**Regression Testing**

Regression testing is software testing that is to confirm that a recent change to the program or code has not adversely affected the existing functions. This test is done to make sure that new code changes should not have any side effects on the existing functionalities. It ensures that the old code still works when the new code changes are added.

The regression testing can be carried out by using techniques such as retest all, regression test selection and prioritization of test cases. In this case retest all will be selected, because the software is not very complicated and there are only a few user cases. The regression testing will be performed at the end of every sprint. Any adverse effect caused by the code changes will be well documented and fixed.

**Unit testing**

For unit testing we need to check that inputting and displaying usernames are implemented correctly, uploading, displaying and downloading a file works and inputting and displaying user info are all able to be used and interact correctly with the database. To do this, we will need to input fake usernames to make sure these are shown correctly when users login. With files, we will need to upload fake files and make sure these are uploaded to the correct places, shown correctly on their appropriate web pages, and download correctly for users. For user info, we will need to input fake user info and make sure this data is displayed correctly for a user’s profile.

**Verification Vs. Validation Tests**

Verification tests are for verifying user or sensitive information. For example, verify the email address of a user. Validation tests are for verifying that things in the back end of the system are working. For example, make sure a database query is successful.