# 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 | **When opened, both the Course Catalog and My Schedule are empty, and Course Details is empty except for the categorical labels.** |
| 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 | **The GUI successfully has 13 courses in the Course Catalog, with 3 sections of CSC 116 and 216, 4 sections of CSC 217, and one section each of CSC 226, 230, and 316. My Schedule is empty, and Course Details is empty except for the categorical 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. | **A message pops up saying, “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 | **CSC 216 section 001 is added to My Schedule.**  **In addition, information for CSC 216 section 001 is on Course Details. The Name having “CSC 216”, Section having “001”, Title having “Software Development Fundamentals”, Instructor having “sesmith5”, Credits having “3”, and Meeting having “TH 1:30PM-2:45PM”.** |
| 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. | **A message pops up saying, “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. | **A message pops up saying, “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 is clear of courses and is now empty.** |
| 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 holds 5 courses: CSC 216 section 601 “Software Development Fundamentals”, CSC 217 section 601 “Software Development Fundamentals Lab”, CSC 116 section 002 “Intro to Programming - Java”, CSC 230 section 001 “C and Software Tools”, and CSC 226 section 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 | **CSC 116 section 002 is removed and My Schedule holds four courses: CSC 216 section 601 “Software Development Fundamentals”, CSC 217 section 601 “Software Development Fundamentals Lab”, CSC 230 section 001 “C and Software Tools”, and CSC 226 section 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” | **The list showing a student’s class schedule is now named “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 | **My Super Awesome Schedule holds four courses:**  **CSC 216 section 601 “Software Development Fundamentals”, 3 credits, jctetter, Arranged**  **CSC 217 section 601 “Software Development Fundamentals Lab”, 1 credit, sesmith5, Arranged**  **CSC 230 section 001 “C and Software Tools”, 3 credits, dbsturgi, MW 11:45AM-1:00PM**  **CSC 226 section 001 “Discrete Mathematics for Computer Scientists”, 3 credits, 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 | **Opened actual\_schedule.txt in the test-files folder, and it contains the following pasted below.**  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) | **The initial GUI is back with the same courses in the Course Catalog, the schedule title remaining “My Super Awesome Schedule”, and with the same four courses (CSC 216 section 601, CSC 216 section 601, CSC 230 section 001, and CSC 226 section 001) in the schedule.** |