# Guided Project 1: System Test Plan

There are 13 system tests. All tests are worth 3 points for a total of 39 points. For each test, 2 points are for passing the test and 1 point is for reporting the actual results of running the test on YOUR program - even if the test if failing! You earn the last point (to get to 40) for submitting your system test plan in the appropriate format.

To run the tests:

1. Right click on WolfSchedulerGUI 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 and the contents of the files used in testing are below:

*invalid\_course\_records.txt*

001,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSC216,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSC a216,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSCSC 16,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

16,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSC 16,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSC 2167,Software Development Fundamentals,001,3,sesmith5,MW,1330,1445

CSC 216,001,3,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,3,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,abc,3,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,001,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,001,0,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,001,6,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,001,3,MW,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,MW,1445

CSC 216,Software Development Fundamentals,01,3,sesmith5,MW,1330,1445

CSC 216,Software Development Fundamentals,001,3,,MW,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,MWA,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,A,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,MW,267,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,MW,1445,1330

CSC 216,Software Development Fundamentals,001,3,sesmith5,,1330,1445

CSC 216,Software Development Fundamentals,001,3,sesmith5,MTWHT,1330,1445

*course\_records.txt*

CSC 116,Intro to Programming - Java,001,3,jdyoung2,MW,0910,1100

CSC 116,Intro to Programming - Java,002,3,spbalik,MW,1120,1310

CSC 116,Intro to Programming - Java,003,3,tbdimitr,TH,1120,1310

CSC 116,Intro to Programming - Java,002,3,jtking,TH,0910,1100

CSC 216,Software Development Fundamentals,001,3,sesmith5,TH,1330,1445

CSC 216,Software Development Fundamentals,002,3,ixdoming,MW,1330,1445

CSC 216,Software Development Fundamentals,601,3,jctetter,A

CSC 217,Software Development Fundamentals Lab,202,1,sesmith5,M,1040,1230

CSC 217,Software Development Fundamentals Lab,211,1,sesmith5,T,830,1020

CSC 217,Software Development Fundamentals Lab,223,1,sesmith5,W,1500,1650

CSC 217,Software Development Fundamentals Lab,601,1,sesmith5,A

CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025

CSC 230,C and Software Tools,001,3,dbsturgi,MW,1145,1300

CSC 316,Data Structures and Algorithms,001,3,jtking,MW,830,945

Note that while all tests end with the statement to Close GUI, you can run Tests 2-13 on the same GUI if there are no failures. If there are failures, you can use the preconditions to identify the dependent test cases.

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| **Test ID** | **Description** | **Expected Results** | **Actual Results** |
| --- | --- | --- | --- |
| Test 1: Invalid File | Preconditions: None   1. Run WolfSchedulerGUI. 2. In the **Load Course Catalog** FileChooser dialog select: test-files/invalid\_course\_records.txt 3. Click **Select** 4. *Check results* 5. Close GUI | * WolfSchdulerGUI loads * Course Catalog is empty * My Schedule is empty * Course Details only shows labels | **WolfSchedulerGUI loads and all tables are empty (Course Catalog, My Schedule, Course Details).**  **Schedule Title is “My Schedule” by default.** |
| Test 2: Valid File | Preconditions: None   1. Run WolfSchedulerGUI. 2. In the **Load Course Catalog** FileChooser dialog select: test-files/course\_records.txt 3. Click **Select** 4. *Check results* 5. Close GUI | WolfSchdulerGUI loads  Course Catalog contains 13 classes   * CSC 116, 001, Intro to Programming - Java * CSC 116, 002, Intro to Programming - Java * CSC 116, 003, Intro to Programming - Java * CSC 216, 001, Software Development Fundamentals * CSC 216, 002, Software Development Fundamentals * CSC 216, 601, Software Development Fundamentals * CSC 217, 202, Software Development Fundamentals Lab * CSC 217, 211, Software Development Fundamentals Lab * CSC 217, 223, Software Development Fundamentals Lab * CSC 217, 601, Software Development Fundamentals Lab * CSC 226, 001, Discrete Mathematics for Computer Scientists * CSC 230, 001, C and Software Tools * CSC 316, 001, Data Structures and Algorithms   My Schedule is empty  Course Details only shows labels | **WolfSchedulerGUI loads**  **Course Catalog appears as follows:**   * **CSC 116, 001, Intro to Programming - Java** * **CSC 116, 002, Intro to Programming - Java** * **CSC 116, 003, Intro to Programming - Java** * **CSC 216, 001, Software Development Fundamentals** * **CSC 216, 001, Software Development Fundamentals** * **CSC 216, 002, Software Development Fundamentals** * **CSC 216, 601, Software Development Fundamentals** * **CSC 217, 202, Software Development Fundamentals Lab** * **CSC 217, 211, Software Development Fundamentals Lab** * **CSC 217, 223, Software Development Fundamentals Lab** * **CSC 217, 601, Software Development Fundamentals Lab** * **CSC 226, 001, Discrete Mathematics for Computer Scientists** * **CSC 230, 001, C and Software Tools** * **CSC 316, 001, Data Structures and Algorithms**   **Schedule title is “My Schedule” and the table is empty**  **Course details table is empty save for the labels** |
| Test 3: Add - No Sel. | Preconditions: Test 2 has passed   1. Make sure that no row in the Course Catalog table is selected (if there is a row selected, restart the GUI) 2. Click **Add Course** 3. *Check results* 4. Click **OK** 5. Close GUI | A pop-up dialog stating “No course selected in the catalog.” is displayed. | **Error dialog “No course selected in the catalog.”** |
| Test 4: Add | Preconditions: Test 2 has passed   1. Select the 4th row of the Course Catalog table (CSC 216, 001, Software Development Fundamentals) 2. *Check results* 3. Click **Add Course** 4. *Check results* 5. Close GUI | Course Details are displayed   * Name: CSC 216 * Section: 001 * Title: Software Development Fundamentals * Instructor: sesmith5 * Credits: 3 * Meeting: TH 1:30PM-2:45PM   Course CSC 216, 001, Software Development Fundamentals is listed in the My Schedule table | **Course details appear as follows:**   * **Name: CSC 216** * **Section: 001** * **Title: Software Development Fundamentals** * **Instructor: sesmith5** * **Credits: 3** * **Meeting: TH 1:30PM-2:45PM**   **After adding course, course appears as expected in My Schedule table** |
| Test 5: Remove - No Sel. | Preconditions: Test 2 and Test 4 have passed   1. Make sure that no row in the My Schedule table is selected (if there is a row selected, restart the test) 2. Click **Remove Course** 3. *Check results* 4. Click **OK** 5. Close GUI | A pop-up dialog stating “No item selected in the schedule.” is displayed. | **Error dialog: “No item selected in the schedule.”** |
| Test 6: Add Same Course | Preconditions: Test 2 and Test 4 have passed   1. Select the 5th row of the Course Catalog table (CSC 216, 002, Software Development Fundamentals) 2. *Check results* 3. Click **Add Course** 4. *Check results* 5. Click **OK** 6. Close GUI | Course Details are displayed   * Name: CSC 216 * Section: 002 * Title: Software Development Fundamentals * Instructor: ixdoming * Credits: 3 * Meeting: MW 1:30PM-2:45PM   A pop-up dialog stating “You are already enrolled in CSC216” is displayed. | **Course details appear as follows:**   * **Name: CSC 216** * **Section: 002** * **Title: Software Development Fundamentals** * **Instructor: ixdoming** * **Credits: 3** * **Meeting: MW 1:30PM-2:45PM**   **Error dialog: “You are already enrolled in CSC 216”** |
| Test 7: Reset | Preconditions: Test 2 and Test 4 have passed   1. Click **Reset Schedule** 2. *Check results* 3. Close GUI | My Schedule table is empty | **My Schedule table clears. All other tables remain the same as before.** |
| Test 8: Add Several | Preconditions: Test 2 has passed   1. Select the 6th row of the Course Catalog table (CSC 216, 601, Software Development Fundamentals) 2. Click **Add Course** 3. Select the 10th row of the CourseCatalog table (CSC 217, 601, Software Development Fundamental Lab) 4. Click **Add Course** 5. Select the 2nd row of the Course Catalog table (CSC 116, 002, Intro to Programming - Java) 6. Click **Add Course** 7. Select the 12th row of the Course Catalog table (CSC 230, 001, C and Software Tools) 8. Click **Add Course** 9. Select the 11th row of the Course Catalog table (CSC 226, 001, Discrete Mathematics for Computer Scientists) 10. Click **Add Course** 11. *Check results* 12. Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals * CSC 217, 601, Software Development Fundamentals Lab * CSC 116, 002, Intro to Programming - Java * CSC 230, 001, C and Software Tools * CSC 226, 001, Discrete Mathematics for Computer Scientists | **My Schedule displays as follows:**   * **CSC 216, 601, Software Development Fundamentals** * **CSC 217, 601, Software Development Fundamentals Lab** * **CSC 116, 002, Intro to Programming - Java** * **CSC 230, 001, C and Software Tools** * **CSC 226, 001, Discrete Mathematics for Computer Scientists** |
| Test 9: Remove | Preconditions: Test 2 and Test 8 have passed   1. Select the 3rd row of the My Schedule table (CSC 116, 002, Intro to Programming - Java) 2. Click **Remove Course** 3. *Check results* 4. Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals * CSC 217, 601, Software Development Fundamentals Lab * CSC 230, 001, C and Software Tools * CSC 226, 001, Discrete Mathematics for Computer Scientists | **Selected course has been successfully removed, My Schedule now reads as:**   * **CSC 216, 601, Software Development Fundamentals** * **CSC 217, 601, Software Development Fundamentals Lab** * **CSC 230, 001, C and Software Tools** * **CSC 226, 001, Discrete Mathematics for Computer Scientists** |
| Test 10: Set Title | Preconditions: Test 1 or Test 2 have passed   1. Enter “My Super Awesome Schedule” into the Schedule Title text field 2. Click **Set Title** 3. *Check results* 4. Close GUI | The label on the third section of the GUI now contains the text “My Super Awesome Schedule” instead of “My Schedule” | **Schedule Title and header of the schedule table has been updated from “My Schedule” to “My Super Awesome Schedule”** |
| Test 11: Finalize | Preconditions: Test 2 and Tests 8-10 have passed   1. Click **Display Final Schedule** 2. *Check results* 3. Close GUI | Schedule Title: “My Super Awesome Schedule”  Schedule Table   * CSC 216, 601, Software Development Fundamentals, 3, jctetter, Arranged * CSC 217, 601, Software Development Fundamentals Lab, 1, sesmith5, Arranged * CSC 230, 001, C and Software Tools, 3, dbsturgi, MW 11:45AM-1:00PM * CSC 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM | **Schedule table header is “My Super Awesome Schedule” and the schedule contents read as follows:**   * **CSC 216, 601, Software Development Fundamentals, 3, jctetter, Arranged** * **CSC 217, 601, Software Development Fundamentals Lab, 1, sesmith5, Arranged** * **CSC 230, 001, C and Software Tools, 3, dbsturgi, MW 11:45AM-1:00PM** * **CSC 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM** |
| Test 12: Export | Preconditions: Test 2 and Tests 8-11 have passed   1. Click **Export Schedule** 2. Select test-files folder. Enter the filename actual\_schedule.txt 3. Click **Save** (it’s ok to overwrite old results) 4. *Check results* 5. Close GUI | In Eclipse, right click on the WolfScheduler project and select **Refresh.**  Open the test-files folder and open actual\_schedule.txt in the editor.  The contents should be:  CSC 216,Software Development Fundamentals,601,3,jctetter,A  CSC 217,Software Development Fundamentals Lab,601,1,sesmith5,A  CSC 230,C and Software Tools,001,3,dbsturgi,MW,1145,1300  CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025 | **The file contents read as follow:**  **CSC 216,Software Development Fundamentals,601,3,jctetter,A**  **CSC 217,Software Development Fundamentals Lab,601,1,sesmith5,A**  **CSC 230,C and Software Tools,001,3,dbsturgi,MW,1145,1300**  **CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025** |
| Test 13: Revise | Preconditions: Test 2 and Tests 8-11 have passed   1. Click **Revise Schedule** 2. *Check Results* 3. Close GUI | The Scheduler view is shown with   * 13 courses listed in the catalog * My Super Awesome Schedule as the schedule title * 4 courses in my schedule (CSC 216-601, CSC 217-601, CSC 230-001, CSC 226-001) | **User is taken back to Scheduler view.**  **Schedule title is “My Super Awesome Schedule”**  **Schedule contents read with the same courses as before (CSC 216-601, CSC 217-601, CSC 230-001, CSC 226-001)** |