

Testing and Documentation

All test cases will provide a failed or success message upon operation

Insertion:

- Test case 1:
 - Check to see if user inserted correct type of data (date created, comments, title, etc.).
 - Can't put a string type into a int field (title of research into a dateCreated).
 - User is prompted to re-enter data if incorrect data is entered, before any processing occurs.
- Test case 2:
 - Check to see if user filled out all required data (no blank input fields when data is required).
- Test case 3:
 - Check to see if user has correct permissions (only researchers and system admins can upload new data into the system).
- Test case 4:
 - Check to see if data was successfully inserted (backend testing).

Deletion

- Test case 1:
 - Check to see if user has correct permissions. Only the researcher of the project can delete items from their own project.
- Test case 2:
 - Check to see if data was deleted correctly and fully in database (backend testing).

Updating

- Test case 1:
 - Check to see if user updated correct type of data (date created, comments, title, etc.).
 - Can't put a string type into a int field (title of research into a dateCreated).
- Test case 2:
 - Check to see if user has correct permission (researcher can update).
- Test case 3:
 - Check if data was deleted (backend testing).

User testing

- Gather around 10 people, and give them a demo to use.
- Have them provide feedback.

Integration Test

- All integration testing will be done every Sunday.
- The group will present their code and explain the changes they made.

- The group will then discuss if the project is ready for integration.
- Once the group agrees everything is good to go, the project leader will merge the project.
- If any conflicts happen here, they should be fixed.

Regression Testing

- To prevent conflicts, we developed a sandbox, so all testing occurs here.
 - This occurs on a site is a sub domain of the main site.
 - Once completed testing, we will integrate it with the main site.

Verification and validation

- Login/logout
 - We will have code the checks for a user credentials(username/password)
 - present a success message on correct validation
 - user has to be in database
 - user upon first time to website will need to register themselves
 - can assign themselves as an admin of the project, and can invite students/data scientist
- User privilege
 - There will be several levels of privileges
 - System Admin-level 1 in database
 - has all privileges; reading, writing, updating, deleting, inserting, user account management, manipulating UI elements, download/upload
 - Researcher-level 2 in database
 - has all privileges; reading, deleting, updating, inserting, writing, upload/download
 - Student-level 3 in database
 - has all privileges; reading, download
 - Data scientist-4 in database
 - has all privileges; reading, download

Future testing:

- Upload/download
- Browsing/searching