# Lab 02: System Test Plan

## Test Overview

\*\*\*If you are last to add system test cases make sure it gets added to the eclipse project docs and pushed to github\*\*\*

| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| --- | --- | --- | --- |
| Test 1: Open PackScheduler  **UC0** | Preconditions: None   1. Run StudentDirectoryPanel as Java Application 2. *Check results* | PackScheduler window opens with four sections: Directory Buttons, Student Directory, Student Controls, Student Information | PackScheduler window opens with four sections: Directory Buttons, Student Directory, Student Controls, Student Information |
| Test 2: Load Invalid File  **UC3** Alternative Flow: Invalid File | Preconditions: Test 1   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “file.txt” (non-existent in path) in File Name field 4. Click Select button 5. *Check results* 6. Click OK 7. *Check results* | * FileChooser Dialog opens * Dialog opens with message: “Unable to read file ${repo path}\PackScheduler\file.txt” * Clicking OK causes return to Student Directory, which has no records | * FileChooser window opens * Selecting file.txt opens error message with “Unable to read file …\PackScheduler\file.txt”, * Clicking OK closes message and returns to unchanged PackScheduler |
| Test 3:  Load Invalid Records  **UC3** Ignore invalid records | Preconditions: Test 1   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/invalid\_student\_records.txt” in File Name field 4. Click Select button 5. *Check results* | * FileChooser Dialog opens * Clicking select causes return to Student Directory, which has no records | * FileChooser window opens * Selecting test-files/invalid\_student\_records.txt closes FileChooser and returns to unchanged PackScheduler |
| Test 4: Load Student Directory  **UC3**  Load and display valid records as they are in file | Preconditions: Test 1   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* | * FileChooser Dialog opens * Clicking select causes return to Student Directory * Student Directory has 10 records (in order):   **First Name,Last Name,Student ID**  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 | * FileChooser window opens * Selecting test-files/student\_records.txt closes FileChooser and returns to PackScheduler * Student Directory section now has 10 students (first names correspond with expected last names and ids):   + Demetrius   + Lane   + Raymond   + Emerald   + Shannon   + Althea   + Zahir   + Dylan   + Cassandra   + Griffith |
| Test 5:AddValidStudent  UC5 - adding a valid student to the directory | Preconditions: Test 4   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* 6. Input valid student informations   Ex. “first”, “last”, “flast”,”[first\_last@ncsu.edu](mailto:first_last@ncsu.edu)”, “pw”, “15”  7.Click Add Student   1. *Check results* | The new student should be added to 8th place of the student directory list with the valid first and last name and id. | * Student Directory section now has 11 students (first names correspond with expected last names and ids):   + Demetrius   + Lane   + Raymond   + Emerald   + Shannon   + Althea   + Zahir   + first   + Dylan   + Cassandra   + Griffith |
| Test 6:AddStudentInvalidEmail  UC5 Adding a student with invalid info in the directory | Preconditions: Test 4   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* 6. Click Add Student 7. Input invalid student informations   Ex. “first”, “last”, “flast”,”email.bademail”, “pw”, “15”   1. *Check results* | A pop up stating “Invalid email” pops up and a new student is not added to the bottom of the directory | A pop up appears saying “Invalid email” and no new students were added |
| Test 7:AddingDuplicateStudent  UC5 Duplicate students can't be in the directory | Preconditions: Test 5   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* 6. Click Add Student 7. Input valid student informations   Ex. “first”, “last”, “flast”,”[first\_last@ncsu.edu](mailto:first_last@ncsu.edu)”, “pw”, “15”   1. *Check results* | When a student with identical ids are attempted to be added a pop up should appear “Student already in system.” | A pop up appears saying “Student already in system” and no duplicate students appear in the student directory |
| Test 8:RemovingStudent  UC6 Removing students | Preconditions: test 5   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* 6. Click Add Student 7. Input valid student informations   Ex. “first”, “last”, “flast”,”[first\_last@ncsu.edu](mailto:first_last@ncsu.edu)”, “pw”, “15”   1. *Check results* 2. Select the student that was just added in the student directory table 3. Click Remove Student 4. *Check results* | The directory should no longer include the removed student but should still have the original 10   * Student Directory has 10 records (in order):   **First Name,Last Name,Student ID**  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 Directory has the original 10 records (in order):   **First Name,Last Name,Student ID**  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 9:RemoveStudentNothingSelected  UC6 remove student only functions if a student is selected | Preconditions: test 4   1. Click Load Student Directory 2. *Check results* 3. In FileChooser dialog, type “test-files/student\_records.txt” in File Name field 4. Click Select button 5. *Check results* 6. Make sure nothing is selected in the student Directory 7. Click Remove Student 8. *Check results* | A pop up appears stating “No student selected.”  And no students were added or removed from the directory | Student Directory has following students (first names correspond with expected last names and ids):   * Demetrius * Lane * Raymond * Emerald * Shannon * Althea * Zahir * Dylan * Cassandra * Griffith   Pop up message saying ““No student selected.”and the student directory table did not change |
| Test 10: SaveStudentDirectory  **UC4**  A valid list of students can be saved to a file | Preconditions: Test 5 passes   1. Repeat steps from Test 5 to add a student to the directory 2. Click Save Student Directory 3. Go to test-files 4. Save file as actual\_student\_records.txt 5. Click Save 6. *Check results* | Go to the test-files folder in your file system and open actual\_student\_records.txt. The contents should contain 11 students and contain the following:  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,18  Lane,Berg,lberg,sociis@non.org,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,14  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,3  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,14  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  first,last,flast,first\_last@ncsu.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,5  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,17 | Upon opening actual\_student\_records.txt on the file system, the contents of the file are as follows:  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,18  Lane,Berg,lberg,sociis@non.org,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,14  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,3  Shannon,Hansen,shansen,convallis.est.vitae@arcu.ca,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,14  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  first,last,flast,first\_last@ncsu.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,5  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,17 |
| Test 11:  UnmatchingPasswords  **UC5**  A user attempts to add a student wherein the password and repeated password do not match | Preconditions: Test 4 passes   1. Click Load Student Directory 2. In FileChooser dialog, go to “test-files/student\_records.txt” in File Name field 3. Click Select button 4. Enter the following in the Student Information section:    1. first    2. last    3. flast    4. [*first\_last@ncsu.edu*](mailto:first_last@ncsu.edu)    5. pw    6. wp    7. 15 5. Click Add Student 6. *Check results* | An error message “Passwords do not match” is displayed | A pop-up window with the message “Passwords do not match” appears. |
| Test 12: NoFirstName  **UC5**  User inputs a null or empty string as a first name | Preconditions: Test 4 passes   1. Click Load Student Directory 2. In FileChooser dialog, go to “test-files/student\_records.txt” in File Name field 3. Click Select button 4. Enter the following in the Student Information section:    1. <Leave blank>    2. last    3. flast    4. [*first\_last@ncsu.edu*](mailto:first_last@ncsu.edu)    5. pw    6. pw    7. 15 5. Click Add Student 6. *Check results* | An error message “Invalid first name” is displayed | A pop-up window with the message “Invalid first name” appears. |
| Test 13: NoLastName  **UC5**  User inputs a null or empty string as a last name | Preconditions: Test 4 passes   1. Click Load Student Directory 2. In FileChooser dialog, go to “test-files/student\_records.txt” in File Name field 3. Click Select button 4. Enter the following in the Student Information section:    1. first    2. <Leave blank>    3. flast    4. [*first\_last@ncsu.edu*](mailto:first_last@ncsu.edu)    5. pw    6. pw    7. 15 5. Click Add Student 6. *Check results* | An error message “Invalid last name” is displayed | A pop-up window with the message “Invalid last name” appears. |
| Test 14:  Create new Student Directory  **UC2**  Clear GUI of directory contents | Preconditions: Test 1, Test 4   1. One or more students must still be displayed in directory GUI 2. Click New Student Directory button 3. *Check results* | All rows of Student Directory are cleared | All rows of students are cleared so Student Directory has no entries. |
| Test 15: NoId  **UC5**  User inputs a null or empty string as the student ID | Preconditions: Test 4 passes   1. Click Load Student Directory 2. In FileChooser dialog, go to “test-files/student\_records.txt” in File Name field 3. Click Select button 4. Enter the following in the Student Information section:    1. first    2. last    3. <Leave blank>    4. [*first\_last@ncsu.edu*](mailto:first_last@ncsu.edu)    5. pw    6. pw    7. 15 5. Click Add Student 6. *Check results* | An error message “Invalid id” is displayed | A pop-up window with the message “Invalid id” appears. |