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.
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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.	**Pop Up occurs stating that the user does not exist. Everything else is cleared afterwards.**

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 panels switch. Goes to the Registrar panel.**
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.	**Students are listed in the panel.**
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	**Error message comes up - 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	**Error message comes up - 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	**Error message comes up - invalid id.**
T7: Add Invalid	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run.		**Error message comes up - invalid email.**

Student - no email	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	
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	**Error message comes up - invalid email.**
T9: Add Invalid Student - password	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T3 has run. Enter the following in the Student Information		**Error message comes up - passwords do not match.**

s don't match	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	
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.	**A user is added and their max credits is set to 18. The user is last in the list of students.**
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:		**User is added and their max credits is set to 18, they are last in the list of students.**

	● 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.	
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 is added to the directory of students.**
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:		**Melvin is added to the directory, but is first in the list.**

	● 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.	
T15: Remove Student - no selection	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). Click **Remove Student**	Error Message: No student selected	**Error message comes up - no student was 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	**Shannon was removed and the list is updated.**
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	**Melvin was removed and the list is updated.**

		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** Select **Patrick Wilkins** Click **Remove student**	Patience Wilkins is removed. Patrick Wilkins remains as the last in the directory Patrick Wilkins is removed. Griffith Stone is the last student in the directory.	**Patience was removed and the list was updated.**
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	**Contents of the directory are as follows and is saved.**

		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,1 7	
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.	**Now that the previous contents were saved, we are shown an empty student directory.**
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		**Patience is added to the directory once again, but is the only one this time.**

	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.	
T22: Course Catalog view	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). Click **Course Catalog**	Course Catalog functionality displayed	**Panel is changed and course catalog is now 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	**Courses are added and listed.**
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**		**Error message comes up - invalid course name.**

	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	
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: **CSC236** ● Course Title: ● 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 title	**Error message comes up - invalid course title.**
T26: Add Invalid Course - no	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run. Enter the following in the Course Information		**Error message comes up - invalid section number.**

section	section: ● Course Name: **CSC236** ● Course Title: **Computer Organization and Assembly Language** ● Course Section: ● 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 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: **CSC236** ● Course Title: **Computer Organization and Assembly Language** ● Course Section: **0011** ● 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 section number	**Error message comes up - 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** ● End Time: **11:30 AM** ● Meeting Days: **Tuesday & Thursday** Click **Add Course** Click **OK**	Error Message: Invalid section number	**Error message comes up - 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**		**Error message comes up - invalid instructor unity id.**

	● Meeting Days: **Tuesday & Thursday** Click **Add Course** Click **OK**	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** ● 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** Click **OK**	Error Message: Invalid meeting times	**Error message comes up - 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**		**Error message comes up - invalid meeting days.**

	● 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	
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: **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** Click **OK**	CSC236-001 is added to the list at the end following CSC230-001	**CSC 236 is added to the list.**
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: **CSC113**		**CSC 113 is added to the list.**

	● Course Title: **MATLAB** ● Course Section: **001** ● Credits: **3** ● Instructor Id: **tbdimitr** ● Enrollment Cap: **250** ● Start Time: **3:00 PM** ● End Time: **3:50 PM** ● Meeting Days: **Monday & Wednesday** Click **Add Course** Click **OK**	CSC113-001 is added to the list at the front and is followed by CSC116-001.	
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: **CSC116** ● Course Title: **Introduction to Programming - Java** ● Course Section: **006** ● Credits: **3** ● Instructor Id: **jdyoung2** ● Enrollment Cap: **33** ● Start Time: **10:40 AM** ● End Time: **12:30 PM** ● Meeting Days: **Tuesday & Thursday** Click **Add Course** Click **OK**	CSC116-006 is added to the list between CSC116-003 and CSC216-001.	**CSC 116 is added to the list.**
T35: Remove Course -	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2).		**Error message comes up - no course was selected.**

no selection	Click **Remove Course**	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.	**CSC 216 was removed and the list is updated.**
T37: Remove Course - front	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T33 has run. Select **CSC113-001** Click **Remove Course**	 CSC113-001 is removed. CSC116-001 is the first course in the catalog	**CSC 113 is removed and the list updated.**
T38: Remove Course - back	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T32 has run. Select **CSC236-001** Click **Remove Course**	 CSC236-001 is removed. CSC316-001 is the last course in the catalog	**CSC 236 is removed and the list is updated.**
T39: Save Course Catalog	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T32-T38 have run. Click **Save Course Catalog**	Contents should be: CSC116,Intro to Programming -	**Contents are as followed and course catalog is then saved.**

Select **test-files** directory and name the file **t39_course_catalog.txt**.	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 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 ,A CSC217,Software Development Fundamentals Lab,202,1,sesmith5,10,M,1040 ,1230 CSC217,Software Development Fundamentals Lab,211,1,sesmith5,10,T,830,1	

		020 CSC217,Software Development Fundamentals Lab,223,1,sesmith5,10,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,1145,1300 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. Click **New Course Catalog**	An empty course catalog is shown.	**Now that the previous contents are saved, the new course catalog is showed and is empty.**
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: **CSC216** ● Course Title: **Programming Concepts - Java** ● Course Section: **601**		**CSC 216 is added to the empty catalog and the list is updated.**

	● Credits: **4** ● Instructor Id: **jep** ● Start Time: ● End Time: ● Meeting Days: **Arranged** Click **Add Course** Click **OK**	CSC216-601 is added to the list	
T42: Logout	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). Click **Logout**	User is returned to the Login view	**Log out happens and we are returned to the log in view.**
T42: Login Student	Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T21 has run User ID: **pwilkins** Password: **pw** Click: **Login**	pwilkins 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!	**Log in is successful**