

# Lab 02: Black Box Test Plan

## Test Overview

To run the tests:

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

The FileChooser for the course catalog will load automatically.

All tests files are located in the test-files/ folder.

Test ID	Description	Expected Results	Actual Results
<Test 1>  Opening valid file	Preconditions: None <ul style="list-style-type: none"><li>• Run student directory gui.</li><li>• In the <b>Load Course Catalog</b> FileChooser dialog select: test-files/student_records.txt</li><li>• Click <b>Select</b></li></ul>	Scheduler shows list of students with first name last name and student id -Zahir King zking -Cassandra Schwartz cschwartz -Shannon Hansen shansen -Demetrius Austin daustin -Raymond Brennan rbrennan - Emerald Frost efrost -Lane Berg lberg -Griffith Stone gstone - Althea Hicks ahicks	Scheduler shows list of students with first name last name and student id -Zahir King zking -Cassandra Schwartz cschwartz -Shannon Hansen shansen -Demetrius Austin daustin -Raymond Brennan rbrennan - Emerald Frost efrost -Lane Berg lberg -Griffith Stone gstone - Althea Hicks ahicks

		- Dylan Nolan dnolan	- Dylan Nolan dnolan
Test 2: Invalid File	Preconditions: None <ol style="list-style-type: none"> <li>1. Run studentDirectoryPanel gui</li> <li>2. In the <b>Load Course Catalog</b> FileChooser dialog select: test-files/valid_student_record s.txt</li> <li>3. Click <b>Select</b></li> <li>4. <i>Check results</i></li> <li>5. Close GUI</li> </ol>	Scheduler loads  Student Catalog is empty  Student info is empty	Scheduler loads  Student Catalog is empty  Student info is empty
Test 3 Remove a student	Preconditions: Test one has passed <ul style="list-style-type: none"> <li>• Select the first student "Zahir King zking" (should be highlighted in blue)</li> <li>• Select "Remove Student"</li> </ul>	Student is removed from the Student directory list	Student is removed from the Student directory list
Test 4 Clear student directory	Preconditions: Test one has passed <ul style="list-style-type: none"> <li>• Select "new student directory"</li> </ul>	Student directory is cleared	Student directory is cleared
Test 5 Valid student	Preconditions: Test one has passed <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : Sarah</li> <li>• Last name: Worley</li> <li>• Id: sworley</li> <li>• Email: <a href="mailto:sw@ncsu.edu">sw@ncsu.edu</a></li> </ul>	The student Sarah Worley with id of sworley is added in the student directory section	The student Sarah Worley with id of sworley is added in the student directory section

	<ul style="list-style-type: none"> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 12</li> <li>• Select “add student”</li> </ul>		
Test 6 Invalid student credits	<p>Preconditions: Test one has passed</p> <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@ncsu.edu</li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 19</li> <li>• Select “add student”</li> </ul>	When add student is selected a pop up box stating “invalid max credits” is displayed	When add student is selected a pop up box stating “invalid max credits” is displayed
Test 7 No credits entered	<p>Preconditions: Test one has passed</p> <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@ncsu.edu</li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: LEAVE BLANK</li> <li>• Select “add student”</li> </ul>	A pop up appears stating “Max credits should be a number between 2 and 18”	A pop up should appear stating “Max credits should be a number between 2 and 18”
Test 8	Preconditions: Test one has passed	A pop up appears that states	A pop up appears that states

missmatched passwords	<ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@<a href="mailto:bs@ncsu.edu">ncsu.edu</a></li> <li>• Password: password</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <li>• Select “add student”</li> </ul>	“passwords do not match”	“passwords do not match”
Test 9 Invalid email, no '@'	<p>Preconditions: Test one has passed</p> <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs.<a href="mailto:bs.ncsu.edu">ncsu.edu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <li>• Select “add student”</li> </ul>	A pop up appears that states “invalid email”	A pop up appears that states “invalid email”
Test 10 invalid email no ':'	<p>Preconditions: Test one has passed</p> <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@<a href="mailto:bs@ncsuedu">ncsuedu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <li>• Select “add student”</li> </ul>	A pop up appears that states “invalid email”	A pop up appears that states “invalid email”

Test 11 invalid email '.' before '@'	Preconditions: Test one has passed <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: b.s@<a href="#">ncsuedu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <li>• Select "add student"</li> </ul>	A pop up appears that states "invalid email"	A pop up appears that states "invalid email"
Test 12 attempts to add student with same id as another student but different name	Preconditions: Test one and three have passed <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: sworley</li> <li>• Email: bs@<a href="#">ncsu.edu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <li>• Select "add student"</li> </ul>	A pop up appears that states "student already exists in the system"	A pop up appears that states "student already exists in the system"
Test 13 Saving students to a directory	Preconditions: Test one and three have passed <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@<a href="#">ncsu.edu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> </ul>	A pop up stating "No student Selected" appears	A pop up stating "No student Selected" appears

	<ul style="list-style-type: none"> <li>• Select “add student”</li> <li>• Make sure no student is selected</li> <li>• Select “Remove student ”</li> </ul>		
Test 14 Empty name	<p>Preconditions: Test one and three have passed</p> <ul style="list-style-type: none"> <li>• Type info into Student information</li> <li>• First name : LEAVE BLANK</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@<a href="mailto:bs@ncsu.edu">ncsu.edu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> </ul>	A pop up stating “Invalid First Name” appears	A pop up stating “Invalid First Name” appears
Test 15	<p>Preconditions: Test one, three and 13 have passed</p> <ul style="list-style-type: none"> <li>• Select “Save Student Directory”</li> <li>• Save the directory under “test-files” as “student.txt”</li> </ul>	A dialog appears and the user selects the location to save the list of students. the list of students is saved to a text file With a comma separating student info and hashed passwords	A dialog appears and the user selects the location to save the list of students. the list of students is saved to a text file With a comma separating student info and hashed passwords