Project Milestone 4: System Testing and Results Document (Due July 13, 2025 @ 11:59 PM)

By this stage, your systems should be complete, and you are ready to begin testing. This documentation outlines the results from testing the system. You will use the test plan and scripts developed to test the system once development is complete and record the results demonstrating that the system works and passed the testing phase. If any failed tests are recorded, capture those in the document. You should then debug the system to update it and resolve any issues and conduct the tests again. Iterate this process until all test cases are successful.

Test Script: Valid Login

Test Case ID: T01

Description: Valid Login

Preconditions: User exists with correct credentials. User has login page open and ready.

1. Test Steps:

· Navigate to login page

Enter "105386" as the User ID

Enter "MyDogButch2024" as the password

· Click 'Login' button

Expected Result: User is redirected to dashboard and session is created

Actual Result: Login success, user redirected to alumni list page.

Pass/Fail: Pass

Test Script: Invalid Login

Test Case ID: T02

Description: Invalid Login

Preconditions: User has login page open and ready.

2. Test Steps:

· Navigate to login page

Enter "105386" as the User ID

· Enter "password" as the password.

· Click 'Login' button

Expected Result: Error message displayed; user remains on login page

Actual Result: User is directed to login page and an error splash message is displayed.

Pass/Fail: Pass

Test Script: Access Without Login

Test Case ID: T03

Description: Access Without Login

Preconditions: User is not logged in, web browser is open and ready.

3. Test Steps:

Navigate directly to /alumni/list URL

Expected Result: User is redirected to login page

Actual Result: Redirected to login page with unauthorized message.

Pass/Fail: Pass

Test Script: View Alumni List

Test Case ID: T04

Description: View Alumni List

Preconditions: User is logged into an account where viewPriveledgeYN is set to "Y" for the user account.

4. Test Steps:

· Navigate to /alumni/list

Expected Result: All alumni records are displayed and match database

Actual Result: List displays alumni (e.g. Jane Doe).

Pass/Fail: Pass

Test Script: Session Expiry

Test Case ID: T05

Description: Session Expiry

Preconditions: User has been logged in and reached 2 hours of inactivity.

- 5. Test Steps:
- · Login
- Remain inactive for 2+ hours
- · Attempt an action

Expected Result: User is logged out and redirected to login page

Actual Result: User is redirected to login page and must log back in.

Pass/Fail: Pass

Test Script: Add New Alumnus

Test Case ID: T06

Description: Add New Alumnus

Preconditions: User is logged in with any account that has insert privileges, aka insertPrivelege = Y. User is on the alumni list page.

- 6. Test Steps:
- · Navigate to /alumni/add
- Enter first name "John" and last name "Smith"
- Enter phone number of 111-111-1111
- · Enter email of jsmith@yahoo.com
- Enter birthdate of 6/29/2025
- Enter in a gender of "M"
- · Click 'Submit'

Expected Result: User is directed to /alumni/view page. Alumnus John Smith appears in the list and is saved in the database

Actual Result: John Smith added, shows in list.

Test Script: Edit Alumnus Details

Test Case ID: T07

Description: Edit Alumnus Details

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready.

- 7. Test Steps:
- · Navigate to the alumnus "John Smith"
- · Click 'Edit' on the card for "John Smith"
- · Modify the "First Name" field to "Jane"
- · Modify the "Last Name" field to "Doe"
- · Modify the email to "jdoe@yahoo.com"
- · Modify the birthdate to 1/1/2000
- · Modify the gender to "F"
- · Click 'Save'

Expected Result: Changes are saved to both database and site UI, with all attributes matching the above changes.

Actual Result: Updated info saved and displayed.

Pass/Fail: Pass

Test Script: Add Primary and Active Address

Test Case ID: T08

Description: Add Address with Primary Flag

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready. Test Cases T06 and T07 have been performed in the respective order.

- 8. Test Steps:
- · Navigate to alumnus "Jane Doe" and click "edit"
- · Navigate to the "Addresses" section.

- · Click "Add a new address" and enter "3391 Town Point Dr NW Kennesaw, GA 30144"
- · Click "Yes" radio buttons for both "Is this your home address?" and "Can we reach you by this address?"
- · Click "Save"

Expected Result: User is directed to the alumni view page. New address saved as "3391 Town Point Dr NW Kennesaw, GA 30144", shows as primaryYN = Y and activeYN = Y on both UI and database.

Actual Result: Correct address shown for Jane Doe.

Pass/Fail: Pass

Test Script: Add Primary and Active Address to overwrite old Primary Address

Test Case ID: T09

Description: Add Non-Primary Address

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready. Test Cases T06, T07, and T08 have been performed in the respective order.

- 9. Test Steps:
- · Navigate to alumnus "Jane Doe" and click "edit"
- · Navigate to the "Addresses" section.
- · Click "Add a new address" and enter "1400 Defense Pentagon Washington, DC 20301"
- · Click "Yes" radio buttons for both "Is this your home address?" and "Can we reach you by this address?"
- · Click "Save"

Expected Result: User is directed to the alumni view page. New address saved as "1400 Defense Pentagon Washington, DC 20301", shows as primaryYN = Y and activeYN = Y. Existing address saved as "3391 Town Point Dr NW Kennesaw, GA 30144", shows as primaryYN = N and activeYN = N on both UI and database.

Actual Result: Both addresses show for Jane Doe, but Kennesaw address is marked as not primary and not active. Pentagon address is shown as primary and active.

Test Script: Add Current Job when there is no current job

Test Case ID: T10

Description: This is to test functionality for adding in a current job when there currently aren't

any for an alumnus.

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready. Test Cases T06 and T07 have been

performed in the respective order.

10. Test Steps:

Navigate to alumnus "Jane Doe" and click "edit"

Navigate to the "Employment" section.

Click "Add Current Employment"

Enter in a company of "Microsoft"

Enter in a city of "Atlanta"

Enter in a ZIP code of "30363"

Enter in a state of "GA"

Enter in a job title of "Data Analyst"

Enter in a start date of "1/21/23"

Click "Submit"

Expected Result: User is directed back to Alumnus view page. Microsoft employment is visible

and set to currentYN = Y. This should show both in UI and database.

Actual Result: Under Jane Doe's profile, her Data Analyst position is visible and shows as

current.

Pass/Fail: Pass

Test Script: Add Current Job when there exists one already

Test Case ID: T11

Description: This is to test functionality for adding in a current job when a current job already

exists.

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready. Test Cases T06, T07, and T10 have been performed in the respective order.

11. Test Steps:

· Navigate to alumnus "Jane Doe" and click "edit"

· Navigate to the "Employment" section.

· Click "Add Current Employment"

Enter in a company of "Microsoft"

· Enter in a city of "Atlanta"

Enter in a ZIP code of "30363"

· Enter in a state of "GA"

Enter in a job title of "Senior Data Analyst"

Enter in a start date of "3/16/25"

· Click "Submit"

Expected Result: User is directed back to Alumnus view page. Microsoft employment is visible and set to currentYN = Y. This should show both in UI and database. Prior employment for Microsoft – Data Analyst should show currentYN = N in both UI and database.

Actual Result: Under Jane Doe's profile, both positions at Microsoft are shown. The senior position is shown as active while the old position is shown as inactive.

Pass/Fail: Pass

Test Script: Add Past Job

Test Case ID: T12

Description: Add Past Job

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. User is on the /alumni/list page and ready. Test Cases T06 and T07 have been performed in the respective order.

12. Test Steps:

Navigate to alumnus "Jane Doe" and click "edit"

- Navigate to the "Employment" section.
- Click "Add Previous Employment"
- Enter in a company of "Staples"
- Enter in a city of "Alpharetta"
- Enter in a ZIP code of "30022"
- Enter in a state of "GA"
- Enter in a job title of "Sale Associate"
- Enter in a start date of "2/20/18"
- Enter in an end date of "4/29/19"
- Click "Submit"

Expected Result: User is directed back to Alumnus view page. Staples employment is visible and set to currentYN = N. This should show both in UI and database.

Actual Result: Under Jane Doe's profile, both positions at Microsoft are shown. The senior position is shown as active while the old position is shown as inactive. The Staples position is also shown as inactive.

Pass/Fail: Pass

Test Script: Add Donation

Test Case ID: T13

Description: Add Donation

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06 and T07 have been performed in the respective order.

13. Test Steps:

- Navigate to alumnus "Jane Doe" and click "edit"
- Navigate to the "Donations" section.
- Click "Add Donation"
- Enter in a donation amount of \$500
- Enter in a donation date of 5/25/25

Enter in a reason of "Campus initiative"

Enter in a description of "A donation of \$500 was made by Jane Doe on 5/25/25 in

consideration of Memorial Day campus initiatives."

Click "Submit"

Expected Result: User is directed back to Alumnus view page. \$500 donation is visible with all

input attributes. This should show both in UI and database.

Actual Result: A donation of \$500 appears on Jane Doe's profile with all pertinet information.

Pass/Fail: Pass

Test Script: Edit Donation Record

Test Case ID: T14

Description: In the case a donation is ever incorrect, it must have the ability to be adjusted. This

tests the functionality of editing a donation.

Preconditions: User is logged in with an account where updatePriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06, T07, and T13 have

been performed in the respective order.

14. Test Steps:

Navigate to alumnus "Jane Doe" and click "edit"

Navigate to the "Donations" section.

Where the donation from 5/25/25 is visible, edit the amount to \$250

Click "Submit"

Expected Result: User is directed back to Alumnus view page. \$500 donation now shows as

\$250 with all input attributes. This should show both in UI and database.

Actual Result: The same donation on Jane Doe's page is edited to show \$250 instead of \$500.

All other information stays the same.

Test Script: Delete Donation Record

Test Case ID: T15

Description: In the case a donation is ever invalid, it must have the ability to be removed. This

tests the functionality of deleting a donation.

Preconditions: User is logged in with an account where deletePriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06, T07, T13, and T14

have been performed in the respective order.

15. Test Steps:

Navigate to alumnus "Jane Doe" and click "edit"

Navigate to the "Donations" section.

Where the donation from 5/25/25 is visible, click the "Delete Donation" button.

Click "Submit"

Expected Result: User is directed back to Alumnus view page. The \$250 donation is no longer visible on the page. The donation record is removed from the database.

Actual Result: On Jane Doe's profile, the \$250 donation is removed and no longer visible.

Pass/Fail: Pass

Test Script: Add New Skill

Test Case ID: T16

Description: Add New Skill

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06 and T07 have been

performed in the respective order.

16. Test Steps:

Navigate to alumnus "Jane Doe" and click "edit"

Navigate to the "Skills" section.

Click "Add new skill"

Enter a skill of "SQL"

Click the "Beginner" radio button

· Click "Submit"

Expected Result: User is directed back to Alumnus view page. Skill "SQL" appears with "Beginner" proficiency. Database shows identical values.

Actual Result: On Jane Doe's profile, a skill of SQL is shown with beginner proficiency.

Pass/Fail: Pass

Test Script: Edit a Skill

Test Case ID: T17

Description: Edit an existing skill

Preconditions: User is logged in with an account where updatePriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06, T07, and T16 have been performed in the respective order.

17. Test Steps:

· Navigate to alumnus "Jane Doe" and click "edit"

· Navigate to the "Skills" section.

Where the skill of "SQL" is shown, click the "Intermediate" radio button.

· Click "Submit"

Expected Result: User is directed back to Alumnus view page. Skill "SQL" appears with "Intermediate" proficiency. Database shows identical values.

Actual Result: The SQL skill on Jane Doe's profile is updated to show "Intermediate"

Pass/Fail: Pass

Test Script: Add New Degree

Test Case ID: T18

Description: Add New Degree

Preconditions: User is logged in with an account where insertPriveledgeYN is set to "Y" for the user account. The user is on the /alumni/list page and ready. Test Cases T06 and T07 have been performed in the respective order.

18. Test Steps:

· Navigate to alumnus "Jane Doe" and click "edit"

- · Navigate to the "Degrees" section.
- · Click "Add new Degree"
- · Enter a major of "MIS"
- · Enter in a minor of "Cybersecurity"
- Enter in a graduation date of 5/11/2023
- Enter in a university of Kennesaw State University
- · Enter in a city of Kennesaw
- · Enter in a state of GA
- · Click "Submit"

Expected Result: User is directed back to Alumnus view page. The degree from KSU appears with all entered values. Database shows identical values.

Actual Result: On Jane Doe's profile, a Cybersecurity degree is shown with all above information.

Pass/Fail: Pass

Test Script: Accessing login with all permissions set to "N"

Test Case ID: T19

Description: View Without Permission

Preconditions: User is not logged in, web browser is open and ready. User account must have all privileges set to "N"

- 19. Test Steps:
- · Navigate to login page
- Enter "105387" as the User ID
- Enter "Icantview2025" as the password
- · Click 'Login' button

Expected Result: User is directed to the alumni view page. No alumni stats are populated

Actual Result: User is directed to the alumni view page. No alumni stats are populated

Pass/Fail: Pass

Test Script: Insert Without Permission

Test Case ID: T20

Description: Insert Without Permission

Preconditions: User is not logged in, web browser is open and ready. User account must viewPriveledgeYN = Y, but all other privileges set to N. Test Cases T06 and T07 have been performed in the respective order.

20. Test Steps:

- · Navigate to login page
- Enter "105388" as the User ID
- Enter "Icantinsert2025" as the password
- · Click 'Login' button
- Navigate to alumnus "Jane Doe" and verify the "edit" button does not show.

Expected Result: "Edit" button does not show for all alumni on the view page.

Actual Result: The "Edit" button shows for all alumni including Jane Doe.

Pass/Fail: Pass

Test Script: Update Without Permission

Test Case ID: T21

Description: Update Without Permission

Preconditions: User is not logged in, web browser is open and ready. User account must viewPriveledgeYN = Y, but all other privileges set to N. Test Cases T06 and T07 have been performed in the respective order.

21. Test Steps:

- · Navigate to login page
- Enter "105389" as the User ID
- Enter "Icantupdate2025" as the password
- · Click 'Login' button
- Navigate to alumnus "Jane Doe" and verify the "edit" button does not show.

Expected Result: "Edit" button does not show for all alumni on the view page.

Actual Result: No "Edit" buttons are visible on the alumni view page.

Pass/Fail: Pass

Test Script: Delete Without Permission

Test Case ID: T23

Description: Delete Without Permission

Preconditions: User is not logged in, web browser is open and ready. User account must deletePriveledgeYN = N, but all other privileges set to Y. Test Cases T06 and T07 have been performed in the respective order.

22. Test Steps:

- · Navigate to login page
- Enter "105390" as the User ID
- Enter "Icantdelete2025" as the password
- · Click 'Login' button
- · Navigate to alumnus "Jane Doe" and click the "edit" button

Expected Result: "Delete" button does not show for any alumni attributes on Jane Doe's page.

Actual Result: The "Delete" button fails to show for any alumni attributes.

Pass/Fail: Pass

Test Script: Delete Alumnus

Test Case ID: T23

Description: Delete Alumnus

Preconditions: User has login page open and ready. User account must have all privileges set to "Y". All other test cases in this document must be performed.

23. Test Steps:

- · Navigate to login page
- Enter "105386" as the User ID
- Enter "MyDogButch2024" as the password
- · Click 'Login' button
- Navigate to alumnus "Jane Doe" and click the "edit" button
- · Click "Delete Alumnus" button.
- · Click "Submit"

Expected Result: User is directed back to Alumni view page. Jane Doe does not appear on page and is also not found in database.

Actual Result: Jane Doe is removed from the website and the database.