# Lab 02: Black Box Test Plan

## Test Overview

<Describe how a test should run the tests. Delete this line in the final report.>

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test 1:  Invalid File Selected | Preconditions: None  Run StudentDirectoryPanel  Check Results | GUI loads with no issues, there are no students listed in the directory, and only labels are displayed in both the Student Directory and Information section. | GUI loaded with no issues.  No students in the directory.  Only labels are displayed. |
| Test 2:  New Student Directory | Preconditions: Test 1 passed.  Click the “New Student Directory” button. | GUI should remain running with no dialogs/pop-ups displayed, all fields should remain blank. | No GUI errors.  All fields remained blanked. |
| Test 3:  Test Invalid File | Preconditions: Test 1 passed.  Click “Load Student Directory”  Navigate to test-files and click “invalid\_student\_records.txt”  Click select and check the results. | File chooser should appear and no students should be added to the directory after selecting “invalid\_student\_records.txt” | File chooser appeared and no students were added to the directory. |
| Test 4:  Test Valid File | Preconditions: Test 1 passed  Click “Load Student Directory” and select “expected\_full\_student\_records.txt.  Check results | The file chooser should appear and 10 students should populate the directory section:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan | The file chooser appeared and 10 students populated the directory once “expected\_full\_student\_records.txt” was selected:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan |
| Test 5:  Remove Student | Preconditions: Test 1 and 4 passed.  Make sure to have 10 students loaded from “expected\_full\_student\_records.txt”.  Click on the first entry, which should be Zahir King and click the button “Remove Student”.  Check results. | Zahir King should no longer be listed under the directory, but the other 9 students should remain unchanged. | Zahir King was removed successfully and the remaining 9 students were left unchanged. |
| Test 6:  Add Student | Preconditions: Test 1, 4, and 5 passed.  Click in the text field beside “Frist Name” and fill out the student information as follows:  First Name: Cody  Last Name: Adcock  ID: cadcock  Email: [cadcock@ncsu.edu](mailto:cadcock@ncsu.edu)  Password: password  Repeat Password: password  Max Credits: 18  Click Add Student.  Check results. | The student “Cody Adcock” with an id of “cadcock” should now be shown at the bottom of the Student Directory. The student directory should now be:   1. Cassandra / Schwartz / cschwartz 2. Shannon / Hansen / shansen 3. Demetrius / Austin / daustin 4. Raymond / Brennan / rbrennan 5. Emerald / Frost / efrost 6. Lane / Berg / lberg 7. Griffith / Stone / gstone 8. Althea / Hicks / ahicks 9. Dylan / Nolan / dnolan 10. Cody / Adcock / cadcock | All information was added correctly and the directory now shows:   1. Cassandra / Schwartz / cschwartz 2. Shannon / Hansen / shansen 3. Demetrius / Austin / daustin 4. Raymond / Brennan / rbrennan 5. Emerald / Frost / efrost 6. Lane / Berg / lberg 7. Griffith / Stone / gstone 8. Althea / Hicks / ahicks 9. Dylan / Nolan / dnolan 10. Cody / Adcock / cadcock |
| Test 7: Add Same Student Twice | Preconditions: Test 1, 4, 5, and 6 passed.  Repeat Test 6 by adding the same information into the Student Information section, then click “Add Student.”  Check results. | A pop-up should display “Student already in system.” | A dialog box saying “Student already in system” was displayed. |
| Test 8: Overwrite Student Directory | Preconditions: Tests 1 and 4 passed.  Click the “Load Student Directory” button and select “expected\_full\_student\_records.txt”  Check results. | The former list was overwritten and now the student directory shows:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan | The former list was overwritten and the student directory shows:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan |
| Test 9: Remove Student (No Selection) | Preconditions: Tests 1, 4, and 8 passed.  Make sure no student is selected in the directory. If there is a selection, reload “expected\_full\_student\_directory.txt.”  Click “Remove Student”  Check results. | A pop-up dialog should display “No student selected.” | A pop-up dialog displayed the message “No student selected.” |
| Test 10:  Add Student after Failed Attempt | Preconditions: Test 9 passed.  Type the following under Student Information:  First Name:  Last Name: Maxford  ID: jmaxford  Email: [jmaxford@ncsu.edu](mailto:jmaxford@ncsu.edu)  Password: pw  Repeat Password: pw  Max Credits: 4  Click “Add Student”  Check results.  Click OK and enter “Jake” as the First Name, keeping the prior entries unchanged.  Check results. | A pop-up dialog should display “Invalid first name.”  Jake / Maxford / jmaxford should be listed at the bottom of the Student Directory. The prior 10 students from Test 8 should remain unchanged. | A pop-up displayed the message “Invalid first name.”  Jake / Maxford / jmaxford is listed at the bottom of the Directory, with the prior 10 students unchanged. |
| Test 11: Add Student W/ Invalid Credits | Preconditions: Test 10 passed  Enter the following under Student Information:  First Name: Jake  Last Name: Maxford  ID: jmaxford1  Email: [jmaxford1@ncsu.edu](mailto:jmaxford1@ncsu.edu)  Password: pw  Repeat Password: pw  Max Credits: 2  Check Results  Click OK.  Enter “6” as the Max Credits, then click “Add Student”.  Check results. | A pop-up should display “Max credits must be a positive number between 3 and 18.  Jake / Maxford / jmaxford1 should show as the last student in the directory, with the prior 11 students left unchanged. | A pop-up displayed “Max credits must be a positive number between 3 and 18.”  Jake / Maxford / jmaxford1 was added to the directory, with the prior 11 students left unchanged. |
| Test 12:  Add Student W/ Invalid Email and Password | Preconditions: Test 11 passed.  Enter the following under the Student Information section:  First Name: Jesse  Last Name: Voliva  ID: jvoliva  Email: [jvoliva@ncsu.edu](mailto:jvoliva@ncsu.edu)  Password:  Repeat Password:  Max Credits: 11  Click “Add Student” and check results.  Click OK and enter “pw” in the Password field only. The Repeat password should still remain blank.  Click “Add Student” and check results.  Enter “pw” in the Repeat Password field, then click “Add Student”  Check Results | A pop-up dialog should display “Invalid password”  A pop-up should display “Invalid password”  Jesse / Voliva / jvoliva should be listed as the last student inside of the directory, with the prior 12 students left unchanged. | A pop-up displayed “Invalid password”  A pop-up displayed “Invalid password”  Jesse / Voliva / jvoliva was added to the directory and is displayed as the last entry, with the prior 12 students left unchanged. |
| Test 13: Add Student with Email and ID Swapped | Preconditions: Test 12 passed.  Enter the following under the Student Information Sections:  First Name: Shelby  Last Name: Anderson  ID: [slander@ncsu.edu](mailto:slander@ncsu.edu)  Email: slander  Password: pw  Repeat Password: pw  Credits: 17  Click “Add Student” and check results.  Click OK, change the ID field to “slander”, then click “Add Student”  Check Results  Click OK, enter “slander@ncsu” as the email, click “Add Student” and check results.  Click OK, enter “slander@ncsuedu, click “Add Student”, then check results.  Click OK, enter [slander@ncsu.edu](mailto:slander@ncsu.edu), click “Add Student”, and check results. | A pop-up should display “Invalid id”  A pop-up should display “Invalid email”  A pop-up should display “Invalid email”  A pop-up should display “Invalid email”  Shelby / Anderson / slander should be listed at the bottom of the directory, with the prior 13 left unchanged. | A pop-up displayed “Invalid id”  A pop-up displayed “Invalid email”  A pop-up displayed “Invalid email”  A pop-up displayed “Invalid email”  Shelby / Anderson / slander was added to the bottom of the directory, with the prior 13 students left unchanged. |
| Test 14: Save Student Directory | Preconditions: Test 13 passed.  Click “Save Student Directory”, navigate to “test-files” and save as “student\_records.txt”  Compare the results by going to the file and opening the contents in notepad or something equivalent. | Contents of student\_records.txt:  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0�R��"��u���\7X�F���9�{-O�F�ap�,15  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,3  Lane,Berg,lberg,sociis@non.org,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0�R��"��u���\7X�F���9�{-O�F�ap�,17  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0�R��"��u���\7X�F���9�{-O�F�ap�,5  Jake,Maxford,jmaxford,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Jake,Maxford,jmaxford1,jmaxford1@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,6  Jesse,Voliva,jvoliva,jvoliva@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Shelby,Anderson,slander,slander@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,17 | File was saved successfully and the following was contained within student\_records.txt”  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0�R��"��u���\7X�F���9�{-O�F�ap�,15  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,3  Lane,Berg,lberg,sociis@non.org,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0�R��"��u���\7X�F���9�{-O�F�ap�,17  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0�R��"��u���\7X�F���9�{-O�F�ap�,5  Jake,Maxford,jmaxford,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Jake,Maxford,jmaxford1,jmaxford1@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,6  Jesse,Voliva,jvoliva,jvoliva@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Shelby,Anderson,slander,slander@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,17 |
| Test 15: Reload Custom Saved Student Directory | Preconditions: Test 14 Passed  Select “New Student Directory”, select “Load Student Directory”, navigate to “test-files” and select “student\_records.txt”  Check Results | 14 students should be listed under the Student Directory:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan 11. Jake / Maxford / jmaxford 12. Jake / Maxford / jmaxford1 13. Jesse / Voliva / jvoliva 14. Shelby / Anderson / slander | 14 Students are listed within the Student Directory:   1. Zahir / King / jking 2. Cassandra / Schwartz / cschwartz 3. Shannon / Hansen / shansen 4. Demetrius / Austin / daustin 5. Raymond / Brennan / rbrennan 6. Emerald / Frost / efrost 7. Lane / Berg / lberg 8. Griffith / Stone / gstone 9. Althea / Hicks / ahicks 10. Dylan / Nolan / dnolan 11. Jake / Maxford / jmaxford 12. Jake / Maxford / jmaxford1 13. Jesse / Voliva / jvoliva 14. Shelby / Anderson / slander |