# Lab 3: Black Box Test Plan

To run the tests:

**Name: Nick Garner**

**Unity ID: nrgarner**

**ID# 000803742**

**CSC 216-651, Tetterton**

1. Right click on StudentDirectoryPanel class in the Package Explorer.
2. Select Run As > Java Application

The program will load to the main Directory GUI.

All tests files are located in the test-files/ folder.

Note that while all tests end with the statement to Close GUI, you can run Tests 2-15 on the same GUI if there are no failures. If there are failures, you can use the preconditions to identify the dependent test cases.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test 1: Invalid File | Preconditions: None  Run StudentDirectoryPanel.  In the **Load Student Directory** FileChooser dialog select: test-files/invalid\_student\_records.txt  Click **Select**  *Check results*  Close GUI | StudentDirectoryPanel loads  Student Directory table is empty  Student Information fields are blank with labels only | **StudentDirectoryPanel loads**  **Student Directory table is empty**  **Student Information fields are blank with labels only** |
| Test 2: Valid File  (Modified) | Preconditions: None  Run StudentDirectoryPanel.  In the **Load Student Directory** FileChooser dialog select: test-files/student\_records.txt  Click **Select**  *Check results*  Close GUI | StudentDirectoryPanel loads  Student Directory contains 10 students   * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone   Student Information fields are empty with only labels | **StudentDirectoryPanel loads**  **Student Directory contains 10 students**   * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone**   **Student Information fields are empty with only labels** |
| Test 3:  Remove Empty Student | Preconditions: Test 2 has passed  Ensure that no student in the directory is selected. If one is, restart the GUI.  Click **Remove Student**  *Check results*  Close GUI | A pop-up dialog stating “No student selected.” is displayed. | **Dialog box pops up labeled “Message” stating “No student selected.” with “OK” and “X” buttons.**  **Clicking “OK” closes the dialog box and makes no other changes.** |
| Test 4: Add Valid Student  (Modified) | Preconditions: Test 2 has passed  Fill in the following for Student Information:  **First Name:** Fred  **Last Name:** Weasley  **ID:** fweasle  **Email:** fweasle@ncsu.edu  **Password:** mischiefmanaged  **Repeat Password:** mischiefmanaged  **Max Credits:** 12  Click **Add Student**  *Check results*  Close GUI | Student Directory contains 11 students   * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * Fred, Weasley, fweasle   Student Information fields are empty with only labels | **Student Directory contains 11 students**   * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **Fred, Weasley, fweasle**   **Student Information fields are empty with only labels** |
| Test 5: Add Blank Student | Preconditions: Test 2 has passed  Make sure no information is entered in any of the Student Information fields.  Click **Add Student**  *Check results*  Close GUI | A pop-up dialog stating “Max Credits must be a positive number between 3 and 18.” is displayed. | **Dialog box pops up labeled “Message” stating “Max Credits must be a positive number between 3 and 18.” with “OK” and “X” buttons.**  **Clicking “OK” closes the dialog box and makes no other changes.** |
| Test 6: Add Duplicate Student ID | Preconditions: Test 2 and Test 4 have passed  Fill in the following for Student Information:  **First Name:** George  **Last Name:** Weasley  **ID:** fweasle  **Email:** gweasle@ncsu.edu  **Password:** maurader  **Repeat Password:** maurader  **Max Credits:** 12  Click **Add Student**  *Check results*  Close GUI | A pop-up dialog stating “Student already in system.” is displayed.  Student information fields remain filled in. | **Dialog box pops up labeled “Message” stating “Student already in system.” with “OK” and “X” buttons.**  **Clicking “OK” closes the dialog box and makes no other changes.**  **Student information fields remain populated.** |
| Test 7a: Remove Student  (Modified) | Preconditions: Test 2 and Test 6 have passed  Change the **ID** field to “gweasle”  Click **Add Student**  *Check results* | Student Directory contains 12 students   * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * Fred, Weasley, fweasle * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 12 students**   * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **Fred, Weasley, fweasle** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 7b: Remove Student  (Modified) | Preconditions: Test 2 and Test 7a have passed  Select the 11th row of the Student Directory table (Fred, Weasley, fweasle)  Click **Remove Student**  *Check results*  Close GUI | Student Directory contains 11 students   * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 11 students**   * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 10:  Add Student to Beginning  (New) | Preconditions: Test 2 and Test 7 have passed  Fill in the following for Student Information:  **First Name:** Hannah  **Last Name:** Abbott  **ID:** habbott  **Email:** habbott@ncsu.edu  **Password:** hpuff4lyfe  **Repeat Password:** hpuff4lyfe  **Max Credits:** 15  Click **Add Student**  *Check results*  Close GUI | Student Directory contains 12 students   * Hannah, Abbott, habbott * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 12 students**   * **Hannah, Abbott, habbott** * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 11:  Add Student to Middle  (New) | Preconditions: Test 2 and Test 10 have passed  Fill in the following for Student Information:  **First Name:** Neville  **Last Name:** Longbottom  **ID:** nlongbo  **Email:** nlongbo@ncsu.edu  **Password:** REALboywholived  **Repeate Password:** REALboywholived  **Max Credits:** 15  Click **Add Student**  *Check results*  Close GUI | Student Directory contains 13 students   * Hannah, Abbott, habbott * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Shannon, Hansen, shansen * Althea, Hicks, ahicks * Zahir, King, zking * Neville, Longbottom, nlongbo * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 13 students**   * **Hannah, Abbott, habbott** * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Shannon, Hansen, shansen** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Neville, Longbottom, nlongbo** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 12: Remove Student from Middle  (New) | Preconditions: Test 2 and Test 11 have passed  Select the 6th row of the Student Directory table (Shannon, Hansen, shansen)  Click **Remove Student**  *Check results*  Close GUI | Student Directory contains 12 students   * Hannah, Abbott, habbott * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Althea, Hicks, ahicks * Zahir, King, zking * Neville, Longbottom, nlongbo * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 12 students**   * **Hannah, Abbott, habbott** * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Neville, Longbottom, nlongbo** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 13:  Remove Student from Beginning (New) | Preconditions: Test 2 and Test 11 have passed  Select the 1st row of the Student Directory table (Hannah, Abbott, habbott)  Click **Remove Student**  *Check results*  Close GUI | Student Directory contains 11 students   * Demetrius, Austin, daustin * Lane, Berg, lberg * Raymond, Brennan, rbrennan * Emerald, Frost, efrost * Althea, Hicks, ahicks * Zahir, King, zking * Neville, Longbottom, nlongbo * Dylan, Nolan, dnolan * Cassandra, Schwartz, cschwartz * Griffith, Stone, gstone * George, Weasley, gweasle   Student Information fields are empty with only labels | **Student Directory contains 11 students**   * **Demetrius, Austin, daustin** * **Lane, Berg, lberg** * **Raymond, Brennan, rbrennan** * **Emerald, Frost, efrost** * **Althea, Hicks, ahicks** * **Zahir, King, zking** * **Neville, Longbottom, nlongbo** * **Dylan, Nolan, dnolan** * **Cassandra, Schwartz, cschwartz** * **Griffith, Stone, gstone** * **George, Weasley, gweasle**   **Student Information fields are empty with only labels** |
| Test 14:  Invalid Password  (New) | Preconditions: Test 2 has passed  Fill in the following for Student Information:  **First Name:** Ronald  **Last Name:** Weasley  **ID:** rweasle  **Email:** rweasle@ncsu.edu  **Password:**  **Repeate Password:**  **Max Credits:** 15  Click **Add Student**  *Check results*  Close GUI | A pop-up dialog stating “Invalid password” is displayed.  Student information fields remain filled in. | **Dialog box pops up labeled “Message” stating “Invalid password” with “OK” and “X” buttons.**  **Clicking “OK” closes the dialog box and makes no other changes.**  **Student information fields remain populated.** |
| Test 15: Password Mismatch  (New) | Preconditions: Test 2 has passed  Fill in the following for Student Information:  **First Name:** Ronald  **Last Name:** Weasley  **ID:** rweasle  **Email:** rweasle@ncsu.edu  **Password:** leviosA  **Repeate Password:** leviOsa  **Max Credits:** 15  Click **Add Student**  *Check results*  Remove text from Student Information fields  Close GUI | A pop-up dialog stating “Passwords do not match” is displayed.  Student information fields remain filled in. | **Dialog box pops up labeled “Message” stating “Passwords do not match” with “OK” and “X” buttons.**  **Clicking “OK” closes the dialog box and makes no other changes.**  **Student information fields remain populated.** |
| Test 8: Save Student Directory  (Modified) | Preconditions: Test 2 and Test 7 have passed  Click **Save Student Directory**  Select test-files folder. Enter the filename actual\_student\_records.txt  Click **Save** (it’s ok to overwrite old results)  *Check results*  Close GUI | In Eclipse, right click on the PackScheduler project and select **Refresh.**  Open the test-files folder and open actual\_student\_records.txt in the editor.  The contents should be:   * 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 * 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 * Neville,Longbottom,nlongbo,nlongbo@ncsu.edu,u�0)̡�Ev�E���:;ܠv�A�W5߼$,15 * Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0�R��"��u���\7X�F���9�{-O�F�ap�,5 * Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,4 * Griffith,Stone,gstone,porta@magnamalesuadavel.net,0�R��"��u���\7X�F���9�{-O�F�ap�,17 * George,Weasley,gweasle,gweasle@ncsu.edu,����9����鄤xm�y+��:�G��ޕ�,12 | **Contents read:**   * **Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0�R��"��u���\7X�F���9�{-O�F�ap�,18** * **Lane,Berg,lberg,sociis@non.org,0�R��"��u���\7X�F���9�{-O�F�ap�,14** * **Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0�R��"��u���\7X�F���9�{-O�F�ap�,12** * **Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0�R��"��u���\7X�F���9�{-O�F�ap�,3** * **Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0�R��"��u���\7X�F���9�{-O�F�ap�,11** * **Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0�R��"��u���\7X�F���9�{-O�F�ap�,15** * **Neville,Longbottom,nlongbo,nlongbo@ncsu.edu,u�0)̡�Ev�E���:;ܠv�A�W5߼$,15** * **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** * **George,Weasley,gweasle,gweasle@ncsu.edu,����9����鄤xm�y+��:�G��12, ޕ�** |
| Test 9: Reset Directory | Preconditions: Test 2 has passed  Click **New Student Directory**  *Check results*  Close GUI | Student Directory table is empty.  Student Information fields are empty with only labels. | **Student Directory table is empty.**  **Student Information fields are empty with only labels.** |