## 3.1 External Interface Requirements

### 3.1.1 User Interfaces

The first screen the user will see will be a login screen. This will have a box for inputting their username and password for our service. There will also be a link for the user to create an account with us which will lead to our next page.

The second screen will be for creating an account. All this page will do is ask the user to create a user name for our website and password. After submitting this information, the user will be directed back to the first screen to log in.

The third page will be the home page for the user. It will show them all the accounts and passwords they have created previosly, or will be blank if they are a new user. From this page, the user will be able to delete previously saved accounts or will use the new password link to save a new username and generate a password.

Clicking the new password button will send the user to the fourth page. This page will ask for the users username for whatever account they are trying to generate a password for. They will also use a drop box to confirm what site they are generating a password for. After clicking submit, the user will be brought back to the home page where their new account and generated password will be listed with the others,

Finally, if the user selects custom from the drop box on the generate password page, they will be lead to our fifth and final page. This page will ask questions about what is expected from the website in regards to password expectations. This will allow the website to generate a password for the user that meets the requirements of the site.

### 3.1.2 Hardware Interfaces

The hardware interfaces this program will use will be the users computer and the server that both communicates to the user and stores the database of users and passwords.

### 3.1.3 Software Interfaces

This program will be able to run on all OS that can run Google Chrome. JavaScrips must also be allowed so that the logic of the program can be implimented.

### 3.1.4 Communications Interfaces

This site will be ran through a web browser (Google Chrome.) Due to the sensitive imformation begin recorded, the comunication standard that will be implemented with be HTTPS. The data will need to be encrypted to protect the users information and that will be done through MongoDb.

## 3.2 Functional Requirements

1. Access database to confirm the username and password of a user who is already in the database.

2. Write to the database for both new users and new account information that is provided by an existing user.

3. Generate a password through a pre-existing algorithym

4. Generate a password with the specifications taken from the user

5. Connect graphical interfaces in flow designated in 3.1.1.

## 3.3 Behaviour Requirements

### 3.3.1 Use Case View

## 4.1 Performance Requirements

1. Generating a password should not take more than 10 seconds.

2. All transitions between pages should take less than 5 seconds.

3. All operations should be ran at under 10 seconds and if they are not, users internect connection should be tested.