# Lab 03: Black Box Test Plan

## Test Overview

To run the tests:

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

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test 1:  Add Valid Student | Preconditions: None  Run PackSchedulerGUI  Type in the following student details:   * First Name: Parker * Last Name: Brooks * ID: pbrooks * Email: [pbrooks&j@email.com](mailto:pbrooks&j@email.com) * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student  Check Results | In Student Directory under First Name, Last Name, Student ID should be:  Parker Brooks pbrooks | Parker Brooks pbrooks |
| Test 2:  Add invalid Student with invalid First Name | Preconditions: None  Type in the following student details:   * First Name: * Last Name: Brooks * ID: pbrooks * Email: [pbrooks&j@email.com](mailto:pbrooks&j@email.com) * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student | A message box should pop up saying “Invalid first name” | A message box popped up saying invalid first name |
| Test 3:  Remove Student | Preconditions: Test 1 passed  Click on Parker Brooks  Click Remove Student  Check Results | Parker Brooks is removed from Student Directory | Parker Brooks is no longer in Student Directory |
| Test 4:  Add Duplicate Student | Preconditions: Test 1 passed  Type in the following student details:   * First Name: * Last Name: Brooks * ID: pbrooks * Email: [pbrooks&j@email.com](mailto:pbrooks&j@email.com) * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student  Enter the same information again and click Add Student  Check Results | Message box appears saying “Student already in system” | A message box appeared saying “Student already in system” |
| Test 5:  Load Valid Student Directory  (Modified) | Preconditions: None  Click Load Student Directory  Enter the file name student\_records.txt  Click Select  Check Results | Student Directory should have 10 Students with the names, ordered alphabetically by last name, and Student IDs of:   1. Demetrius Austin daustin 2. Lane Berg, lberg 3. Raymond Brennan, rbrennan 4. Emerald Frost, efrost 5. Shannon Hansen, shansen 6. Athea Hicks, ahicks 7. Zahir King, zking 8. Dylan Nolan, dnolan 9. Cassandra Schwartz, cschwartz 10. Griffith Stone, gstone | Student Directory should have 10 Students with the names, ordered alphabetically by last name, and Student IDs of:   1. Demetrius Austin daustin 2. Lane Berg, lberg 3. Raymond Brennan, rbrennan 4. Emerald Frost, efrost 5. Shannon Hansen, shansen 6. Athea Hicks, ahicks 7. Zahir King, zking 8. Dylan Nolan, dnolan 9. Cassandra Schwartz, cschwartz   Griffith Stone, gstone |
| Test 6:  Save Student Directory | Preconditions: Test 5 passed  With Student Directory loaded from student\_records.txt  Click Save Student Directory  Enter the file name saved\_student\_records.txt  Click Save  In the GUI click Load Student Directory  Enter the file name saved\_student\_records.txt  Click Select  Check Results | Student Directory should remain the same | Student Directory remained the same |
| Test 7:  Invalid save file | Preconditions: Test 5 passed  With Student Directory loaded from student\_records.txt  Click Save Student Directory  Enter the file name  /home/pbrooks/student\_records.txt  Click Save  Check Results | Message box should pop up saying:  “Unable to write to file <path name>\PackScheduler\home\pbrooks\student\_records.txt” | Message box popped up saying:  “Unable to write to file <path name>\PackScheduler\home\pbrooks\student\_records.txt” |
| Test 8:  New Student Directory | Preconditions: Test 1 or Test 5 passed  With Student Directory loaded from student\_records.txt  Click New Student Directory  Check Results | Student Directory should be empty | Student Directory is empty |
| Test 9:  Load Invalid Student Directory | Preconditions: None  Click Load Student Directory  Enter file name notAFile  Click Select  Check Results | Message box should appear with the message:  “Unable to read file <path name>\PackScheduler\notAFile” | A message box appeared with the message:  “Unable to read file <path name>\PackScheduler\notAFile” |
| Test 10:  Invalid Last Name | Preconditions: None  Type in the following student details:   * First Name: Parker * Last Name: * ID: pbrooks * Email: [pbrooks&j@email.com](mailto:pbrooks&j@email.com) * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student  Check Results | A message box should pop up saying:  “Invalid last name” | A message box popped up saying:  “Invalid last name” |
| Test 11:  Invalid ID | Preconditions: None  Type in the following student details:   * First Name: Parker * Last Name: Brooks * ID: * Email: [pbrooks&j@email.com](mailto:pbrooks&j@email.com) * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student  Check Results | A message box should pop up saying:  “Invalid id” | A message box popped up saying:  “Invalid id” |
| Test 12:  Invalid Email | Preconditions: None  Type in the following student details:   * First Name: Parker * Last Name: Brooks * ID: pbrooks * Email: pbrooks.j@email * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: 4   Click Add Student  Check Results | A message box should pop up saying:  “Invalid email” | A message box popped up saying:  “Invalid email” |
| Test 13:  Invalid Password | Preconditions: None  Type in the following student details:   * First Name: Parker * Last Name: Brooks * ID: pbrooks * Email: pbrooks.j@email.com * Password: * Repeated Password: * Max Credits: 4   Click Add Student  Check Results | A message box should pop up saying:  “Invalid password” | A message box popped up saying:  “Invalid password” |
| Test 14: Invalid Max Credits | Preconditions: None  Type in the following student details:   * First Name: Parker * Last Name: Brooks * ID: pbrooks * Email: pbrooks.j@email.com * Password: PB&Jsforlifez * Repeated Password: PB&Jsforlifez * Max Credits: -100   Click Add Student  Check Results | A message box should pop up saying:  “Invalid max credits” | A message box popped up saying:  “Invalid max credits” |
| Test 15: Saving an edited Student Directory  (Modified) | Precondition: Test 5 Passed  Type in the following student information:   * First Name: Gary * Last Name: Larry * ID: Harry * Email: [Jerry@Carrie.com](mailto:Jerry@Carrie.com) * Password: Marie * Repeated Password: Marie * Max Credits: 15   Click Add Student  Check Results  Click Save Student Directory  Click test-files  Save as New\_Student  Close GUI  Check New\_Students.txt | Gary, Larry, Harry should be added as an 8th student.  Document should be the same as student\_records.txt, but Gary’s information should be on the 11th line with the Password hashed. | Gary, Larry, Harry should be added as an 8th student.  Document should be the same as student\_records.txt, but Gary’s information should be on the 11th line with the Password hashed. |
| Test 16: Adding Valid Students into a pre-existing Student Directory  (New) | Precondition: Test 15 passed  Click Load Student Directory  Select the New\_Student.txt file in the test-files Folder  Type in the following student information:   * First Name: Yellow * Last Name: Marker * ID: Highlighter * Email: [Highlight@email.com](mailto:Highlight@email.com) * Password: NeonY3ll0w * Repeated Password: NeonY3llow * Max Credits: 10   Click Add Student  Check Results  Type in the following student information:   * First Name: Anthony * Last Name: Aardvark * ID: anteater * Email: [Slurpie@email.com](mailto:Slurpie@email.com) * Password: Anti-ant777 * Repeated Password: Anti-ant777 * Max Credits: 7   Click Add Student  Check Results  Type in the following student information:   * First Name: Ranbo * Last Name: Zambo * ID: rzam * Email: [email@email.com](mailto:email@email.com) * Password: dunno * Repeated Password: dunno * Max Credits: 7   Click Add Student  Check Results  Close GUI | Yellow Marker Highlighter appears as the 9th student in the Directory  Anthony Aardvark anteater appears as the 1st student in the Directory  Ranbo Zambo rzam appears as the last student in the Directory | Yellow Marker Highlighter appears as the 9th student in the Directory  Anthony Aardvark anteater appears as the 1st student in the Directory  Ranbo Zambo rzam appears as the last student in the Directory |