1: Log into website.

|  |  |
| --- | --- |
| Use Case Name | Log into website. |
| Participating Actors | Users. |
| Goal | Obtain logged in status on website on registered account. |
| Trigger | User desires to be logged into website. |
| Precondition | User is not logged into the website. |
| Postcondition | User is logged into the website. |

## Basic Flow:

|  |  |
| --- | --- |
| 1 | Website Prompts for username and password entry. |
| 2 | User enters in their username and password. |
| 3 | User submits username + password. |
| 4 | System creates a new user with the given username + password. |
| 5 | User is logged into the website as the account they just registered. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | Username is already in use |
| 2.1 | System displays a notification to the user informing them that the username is already taken. |
| 2.2 | System returns to step 1. |
| 3 | Special Character Filtration (Such as various ASCII symbols) |
| 3.1 | System displays a notification to the user stating that special characters are not allowed. |
| 3.2 | System returns to step 1. |
| 3 | Explicative Filtration. |
| 3.1 | System displays a notification to the user stating that a explicative word is not allowed. |
| 3.2 | System returns to step 1. |

## Tests:

|  |  |
| --- | --- |
| 1 | Upon arriving at the login screen, confirm that the prompt is displayed. |
| 2 | Test that the user can input text in (1) username field (2) password field. |
| 3 | Test that the user can successfully submit their username and password to the System. |
| 4 | Test that the database (1) makes a new user (2) that the new user has the username/password combo that the User submitted (3) that this account CAN be accessed with the username/password combo tied to it. |
| 5 | Test that the User is automatically logged into their account after this process. |

2: Register for website.

|  |  |
| --- | --- |
| Use Case Name | Register for website. |
| Participating Actors | Users. |
| Goal | Obtain a new personal account for this particular user. |
| Trigger | User wants to be able to log in and have an account on the website. |
| Precondition | User does not have an account. (Or desires a new one.) |
| Postcondition | User creates a brand new account with given credentials on the website. |

## Flow:

|  |  |
| --- | --- |
| 1 | System Prompts for username and password entry. |
| 2 | User supplies the username and password. |
| 3 | User confirms submission. |
| 4 | System logs in the User with the credentials provided. |

## Exceptions:

|  |  |
| --- | --- |
| 3 | Incorrect username / password combination. |
| 3.1 | System displays a notification to the user stating that they entered incorrect username/pass. |
| 3.2 | System returns to step 1. |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the System displays the prompt for username/password entry. |
| 2 | Test that the User can input their username and password. |
| 3 | Test that the User can submit their entered username and password combo to the System. |
| 4 | Test that the System successfully logs in the user with the supplied credentials. |

3: Look up Privacy Information.

|  |  |
| --- | --- |
| Use Case Name | Look up Privacy Information. |
| Participating Actors | Users. |
| Goal | Discover privacy information about the website. |
| Trigger | User desires to know about privacy on the website. |
| Precondition | User doesn’t (or they might) know privacy on this website. |
| Postcondition | User reads and is informed of the privacy measures on the website. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates to the part of the page regarding privacy information |
| 2 | User clicks the button dealing with privacy information. |
| 3 | System takes the User to the Website Page regarding Privacy Information. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | User is not connected to the internet. |
| 2.1 | System displays a notification that the User is not connected to the internet. |
| 2.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User actually has a method to navigate to the Privacy Info Page. |
| 2 | Test that the link to navigate to the Privacy Info Page actually successfully works. |
| 3 | Test that the assumption that the User arrives on the Privacy Info Page is accurate. |
|  | Exception Testing |
| 2.1 | Test that when a User has no internet that a notification is displayed if they attempt to navigate. |
| 2.2 | Test that when they are notified (as above) that their page doesn’t just vanish or cause an error. |

4: Look up Terms of Use Information.

|  |  |
| --- | --- |
| Use Case Name | Look up Terms of Use Information. |
| Participating Actors | Users. |
| Goal | Discover Terms of Use Information for the website. |
| Trigger | User desires to know about the Terms of Use for this website. |
| Precondition | User doesn’t (they might though) know the TOU of the website. |
| Postcondition | User reads and is informed of the TOU of the website. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates to the part of the page regarding Terms of Use information. |
| 2 | User clicks the button dealing with Terms of Use information. |
| 3 | System takes the User to the Website Page regarding Terms of Use Information. |

## Exception:

|  |  |
| --- | --- |
| 2 | User is not connected to the internet. |
| 2.1 | System displays a notification that the User is not connected to the internet. |
| 2.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User actually has a method to navigate to the Privacy Info Page. |
| 2 | Test that the link to navigate to the Privacy Info Page actually successfully works. |
| 3 | Test that the assumption that the User arrives on the Privacy Info Page is accurate. |
|  | Exception Testing |
| 2.1 | Test that when a User has no internet that a notification is displayed if they attempt to navigate. |
| 2.2 | Test that when they are notified (as above) that their page doesn’t just vanish or cause an error. |

5: Get in Contact with the Webpage Admins/ Contact Information.

|  |  |
| --- | --- |
| Use Case Name | Get in Contact With the Webpage Admins/ Contact Information. |
| Participating Actors | Users. |
| Goal | Obtain Contact Information. |
| Trigger | User desires to get contact information (for whatever reason). |
| Precondition | User doesn’t know contact information. |
| Postcondition | User knows contact information. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates to the part of the page regarding Contact Information. |
| 2 | User clicks the button dealing with Contact Information. |
| 3 | System takes the User to the Website Page regarding Contact Information. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | User is not connected to the internet. |
| 2.1 | System displays a notification that the User is not connected to the internet. |
| 2.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test to see if the user is given a method to navigate to the page of Contact Information. |
| 2 | Test that the method to navigate to the Contact Information page is functional. |
| 3 | Test to see, that upon click, that the User is successfully taken to Contact Information webpage. |

6: Visualization.

|  |  |
| --- | --- |
| Use Case Name | Visualization. |
| Participating Actors | Users. |
| Goal | Display a fantastic visual representation of the database data. |
| Trigger | User desires to see a visual representation of the website’s data. |
| Precondition | The user doesn’t see a visual representation of the data. |
| Postcondition | The user now sees a visual representation of the data. |

## Flow:

|  |  |
| --- | --- |
| 1 | User clicks to the visualization page. |
| 2 | System displays the visualization page and all search options. |

## Exception:

|  |  |
| --- | --- |
| 2 | User is not connected to the internet. |
| 2.1 | System displays a notification that the User is not connected to the internet. |
| 2.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test to see that there is an option to go to Visualize the data. |
| 2 | Test if the method can be interacted with by the User. |
| 3 | Test if the User is taken to the Visualization page. |
| 4 | Test if the Visualizations and search options are displayed. |

7: Search (Advanced Search).

|  |  |
| --- | --- |
| Use Case Name | Search (Advanced Search). |
| Participating Actors | Users. |
| Goal | To search for a particular field on the website and obtain results of said search. |
| Trigger | User wants to find someone/something/a research topic/etc. |
| Precondition | User not being able to see a particular set of data on a search. |
| Postcondition | User is presented with the data of the search. |

## Flow:

|  |  |
| --- | --- |
| 1 | User clicks on the System button to navigate to the Search Page. |
| 2 | User selects the search field that they desire to search in. |
| 3 | The User types in what they want to search for into the box and initiates the search. |
| 4 | The System takes in the supplied entry and then searches the database for related results. |
| 5 | The System presents the results from the query to the User. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | User selects wrong search field |
| 2.1 | The search will run as normally, but is very unlikely to return the desired results. |
| 2.2 | Do not flag the user, continue as if nothing was wrong. |
| 4 | The field desired to be searched for does not exist. |
| 4.1 | Proceed to the same final search page (step 5) however (refer to 4.2): |
| 4.2 | System displays a notification displaying to the User their search query had no results. |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User has a method to navigate to the page. |
| 2 | Test that the User can select search fields. |
| 3 | Test that the User can type input data into the search tool. |
| 4 | Test that the User can begin a search with the query they chose. |
| 5 | Test that the System searches the database for the related results. |
| 6 | Extensively Test that the database returns accurate results to the User’s queries. |
| 7 | Test that the System presents the accurate results to the User. |
| 8 | Test that if the query has no results the User is informed of it. |
| 9 | Test that incorrect field and query information can still work and proceeds as if normal. |

8: Profile Information.

|  |  |
| --- | --- |
| Use Case Name | Profile Information. |
| Participating Actors | Users. |
| Goal | To obtain information of a particular user’s profile, and thus their info. |
| Trigger | User desires to learn more about a particular other User. |
| Precondition | User is unaware of the information of the other User. |
| Postcondition | User is now displayed the information of the other User. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates through the webpage and clicks on a particular User’s profile link. |
| 2 | The System presents the User with the Profile of the other User. |
| 3 | The User is now on the other User’s webpage. |

## Exception:

|  |  |
| --- | --- |
| 2 | User is not connected to the internet. |
| 2.1 | System displays a notification that the User is not connected to the internet. |
| 2.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that there is a method for Users to select to view the Profile Information of another User. |
| 2 | Test that the method is something a User can successfully interact with. (Is it functional?) |
| 3 | Test that upon utilizing the method, that the User is successfully taken to the Profile Information. |
| 4 | Test that the Profile the User is on is the correct Profile. |
| 5 | Test that if the User is not connected to the internet that they are notified of it. |
| 6 | Test that if the User is not connected to the internet they remain on the same page (No 404, etc) |

9: View a Specific Paper.

|  |  |
| --- | --- |
| Use Case Name | View a Specific Paper. |
| Participating Actors | Users. |
| Goal | User can view a specific Paper. |
| Trigger | User desires to view a specific Paper. |
| Precondition | User does not have a specific Paper of interest. |
| Postcondition | User now obtains the information on a specific Paper of interest. |

### Flow:

|  |  |
| --- | --- |
| 1 | User navigates webpage and locates a specific Paper of interest. |
| 2 | User clicks the Paper of interest. |
| 3 | System provides the User with the Paper of interest. |

#### Exceptions:

|  |  |
| --- | --- |
| 3 | User is not connected to the internet. |
| 3.1 | System displays a notification that the User is not connected to the internet. |
| 3.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User has a method to navigate to the Paper of Interest. |
| 2 | Test that the method to examine the Paper is functional. |
| 3 | Test that upon interaction with the method, the User is taken to the Paper. |
| 4 | Test that the Paper taken to is the proper paper. |
| 5 | Test that the Paper was fully loaded with no errors. |
| 6 | Test if the User is not connected to the internet that they are notified of it. |
| 7 | Test that if the User is not connected to the internet that they are left on the same page. |

10: View a specific Lab.

|  |  |
| --- | --- |
| Use Case Name | View a specific Lab. |
| Participating Actors | Users. |
| Goal | User can view details of a specific Lab. |
| Trigger | User desires to view information on a specific Lab. |
| Precondition | User does not have information on a specific Lab. |
| Postcondition | User obtains information on a specific Lab. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates webpage to a specific lab of interest. |
| 2 | User clicks on a link to the lab of interest. |
| 3 | The System transfers the User to the page of the lab of interest. |

## Exceptions:

|  |  |
| --- | --- |
| 3 | User is not connected to the internet. |
| 3.1 | System displays a notification that the User is not connected to the internet. |
| 3.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User has a method to view a specific Lab’s page. |
| 2 | Test that the method is functional. |
| 3 | Test that the User is successfully taken to the Lab’s page. |
| 4 | Test that the Lab Page that the User arrives to is the correct Lab Page. |
| 5 | Test that if the User is not connected to the internet that they are notified of it. |
| 6 | Test that if the User is not connected to the Internet that they are left on the same page. |

11: Edit information

|  |  |
| --- | --- |
| Use Case Name | Edit Information. |
| Participating Actors | Users. |
| Goal | User chooses to edit information. |
| Trigger | User desires to edit information. |
| Precondition | The user knows what information they would like to edit. |
| Postcondition | The information is edited on the website. |

## Flow:

|  |  |
| --- | --- |
| 1 | User locates piece of data that they wish to modify on the page. |
| 2 | User clicks the edit button. |
| 3 | System displays methods to edit the data on the page. |
| 4 | User decides what edits that they wish to make to the page and types them in. |
| 5 | User confirms that they want these changes made to the page. |
| 6 | System creates a new save object of the edited data and stores it for later rollbacks. |
| 7 | System displays the new edited data to the User. |

## Exceptions:

|  |  |
| --- | --- |
| 5 | User loses internet connection when attempting to confirm their edits. |
| 5.1 | System displays notification to the user stating that they have lost internet connection. |
| 5.2 | System will remain on the same edit page with the text stored in it until the user resubmits |
| 5.3 | User may alternatively leave the page and then the System will discard their typed in edits. |
| 6 | No database storage space left. |
| 6.1 | System will notify administrator of the issue. |
| 6.2 | System will display notification of the error to the user, stating inability to make edit. |
| 6.3 | No edit will be done to the data on the page, as if nothing ever happened. |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that data is present on the page, as is the edit button. |
| 2 | Test that the edit button is functional. |
| 3 | Test that the page presents to the User the ways to edit the data on the page. |
| 4 | Test that the User can successfully confirm the way they wish to edit the page’s information. |
| 5 | Test that the User has a method to input the data modifications |
| 6 | Test that the User has a method to confirm their modifications, and that this commits them. |
| 7 | Test that when the User confirms their commit that the System accepts the modifications. |
| 8 | Test that the System accepts the changes that the System creates a new save object of data. |
| 9 | Test that the System successfully maintains this new save object of data in the database. |
| 10 | (Somewhat related.) Test that the data can be rolled back to this new saved data. |

12: Import Information.

|  |  |
| --- | --- |
| Use Case Name | Import Information. |
| Participating Actors | Users. |
| Goal | User chooses to import information. |
| Trigger | The user chooses to import information. |
| Precondition | The user knows what information they would like to import. |
| Postcondition | The information is imported onto the System. |

## Flow:

|  |  |
| --- | --- |
| 1 | User navigates to page where they can import information. |
| 2 | User selects the import button. |
| 3 | System presents the various ways to import data. |
| 4 | User selects a way to import data into the System. |
| 5 | System imports the data into it’s own database. |
| 6 | System displays the imported database onto the webpage. |

## Exceptions:

|  |  |
| --- | --- |
| 3 | System does not have the desired method to import the data. |
| 3.1 | The option to select the method is greyed out. |
| 4 | There is no internet connection. |
| 4.1 | System displays a notification to the User where they have no internet connection. |
| 4.2 | Nothing is imported. |
| 4 | Desired data to import does not exist, is corrupted or otherwise cannot be done. |
| 4.1 | System displays a notification to the User stating that there is an error. |
| 5 | Database is full. |
| 5.1 | System displays a notification to the user that the database is full. |
| 5.2 | System displays a notification to the administrators of the database being full. |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the System displays the page where you can import information. |
| 2 | Test that there is a method to select to import information |
| 3 | Test that the system, when requested, presents the various ways to import information. |
| 4 | Test that the user can select a way to import data successfully. |
| 5 | Test that the System can successfully intake the data into itself. |
| 6 | Test that the System has the data correctly maintained in it’s database. |
| 7 | Test that the System displays to the User the imported data. |
| 8 | Test that if a method(s) are not available to import in some instances that they are greyed out. |
| 9 | Test that the System displays a notification to the User that states a lack of internet connection. |
| 10 | Test that if there is nothing to import that the System notifies the User of such. |
| 11 | Test that if the database is full that the System will display a notification to the User. |
| 12 | Test that if the database is full that the administrator will be notified of the issue. |

13: Ability to Reverse Edits

|  |  |
| --- | --- |
| Use Case Name | Ability to Reverse Edits |
| Participating Actors | Users. |
| Goal | User reverts information to an older version of an edit. |
| Trigger | User desires to revert the information on a page to a previous version. |
| Precondition | The user knows what information they would like to revert back to. |
| Postcondition | The information is edited on the website. |

## Flow:

|  |  |
| --- | --- |
| 1 | User locates part of information they wish to edit. |
| 2 | User clicks the modify information button on the page. |
| 3 | System provides a new page that allow the modification of the information on the current page. |
| 4 | User selects option to roll back to a prior edit. |
| 5 | System commits the desired changes to the data. |
| 6 | User views newly updated data on the System. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | User has no internet or has connectivity issues. |
| 2.1 | System displays notification that the User is experiencing connectivity issues. |
| 2.2 | System does not display the next page and instead stays on the current page. |
| 4 | User has no internet or has connectivity issues. |
| 4.1 | System displays notification that the User is experiencing connectivity issues. |
| 4.2 | System does not display the next page and instead stays on the current page. |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that the User can view the current information. |
| 2 | Test that there is a method that the User can interact with to modify data. |
| 3 | Test that the method to modify data is functional. |
| 4 | Test that the System displays to the user a specialized page to modify information. |
| 5 | Test that on this new specialized edit page that there is an option to rollback to a prior edit. |
| 6 | Test that the method to choose a prior edit is functional to logged in users. |
| 7 | Test that once the User selects a prior edit that the System will commit the chosen change. |
| 8 | Test that the database has successfully stored the changes to the data. |
| 9 | Test that the User is now able to view the changes to the data. |
| 10 | Test that if the User has no internet connection that the System displays a notification to User. |
| 11 | Test that if the User has no internet connection that the System will stay on the current page. |
| 12 | Test that if the User has no internet connection and is trying to submit a change that no change is made to the database. And follow test 10 and 11 for this case as well. |

14: Ability to Log Out

|  |  |
| --- | --- |
| Use Case Name | Ability to Log Out |
| Participating Actors | (Logged in) Users. |
| Goal | The User is to be logged out of the System. |
| Trigger | User desires to log out of the System. |
| Precondition | User is logged into the System. |
| Postcondition | User is logged out of the System. |

## Flow:

|  |  |
| --- | --- |
| 1 | User is logged into the system. |
| 2 | User hits the log out button. |
| 3 | System logs the User out. |
| 4 | System returns User to the default entry page of the Website. |

## Exception Template:

|  |  |
| --- | --- |
| 3 | User is not connected to the internet. |
| 3.1 | System displays a notification that the User is not connected to the internet. |
| 3.2 | System returns to the original page where the user clicked the link (No change). |

## Tests:

|  |  |
| --- | --- |
| 1 | Test that Users are logged into the System. |
| 2 | Test that the System displays a method to the User to log out of the System. |
| 3 | Test that the method displayed to log out of the System is functional. |
| 4 | Test that the method, once pressed, will inform the server to log the User out of the system. |
| 5 | Test that the User is properly logged out (such as reloading the page won’t log them in). |
| 6 | Test that upon being logged out that the User is brought to the main entry page of the System. |
| 7 | Test that if the User is not connected to the internet that they are notified of it by the System. |
| 8 | Test that if the User is not connected to the internet that they remain on the same page. |

15: Information Verification

|  |  |
| --- | --- |
| Use Case Name | Information Verification |
| Participating Actors | Administrator(s) |
| Goal | Administrators screen information coming into the System. |
| Trigger | Any edit, import or any other modification to the System. |
| Precondition | The system is unmodified and Administrator(s) are NOT notified. |
| Postcondition | The system is modified and the Administrator(s) ARE notified. |

## Flow:

|  |  |
| --- | --- |
| 1 | Any user of the System provides some sort of data modification. |
| 2 | System notifies the/all Administrator(s) of this modification. |
| 3 | Administrator(s) may view their Administrator page to confirm or deny the data modifications. |
| 4 | If the Administrator decides to keep the data modification. |
| 4.1 | Administrator confirms the data modification. |
| 4.2 | The System makes the changes to the database and then the webpage. |
| 5 | If the Administrator(s) decide to not keep the data modification. |
| 5.1 | Administrator denies the data modification. |
| 5.2 | The System drops any possible modifications that could have been made to the System. |

## Exceptions:

|  |  |
| --- | --- |
| 2 | Administrator is not currently online (no internet access or otherwise). |
| 2.1 | Save messages in the administrator inbox to display when they come online. |
| 2.2 | Until administrator approval all modifications made to the data are not commited. |
| 4 | There is an issue with the database being too full or some other error in the commit. |
| 4.1 | The system displays a notification to the Administrator stating the database problem. |
| 4.2 | No changes are commited to the database. |

## Tests:

|  |  |
| --- | --- |
| 1 | (Beforehand in other Use cases) Test that User modifications are stored by the System. |
| 2 | Test that the System recognizes a modification to itself. |
| 3 | Test that when the System notes a change to itself it sends a message to all Administrators. |
| 4 | Test that all Administrator accounts receive a notification from the System. |
| 5 | Test that the Administrators can view these messages. |
| 6 | Test that the Administrators have a functional method to confirm or deny changes. |
| 7 | Test that the confirm or denial of changes is commited by the System. |
| 8 | Test that the modifications if denied are dropped completely by the System. |
| 9 | Test that if the modifications are accepted the database of the System is properly changed. |
| 10 | Test that once a decision is made that the Administrators have the messages marked as read. |
| 11 | Test that when the Administrators aren’t online that messages are still received. |
| 12 | Test that changes are NOT committed to the database without Administrator permission. |