# Lab 02: System Test Plan

## Test Overview

<Describe how a test should run the tests. Delete this line in the final report.>

To run a test:

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| Test 1: First Name Invalid  First Name is null | Preconditions: None   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: * Last Name: Smith * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14 | A pop-up dialog stating “Invalid first name” is displayed. | **After inputting information for a student and leaving first name as blank, a pop-up dialog box is prompted with “Invalid first name”** |
| Test 2: AddStudent Button Invalid  No parameters passed | Precondition: None   1. Run StudentDirectoryPanel 2. Click Add Student 3. Click OK | A pop-up dialog stating “Invalid password” is displayed | **After launching the GUI and pressing the “Add Student” button, a pop-up displays saying “Invalid password”** |
| Test 3: RemoveStudent Button Invalid  No parameters passed | Precondition: None   1. Run StudentDirectoryPanel 2. Click Remove Student 3. Click OK | A pop-up dialog stating “No student selected” is displayed | **After launching the GUI and pressing the “Remove Student” button, a pop-up displays saying “No student selected”** |
| Test 4: Password and Repeat Passwords Mismatch  Repeat Password is not same as the Password | Preconditions: None   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: Darah * Last Name: Smith * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC116 * Max Credits: 14 | A pop-up dialog stating “Passwords do not match” is displayed. | **After inputting information for a student and having the repeat password different to password pops-up dialog box with message “Passwords do not match”** |
| Test 5: Adding a valid file  Add a valid file from the Loud Course Catalog button | Preconditions: None   1. Run StudentDirectoryPanel 2. Press “Load Student Directory” 3. Select “test-files”, and doble click 4. Select “actual\_student\_records.txt” 5. Press “Select” 6. Check Results 7. Close GUI | A row containing “Zahir King zKing” is added in the Student Directory layout. Zahir comes under First Name, King comes under Last Name, zKing comes under Student ID. | **After pressing and adding the “actual\_student\_records.txt”, a new row is added in the “Student Directory” Layout. It includes Zahir, King, and zKing respectively as the First Name, Last Name, and a Student ID.** |
| Test 6: Invalid Email  Email has a period before the @ | Preconditions: None   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: s.heckman@ncsuedu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14 | A pop-up dialog stating “Invalid email” is displayed. | **After passing in the parameters to add a student with the invalid email, a pop-up dialog box is displayed with “Invalid email”** |
| Test 7:  Invalid Email Cont.  Email doesn’t have a period | Preconditions: None   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: sheckman@ncsuedu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14 | A pop-up dialog stating “Invalid email” is displayed. | **After passing in the parameters to add a student with the invalid email, a pop-up dialog box is displayed with “Invalid email”** |
| Test 7:  Add Student Sorted  (Modified)  Add a second student which should be sorted | Preconditions: Test 5 passes   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14  1. Check Results | Student Directory should display   * Sarah, Heckman, sheckman * Zahir, King, zking | **Zahir King was already in the student directory but after adding Sarah Heckman, Zahir King was pushed down a row which implies the directory is sorted.** |
| Test 9: Duplicate Student  Try to add a duplicate student | Preconditions: Test 8 Passes   1. Run StudentDirectoryPanel 2. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14  1. Click Add Student 2. Check Results 3. Click OK | A pop-up dialogue box should be displayed prompting “Student already in the system” | **When running test 8, a duplicate Sarah Heckman was not able to be added because she is already present in the system.** |
| Test 10:  Remove Student  Remove the previously added student | Preconditions: Test 8 Passes   1. Select “Sarah Heckman 216” 2. Click Remove Student 3. Check Results | The Student Directory Table should only have Zahir King row and have had removed Sarah Heckman | **After clicking Remove Student, Sarah Heckman is removed from the table and Zahir King is moved up** |
| Test 11:  Save File  Save a file of students | Preconditions: Test 8 passes   1. Click “Save Student Directory” 2. Select “test-files” 3. Save as “saved\_test”.txt 4. Click save | Refresh the PackScheduler project and open the test-files to see if the “saved\_test”.txt file is present | **Running through the test, the “saved\_test.txt” file is in the present in the test-files folder** |
| Test 12:  Save Student Directory Invalid  Check a different path for Save Student Directory | Precondition: None   1. Click Save Student Directory 2. Click Cancel 3. Check Results 4. Click OK | A pop-up dialogue box should be displayed prompting “Invalid selection” | **After the pop up dialogue box is prompted, nothing changes in the display** |
| Test 13: New Student Directory  Create a new student directory | Precondition: None   1. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 14  1. Click Add Student 2. Click New Student Directory 3. Check results | The display should be entirely blank with nothing in the dialogue boxes | **After clicking New Student Directory, Sarah Heckman disappears from the Student Directory** |
| Test 14:  Load Invalid File  Load an invalid file | Preconditions: None   1. Click Load Student Directory 2. Click test-files 3. Click invalid\_student\_records.txt 4. Click select 5. Check results | The display should be entirely blank with nothing in the dialogue boxes | **Even after attempting to open the file, all the tables and layouts are blank** |
| Test 15: Valid Output File  Create an output and check its contents | Precondition: Test 8 passes   1. Input student information as follows  * First Name: Sarah * Last Name: Heckman * ID: 216 * Email: sheckman@ncsu.edu * Password: CSC216 * Repeat Password: CSC216 * Max Credits: 20  1. Click Add Student 2. Click Save Student Directory 3. Save as “test\_fifteen.txt” 4. Save under the test-files folder 5. Refresh PackScheduler 6. Open test\_fifteen.txt in the test-files folder 7. Check results | The max credit hours for this student should be defaulted to 18 instead of 20 when the file is open in Eclipse | **test\_fifteen.txt changed Sarah Heckman’s max credits to 18 instead of 20 hours without any errors prompted** |