# Lab 02: System Test Plan

## Test Overview

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

.

|  |  |  |  |
| --- | --- | --- | --- |
| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| <provide a test id>  <also describe the equivalence class or boundary value under test> | Preconditions: |  |  |
| Test 1: test Load Student Directory for Invalid Students | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Click Load Student Directory 3. Load the file “test-files/invalid\_student\_records.txt” 4. Check results 5. Close GUI | The load menu closes and the Student directory remains empty | **the load menu closed and the Student Directory section is empty** |
| Test 2: test Load Student Directory for valid students | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Click Load Student Directory 3. Load the file “test-files/invalid\_student\_records.txt” 4. Check results 5. Close GUI | Student Directory is updated:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg 3. Raymond, Brennan, rbrennan 4. Emerald, Frost, efrost 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Cassandra, Schwartz, cschwartz 10. Griffith, Stone, gstone | **Student Directory is updated**   1. **Demetrius, Austin, daustin** 2. **Lane, Berg, lberg** 3. **Raymond, Brennan, rbrennan** 4. **Emerald, Frost, efrost** 5. **Shannon, Hansen, shansen** 6. **Althea, Hicks, ahicks** 7. **Zahir, King, zking** 8. **Dylan, Nolan, dnolan** 9. **Cassandra, Schwartz, cschwartz** 10. **Griffith, Stone, gstone** |
| Test 3:  Test Add Student | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Close GUI | Student Directory is updated:   * first, last, id | **Student directory is updated:**   * **first, last, id** |
| Test 4: Add Student no input | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Click add student 3. Check results 4. Click Ok 5. Close GUI | A pop-up for any of the fields of student information shows up claiming it is invalid | **A popup displays “Invalid password”** |
| Test 5: Add student no first name | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A popup displays “Invalid first name” | **A popup displays the text “Invalid first name”** |
| Test 6: Add student no last name | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A popup displays “Invalid last name” | **A popup displays “Invalid last name”** |
| Test 7:  Add student no id | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A popup displays “Invalid id” | **A pop-up displays “invalid id”** |
| Test 8: Add student no email | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A pop-up displays “Invalid email” | **A pop-up displays “Invalid email”** |
| Test 9: Add student invalid email | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “first.last@ncsu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A pop-up displays “Invalid email” | **A pop-up displays invalid email** |
| Test 10: Add student no password | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A pop-up displays “Invalid password” | **A pop-up displays “Invalid password”** |
| Test 11: Add student no repeat password | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “”    7. Max Credits: “18” 3. Click Add Student 4. Check results 5. Click ok 6. Close GUI | A popup displays “Invalid password” | **A popup displays “Invalid password** |
| Test 12: Different passwords | Preconditions: None  Run StudentDirectoryPanel.java  Enter the text into the Student information in their respective positions:  First Name: “first”  Last Name: “last”  ID: “id”  Email: “email@ncsu.edu”  Password: “pw”  Repeat Password: “password”  Max Credits: “18”  Click Add Student  Check results  Click ok  Close GUI | A popup displays: “Passwords do not match” | **A popup displays: “Passwords do not match”** |
| Test 13: save to file | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: 15“” 3. Click Add Student 4. Check results 5. Click Save Student Directory 6. Save to “test-files/junk.txt” 7. Close GUI 8. Open “junk.txt” 9. Check results 10. Close “junk.txt” | 4.  Student directory is updated:   * first, last, id   9.  Contents of the file are:  “  first,last,id,email@ncsu.edu, MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  “ | **4.**  **Student directory is updated**   * **first, last, id**   **9.**  **Contents of the file are:**  **“**  first,last,id,email@ncsu.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,15  **“** |
| Test 14: empty max credits | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “” 3. Click Add Student 4. Check results 5. Click ok 6. Click Save Student Directory 7. Save to “test-files/junk.txt” 8. Close GUI 9. Open “junk.txt” 10. Check results 11. Close “junk.txt” | 4.:  Student directory is updated:   * first”, last, id   10.  Contents of the file are:  “  first,last,id,email@ncsu.edu, MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,18 “ | **4.**  **Student directory is updated:**   * **first, last, id**   **10.**  **Contents of the file are:**  **“**  first,last,id,email@ncsu.edu,MMlS+rEiw/l1nwKm2Vw3WLJGtP7iOZV7LU/uRuJhcMQ=,18  **“** |
| Test 15: Remove nothing selected | Preconditions: Test 2 passes   1. Make sure nothing is selected in Student Directory 2. Click Remove Student 3. Check results 4. Click ok 5. Close GUI | A pop-up displays: “No student selected” | **A pop-up displays: “No student selected.”** |
| Test 16: Remove | Preconditions: Test 2 passes   1. Click on the ninth row down of Student Directory (Cassandra Schwartz, cschwartz) 2. Click Remove Student 3. Check results 4. close GUI | Student Directory is updated:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg 3. Raymond, Brennan, rbrennan 4. Emerald, Frost, efrost 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Griffith, Stone, gstone | **Student Directory is updated:**   1. **Demetrius, Austin, daustin** 2. **Lane, Berg, lberg** 3. **Raymond, Brennan, rbrennan** 4. **Emerald, Frost, efrost** 5. **Shannon, Hansen, shansen** 6. **Althea, Hicks, ahicks** 7. **Zahir, King, zking** 8. **Dylan, Nolan, dnolan** 9. **Griffith, Stone, gstone** |
| Test 17: remove and add | Preconditions: test 2+16 have passed   1. Enter the text into the Student information in their respective positions:    1. First Name: “first”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “15” 2. click Add Student 3. check results 4. close GUI | Student Directory is updated:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg 3. Raymond, Brennan, rbrennan 4. Emerald, Frost, efrost 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. Zahir, King, zking 8. Dylan, Nolan, dnolan 9. Griffith, Stone, gstone 10. first, last, id | **Student Directory is updated:**   1. **Demetrius, Austin, daustin** 2. **Lane, Berg, lberg** 3. **Raymond, Brennan, rbrennan** 4. **Emerald, Frost, efrost** 5. **Shannon, Hansen, shansen** 6. **Althea, Hicks, ahicks** 7. **Zahir, King, zking** 8. **Dylan, Nolan, dnolan** 9. **Griffith, Stone, gstone** 10. **first, last, id** |
| Test 18: multiple removes and adds | Preconditions: test 2+ 16-17 have passed   1. click on the ninth row down on Student Directory (Griffith, Stone, gstone) 2. Click Remove Student 3. click on the eighth row down on Student Directory (Dylan, Nolan, dnolan) 4. Click Remove Student 5. Enter the text into the Student information in their respective positions:    1. First Name: “John”    2. Last Name: “Johnson”    3. ID: “jjohnson”    4. Email: “jjohnson @ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “3” 6. click Add Student 7. check results 8. close GUI | Student Directory is updated:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg 3. Raymond, Brennan, rbrennan 4. Emerald, Frost, efrost 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. John, Johnson, jjohnson 8. Zahir, King, zking 9. first, last, id | **Student Directory is updated:**   1. **Demetrius, Austin, daustin** 2. **Lane, Berg, lberg** 3. **Raymond, Brennan, rbrennan** 4. **Emerald, Frost, efrost** 5. **Shannon, Hansen, shansen** 6. **Althea, Hicks, ahicks** 7. **John, Johnson, jjohnson** 8. **Zahir, King, zking** 9. **first, last, id** |
| Test 19: New Student Directory | Preconditions: test 2 has passed   1. Click New Student Directory 2. Check results 3. close GUI | Student Directory is now empty | **Student Directory is now empty** |
| Test 20: saving/loading after manipulation | Preconditions: test 2 and 16-18 passed   1. click save Student Directory 2. save to “test-files/junk.txt” 3. Click New Student Directory 4. Check results 5. Click load student directory 6. load from “test-files/junk.txt” 7. check results 8. Close GUI | 4.  Student Directory is empty  6.  Student Directory is updated:   1. Demetrius, Austin, daustin 2. Lane, Berg, lberg 3. Raymond, Brennan, rbrennan 4. Emerald, Frost, efrost 5. Shannon, Hansen, shansen 6. Althea, Hicks, ahicks 7. John, Johnson, jjohnson 8. Zahir, King, zking 9. first, last, id | **4.**  **Student Directory is empty**  **6.**  **Student Directory is updated:**   1. **Demetrius, Austin, daustin** 2. **Lane, Berg, lberg** 3. **Raymond, Brennan, rbrennan** 4. **Emerald, Frost, efrost** 5. **Shannon, Hansen, shansen** 6. **Althea, Hicks, ahicks** 7. **John, Johnson, jjohnson** 8. **Zahir, King, zking** 9. **first, last, id** |
| Test 21: Comma Corruption | Preconditions: None   1. Run StudentDirectoryPanel.java 2. Enter the text into the Student information in their respective positions:    1. First Name: “first,second”    2. Last Name: “last”    3. ID: “id”    4. Email: “email@ncsu.edu”    5. Password: “pw”    6. Repeat Password: “pw”    7. Max Credits: “18” 3. Click Add Student 4. Click Save Student Directory 5. Save to “test-files/comma\_corruption.txt” 6. Click load student directory 7. Load from “test-files/comma\_corruption.txt” 8. Check results 9. Close GUI | Student directory displays:   * “first,second”, “last”, “id”   (this is not what I expect the code to actually do as per specifications, but if we were to perfect the code, this would be the end result) | **Student directory is blank** |