# Lab 02: Black Box Test Plan

## Test Overview

Each test can be run consecutively AFTER test 1 if each test passes after one and another. If any system errors/mistypes occur then you should restart PackScheduler before continuing through the system tests.

A new file is output called directory\_output.txt, should out put to the test-files folder/overwrite the existing on in the folder. Other than that only the provided files are used ( invalid\_student\_records.txt ) ( student\_records.txt )

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test 1: Invalid File  Equivalence Class (checking invalid file) | Preconditions: None   1. Run PackScheduler 2. Click **Load Student Directory** 3. In the file menu Select: **test-files/invalid\_student\_records.txt** 4. Click **Select** 5. Check Results 6. Close GUI | PackScheduler loads.  Student directory is empty.  Student information panel is empty. | PackScheduler loads.  Student directory is empty.  Student information panel is empty. |
| Test 2: Valid File  Equivalence Class  (Testing a valid test file loads students) | Preconditions: None   1. Run PackScheduler 2. Click **Load Student Directory** 3. In the file menu Select: **test-files/student\_records.txt** 4. Click **Select** 5. Check Results 6. Close GUI | PackScheduler loads.  10 students load into the Student Directory Panel:  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 panel is empty. | PackScheduler loads.  10 students load into the Student Directory Panel:  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 panel is empty. |
| Test 3:  New Student Directory  Equivalence Class  (Test functionality of new student directory) | Preconditions: Test 2 has passed.  Click **New Student Directory**  Check Results | Student directory is cleared  Student directory is empty.  Student information panel is empty. | Student directory is cleared  Student directory is empty.  Student information panel is empty. |
| Test 4: Add Valid Student  Equivalence Class  (Tests adding valid student functionality) | Preconditions: Test 2 has passed  In the Student information panel enter:  First Name: Ashten  Last Name: Herr  ID: agherr  Email: agherr@ncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 15  Click **Add Student**  Check Results | 11 students are displayed in the student directory panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone | 11 students are displayed in the student directory panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone |
| Test 5: Remove Student  Equivalence Class:  Testing remove student functionality | Preconditions: Test 2 and 4 have passed.  In the Student Directory panel select the 6th row  Ashten Herr agherr  Click **Remove Student**  Check Results | 10 students exist in the Student Directory Panel:  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 | 10 students exist in the Student Directory Panel:  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 |
| Test 6: Add Student With High Credits  Boundary value (checking boundaries on credit value) | Preconditions: Test 2, 4-5 has passed  In the Student information panel enter:  First Name: Ashten  Last Name: Herr  ID: agherr  Email: agherr@ncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 19  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box which says “Invalid max credits” is displayed. | A pop-up dialog box which says “Invalid max credits” is displayed. |
| Test 7: Add Student with low Max credits  (Boundary Value on credits valueE) | Preconditions: Test 2, 4-6 has passed  In the Student information panel enter:  First Name: Ashten  Last Name: Herr  ID: agherr  Email: agherr@ncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 2  Click **Add Student**  Check Results | 11 students exist in the Student Directory Panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone | 11 students exist in the Student Directory Panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone |
| Test 8: add student with same ID  Equivalence Class | Preconditions: Test 2, 4-7 has passed  In the Student information panel enter:  First Name: Ashten  Last Name: Herr  ID: agherr  Email: agherr@ncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Student already in system.” Appears. | A pop-up dialog box appears which contains the text “Student already in system.” Appears. |
| Test 9: Invalid Password  Equivalence Class | Preconditions: Test 2, 4-8 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsu@ncsu.edu  Password:  Repeat Password:  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Invalid password” Appears. | A pop-up dialog box appears which contains the text “Invalid password” Appears. |
| Test10: Mismatch Password  Equivalence Class | Preconditions: Test 2, 4-9 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsu@ncsu.edu  Password: wrong  Repeat Password: password  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Passwords do not match” Appears. | A pop-up dialog box appears which contains the text “Passwords do not match” Appears. |
| Test 11: Email With no ‘@’  Equivalence Class | Preconditions: Test 2, 4-10 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsuncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Invalid email” Appears. | A pop-up dialog box appears which contains the text “Invalid email” Appears. |
| Test 12: Email with no ‘.’ Character  Equivalence Class | Preconditions: Test 2, 4-11 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsu@ncsuedu  Password: pw  Repeat Password: pw  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Invalid email” Appears. | A pop-up dialog box appears which contains the text “Invalid email” Appears. |
| Test 13: Email with backwards characters  Equivalence Class | Preconditions: Test 2, 4-12 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsu.ncsu@edu  Password: pw  Repeat Password: pw  Max Credits: 15  Click **Add Student**  Check Results  Close Dialog Box | A pop-up dialog box appears which contains the text “Invalid email” Appears. | A pop-up dialog box appears which contains the text “Invalid email” Appears. |
| Test 14: Max credit value  Boundary Value- tests maximum possible credit value | Preconditions: Test 2, 4-13 has passed  In the Student information panel enter:  First Name: Wolf  Last Name: Pack  ID: ncsu  Email: ncsu@ncsu.edu  Password: pw  Repeat Password: pw  Max Credits: 18  Click **Add Student**  Check Results  Close Dialog Box | 12 students exist in the Student Directory Panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Wolf, Pack, ncsu  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone | 12 students exist in the Student Directory Panel:  Demetrius, Austin, daustin  Lane, Berg, lberg  Raymond, Brennan, rbrennan  Emerald, Frost, efrost  Shannon, Hansen, shansen  Ashten, Herr, agherr  Althea, Hicks, ahicks  Zahir, King, zking  Dylan, Nolan, dnolan  Wolf, Pack, ncsu  Cassandra, Schwartz, cschwartz  Griffith, Stone, gstone  Wolf, Pack, ncsu |
| Test 15:  Save Directory  Equivalence Class  Tests equality on output files | Preconditions: Test 2, 4-14 has passed  Click **Save Student Directory**  Click on the **test-files** folder  Type **directory\_output.txt**  Click **Save**  Close GUI  Check Results | In Eclipse, right click on the PackScheduler project and select **Refresh.**  Open the test-files folder and open directory\_output.txt in the editor.  Directory\_output.txt should contain 12 lines of student information. With this content,  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,18  Lane,Berg,lberg,sociis@non.org,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,14  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,3  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,14  Ashten,Herr,agherr,agherr@ncsu.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,5  Wolf,Pack,ncsu,ncsu@ncsu.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,18  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,17 | In Eclipse, right click on the PackScheduler project and select **Refresh.**  Open the test-files folder and open directory\_output.txt in the editor.  Directory\_output.txt should contain 12 lines of student information. With this content,  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,18  Lane,Berg,lberg,sociis@non.org,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,14  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,3  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,14  Ashten,Herr,agherr,agherr@ncsu.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,5  Wolf,Pack,ncsu,ncsu@ncsu.edu,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,18  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0ÉRú±"ÃùuŸ\_¦Ù\7X²F´þâ9•{-OîFâapÄ,17 |