# Lab 12: 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

All tests files should be located in the test-files/ folder.

If you run all tests independently, you can close the GUI between each test. However, the tests are structured so that they may be run in order without shutting down the GUI.

## Test Initialization

Each test should start with the following steps:

1. Log in as a registrar using the id “registrar” and password “Regi5tr@r”
2. Click on Student Directory button
3. Click on Load Student Directory button
4. Load test-files/student\_records.txt. Click Select button.
5. Click Faculty Directory button
6. Click on Load Faculty Directory button
7. Load test-files/faculty\_records\_extended.txt. Click Select button.
8. Click Course Catalog button
9. Click on Load Course Catalog button
10. Load test-files/course\_records.txt. Click Select button.
11. Logout.

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| T1: Empty Faculty Schedule Panel | Preconditions: PackSchedulerGUI has loaded and the test has been initialized.  User ID: **sesmith5**  Password: **pw**  Click **Login**.  Check results. | Sesmith5 is logged in and is switched to the faculty schedule view. There is a Logout button in the top left corner. Faculty Schedule shows columns for Name, Section, Title, Meeting, and Open Seats, and has 1 course (CSC216 001). Course Details is empty but has labels for Name, Section, Title, Instructor, Credits, Enrollment Cap, and Open Seats. Course Roll is empty but has columns for First Name, Last Name, and Student ID. | Sesmith5 is logged in and is switched to the faculty schedule view. There is a Logout button in the top left corner. Faculty Schedule shows columns for Name, Section, Title, Meeting, and Open Seats, and has 1 course (CSC216 001). Course Details is empty but has labels for Name, Section, Title, Instructor, Credits, Enrollment Cap, and Open Seats. Course Roll is empty but has columns for First Name, Last Name, and Student ID. |
| T2: Remove Faculty From Course | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T1 has run.  Click **Logout**.  User ID: **registrar**  Password: **Regi5tr@r**  Click **Login**.  Click **Faculty Assignment**.  Select **CSC216 001** and **Sarah Heckman**.  Click **Remove Faculty From Course**.  Click **Logout**.  User ID: **sesmith5**  Password: **pw**  Click **Login**.  Check results. | Sesmith5 is logged in and is switched to the faculty schedule view. There is a Logout button in the top left corner. Faculty Schedule is empty and shows columns for Name, Section, Title, Meeting, and Open Seats. Course Details is empty but has labels for Name, Section, Title, Instructor, Credits, Enrollment Cap, and Open Seats. Course Roll is empty but has columns for First Name, Last Name, and Student ID. | Sesmith5 is logged in and is switched to the faculty schedule view. There is a Logout button in the top left corner. Faculty Schedule is empty and shows columns for Name, Section, Title, Meeting, and Open Seats. Course Details is empty but has labels for Name, Section, Title, Instructor, Credits, Enrollment Cap, and Open Seats. Course Roll is empty but has columns for First Name, Last Name, and Student ID. |
| T3: Assign Faculty To Course | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T2 has run.  Click **Logout**.  User ID: **registrar**  Password: **Regi5tr@r**  Click **Login**.  Click **Faculty Assignment**.  Select **CSC216 001** and **Sarah Heckman**.  Click **Assign Faculty to Course**.  Click **Logout**.  User ID: **sesmith5**  Password: **pw**  Click **Login**.  Select **CSC216 001**.  Check results. | Faculty Schedule shows 1 course: CSC216 001 Programming Concepts – Java TH 1:30PM-2:45PM 5 Open Seats  Course Details shows:   * Name: CSC216 * Section: 001 * Title: Programming Concepts – Java * Instructor: sesmith5 * Credits: 4 * Meeting: TH 1:30PM-2:45PM * Enrollment Cap: 10 * Open Seats: 10   Waitlist: 0  Course Details shows 0 students. | Faculty Schedule shows 1 course: CSC216 001 Programming Concepts – Java TH 1:30PM-2:45PM 5 Open Seats  Course Details shows:   * Name: CSC216 * Section: 001 * Title: Programming Concepts – Java * Instructor: sesmith5 * Credits: 4 * Meeting: TH 1:30PM-2:45PM * Enrollment Cap: 10 * Open Seats: 10   Waitlist: 0  Course Details shows 0 students. |
| T4: Cancel Load Student Directory | Preconditions: PackSchedulerGUI has loaded.  User ID: **registrar**  Password: **Regi5tr@r**  Click **Login**.  Click **Student Directory**.  Click **Load Student Directory**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T5: Cancel Save Student Directory | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T4 has run.  Click **Save Student Directory**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T6: Cancel Load Faculty Directory | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T5 has run.  Click **Faculty Directory**.  Click **Load Faculty Directory**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T7: Cancel Save Faculty Directory | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T6 has run.  Click **Save Faculty Directory**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T8: Cancel Load Course Catalog | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T7 has run.  Click **Course Catalog**.  Click **Load Course Catalog**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T9: Cancel Save Course Catalog | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T8 has run.  Click **Save Course Catalog**.  Click **Cancel**.  Check results. | Console doesn’t show any exceptions thrown and no internal state has been modified. | Console doesn’t show any exceptions thrown and no internal state has been modified. |
| T10: Display Empty Final Schedule | Preconditions: PackSchedulerGUI has loaded and the test has been initialized.  Click **Logout**.  User ID: **daustin**  Password: **pw**  Click **Login**.  Click **Display Final Schedule**.  Check results. | Error message: At least one course must be added to the schedule. |  |
| T11: Display Final Schedule Details | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T10 has run.  Select **CSC216 001**.  Click **Add Course**.  Check results.  Click **Display Final Schedule**.  Check results. | daustin is logged in and switched to the final schedule display view. The course schedule display table shows 1 course, CSC 216 001 Programming Concepts – Java TH 1:30PM-2:45PM. There is an Export button and a Revise Schedule button. |  |
| T12: Export Final Schedule | Preconditions: PackSchedulerGUI has loaded and the test has been initialized. T11 has run.  Click **Export**.  Save File Name: **test-files/exported\_student\_schedule.txt**  Click **OK**.  Check results. | File contents are:   * CSC216,Programming Concepts - Java,001,4,sesmith5,10,TH,1330,1445 |  |