**Software Features**

1. **Updating stocks**

**Description and priority**

The users will be able to record the stocks that are outgoing or incoming easily. This feature is of high priority as it’s important to know the number of stocks that are currently in store.

**Stimulus/Response sequences**

After logging in, the user will be capable of updating the stock through the use of updateStock() function in ListOfStock.

**Functional requirements**

Req – 1: To be able to record stocks only after successful login.

Req – 2: Error messages should be shown if negative numbers are inputted.

1. **Stocks tracking**

**Description and priority**

Managers will be able to track the stocks by their category and/or sub category. Medium priority as it is not as important as other functions.

**Stimulus/Response sequences**

Upon tracking, the list of stocks will be shown to the user.

**Functional requirements**

Req - 1 : Correct information should be shown upon request.

1. **Sorting**

**Description and priority**

Users can search for either specific stocks in their respective categories or display a list of stocks according to their price range as well as the quantity in either ascending or descending order. Medium/low priority as it only gives readability and does not provide anything substantial.

**Stimulus/Response sequences**

ListOfStock class is accessed through ApplicationController, and you are able to sort according to descending or ascending through the aptly named sortInDescending and sortInAscending functions.

**Functional requirements**

Req – 1 : Sorting functions must be done correctly, checking the second letter if the first letters matches, and so on.

1. **Summary report**

**Description and priority**

There will be a summary report daily, weekly or monthly that will show the total incoming and outgoing stock details. Low priority as it simply makes it easier for the user, but it is of low importance.

**Stimulus/Response sequences**

Summary reports are accessed through the ApplicationControllers’ stockSummaryReport function.

**Functional requirements**

Req – 1 : Total profits, stocks sold, stocks remaining and so on should be correctly displayed upon the functions’ activation.

1. **Login**

**Description and priority**

There will be a login feature where you are able to encrypt your data if you desire. Furthermore, if there are three consecutive unsuccessful login attempts, the record will be marked as locked and the user will be barred from logging into the system. This is of high priority as login is important to ensure that only the authorized personnel are able to enter the system.

**Stimulus/Response sequences**

The user is first presented with a login screen. Upon a successful login by typing in the correct username and password through User class, loginStatus variable in User class will be changed and the user will be allowed to access the program. If the user fails to enter the correct login information three times, the account will be locked through the use of lockUserAcc variable in ApplicationController.

**Functional requirements**

Req – 1 : Access should be denied if the username or password is inputted incorrectly.

Req – 2 : User should be barred from retrying after failing three times in a row.

Req – 3 : Users should NOT be allowed entry upon the input of an invalid username or password.

1. **Alerts**

**Description and priority**

Whenever the quantity of a stock drops below a preset number, the system will send out a warning to the user. Medium priority because if it isn’t working, you are still able to manually check the quantity of the stocks.

**Stimulus/Response sequences**

When a stock is sold, the remaining quantity is checked against the specified preset warning number. If it is lower or equal to it, a warning will be sent.

**Functional requirements**

Req – 1 : Warning should only be sent if it is lower or equal to the preset number.

Req – 2 : Nothing should be done if the current quantity is higher than the number.