# Lab 02: Black Box Test Plan

Write at least 15 black box tests for the StudentDirectory portion of PackScheduler. Each test should consider a different equivalence class or boundary value (which should be labeled under the Test ID). Remember to use repeatable and specific values.

Any new input or expected output files should be created and placed in your test-files/ directory so the teaching staff can run your tests.

Actual results of execution MUST be reported for full credit.

## 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: Open  GUI | Preconditions: None  Run StudentDirectoryPanel.java.  *Check results*  Close GUI | StudentDirectoryPanel loads  Student Directory is empty  Student Information only shows labels | StudentDirectoryPanel loads  Student Directory is empty  Student Information only shows labels |
| Test 2: Invalid File | Preconditions: Test 1 passed  Run StudentDirectoryPanel.java.  Click **Load Student Directory**  Open test-files/invalid\_student\_records.txt  Click **Select**  *Check results*  Close GUI | StudentDirectoryPanel loads  StudentDirectory is empty  StudentInformation only shows labels | StudentDirectoryPanel loads  StudentDirectory is empty  StudentInformation only shows labels |
| Test 3: Valid File | Preconditions: Test 1 passed  Run StudentDirectoryPanel.java.  Click **Load Student Directory**  Open test-files/student\_records.txt  Click **Select**  *Check results*  Close GUI | StudentDirectoryPanel loads  Student Directory has the following names in the following order:  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 only shows labels | StudentDirectoryPanel loads  Student Directory has the following names in the following order:  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 only shows labels |
| Test 4: Add- No. Sel | Preconditions: Test 1 and 3 passed  Make sure all Student Information fields are empty.  Click “Add Student”  *Check* *results* | A pop-up message saying “Max credits must be a positive number between 3 and 18.” Is displayed. | A pop-up message saying “Max credits must be a positive number between 3 and 18.” Is displayed. |
| Test 5: Add Student | Preconditions: Test 1 and 3 have passed  Enter the following information into the corresponding Student Information fields:  First Name: David  Last Name: Thompson  ID: djthomp3  Email: [notrealemail@fakesite.com](mailto:notrealemail@fakesite.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  Click “Add student”  *Check Results* | “David Thompson djthomp3” is displayed under:  “Griffith Stone gstone” in Student Directory.  Student Information is empty. | “David Thompson djthomp3” is displayed under:  “Griffith Stone gstone” in Student Directory.  Student Information is empty. |
| Test 6: Remove no-select. | Preconditions: Test 1 and 3 have passed  If a student is selected in the Student Directory then close StudentDirectoryPanel and run it again.  Make sure no student is selected.  Click “Remove Student”  *Check* *Results* | Student Directory has the following names in the following order:  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  A pop-up message saying: “No student selected.” Is displayed. | Student Directory has the following names in the following order:  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  A pop-up message saying: “No student selected.” Is displayed. |
| Test 7: Add  Same Student | Preconditions: Test 1, Test 3, and Test 5 have passed  Make sure David is not already in Schedule Directory.  Enter the following information into the corresponding Student Information fields:  First Name: David  Last Name: Thompson  ID: djthomp3  Email: [notrealemail@fakesite.com](mailto:notrealemail@fakesite.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  Click Add Student.  Add the student again.  Check Results | Student Directory has the following names in the following order:  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  David,Thompson,djthomp3  A pop-up message saying: “Student already in system.” | Student Directory has the following names in the following order:  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  David,Thompson,djthomp3  A pop-up message saying: “Student already in system.” |
| Test 8: New Student Directory | Preconditions: Test 1 and Test 3 have passed  Click “New Student Directory”    Check Results | StudentDirectoryPanel loads  Student Directory is empty  Student Information only shows labels | StudentDirectoryPanel loads  Student Directory is empty  Student Information only shows labels |
| Test 9: Remove Student | Preconditions: Test 1, 3, 5 and 8 have passed  Click “New Student Directory”  Enter the following information into the corresponding Student Information fields:  First Name: David  Last Name: Thompson  ID: djthomp3  Email: [notrealemail@fakesite.com](mailto:notrealemail@fakesite.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  Click Add Student.  Click on David’s name in the Student Directory  Click Remove Student  *Check* *Results* | Student Directory is empty. | Student Directory is empty. |
| Test 10: Add Multiple Students | Preconditions: Test 1, Test 3, 5 and 8 have passed  Click New Student Directory  Enter the following information into the corresponding Student Information fields:  First Name: David  Last Name: Thompson  ID: djthomp3  Email: [notrealemail@fakesite.com](mailto:notrealemail@fakesite.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  Click Add Student.  Do the same except **notice** the fields are **different**  except for the student’s first and last name.  First Name: David  Last Name: Thompson  ID: djthomp2  Email: [email@website.com](mailto:email@website.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 17  Click Add Student. | The Student Directory looks like:  David,Thompson,djthomp2  David,Thompson,djthomp3 | The Student Directory looks like:  David,Thompson,djthomp2  David,Thompson,djthomp3 |
| Test 11: Remove Multiple | Preconditions: Test 1 and 3 have passed  Click on the 2nd row in Student Directory.  Click Remove Student  Click on the 3rd row in Student Directory.  Click Remove Student  *Check* *Results* | The Schedule Directory now shows:  Demetrius,Austin,daustin  Raymond,Brennan,rbrennan  Shannon,Hansen,shansen  Althea,Hicks,ahicks  Zahir,King,zking  Dylan,Nolan,dnolan  Cassandra,Schwartz,cschwartz  Griffith,Stone,gstone | The Schedule Directory now shows:  Demetrius,Austin,daustin  Raymond,Brennan,rbrennan  Shannon,Hansen,shansen  Althea,Hicks,ahicks  Zahir,King,zking  Dylan,Nolan,dnolan  Cassandra,Schwartz,cschwartz  Griffith,Stone,gstone |
| Test 12: Save New Student Directory | Preconditions: Test 1, 5, 8, and 10 have passed  In an empty schedule add the following students:  First Name: David  Last Name: Thompson  ID: djthomp2  Email: [email@website.com](mailto:email@website.com)  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  First Name: Jacob  Last Name: Campbell  ID: jpcampb  Email: mail@email.com  Password: wolfpack  Repeat Password: wolfpack  Max Credits: 18  Click “Save Student Directory”  Browse into: /test-files  Name the file: bbtp\_test\_student.txt  *Check* *Results* | Go to Eclipse.  Right Click PackScheduler project.  Click Refresh.  Open /test-files.  Open bbtp\_test\_student.txt file  Contents should be:  **On** **first** **line**:  Jacob,Campbell,jpcampb,mail@email.com, 'Q¶oÕÞ¢M¤ï?\_¦ÙÓÛ\_µL\_ù\_PÝ PÆ¥\_î?\_,18  **On** **Second** **Line:**  David,Thompson,djthomp2,email@website.com, 'Q¶oÕÞ¢M¤ï?\_¦ÙÓÛ\_µL\_ù\_PÝ PÆ¥\_î?\_,18 | Go to Eclipse.  Right Click PackScheduler project.  Click Refresh.  Open /test-files.  Open bbtp\_test\_student.txt file  Contents should be:  **On** **first** **line**:  Jacob,Campbell,jpcampb,mail@email.com, 'Q¶oÕÞ¢M¤ï?\_¦ÙÓÛ\_µL\_ù\_PÝ PÆ¥\_î?\_,18  **On** **Second** **Line:**  David,Thompson,djthomp2,email@website.com, 'Q¶oÕÞ¢M¤ï?\_¦ÙÓÛ\_µL\_ù\_PÝ PÆ¥\_î?\_,18 |
| Test 13: Load Schedule | Preconditions: Test 12 has passed  Click “Load Student Directory”.  Browse to /test-files  Open the file you just created: bbtp\_test\_student.txt  *Check* *Results* | Student Directory shows:  Jacob,Campbell,jpcampb  David,Thompson,djthomp2  Student Information only has labels | Student Directory shows:  Jacob,Campbell,jpcampb  David,Thompson,djthomp2  Student Information only has labels |
| Test 14:  Remove, Save, Load | Preconditions: Tests 1, 3, and 9 have passed  Click on the first row in Student Directory.  Click Remove Student  Click “Save Student Directory”  Browse into: /test-files  Name the file: remove\_first\_bbtp.txt  Close StudentDirectoryPanel.  Right Click PackScheduler project in eclipse and click Refresh.  Run StudentDirectoryPanel.  Click “Load Student Directory”.  Browse to /test-files  Open the file you just created: remove\_first\_bbtp.txt  *Check* *Results* | Student Directory shows the following students in the following order:  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 Directory shows the following students in the following order:  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 |
| Test 15  Save – Load Empty File | Precondition: Test 1, 12 and 13 have passed  Click “New Student Directory”  Click “Save Student Directory”  Browse into: /test-files  Name the file: empty\_student\_bbtp.txt  Close StudentDirectoryPanel.  Right Click PackScheduler project in eclipse and click Refresh.  Run StudentDirectoryPanel.  Click “Load Student Directory”.  Browse to /test-files  Open the file you just created: empty\_student\_bbtp.txt  *Check* *Results* | Student Directory is empty.  Student Information only shows labels.  No errors are shown. | Student Directory is empty.  Student Information only shows labels.  No errors are shown. |