## **Testing and Debugging Report - EECS 497**

## 1. Sample Test Suite

1.1.

| Test Name                    | Valid Login Test   |
|------------------------------|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX   |
| Description                  | In this test, we will check that an existing user was able to login with the correct username and password to their account. |
| Results that dictate success | This test ran successfully.  |
| Test assigned to             | Rohan Saha   |

1.2.

| Test Name                    | Invalid Login Test   |  |
|------------------------------|--|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX   |  |
| Description                  | In this test, we will check that users logging in with incorrect credentials can not successfully gain access to the website.  |  |
| Results that dictate success | This test did result in a bug. While users with either an incorrect password or username were unable to log in, we had found that accounts that were deleted through the website still could log in using their account password and username. |  |
| Test assigned to             | Rohan Saha   |  |

1.3.

| Test Name                    | Creating Account Test   |  |
|------------------------------|---|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX  |  |
| Description                  | In this test, we checked that a student was able to successfully create an account on the website.  |  |
| Results that dictate success | This test was not fully successful. While creating an account we were able to successfully add usernames and passwords to the database, but we realized we forgot to add the email that the user gave to the database |  |
| Test assigned to             | Colin Brosnan   |  |

1.4.

| Test Name                  | Brows | se Tour Guide | s Button Tes | t      |       |
|----------------------------|-------|---------------|--------------|--------|-------|
| Type (circle at least one) | Unit  | Integration   | Validation   | System | UI/UX |

| Description                  | In this test, we checked that the button on our homepage correctly redirected to the tour guides page on our website.               |
|------------------------------|---|
| Results that dictate success | This test was not successful. We found out that the button redirected to the wrong page, which was Colin Brosnan's tour guide page. |
| Test assigned to             | Colin Brosnan   |

1.5.

| Test Name                    | Edit Account Test   |
|------------------------------|---|
| Type (circle at least one)   | Unit Integration Validation System UI/UX  |
| Description                  | In this test, we checked that a user was able to correctly edit their account. We checked that they could change their username, passwords, photo, and email. |
| Results that dictate success | This test exposed a bug. The bug was that we forgot to salt and hash the password before inserting it into the database.                                      |
| Test assigned to             | James Spillmann   |

1.6.

| Test Name                    | Individual Tour Guide Button Test   |
|------------------------------|---|
| Type (circle at least one)   | Unit Integration Validation System UI/UX  |
| Description                  | In this test, we checked that the user was able to click the button and view a specific tour guide on the tour guides page. |
| Results that dictate success | This test ran successfully.   |
| Test assigned to             | James Spillmann   |

1.7.

| Test Name                    | Image Testing  |  |
|------------------------------|--|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX   |  |
| Description                  | In this test, we used regression testing to see if all of the images on our website were correct and in the right place. |  |
| Results that dictate success | This test exposed a bug. We realized that the images for a tourguides profile were not showing up correctly.             |  |
| Test assigned to             | Colin Brosnan  |  |

| Test Name                    | Contect Button Test   |  |
|------------------------------|---|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX  |  |
| Description                  | In this test, we checked that the contact button opened up the email client with the correct mailing address and subject. |  |
| Results that dictate success | This test found a bug. We found that the email would not show up on the client's device.                                  |  |
| Test assigned to             | Rohan Saha  |  |

1.9.

| Test Name                    | Student Form Test   |
|------------------------------|---|
| Type (circle at least one)   | Unit Integration Validation System UI/UX  |
| Description                  | In this test, we checked that a student was able to correctly fill out their interests on the website.  |
| Results that dictate success | This test found a bug as currently they are able to fill out the form, but the drop down options are not showing up. This is also affecting our matching algorithm as now students with similar interests as tour guides are not being matched. |
| Test assigned to             | Colin Brosnan   |

1.10.

| Test Name                    | Best mentor algorithm test   |  |
|------------------------------|--|--|
| Type (circle at least one)   | Unit Integration Validation System UI/UX   |  |
| Description                  | In this test, we checked that our find best mentor match algorithm returns the "best-fit". This is done by having specific mentors in the database and expecting an obvious "best-fit".  |  |
| Results that dictate success | This test was not fully successful. The algorithm returns random / inconsistent data resulting in the "best-fit" being different every time. Sometimes it achieves the correct match but this is not done because our algorithm was run successfully, it occurs at random. |  |
| Test assigned to             | James  |  |

## 2. Bug Reports

2.1.

| Bug Name        | Deleted logins being accepted   |
|-----------------|---|
| Associated Test | Invalid login test  |
| Description     | When testing login for with invalid logins we found that previously deleted accounts were still able to login, something that should be prohibited. |
| Bug Status      | Resolved; there was an error in deleting data from the students table which we were able to address.  |
| Bug assigned to | Rohan   |

2.2.

| Bug Name        | Can't access my account page  |
|-----------------|---|
| Associated Test | Found through alpha testing   |
| Description     | Once logged in to an account there is no way of accessing the "my account" page to see one's profile and change password. |
| Bug Status      | Unresolved; must link the accounts page to main page.   |
| Bug assigned to | Colin   |

2.3.

| Bug Name        | Student email not being added to database   |
|-----------------|---|
| Associated Test | Create an account test  |
| Description     | Tested whether all input fields correctly captured and submitted data to the students table. It turns out the email was not being added to the table. |
| Bug Status      | Resolved; added the email field to the data being submitted to the database.  |
| Bug assigned to | Colin   |

2.4.

| Bug Name        | Contact button failure  |
|-----------------|---|
| Associated Test | Contact button test   |
| Description     | Through testing we realized that the contact button did not properly bring up the email client on the testers device. |
| Bug Status      | This bug was solved by correctly implementing the email client.   |
| Bug assigned to | James   |

2.5.

| Bug Name        | Browse tour guide button leading to a single tour guide           |
|-----------------|---|
| Associated Test | Browse tour guides button test                                    |
| Description     | We tested the button click functionality resulting in a failure.  |
| Bug Status      | Resolved; the button click command was leading to the wrong page. |
| Bug assigned to | Colin   |

2.6.

| Bug Name        | Update password command was sending unsalted password  |
|-----------------|--|
| Associated Test | Edit account test  |
| Description     | Tested whether the update password command resulted in a hash of the updated password, returned false. |
| Bug Status      | Resolved; added the salting feature to the string updated in the database.                             |
| Bug assigned to | Rohan  |

2.7.

| Bug Name        | Tour guide photos incorrectly populating  |
|-----------------|---|
| Associated Test | Image testing   |
| Description     | The images of tour guides were not displaying correctly, instead of the actual photo the name of the file was being displayed. Was tested and discovered by our image testing test. |
| Bug Status      | Resolved; images routing failed because in the wrong directory was being used.  |
| Bug assigned to | Colin   |

2.8.

| Bug Name        | Get_Yo_Money_Up  |
|-----------------|--|
| Associated Test | Alpha testing using Chrome developer tools to select old iPhones   |
| Description     | Colin found when using Chrome developer tools to select old iPhones  |
| Bug Status      | Bug is unresolved. To resolve this, we need to add a Bootstrap grid and use responsive design instead of fixed padding for alignment. This should make the website mobile-friendly |

|                 | regardless of screen size |
|-----------------|---------------------------|
| Bug assigned to | Colin                     |

2.9.

| Bug Name        | Zoom_Out_Bro  |
|-----------------|---|
| Associated Test | Alpha testing using the Chrome Zoom In/Out  |
| Description     | When I zoomed out, the website looked all wonky. Test was misaligned and images did not render properly.  |
| Bug Status      | The bug has not been resolved. To resolve this, we need to add a Bootstrap grid and use responsive design instead of fixed padding for alignment. |
| Bug assigned to | Colin   |

2.10.

| Bug Name        | Not_Interested  |
|-----------------|---|
| Associated Test | N/A   |
| Description     | We are currently having issues adding interests to student profiles. We did not consider having uniform interests before it became an issue. We need to properly have the user select from a finite, fixed list of interests.   |
| Bug Status      | This bug is not currently resolved. Rohan plans to resolve it by adding a list of student interests to the backend, purging all existing interests in the database, and then ensuring that users cannot bypass the form values on the frontend when selecting interests |
| Bug assigned to | Rohan   |

## 3. Testing and Debugging Summary

• Our test selection for this report primarily stems from a desire to produce a diverse subset of our project tests that is of relatively high priority. While we are running a large number of tests overall, many of them are of low priority. For example, aspects of our UI/UX do not render well on some outdated mobile devices, such as the iPhone XR. As we do not anticipate many of our users to be viewing our website on outdated mobile devices, we have deemed this as being a relatively lower priority test to pass in comparison to aspects of our website that comprise its core functionality. Therefore, many of the tests that we have included in this report ensure that our website properly allows users to log in, edit their accounts, create an account, and have a properly secured account (using updated security protocols). We feel that passing those tests is crucial to the functionality and

success of our finished product and felt that including them in this report would provide helpful insight into our development progress. Many of these tests stemmed from bugs we found and we have a number of bugs that are currently unresolved. To resolve these, we plan to follow our existing distribution of work, which our team has found successful thus far. This includes an initial triage of potential bugs that provides a time and effort estimation, assignment based on prior expertise and interest in learning, and consideration for the outside obligations of other group members. Bugs are also given an anticipated resolution date. By ensuring that each bug is assigned to a team member who has ample time, interest, and experience to resolve it on time, our team hopes to resolve all remaining (and to-be-found) bugs. Lastly, each resolved bug will have a regression test written for it to ensure that the bug does not resurface. Prior to project completion, we will run all of the regression tests from previously solved bugs, manual tests for common errors (security defects, rendering, code issues and style, etc.), and beta testing that will rely on user stories and bug reports to ensure proper functionality.