1: Register for website.

|  |  |
| --- | --- |
| Use Case Name | Register for website |
| Participating Actors | Not logged in user |
| 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 and desires a new one. |
| Postcondition | User creates a brand new account with given credentials on the website. |

## Basic Flow:

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

## Exceptions:

|  |  |
| --- | --- |
| 2 | Email is already in use |
| 2.1 | System displays a notification to the user informing them that the email is already taken. |
| 2.2 | 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) email field (2) password field. |
| 3 | Test that the user can successfully submit their email and password to the System. |
| 4 | [u] Test that the database (1) makes a new user (2) that the new user has the email and password combination that the User submitted (3) that this account CAN be accessed with the email and password tied to it. |
| 5 | Test that the User is automatically logged into their account after this process. |

2: Log into website.

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

## Flow:

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

## Exceptions:

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

## Tests:

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

3: 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. |

4: 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. |

5: 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. |

6: View contact information.

|  |  |
| --- | --- |
| Use Case Name | View 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. |

7: 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. |
| 3 | User has the information displayed for a particular node of the graph where visualizations like graph are represented by the node-vertex relationship, contributed relationships, etc. are presented on the page for the node the user is currently on. |

## 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. |

8: 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 | [u] Test that the User can begin a search with the query they chose. |
| 5 | [u] Test that the System searches the database for the related results. |
| 6 | [u] Extensively Test that the database returns accurate results to the User’s queries. |
| 7 | [u] Test that the System presents the accurate results to the User. |
| 8 | [u] 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. |

9: 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 | [u] 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 then they remain on the same page (No 404, etc.) |

10: 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 | [u] Test that the Paper the User is taken to is the proper paper. |
| 5 | [u] 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. |

11: 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 | [u] 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. |

12: Edit information

|  |  |
| --- | --- |
| Use Case Name | Edit Information. |
| Participating Actors | Logged in user. |
| 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 | [u] Test that the User has a method to confirm their modifications, and that this commits them. |
| 7 | [u] Test that when the User confirms their commit that the System accepts the modifications. |
| 8 | [u] Test that the System accepts the changes that the System creates a new save object of data. |
| 9 | [u] Test that the System successfully maintains this new save object of data in the database. |
| 10 | [u] Test that the data can be rolled back to this new saved data. |

13: Import Information.

|  |  |
| --- | --- |
| Use Case Name | Import Information. |
| Participating Actors | Logged in user. |
| 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 way to import data through XML files. |
| 4 | User selects the XML data to import into the System. System imports the XML data into its own database. |
| 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. |

## 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 | [u] Test that the System can successfully intake the data into itself. |
| 6 | [u] Test that the System has the data correctly maintained in its database. |
| 7 | [u] 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 | [u] Test that if the database is full that the System will display a notification to the User. |
| 12 | [u] Test that if the database is full that the administrator will be notified of the issue. |

14: Ability to Reverse Edits

|  |  |
| --- | --- |
| Use Case Name | Ability to Reverse Edits |
| Participating Actors | Logged in user. |
| 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 | [u] 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 | [u] Test that once the User selects a prior edit that the System will commit the chosen change. |
| 8 | [u] Test that the database has successfully stored the changes to the data. |
| 9 | [u] 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 | [u] 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. |

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 committed. |
| 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 committed to the database. |

## Tests:

|  |  |
| --- | --- |
| 1 | [u] Test that User modifications are stored by the System. |
| 2 | [u] Test that the System recognizes a modification to itself. |
| 3 | [u] Test that when the System notes a change to itself it sends a message to all Administrators. |
| 4 | [u] 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 | [u] Test that the confirmation or denial of changes is committed by the System. |
| 8 | [u] Test that the modifications if denied are dropped completely by the System. |
| 9 | [u] 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 | [u] Test that when the Administrators aren’t online that messages are still received. |
| 12 | [u] Test that changes are NOT committed to the database without Administrator permission. |