# Lab 03: System Test Plan

## Test Overview

To run the following tests, right click on “edu.ncsu.csc216.pack\_scheduler.ui” under “src” in “PackScheduler” in the Package Explorer, then select “Run As” > “Java Application”

A file named “saved\_directory.txt” should exist in “test-files”

| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| --- | --- | --- | --- |
| 1  Valid student records file | Preconditions: PackScheduler GUI is open and Student Directory is empty  Click “Load Student Directory”  Navigate to “test-files” and select “student\_records.txt”  Click “Select”  Check results | Under the “Student Directory” section, 10 students are shown 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 | The file selection menu opens, and the file loads successfully into the main GUI.  The following students are then loaded into the Student Directory:   * 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 |
| 2  Invalid student records file | Preconditions: PackScheduler GUI is open and Student Directory is empty  Click “Load Student Directory”  Navigate to “test-files” and select “invalid\_student\_records.txt”  Click “Select”  Check results | PackScheduler GUI is loaded  After selecting the student records file, no students are displayed under Student Directory | PackScheduler GUI loads successfully, after selecting the invalid student records file, the GUI returns to the main page and no students are shown in the “Student Directory” section |
| 3  Add valid student | Preconditions: PackScheduler GUI is loaded  Under “Student Information,” enter the following information:   * First Name: John * Last Name: Doe * ID: jdoe * Email: jdoe@ncsu.edu * Password: password * Repeat Password: password * Max Credits: 18   Click “Add Student”  Check results | PackScheduler GUI loads successfully  After entering the student information and clicking “Add Student,” a new student appears in the Student Directory:   * John,Doe,jdoe | PackScheduler GUI has loaded successfully  Entering the given student information under “Student Information” and clicking “Add Student” causes the following row to be added under “Student Directory”   * John,Doe,jdoe |
| 4  Add invalid student – non-unique ID | Preconditions: PackScheduler GUI is loaded  A user with ID “jdoe” exists in the Student Directory  Under “Student Information,” enter the following information:   * First Name: John * Last Name: Doe * ID: jdoe * Email: jdoe@ncsu.edu * Password: password * Repeat Password: password * Max Credits: 18   Click “Add Student”  Check results | After entering the student information in the “Student Information” section and clicking “Add Student,” a pop-up appears stating “Student already in system.” | PackSchedulerGUI loads successfully  Entering the given student information and clicking “Add Student” causes a pop-up with the following text to be displayed:   * “Student already in system” |
| 5  Add invalid student – non-matching passwords | Preconditions: PackScheduler GUI is loaded  Under “Student Information,” enter the following information:   * First Name: Sarah * Last Name: Smith * ID: ssmith * Email: ssmith@ncsu.edu * Password: password * Repeat Password: password2   Click “Add Student”  Check results | After entering the given student information under “Student Information,” a pop-up stating “Passwords do not match” appears. | PackSchedulerGUI loads successfully  Entering the given student information and clicking the “Add Student” button causes a pop-up with the following text to be displayed:   * “Passwords do not match” |
| 6  Remove valid student | Preconditions: PackSchedulerGUI is loaded and Test 1 has passed  Select the first student under “Student Directory” (Zahir,King,zking)  Click “Remove Student”  Check results | After selecting the given student and clicking “Remove Student,” the student should disappear from the Student Directory, leaving only the following:   * Demetrius,Austin,daustin * Lane,Berg,lberg * Raymond,Brennan,rbrennan * Emerald,Frost,efrost * Shannon,Hansen,shansen * Althea,Hicks,ahicks * Dylan,Nolan,dnolan * Cassandra,Schwartz,cschwartz * Griffith,Stone,gstone | Selecting the given student clicking the “Remove Student” button causes the selected student to be removed from the Student Directory.  Only the following students remain:   * Demetrius,Austin,daustin * Lane,Berg,lberg * Raymond,Brennan,rbrennan * Emerald,Frost,efrost * Shannon,Hansen,shansen * Althea,Hicks,ahicks * Dylan,Nolan,dnolan * Cassandra,Schwartz,cschwartz * Griffith,Stone,gstone |
| 7  Remove invalid student | Preconditions: PackSchedulerGUI is loaded and Student Directory is empty  Click “Remove Student”  Check results | After clicking “Remove Student,” a pop-up appears, stating “No student selected.” | Clicking the “Remove Student” button with no student selected causes a pop-up with the following text to appear:   * “No student selected.” |
| 8  Add invalid student – invalid password | Preconditions: PackSchedulerGUI is loaded  Enter the following information into the Student Information section:   * First Name: Sarah * Last Name: Smith * ID: ssmith * Email: ssmith@ncsu.edu * Password: * Repeat Password: password2   (Enter nothing in the password field)  Click “Add Student”  Check results | After entering the given information and clicking “Add Student,” a pop-up appears stating “Invalid password” | Entering the given student information and clicking the “Add Student” button causes a pop-up with the following text to appear:   * “Invalid password” |
| 9  Valid New Student Directory | Preconditions: PackSchedulerGUI is open and Test 1 has passed  Click “New Student Directory”  Check results | All of the students previously listed under “Student Directory” are removed, leaving none. | Before clicking “New Student Directory”, all of the students from Test 1 are displayed.  However, after clicking “New Student Directory,” all of those students disappear and “Student Directory” is empty |
| 10  Valid Save Student Directory | Preconditions: WolfSchedulerGUI is open and Test 1 has passed  Click “Save Student Directory”  In the pop-up that appears, navigate to “test-files” and select “saved\_directory.txt” (or create that file if it does not exist) then press “Save”  In Eclipse, navigate to “saved\_directory.txt” in the “test-files” and open it  Check results | After saving the current Student Directory to the given file, “saved\_directory.txt” has the following contents:  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  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 | After clicking “Save Student Directory,” the save pop-up appears, and after selecting the “saved\_directory.txt” file, it contains 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  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 |
| 11  Invalid file for loading a student directory | Preconditions: PackSchedulerGUI is open and a file named “gibberish” does not exist in Pack Scheduler  Click “Load Student Directory”  Next to “File Name” enter “gibberish”  Click “Select”  Check results | After clicking “Select,” a pop-up should appear stating “Unable to read file \_\_\_gibberish”, where \_\_\_ is a path to a nonexistent file called “gibberish” that will vary from machine to machine | Clicking “Load Student Directory,” entering “gibberish” for the file name, and clicking select causes a pop-up with the following text to appear:   * “Unable to read file \_\_\Pack Scheduler\gibberish” |
| 12  Add invalid student - invalid email | Preconditions: PackSchedulerGUI is loaded  Enter the following information into the Student Information section:   * First Name: Sarah * Last Name: Smith * ID: ssmith * Email: ssmith@ncsuedu * Password: password2 * Repeat Password: password2   (Enter an invalid email)  Click “Add Student”  Check results | After entering the given information and clicking “Add Student,” a pop-up appears stating “Invalid email” | Entering the given student information and clicking the “Add Student” button causes a pop-up with the following text to appear:   * “Invalid email” |
| 13  Add invalid student - invalid first name | Preconditions: PackSchedulerGUI is loaded  Enter the following information into the Student Information section:   * First Name: * Last Name: Smith * ID: ssmith * Email: ssmith@ncsu.edu * Password: password2 * Repeat Password: password2   (Enter an empty first name)  Click “Add Student”  Check results | After entering the given information and clicking “Add Student,” a pop-up appears stating “Invalid first name” | Entering the given student information and clicking the “Add Student” button causes a pop-up with the following text to appear:   * “Invalid first name” |
| 14  Add invalid student - invalid last name | Preconditions: PackSchedulerGUI is loaded  Enter the following information into the Student Information section:   * First Name: Sarah * Last Name: * ID: ssmith * Email: ssmith@ncsu.edu * Password: password2 * Repeat Password: password2   (Enter an empty last name)  Click “Add Student”  Check results | After entering the given information and clicking “Add Student,” a pop-up appears stating “Invalid last name” | Entering the given student information and clicking the “Add Student” button causes a pop-up with the following text to appear:   * “Invalid last name” |
| 15  Add invalid max credit - upper limit | Preconditions: PackSchedulerGUI is loaded  Enter the following information into the Student Information section:   * First Name: Sarah * Last Name: Smith * ID: ssmith * Email: ssmith@ncsu.edu * Password: password2 * Repeat Password: password2 * Max Credits: 19   (Enter an empty last name)  Click “Add Student”  Click “Save Student Directory”  In the pop-up that appears, navigate to “test-files” and select “max\_credit\_test.txt” then press “Save”  In Eclipse, navigate to “max\_credit\_test.txt” in the “test-files” and open it  Check results | After saving the current Student Directory to the given file, “max\_credit\_test.txt” has the following contents:  Sarah,Smith,ssmith,ssmith@ncsu.edu,bPYV1byqx3g1Ko8fM2DSPwLzTsGC4lmJf9bOSF14cNQ=,18  (credits should be 18) | After clicking “Save Student Directory,” the save pop-up appears, and after selecting the “max\_credit\_test.txt” file, it contains the following:  Sarah,Smith,ssmith,ssmith@ncsu.edu,bPYV1byqx3g1Ko8fM2DSPwLzTsGC4lmJf9bOSF14cNQ=,18  Credits are set to 18 |