# Lab 03: Black Box Test Plan

## Test Overview

To run the tests:

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

The FileChooser for the course catalog will load automatically.

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 2-13 on the same GUI if there are no failures. If there are failures, you can use the preconditions to identify the dependent test cases.

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test: 1  Invalid File | Preconditions:  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/invalid\_student\_records.txt | Nothing loads from the invalid file. All student information remains empty in the GUI. | Nothing loads from the invalid file. All student information remains empty in the GUI. |
| Test: 2  Valid File | Preconditions:  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt | A list of 10 Student Names shows up in the Student Directory. | A list of 10 Student Names shows up in the Student Directory. |
| Test 3:  No Selection | Preconditions:  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  4. Click Add student | An Error Saying “Max Credits must be a positive number between 3 and 18” pops up. No student is added to the | An Error Saying “Max Credits must be a positive number between 3 and 18” pops up. No student is added to the |
| Test 4:  Remove Student | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Click the student on row 1  6. Click Remove Student | The student in Row one is then removed from the row making “Berg” the new 1st student in the Student Directory. | The student in Row one is then removed from the row making “Berg” the new 1st student in the Student Directory. |
| Test 5:  Invalid First Name | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with nothing for first name and for the rest(“Last”,”id”,”email@ncsu.edu”,”password”,”password”,”15”)  6. Click Add Student | No student is added to the Directory and an error is thrown saying “Invalid First Name”. | No student is added to the Directory and an error is thrown saying “Invalid first name”. |
| Test 6: Invalid Last Name | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with nothing for last name and for the rest(“first”,”id”,”email@ncsu.edu”,”password”,”password”,”15”)  6. Click Add Student | No student is added to the directory and an error is thrown saying “Invalid Last name”. | No student is added to the directory and an error is thrown saying “Invalid last name”. |
| Test 7:  Invalid id | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with nothing for id and for the rest(“first”,”last”,”email@ncsu.edu”,”password”,”password”,”15”)  6. Click Add Student | No student will be added to the directory and an error message will show up saying “Invalid id”. | No student was added to the directory and an error message will show up saying “Invalid id”. |
| Test 8:  Invalid Email | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with “ncsu.edu@email” for the email and for the rest(“first”,”last”,”id”,”password”,”password”,”15”)  6. Click Add Student | No student is added to the directory. An error is displayed saying “Invalid email”. | No student is added to the directory. An error is displayed saying “Invalid email”. |
| Test 9: Test Invalid Password | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with nothing for password and for the rest(“first”,”last”,”id”,”email@ncsu.edu”,””,”password”,”15”)  6. Click Add Student | An error message saying “Invalid password” is shown. No student is then added to the student directory | An error message saying “Invalid password” is shown. No student is then added to the student directory |
| Test 10: Mismatched Passwords | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with rest(“first”,”last”,”id”,”email@ncsu.edu”,”passw0rd”,”password”,”15”)  6. Click Add Student | An error message pops up saying “Passwords do not match”. No student is added to the student directory. | An error message pops up saying “Passwords do not match”. No student is added to the student directory. |
| Test 11:  Test Min Credits | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with rest(“first”,”last”,”id”,”email@ncsu.edu”,”password”,”password”,”2”)  6. Click Add Student | An error Message pops up saying “Invalid max credits”. No student is added to the student directory. | An error Message pops up saying “Invalid max credits”. No student is added to the student directory. |
| Test 12: Test Max Credit | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with rest(“first”,”last”,”id”,”email@ncsu.edu”,”password”,”password”,”20”)  6. Click Add Student | An error Message pops up saying “Invalid max credits”. No student is added to the student directory | An error Message pops up saying “Invalid max credits”. No student is added to the student directory |
| Test 13: Successful student adding | Preconditions: Test 2 has passed  1. Run Student Directory Panel  2. Click Load Student Directory  3. In the **Load Student Directory** FileChooser dialog select: test-files/ student\_records.txt  5. Fill out the student information with rest(“first”,”last”,”id”,”email@ncsu.edu”,”password”,”password”,”15”)  6. Click Add Student | A new student is added to the directory with the information in the directory as   * First, Last, id | A new student is added to the directory with the information in the directory as   * First, Last, id |
| Test 14: Test save student directory | Preconditions: Test 13 has passed  1. Click Save Student Directory  2. Name the directory “actual\_directory.txt”  3. Open the directory in Eclipse | Directory has 10 students listed in it   * Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,18 * Lane,Berg,lberg,sociis@non.org,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,14 * Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,12 * Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,3 * Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,14 * Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,11 * Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,15 * Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,5 * Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,4 * Griffith,Stone,gstone,porta@magnamalesuadavel.net,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,17 | Directory has 10 students listed in it   * Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,18 * Lane,Berg,lberg,sociis@non.org,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,14 * Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,12 * Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,3 * Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,14 * Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,11 * Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,15 * Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,5 * Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,4 * Griffith,Stone,gstone,porta@magnamalesuadavel.net,0ï¿½Rï¿½ï¿½"ï¿½ï¿½uï¿½\_ï¿½ï¿½\7Xï¿½Fï¿½ï¿½ï¿½9ï¿½{-Oï¿½Fï¿½apï¿½,17 |
| Test 15:  Test new Directory | Preconditions: Test 13 has passed  1. Remove all students from student directory until only (“first”,”last”,”id”,”email@ncsu.edu”,”password”,”password”,”20”) is left.  2. Click Save Student Directory  3. Name the directory “actual\_directory.txt”  4. Open the directory in Eclipse | Directory only has 1 student in it   * First,Last,id,email@ncsu.edu,^�H��(\_qQ��o��)'s`=j���\*\_�r\_\_B�,15 | Directory only has 1 student in it   * First,Last,id,email@ncsu.edu,^�H��(\_qQ��o��)'s`=j���\*\_�r\_\_B�,15 |