Lab 08: 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.

A registrar properties file contains a username and password. Use the values in your registrar properties for testing. We will use registrar properties id or registrar properties pw to designate those strings.

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 ID	Description	Expected Results	Actual Results
T1: Invalid Login	Preconditions: PackSchedulerGUI has loaded User ID: Iberg Password: pw Click Login Click OK Click Clear	Pop up with message "User doesn't exist." User ID and password text fields are cleared.	A pop up is displayed with message "User doesn't exist." User ID and password text fields were cleared.

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	The view switches to the Registrar panel with Student Directory functionality 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.	10 students are now listed in alphabetical order by last name. The list begins 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		An Error Message is displayed: Invalid first name

	Click Add Student Click OK	Error Message: 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	An Error Message is displayed: 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	Error Message: Invalid id	An Error Message is displayed: Invalid id

	Click OK		
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	Error Message: Invalid email	An Error Message is displayed: Invalid email
T8: Add Invalid Student - invalid email	Click OK 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	An Error Message is displayed: Invalid email

T9: Add Invalid Student - password s 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	An Error Message is displayed: Passwords do not match
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	User is added with max credits of 18. User is the last student in the list.	Patience Wilkins is successfully added to the Student Directory and is now the last student in the list. Max credits are set to 18.
T11: Add	Preconditions: PackSchedulerGUI has loaded and		Patience Wilkins is

Invalid Student - 11 max credits	registrar user is logged in (T2). T3 has run. Enter the following in the Student Information section: • First Name: Patrick • Last Name: Wilkins • ID: pwilkins2 • Email: pwilkins2@ncsu.edu • Password: pw • Repeat Password: pw • Max Credits: 19 Click Add Student Click OK	User is added with max credits of 18. User is the last student in the list.	successfully added to the Student Directory and is now the last student in the list. Max credits are set to 18.
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	Rylee Puckett is successfully added to the Student Directory between Dylan Nolan and Cassandra Schwartz.
T14: Add	Preconditions: PackSchedulerGUI has loaded and		Melvin Acevedo is

Student - front	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.	successfully added to the Student Directory and is now 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	An Error Message is displayed: 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	Athea Hicks follows Emerald Frost in the list, and Shannon Hansen is successfully removed.
T17: Remove Student -	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T14 has run.		Melvin Acevedo is successfully removed.

front	Select Melvin Acevedo Click Remove student	Melvin Acevedo is removed. Demetrius Austin is front of the directory	Demetrius Austin is now in the 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		Patience Wilkins is successfully removed. Griffith Stone is now the last student in the directory
	Click Remove student Select Patrick Wilkins	Patience Wilkins is removed. Patrick Wilkins remains as the last in the directory	
	Click Remove student	Patrick Wilkins is removed. Griffith Stone is the last student in the directory.	
T19: Save Student	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12-T18 have run. Click Save Student Directory	Contents should be (note that the password hash may be different due to encoding):	Contents are:
Directory	Select test-files directory and name the file t19_student_directory.txt.	Demetrius, Austin, daustin, Cura bitur. egestas. nunc@placerator cilacus. co.uk, 0 ÉRú±"ÃùuŸ¦Ù\7 X²F′þâ9•{-OîFâapÄ, 18 Lane, Berg, lberg, sociis@non.or	Demetrius,Austin,daustin,Cu rabitur.egestas.nunc@placer atorcilacus.co.uk,0ÉRú±"Ãù uŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,18
		g,0ÉRú±"ÃùuŸ¦Ù\7X²F´pâ9•{- OîFâapÄ,14 Raymond,Brennan,rbrennan,lit ora.torquent@pellentesquema	Lane,Berg,Iberg,sociis@non .org,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ 9•{-OîFâapÄ,14
		ssalobortis.ca,0ÉRú±"ÃùuŸ¦Ù\ 7X²F′þâ9•{-OîFâapÄ,12	Raymond,Brennan,rbrennan,

Emerald,Frost,efrost,adipiscing @acipsumPhasellus.edu,0ÉRú ±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ ,3

Althea,Hicks,ahicks,Phasellus.dapibus@luctusfelis.com,0ÉR ú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâap Ä.11

Zahir,King,zking,orci.Donec@a metmassaQuisque.com,0ÉRú± "ÃùuŸ¦Ù\7X²F′þâ9•{-OîFâapÄ, 15

Dylan,Nolan,dnolan,placerat.C ras.dictum@dictum.net,0ÉRú± "ÃùuŸ¦Ù\7X²F′þâ9•{-OîFâapÄ, 5

Rylee,Puckett,rpuckett,rpuckett @ncsu.edu,0ÉRú±"ÃùuŸ¦Ù\7X 2F´þâ9•{-OîFâapÄ,15

Cassandra,Schwartz,cschwart z,semper@imperdietornare.co. uk,0ÉRú±"ÃùuŸ¦Ù\7X²F′þâ9•{-OîFâapÄ,4

Griffith,Stone,gstone,porta@m agnamalesuadavel.net,0ÉRú±" ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,17

litora.torquent@pellentesqu emassalobortis.ca,0ÉRú±"Ã ùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,1 2

Emerald,Frost,efrost,adipisci ng@acipsumPhasellus.edu, 0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-O îFâapÄ,3

Althea,Hicks,ahicks,Phasell us.dapibus@luctusfelis.com,0ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâapÄ,11

Zahir,King,zking,orci.Donec @ametmassaQuisque.com,0 ÉRú±"ÃùuŸ¦Ù\7X²F´þâ9•{-Oî FâapÄ,15

Dylan,Nolan,dnolan,placerat. Cras.dictum@dictum.net,0É Rú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâ apÄ,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´þ â9•{-OîFâapÄ,4 Griffith,Stone,gstone,porta@ magnamalesuadavel.net,0É Rú±"ÃùuŸ¦Ù\7X²F´þâ9•{-OîFâ apÄ,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.	A new and 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 successfully added to the Student Directory and is the only student in the list.
T22: Course	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).		Course Catalog view displayed

Catalog view	Click Course Catalog	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 CSC116-001 and ending with CSC316-001	13 courses are listed starting with CSC116-001 and ending with CSC316-001
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: freeh • Enrollment Cap: 10 • Start Time: 10:15 AM • End Time: 11:30 AM • Meeting Days: Tuesday & Thursday Click Add Course Click OK	Error Message: Invalid course name	Error Message: Invalid course name
T25: Add Invalid	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.		Error Message: Invalid course title

Course - no title	Enter the following in the Course Information section:	Error Message: Invalid course 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:	Error Message: Invalid section number	Error Message: Invalid section number

	Click OK		
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:	Error Message: Invalid section number	Error Message: Invalid section number
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: CSC236 • Course Title: Computer Organization and Assembly Language • Course Section: 01 • Credits: 3 • Instructor Id: freeh • Enrollment Cap: 10 • Start Time: 10:15 AM		Error Message: Invalid section number

	 End Time: 11:30 AM Meeting Days: Tuesday & Thursday Click Add Course 	Error Message: Invalid section number	
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: CSC236 • Course Title: Computer Organization and Assembly Language • Course Section: 001 • Credits: 3 • Instructor Id: • Enrollment Cap: 10 • 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	Error Message: Invalid instructor unity 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: CSC236 • Course Title: Computer Organization and Assembly Language • Course Section: 001		Error Message: Invalid meeting days and times

	 Credits: 3 Instructor Id: freeh Enrollment Cap: 10 Start Time: 11:30 AM End Time: 10:15 AM Meeting Days: Tuesday & Thursday Click Add Course 	Error Message: Invalid meeting 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: CSC236 • Course Title: Computer Organization and Assembly Language • Course Section: 001 • Credits: 3 • Instructor Id: freeh • Enrollment Cap: 10 • Start Time: 10:15 AM • End Time: 11:30 AM • Meeting Days: Click Add Course Click OK	Error Message: Invalid meeting days	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:		CSC236-001 is added to the list at the end following CSC230-001

	 Course Name: CSC236 Course Title: Computer Organization and Assembly Language Course Section: 001 Credits: 3 Instructor Id: freeh Enrollment Cap: 10 Start Time: 10:15 AM End Time: 11:30 AM Meeting Days: Tuesday & Thursday Click Add Course 	CSC236-001 is added to the list at the end following CSC230-001	
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:	CSC113-001 is added to the list at the front and is followed by CSC116-001.	CSC113-001 is added to the list at the front and is followed by CSC116-001.
T34: Add Course -	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run.		CSC116-006 is added to the list between CSC116-003

middle	Enter the following in the Course Information section:	CSC116-006 is added to the list between CSC116-003 and CSC216-001.	and CSC216-001.
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 CSC216-001 Click Remove Course	CSC216-001 is removed. CSC116-006 is followed by CSC216-002.	CSC216-001 is removed. CSC116-006 is followed by CSC216-002.
T37: Remove	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T33 has run.		CSC113-001 is removed.

Course - front	Select CSC113-001		CSC116-001 is the first course ien the catalog
	Click Remove Course	CSC113-001 is removed. CSC116-001 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 CSC236-001		CSC236-001 is removed. CSC316-001 is the last course in the catalog
	Click Remove Course	CSC236-001 is removed. CSC316-001 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 be: CSC116,Intro to Programming Java,001,3,jdyoung2,10,MW,9 10,1100 CSC116,Intro to Programming Java,002,3,spbalik,10,MW,112 0,1310 CSC116,Intro to Programming Java,003,3,tbdimitr,10,TH,1120 ,1310 CSC116,Introduction to Programming - Java,006,3,jdyoung2,33,TH,10 40,1230	Contents are CSC116,Intro to Programming - Java,001,3,jdyoung2,10,MW, 910,1100 CSC116,Intro to Programming - Java,002,3,spbalik,10,MW,11 20,1310 CSC116,Intro to Programming - Java,003,3,tbdimitr,10,TH,11 20,1310 CSC116,Introduction to Programming - Java,003,3,tbdimitr,10,TH,11 20,1310 CSC116,Introduction to Programming - Java,006,3,jdyoung2,33,TH,1040, 1230

CSC216,Software Development Fundamentals,001,3,sesmith5, 10,TH,1330,1445 CSC216,Software Development Fundamentals,002,3,ixdoming, 10,MW,1330,1445 CSC216,Software Development Fundamentals, 601, 3, jctetter, 10 ,Α CSC217,Software **Development Fundamentals** Lab, 202, 1, sesmith 5, 10, M, 1040 .1230 CSC217,Software **Development Fundamentals** Lab,211,1,sesmith5,10,T,830,1 020 CSC217,Software **Development Fundamentals** Lab, 223, 1, sesmith 5, 10, W, 1500 ,1650 CSC217.Software **Development Fundamentals** Lab,601,1,sesmith5,10,A CSC226, Discrete Mathematics for Computer Scientists, 001, 3, tmbarnes, 10, MWF,935,1025 CSC230.C and Software Tools,001,3,dbsturgi,10,MW,11

CSC216,Software **Development** Fundamentals,002,3,ixdomin g,10,MW,1330,1445 CSC216,Software Development Fundamentals, 601, 3, jctetter, 10.A CSC217,Software **Development Fundamentals** Lab,202,1,sesmith5,10,M,104 0.1230 CSC217,Software **Development Fundamentals** Lab,211,1,sesmith5,10,T,830, 1020 CSC217,Software **Development Fundamentals** Lab,223,1,sesmith5,10,W,150 0,1650 CSC217,Software **Development Fundamentals** Lab,601,1,sesmith5,10,A CSC226, Discrete **Mathematics for Computer** Scientists,001,3,tmbarnes,10 ,MWF,935,1025 CSC230,C and Software Tools,001,3,dbsturgi,10,MW, 1145.1300 CSC316.Data Structures and Algorithms,001,3,jtking,10,M W.830.945

		45,1300 CSC316,Data Structures and Algorithms,001,3,jtking,10,MW, 830,945	
T40: New Course Catalog	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T12-T18 have run.		An empty course catalog is shown.
Odialog	Click New Course Catalog	An empty course catalog is shown.	
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:	CSC216-601 is added to the list	CSC216-601 is added to the list
T42: Logout	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).		User is returned to the Login view
	Click Logout	User is returned to the Login view	

T42: Login Student	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T21 has run User ID: flast Password: password		Flast is logged in and is switched to the user view. The user can see the course catalog and register for courses.
	Click: Login	Flast is logged in and is switched to the user view. The user can see the course catalog and register for courses.	
		You'll need to create your own system tests for this functionality!	