# Lab 05: 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.

The project should have a registrar.properties file that contain values for the following properties:

first=John

last=doe

id=jdoe

email=jdoe@gmail.com

pw=passw0rd

The values should be substituted in the tests below as appropriate for the local copy of the registrar.properties file.

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.

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| --- | --- | --- | --- |
| T1: Invalid Login | Preconditions: PackSchedulerGUI has loaded  User ID: **lberg**  Password: **pw**  Click **Login**  Click **OK**  Click **Clear** | Pop up with message “User doesn’t exist.”  User ID and password text fields are cleared. | **The PackSchedulerGUI opens up**  **After entering the credentials  UserID: Iberg Password: pw Clicking on login gives a pop message saying”User doesn’t exist” is shown** |
| T2: Registrar Login | Preconditions: PackSchedulerGUI has loaded  User ID: **registrar.properties.id**  Password: **registrar.properties.pw**  Click **Login** | View switches to Registrar panel with Student Directory functionality displayed | **After T1 is passed**  **Enter user credentials User ID: jdoe**  **Password: passw0rd  Clicking on login switches to the registrar panel with Student DIrectory functionality is displayed.** |
| T3: Load Student Directory | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2)  Click **Load Student Directory**  Select **test-files/student\_records.txt**  Click **Select** | 10 students are listed in alphabetical order by last name. The list starts with Demetrius Austin and ends with Griffith Stone. | **After T2 is passed**  **Clicking on Load Student Directory and selecting student\_records.txt from the test-files folder.  Loads a list of 10 students in alphabetical order by the last name. The list starts with Demetrius Austin and ends with Griffith Stone.** |
| T4: Add Invalid Student - no first name | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Invalid first name | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name:** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid first name”** |
| T5: Add Invalid Student - no last name | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Invalid last name | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name:** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid last name”** |
| T6: Add Invalid Student - no id | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Invalid id | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID:** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid id”** |
| T7: Add Invalid Student - no email | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Invalid email | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email:** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid email”** |
| T8: Add Invalid Student - invalid email | PPreconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkinsncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Invalid email | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkinsncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid email”** |
| T9: Add Invalid Student - passwords don’t match | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw1** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Error Message: Passwords do not match | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw1** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student  Shows an error message saying “Invalid password”** |
| T10: Add Invalid Student - zero max credits | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **0**   Click **Add Student**  Click **OK** | Student added with max credits of 18. | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 0**   **Clicking on Add Student  Student is added with mx credits of 18** |
| T11: Add Invalid Student - 11 max credits | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **19**   Click **Add Student**  Click **OK** | Student added with max credits of 18 | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 19**   **Clicking on Add Student  Student is added with mx credits of 18** |
| T12: Add Student - end | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Patience Wilkins is added to the Student Directory and is the last student in the list. | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Patience** * **Last Name: Wilkins** * **ID: pwilkins** * **Email: pwilkins@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 19**   **Clicking on Add Student Patience Wilkins is added to the Student Directory and is the last student in the list.** |
| T13: Add Student - middle | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Rylee** * Last Name: **Puckett** * ID: **rpuckett** * Email: **rpuckett@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Rylee Puckett is added to the Student Directory between Dylan Nolan and Cassandra Schwartz | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Rylee** * **Last Name: Puckett** * **ID: rpuckett** * **Email: rpuckett@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student Rylee Puckett is added to the Student Directory between Dylan Nolan and Cassandra Schwartz** |
| T14: Add Student - front | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.  Enter the following in the Student Information section:   * First Name: **Melvin** * Last Name: **Acevedo** * ID: **macevedo** * Email: **macevedo@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Melvin Acevedo is added to the Student Directory and is the first student in the list. | **After T2 and T3 are passing  Enter the following in the Student Information section:**   * **First Name: Melvin** * **Last Name: Acevedo** * **ID: macevedo** * **Email: macevedo@ncsu.edu** * **Password: pw** * **Repeat Password: pw** * **Max Credits: 15**   **Clicking on Add Student**  **Melvin Acevedo is added to the Student Directory and is the first student in the list.** |
| T15: Remove Student - no selection | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).  Click **Remove Student** | Error Message: No student selected | **After T2 is passing**  **Clicked on Remove student**  **The given error message is “No student selected.”** |
| T16: Remove Student - middle | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).  Select **Shannon Hansen**  Click **Remove student** | Shannon Hansen is removed. Athea Hicks follows Emerald Frost in the list | **After T2 is passing**  **Selected Shannon Hansen**  **Clicked on Remove student**  **Shannon Hansen is removed. Athea Hicks follows Emerald Frost in the list** |
| T17: Remove Student - front | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T14 has run.  Select **Melvin Acevedo**  Click **Remove student** | Melvin Acevedo is removed. Demetrius Austin is front of the directory | **After T2 and T14 are passing**  **Selected Melvin Acevedo**  **Clicked on Remove student**  **Melvin Acevedo is removed. Demetrius Austin is front of the directory** |
| T18: Remove Student - back | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12 has run.  Select **Patience Wilkins**  Click **Remove student** | Patience Wilkins is removed. Griffith Stone is last in the directory | **After T2 and T12 are passing**  **Selected Patience Wilkins**  **Clicked on Remove student**  **Patience Wilkins is removed. Griffith Stone is last in the directory** |
| T19: Save Student Directory | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12-T18 have run.  Click **Save Student Directory**  Select **test-files** directory and name the file **t19\_student\_directory.txt**. | Contents should be (note that the password hash may be different due to encoding):  Demetrius,Austin,daustin,Curabitur.egestas.nunc@placeratorcilacus.co.uk,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,18  Lane,Berg,lberg,sociis@non.org,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,14  Raymond,Brennan,rbrennan,litora.torquent@pellentesquemassalobortis.ca,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,12  Emerald,Frost,efrost,adipiscing@acipsumPhasellus.edu,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,3  Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,11  Zahir,King,zking,orci.Donec@ametmassaQuisque.com,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Dylan,Nolan,dnolan,placerat.Cras.dictum@dictum.net,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,5  Rylee,Puckett,rpuckett,rpuckett@ncsu.edu,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,15  Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,4  Griffith,Stone,gstone,porta@magnamalesuadavel.net,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,17 | **Contents in t19\_student\_directory.txt**.  **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**  **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**  **Rylee,Puckett,rpuckett,rpuckett@ncsu.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,18**  **Cassandra,Schwartz,cschwartz,semper@imperdietornare.co.uk,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,4**  **Griffith,Stone,gstone,porta@magnamalesuadavel.net,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,17** |
| T20: New Student Directory | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12-T18 have run.  Click **New Student Directory** | An empty student directory is shown. | **An empty student directory is shown.** |
| T21: Add Student - first | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T20 has run.  Enter the following in the Student Information section:   * First Name: **Patience** * Last Name: **Wilkins** * ID: **pwilkins** * Email: **pwilkins@ncsu.edu** * Password: **pw** * Repeat Password: **pw** * Max Credits: **15**   Click **Add Student**  Click **OK** | Patience Wilkins is added to the Student Directory and is the only student in the list. | **Patience Wilkins is added to the Student Directory and is the only student in the list.** |
| T22: Course Catalog view | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).  Click **Course Catalog** | Course Catalog functionality displayed | **Course Catalog functionality displayed** |
| T23: Load Course Catalog | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2)  Click **Load Course Catalog**  Select **test-files/course\_records.txt**  Click **Select** | 13 courses are listed starting with CSC 116-001 and ending with CSC 316-001 as provided in the course\_records.txt file (minus the one duplicate course) | **13 courses are listed starting with CSC 116-001 and ending with CSC 316-001 as provided in the course\_records.txt file** |
| T24: Add Invalid Course - no name | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: * Course Title: **Computer Organization and Assembly Language** * Course Section: **001** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid course name | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name:** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 001** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid course name.”** |
| T25: Add Invalid Course - no title | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: * Course Section: **001** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid course title | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title:** * **Course Section: 001** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid title.”** |
| T26: Add Invalid Course - no section | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid section number | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section:** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid section number”** |
| T27: Add Invalid Course - section too short | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **0011** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid section number | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 0011** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid section.”** |
| T28: Add Invalid Course - section too long | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **01** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid section number | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 01** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid section.”** |
| T29: Add Invalid Course - no instructor id | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **001** * Credits: **3** * Instructor Id: * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid instructor unity id | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 001** * **Credits: 3** * **Instructor Id:** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid instructor id.”** |
| T30: Add Invalid Course - end time after start time | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **001** * Credits: **3** * Instructor Id: **lasher** * Start Time: **11:30 AM** * End Time: **10:15 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | Error Message: Invalid course times | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 001** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 11:30 AM** * **End Time: 10:15 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid meeting days and times.”** |
| T31: Add Invalid Course - no meeting days | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **001** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days:   Click **Add Course**  Click **OK** | Error Message: Invalid meeting days | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 001** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days:**   **Clicked on Add Course**  **Clicked OK**  **This gave an error message “Invalid meeting days and times.”** |
| T32: Add Course - end | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 236** * Course Title: **Computer Organization and Assembly Language** * Course Section: **001** * Credits: **3** * Instructor Id: **lasher** * Start Time: **10:15 AM** * End Time: **11:30 AM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | CSC 236-001 is added to the list between CSC 230-001 and CSC 316-001 | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 236** * **Course Title: Computer Organization and Assembly Language** * **Course Section: 001** * **Credits: 3** * **Instructor Id: lasher** * **Start Time: 10:15 AM** * **End Time: 11:30 AM** * **Meeting Days: Tuesday & Thursday**   **Clicked on Add Course**  **Clicked OK**  **CSC 236-001 is added to the list between CSC 230-001 and CSC 316-001** |
| T33: Add Course - front | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 113** * Course Title: **Introduction to Computer - MATLAB** * Course Section: **001** * Credits: **3** * Instructor Id: **tbdimitr** * Start Time: **3:00 PM** * End Time: **3:50 PM** * Meeting Days: **Monday & Wednesday**   Click **Add Course**  Click **OK** | CSC 113-001 is added to the list at the front and is followed by CSC 116-001. | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 113** * **Course Title: Introduction to Computer - MATLAB** * **Course Section: 001** * **Credits: 3** * **Instructor Id: tbdimitr** * **Start Time: 3:00 PM** * **End Time: 3:50 PM** * **Meeting Days: Monday & Wednesday Clicked on Add Course  Click OK CSC 113-001 is added to the list at the front and is followed by CSC 116-001.** |
| T34: Add Course - middle | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 116** * Course Title: **Introduction to Programming - Java** * Course Section: **006** * Credits: **3** * Instructor Id: **jdyoung2** * Start Time: **10:40 AM** * End Time: **12:30 PM** * Meeting Days: **Tuesday & Thursday**   Click **Add Course**  Click **OK** | CSC 116-006 is added to the list between CSC 116-003 and CSC 216-001. | **After T23 is passing**  **Entered the following in the Course Information section:**   * **Course Name: CSC 116** * **Course Title: Introduction to Programming - Java** * **Course Section: 006** * **Credits: 3** * **Instructor Id: jdyoung2** * **Start Time: 10:40 AM** * **End Time: 12:30 PM** * **Meeting Days: Tuesday & Thursday**   **Clicked Add Course**  **Clicked OK**  **CSC 116-006 is added to the list between CSC 116-003 and CSC 216-001.** |
| T35: Remove Course - no selection | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).  Click **Remove Course** | Error Message: No course selected | **Error Message: No course selected.** |
| T36: Remove Course - middle | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).  Select **CSC 216-001**  Click **Remove Course** | CSC 216-001 is removed. CSC 116-006 is followed by CSC 216-002. | **CSC 216-001 is removed. CSC 116-006 is followed by CSC 216-002.** |
| T37: Remove Course - front | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T33 has run.  Select **CSC 113-001**  Click **Remove Course** | CSC 113-001 is removed. CSC 116-001 is the first course in the catalog | **CSC 113-001 is removed. CSC 116-001 is the first course in the catalog** |
| T38: Remove Course - back | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T32 has run.  Select **CSC 236-001**  Click **Remove Course** | CSC 236-001 is removed.  CSC 316-001 is the last course in the catalog | **CSC 236-001 is removed.**  **CSC 316-001 is the last course in the catalog** |
| T39: Save Course Catalog | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T32-T38 have run.  Click **Save Course Catalog**  Select **test-files** directory and name the file **t39\_course\_catalog.txt**. | Contents should contain the courses in the following order with all information as in the original file or entered via earlier tests:  CSC 116-001  CSC 116-002  CSC 116-003  CSC 116-006  CSC 216-002  CSC 216-601  CSC 217-202  CSC 217-211  CSC 217-223  CSC 217-601  CSC 226-001  CSC 230-001  CSC 316-001 | **The t39\_course\_catalog.txt in the test-files directory contains the following:**  **CSC 116,Intro to Programming - Java,001,3,jdyoung2,MW,910,1100**  **CSC 116,Intro to Programming - Java,002,3,spbalik,MW,1120,1310**  **CSC 116,Intro to Programming - Java,003,3,tbdimitr,TH,1120,1310**  **CSC 116,Intro to Programming - Java,006,3,jdyoung2,TH,1040,1230**  **CSC 216,Software Development Fundamentals,002,3,ixdoming,MW,1330,1445**  **CSC 216,Software Development Fundamentals,601,3,jctetter,A**  **CSC 217,Software Development Fundamentals Lab,202,1,sesmith5,M,1040,1230**  **CSC 217,Software Development Fundamentals Lab,211,1,sesmith5,T,830,1020**  **CSC 217,Software Development Fundamentals Lab,223,1,sesmith5,W,1500,1650**  **CSC 217,Software Development Fundamentals Lab,601,1,sesmith5,A**  **CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025**  **CSC 230,C and Software Tools,001,3,dbsturgi,MW,1145,1300**  **CSC 316,Data Structures and Algorithms,001,3,jtking,MW,830,945** |
| T40: New Course Catalog | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12-T18 have run.  Click **New Course Catalog** | An empty course catalog is shown. | **An empty course catalog is shown after clicking New Course Catalog** |
| T41: Add Course - first | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T20 has run.  Enter the following in the Course Information section:   * Course Name: **CSC 216** * Course Title: **Programming Concepts - Java** * Course Section: **601** * Credits: **4** * Instructor Id: **jep** * Start Time: **0** * End Time: **0** * Meeting Days: **Arranged**   Click **Add Course**  Click **OK** | CSC 216-601 is added to the list | **After T20 is passing   Adding the following course details:**   * **Course Name: CSC 216** * **Course Title: Programming Concepts - Java** * **Course Section: 601** * **Credits: 4** * **Instructor Id: jep** * **Start Time: 0** * **End Time: 0** * **Meeting Days: Arranged**   **Clicked Add Course**  **Clicked OK CSC 216-601 is added to the list** |
| T42: Login Student | Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T21 has run  Click **Logout**  User ID: **pwilkins**  Password: **pw**  Click: **Login** | User is returned to the Login view  pwilkins is logged in and is switched to the user view. All that is shown is a Logout button. | **User is returned to the Login view**  **pwilkins is logged in and is switched to the user view. All that is shown is a Logout button.** |