

# 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 select load student directory.</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 sorted list of students with first name last name and student id Demetrius,Austin,daustin, Lane,Berg,lberg, Raymond,Brennan,rbrennan, Emerald,Frost,efrost, Shannon,Hansen,shansen, Althea,Hicks,ahicks, Zahir,King,zking, Dylan,Nolan,dnolan, Cassandra,Schwartz,cschwartz, Griffith,Stone,gstone,	Scheduler shows list of students with first name last name and student id Demetrius,Austin,daustin, Lane,Berg,lberg, Raymond,Brennan,rbrennan, Emerald,Frost,efrost, Shannon,Hansen,shansen, Althea,Hicks,ahicks, Zahir,King,zking, Dylan,Nolan,dnolan, Cassandra,Schwartz,cschwartz ,

			Griffith,Stone,gstone,
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Test 2: Invalid File *modified previous version said "valid" when it should have been "invalid"	Preconditions: None <ol style="list-style-type: none"> <li>1. Run studentDirectoryPanel gui select load student directory</li> <li>2. In the <b>Load Course Catalog</b> FileChooser dialog select: test-files/invalid_student_records.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 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> </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>• Id: sworley</li> <li>• Email: <a href="mailto:sw@ncsu.edu">sw@ncsu.edu</a></li> <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: <a href="mailto:bs@ncsu.edu">bs@ncsu.edu</a></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  * modified llast test said 2 instead of 3	<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: <a href="mailto:bs@ncsu.edu">bs@ncsu.edu</a></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 3 and 18”	A pop up should appear stating “Max credits should be a number between 3 and 18”

Test 8 mismatched passwords	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: 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>	A pop up appears that states "passwords do not match"	A pop up appears that states "passwords do not match"
Test 9 Invalid email, no '@'	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: 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 '.'	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: bs@<a href="mailto:bs@ncsuedu">ncsuedu</a></li> <li>• Password: pw</li> <li>• Repeat password: pw</li> <li>• Credits: 15</li> </ul>	A pop up appears that states "invalid email"	A pop up appears that states "invalid email"

	<ul style="list-style-type: none"> <li>• Select “add student”</li> </ul>		
Test 11 invalid email ‘.’ before ‘@’	<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: b.s@<a href="mailto: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 12 attempts to add student with same id as another student but different 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 : bob</li> <li>• Last name: smith</li> <li>• Id: sworley</li> <li>• Email: bs@<a href="mailto: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 “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	<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 : bob</li> <li>• Last name: smith</li> <li>• Id: bsmith</li> <li>• Email: bs@<a href="mailto:ncsu.edu">ncsu.edu</a></li> <li>• Password: pw</li> </ul>	Bob is added above sarah also A pop up stating “No student Selected” appears	Bob is added above sarah also A pop up stating “No student Selected” appears

	<ul style="list-style-type: none"> <li>• Repeat password: pw</li> <li>• Credits: 15</li> <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 “studentSorted.txt”</li> </ul>	<p>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 Bob is before sarah</p>	<p>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 Bob is before sarah</p>