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)
- Test case 2:
    - check to see if user filled out all required data(no blank input fields)
- Test case 3:
    - check to see if user has correct permissions(researchers)
- 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.

- 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

<u>Verification and validation</u>
- 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