

LAB 1 - SC2006

- **Website or App:** Interactive Website
- **What website/app?** Stock Market with Yahoo finance as the database
- **Target Users:**

The stakeholders for this website is mainly users who want to monitor the stock market. Information of the stock prices will be collected through the assistance of YH finance api. Users will be able to search for their stock of interests, save them for easier monitoring. The app strives to bring a smooth and pleasant experience to users using the website.

- **Functional and Non Functional Requirements:**

Functional requirements

1. Login page

- 1.1 The user must be able to login using their email and password
- 1.2 The system must be able to validate that both fields have been filled out
- 1.3 The system must be able to validate that the email and password are correct.
- 1.4 If any of the particulars are wrong, the system will display an error message.
- 1.5 Upon correct verification, the system will direct the user to the main page.
- 1.6 The system must be able to allow users to register an account

2. Main page

- 2.1 The system must be able to display the most active stocks.
- 2.2 The user must be able to see the names and graph of the stock.
- 2.3 The system must allow the user to search for stocks based on filters.
 - 2.3.1 Filters include
 - 2.3.1.1 Type of stock

2.3.1.2 Top gains

2.3.1.3 Top losses

2.4 The system must direct the user to the search page upon using the search bar.

3. Search page

3.1 The system must be able to give search results based on search bar.

3.2 The system must be able to provide a detailed graph and information upon clicking on the desired stock.

3.2.1 Information such as date range selection.

3.2.2 Information such as highs and lows during a particular time.

3.3 The user must be able to bookmark the stocks they are looking out for.

4. Bookmarks page

4.1 The user must be able to see the stock they have saved.

5. Profile page

5.1 System must allow user to change password.

5.1.1 System must verify password based on old password

6. The system must allow the user to be able to log out.

Non Functional requirements

1. Usability

1.1 System should provide feedback

1.1.1 System should provide notifications when there are invalid inputs detected

1.1.2 System should provide notifications when certain process fails.

1.2 System must be consistent

1.2.1 System layout and design should be similar for all pages

1.2.2 Similar actions should have similar functions

1.3 System actions should not be difficult

1.3.1 Bookmark page should be able to remove easily

1.4 There should be a FAQ page that contains answers to some questions that users might need help with.

2. Performance

2.1 System should not crash

2.2 System should behave as the user expect

3. Security requirement

3.1 User password requirements

3.1.1 Password should be at least 8 characters long

3.1.2 Password should contain 1 special character

3.1.3 Password should contain 1 uppercase

3.1.4 Password should contain 1 number

3.2 System should have a sort of password protection such as hashing

4. Extendability

4.1 System should support future enhancements and extensions.

- Verifiable Statements

1. The user must be able to login into the system with correct username and password.

2. Depending on the filters that is being applied the system must display the information about stocks.

3. The system must give search results when the required information is on the search bar.

4. A graph and detailed description of the desired stock must be given only when the desired stock is chosen.

5. System must verify the password based on the old password and then allows the user to change password.

- **Traceability Statements**

1. The user must be able to login using their email and password.

1.1 If there is an incorrect password or email address, the system prompts the user to re enter.

2. The system must allow the user to track the active stocks using the three filters: Type of Stock, Top gain and Top losses.

3. The system must give details on the search results depending on the search bar.

4. The user must be able to see the stock they saved.

5. System must allow user to change password.

5.1 System must verify password from old password

6. The user must be able to view frequently asked questions to get solutions to frequently encountered problems.

- **DATA DICTIONARY** - The important terms of your application:

1. User:

- Definition: An individual who interacts with the system.

- Usage: Refers to individuals who have registered and use the application.

2. Email:

- Definition: A unique identifier for each user, used for login and communication.

- Usage: Required for user login and authentication.

3. Password:

- Definition: A secret alphanumeric code associated with a user's account for secure access.

- Usage: Required for user login and can be changed in the profile page.

4. Login Page:

- Definition: The initial screen where users provide their credentials to access the system.
- Usage: Users input email and password for authentication.

5. Validation:

- Definition: The process of checking if the entered data (email and password) meets the required criteria.
- Usage: Ensures that both fields are filled out and verifies the correctness of the email and password.

6. Error Message:

- Definition: A notification displayed to the user when there is an issue during login.
- Usage: Appears when login credentials are incorrect or incomplete.

7. Main Page:

- Definition: The central interface after successful login, displaying key information and functionalities.
- Usage: Shows active stocks, names, and graphs; provides access to stock search.

8. Stock:

- Definition: A financial instrument representing ownership in a company.
- Usage: Displayed on the main page and can be searched for using filters.

9. Search Page:

- Definition: A page where users can search for specific stocks using filters or a search bar.

- Usage: Shows search results, detailed graphs, and information about selected stocks.

10. Login Page

- Definition: A page where users can refer to frequently asked questions if required.
 - Usage: Shows frequently asked questions and address common user queries, enhancing user experience by providing quick solutions to frequently encountered issues.

11. Notification:

- Definition: A message that informs the user about a specific event or status.
- Usage: Notifies users about search results, errors, or other relevant information.

12. Bookmark:

- Definition: A feature allowing users to save and track specific stocks of interest.
- Usage: Users can save and later view their bookmarked stocks on the bookmarks page.

13. Bookmarks Page:

- Definition: A page displaying a list of stocks that the user has saved or bookmarked.
- Usage: Users can easily access and manage their saved stocks.

14. Profile Page:

- Definition: A section where users can view and manage their account settings.
- Usage: Allows users to change their password and access other profile-related functionalities.

1.5 Device:

- Definition: The hardware (e.g., computer, smartphone, tablet) used to interact with the application.
- Usage: Users access the application through various devices.

16. Input:

- Definition: Data provided by the user to the system.
- Usage: Includes email, password, search queries, and other information entered by the user.

17. Output:

- Definition: Information provided by the system in response to user actions.
- Usage: Includes displayed stock information, search results, error messages, etc.

USE CASE AND UI PROTOTYPE

<https://www.canva.com/design/DAF7wSpl9mE/o2ejUgtcAJWNbT7-gzg7Lw/edit>