# Lab 02: Black Box Test Plan

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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. Demetrius, Austin, daustin 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone | The file chooser appeared and 10 students populated the directory once “expected\_full\_student\_records.txt” was selected:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone |
| 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 Demetrius Austin, and click the button “Remove Student”.  Check results. | Demetrius Austin should no longer be listed under the directory, but the other 9 students should remain unchanged. | Demetrius Austin 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 top of the Student Directory. The student directory should now be:   1. Cody, Adcock, cadcock 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone | The student “Cody Adcock” with an id of “cadcock” is shown at the top of the Student Directory. The student directory shows:   1. Cody, Adcock, cadcock 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone |
| 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. Demetrius, Austin, daustin 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone | The former list was overwritten and the student directory shows:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg, 3. Raymond, Brennan, rbrennan, 4. Emerald, Frost, efrost, 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone |
| 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 between Zahir King and Dylan Nolan. | A pop-up displayed the message “Invalid first name.”  Jake / Maxford / jmaxford is listed between Zahir King and Dylan Nolan. |
| 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 “Invalid max credits”.  Jake / Maxford / jmaxford1 should be listed under Jake Maxford (jmaxford) and Dylan Nolan. | A pop-up displayed “Invalid max credit”.  Jake / Maxford / jmaxford1 is listed under Jake Maxford (jmaxford) and Dylan Nolan. |
| 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 under Griffith Stone, at the bottom of the directory, with all other students left unchanged. | A pop-up displayed “Invalid password”  A pop-up displayed “Invalid password”  Jesse / Voliva / jvoliva was was added to the bottom of the directory, beneath Griffith Stone, with all other students 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 top 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 top 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:  Shelby,Anderson,slander,slander@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,17  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Lane,Berg,lberg,sociis@non.org,0�R��"��u���\7X�F���9�{-O�F�ap�,14  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  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0�R��"��u���\7X�F���9�{-O�F�ap�,15  Jake,Maxford,jmaxford,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Jake,Maxford,jmaxford1,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,6  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0�R��"��u���\7X�F���9�{-O�F�ap�,5  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0�R��"��u���\7X�F���9�{-O�F�ap�,17  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  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Lane,Berg,lberg,sociis@non.org,0�R��"��u���\7X�F���9�{-O�F�ap�,14  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  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,14  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0�R��"��u���\7X�F���9�{-O�F�ap�,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0�R��"��u���\7X�F���9�{-O�F�ap�,15  Jake,Maxford,jmaxford,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,18  Jake,Maxford,jmaxford1,jmaxford@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,6  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0�R��"��u���\7X�F���9�{-O�F�ap�,5  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0�R��"��u���\7X�F���9�{-O�F�ap�,17  Jesse,Voliva,jvoliva,jvoliva@ncsu.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,11 |
| 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. Shelby, Anderson, slander 2. Demetrius, Austin, daustin 3. Lane, Berg, lberg, 4. Raymond, Brennan, rbrennan, 5. Emerald, Frost, efrost, 6. Shannon, Hansen, shansen 7. Althea, Hicks, ahicks 8. Zahir, King, zking 9. Jake, Maxford, jmaxford 10. Jake, Maxford, jmaxford1 11. Dylan, Nolan, dnolan 12. Cassandra, Schwartz, cschwartz 13. Griffith, Stone, gstone 14. Jesse, Voliva, jvoliva | 14 Students are listed within the Student Directory:   1. Shelby, Anderson, slander 2. Demetrius, Austin, daustin 3. Lane, Berg, lberg, 4. Raymond, Brennan, rbrennan, 5. Emerald, Frost, efrost, 6. Shannon, Hansen, shansen 7. Althea, Hicks, ahicks 8. Zahir, King, zking 9. Jake, Maxford, jmaxford 10. Jake, Maxford, jmaxford1 11. Dylan, Nolan, dnolan 12. Cassandra, Schwartz, cschwartz 13. Griffith, Stone, gstone 14. Jesse, Voliva, jvoliva |