Customer can view all store address, open time and close time. Customer can change save the preference store. After customer select a store, customer can view all items informations in this store and search items by any key word (item name or category). Customer will get the previous shopping list that they login last time. Customer has one shopping list for each store. After they log out, these shopping list will be saved.

4.5:

The assumption here is use the items' coordinate on the store map to give the best order to customer.