# Guided Project 3: System Test Plan

## GP3 System Test Plan Instructions

There are 15 system-level system tests that were provided to validate that Guided Project 2 was working properly. You will ***revise*** the existing tests to meet the new requirements. Additionally, you will write another **5 system tests** for a total of **20 tests.**

**Identify *changed tests* by highlighting the row in light gray. Also, annotate the Test ID column with the tag (Modified).**

**Identify *new tests* by highlighting the row in a darker gray. Also, annotate the Test ID column with the tag (New).**

All tests are worth 1 point for a total of 20 points. For each test, half a point is for passing the test and half a point is for reporting the actual results of running the test on YOUR program - even if the test is failing! There are global deductions for incorrect highlighting.

## GP3 System Test Plan Execution Information

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

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

*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 run 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 * *Add Event section is empty* | **Test Passed - WolfSchedulerGUI loaded with the appropriate labels and display. The Course Catalog, My Schedule, Course Details, and Add Event sections were empty, displaying no information and only 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, MW 9:10AM-11:00AM * CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM * CSC 116, 003, Intro to Programming - Java,TH 11:20AM-1:10PM * CSC 216, 001, Software Development Fundamentals, TH 1:30PM-2:45PM * CSC 216, 002, Software Development Fundamentals, MW 1:30PM-2:45PM * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 202, Software Development Fundamentals Lab, M 10:40AM-12:30PM * CSC 217, 211, Software Development Fundamentals Lab, T 8:30AM-10:20AM * CSC 217, 223, Software Development Fundamentals Lab, W 3:00PM-4:50PM * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 226, 001, Discrete Mathematics for Computer Scientists, MWF 9:35AM-10:25AM * CSC 230, 001, C and Software Tools, MW 11:45PM-1:00PM * CSC 316, 001, Data Structures and Algorithms, MW 8:30AM-9:45AM   My Schedule is empty  Course Details only shows labels  *Add Event only shows labels* | **Test Passed - WolfSchedulerGUI loaded with the appropriate labels and display. The Course Catalog is populated with 13 courses. Each course displayed the accurate name, section, title, meeting days, and meeting times. The My Schedule, Course Details, and Add Event sections remained empty, displaying no information and only 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. | **Test Passed - Test 2 has passed prior to beginning Test 3. After selecting Add Course without selecting any row in the Course Catalog, a pop-up dialog appeared. It displayed a message, stating “No course selected in the catalog.”** |
| Test 4: Add | Preconditions: Test 2 has passed   1. Select the 4th row of the Course Catalog table (CSC216, 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 | **Test Passed - Test 2 passed prior to beginning Test 4. After selecting the 4th row of the Course Catalog table, the row was highlighted, and the Course Details for CSC 216 (001) were displayed. It showed the accurate name, section, title, instructor, credits, and meeting information. After selecting Add Course, CSC 216 (001) was listed in the My Schedule table with its appropriate information.** |
| 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 Activity** 3. *Check results* 4. Click **OK** 5. Close GUI | A pop-up dialog stating, “No item selected in the schedule.” is displayed. | **Test Passed - Test 2 and Test 4 have passed prior to beginning Test 5. When clicking Remove Activity without selecting any row of the My Schedule table, a pop-up dialog box appeared. It displayed a message, stating “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 (CSC216, 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, “The course cannot be added due to a conflict.” is displayed. | **Test Passed - Test 2 and Test 4 have passed prior to beginning Test 6. After selecting the 5th row of the Course Catalog table, the row was highlighted and the information for CSC 216 (002) was displayed in the Course Details section. The appropriate name, section, title, instructor, credits, and meeting information were displayed. After selecting Add Course, a pop-up dialog box appeared. It displayed a message, stating “You are already enrolled in CSC 216.”** |
| Test 14: Add Event | Preconditions: Test 2 and Test 4 have passed   1. Enter the following in the Add Event section:  * Event Title: Lunch * Meeting Days: Mon and Wed * Event Start Time: 11:30AM * Event End Time: 12:30PM * Details: Meet at the Oval before class  1. Click **Add Event** 2. *Check results* 3. Close GUI | My Schedule table contains:   * CSC 216, 001, Software Development Fundamentals, TH 1:30PM-2:45PM * “”, “”, Lunch, MW 11:30AM-12:30PM | **Test Passed - Test 2 and Test 4 passed prior to beginning Test 14. After entering the appropriate information and selecting Add Event, My Schedule populated with the event. The My Schedule table displayed the previously added CSC 216 course and the newly added event under it, with the appropriate name and meeting information.** |
| Test 15: Duplicate Event | Preconditions: Test 2, Test 4, and Test14 have passed   1. Enter the following in the Add Event section:  * Event Title: Lunch * Meeting Days: Tue * Event Start Time: 12:00PM * Event End Time: 1:00PM * Details: Lunch with mom  1. Click **Add Event** 2. *Check results* 3. Click **OK** 4. Close GUI | A pop-up dialog stating, “You have already created an event called Lunch” is displayed. | **Test Passed - Test 2, Test 4, and Test 14 have passed prior to beginning Test 15. After entering a new event with the same name and different meeting information, a pop-up dialog box appeared. It displayed a message, stating “You have already created an event called Lunch.”** |
| 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 | **Test Passed - Test 2 and Test 4 passed prior to beginning Test 7. After selecting Reset Schedule, the My Schedule table became empty, displaying no course information or events.** |
| Test 8: Add Several  (Modified) | Preconditions: Test 2 has passed   1. Select the 6th row of the Course Catalog table (CSC 216, 601, Software Development Fundamentals, Arranged) 2. Click **Add Course** 3. Select the 10th row of the Course Catalog table (CSC 217, 601, Software Development Fundamental Lab, Arranged) 4. Click **Add Course** 5. Select the 2nd row of the Course Catalog table (CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM) 6. Click **Add Course** 7. Check *results* 8. Select the 12th row of the Course Catalog table (CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM) 9. Click **Add Course** 10. *Check results* 11. *Enter “Exercise” UMTHF 8:00AM-9:00AM and select* ***Add Event*** 12. Select CSC 226 001 in **Course Catalog** and select **Add Course** 13. Enter Lunch, MTWHF, 11:45AM-1:00PM and select **Add Event** 14. Check results 15. Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM   A pop-up dialog stating, “The course cannot be added due to a conflict.” is displayed.  My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM * “”, “”, Exercise, UMTHF 8:00AM-9:00AM * CSC 226, 001, Discrete Mathematics for Computer Scientists, MWF 9:35AM-10:25AM   A pop-up dialog stating, “The course cannot be added due to a conflict.” is displayed. | **Test Passed - Test 2 passed prior to beginning Test 8. After adding the first three appropriate courses, the My Schedule box displayed the three courses with their accurate information and meeting times. After adding CSC 230 (001), a pop-up dialog box appeared. It displayed a message, stating “The course cannot be added due to a conflict.” This occurred because there is an overlap in the timings of CSC 116 (002) and CSC 230 (001). After you go on to add the rest of the courses, a pop-up dialog box stating the same message displays after attempting to add an event with overlapping time.** |
| Test 9: Remove  (Modified) | Preconditions: Test 2 and Test 8 have passed  Select the 3rd row of the My Schedule table (CSC116, 002, Intro to Programming - Java)  Click **Remove Activity**  *Check results*  Select the 3rd row of the My Schedule table (Exercise)  Click **Remove Activity**  *Check results*  Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * “”, “”, Exercise, UMTHF 8:00AM-9:00AM * CSC 226, 001, Discrete Mathematics for Computer Scientists, MWF 9:35AM-10:25AM   My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 226, 001, Discrete Mathematics for Computer Scientists, MWF 9:35AM-10:25AM | **Test Passed - Test 2 and Test 8 passed prior to beginning Test 9. After selecting Remove Activity on the third row of My Schedule, it changed to display only four courses with their appropriate names and information. After selecting Remove Activity for the new third row, the Exercise event added was also removed, and now only three activities were displayed in the schedule.** |
| Test 10: Set Title | Preconditions: Test 1 or Test 2 have passed  Enter “My Super Awesome Schedule” into the Schedule Title text field  Click **Set Title**  *Check results*  Close GUI | The label on the third section of the GUI now contains the text “My Super Awesome Schedule” instead of “My Schedule” | **Test Passed - Tests 1 and 2 have passed prior to beginning Test 10. After entering the new name and selecting Set Title, the label on the third section displayed “My Super Awesome Schedule” rather than the original “My Schedule.”** |
| Test 11: Finalize  (Modified) | Preconditions: Test 2 and Tests 8-10 have passed  Click **Display Final Schedule**  *Check results*  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 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM, “” | **Test Passed - Test 2 and Tests 8-10 passed prior to beginning Test 11. After selecting Display Final Schedule, the appropriate courses were displayed in the Schedule Table with their appropriate information. The Schedule Title also displayed as “My Super Awesome Schedule.”** |
| Test 12: Export  (Modified) | Preconditions: Test 2 and Tests 8-11 have passed  Click **Export Schedule**  Select test-files folder. Enter the filename actual\_schedule.txt  Click **Save** (it’s ok to overwrite old results)  *Check results*  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 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025 | **Test Passed - Test 2 and Tests 8-11 passed prior to beginning Test 12. After selecting Export Schedule and opening the actual\_schedule.txt file, the text file displayed all the appropriate courses with their accurate names, titles, section numbers, credits, instructor ids, and meeting information.** |
| Test 13: Revise  (Modified) | Preconditions: Test 2 and Tests 8-11 have passed  Click **Revise Schedule**  *Check Results*  Close GUI | The Scheduler view is shown with   * 13 courses listed in the catalog * My Super Awesome Schedule as the schedule title * 3 courses in my schedule (CSC 216-601, CSC 217-601, CSC 226-001) - all 3 columns are filled as expected for each activity. | **Test Passed - Test 2 and Tests 8-11 passed prior to beginning Test 13. After selecting Revise Schedule, the Scheduler view displayed 13 courses in the course catalog, the Schedule Title remained as “My Super Awesome Schedule,” and there were the 3 appropriate courses in my schedule. Each course listed its accurate information and labels.** |
| Test 16: Add Conflicting Event on One Day  (New) | Preconditions: None  Add an event with the information: “Study group”, MWF, 3:00PM, 4:30PM, “Chemistry Review”  Select **Add Event**  Add an event with the information: “Tutoring”, MH, 3:00PM, 3:30PM, “Math tutoring”  Select **Add Event**  Check *results*  Close GUI | My Schedule displays:   * Study group, MWF, 3:00PM-4:30PM   A pop-up dialog stating, “The event cannot be added due to a conflict.” is displayed. | **Test Passed - My Schedule displayed the newly added event, Study group, with its appropriate meeting information and details. After attempting to add an event with a time overlap, a pop-up dialog appeared. It displayed a message, stating “The event cannot be added due to a conflict.”** |
| Test 17: Add Conflicting Event and Course  (New) | Preconditions: None  Select Row 1 of the Course Catalog: CSC 116 (001) MW 9:10AM-11:00AM  Select **Add Course**  Add an event with the information: “Tutoring”, MW, 9:10AM, 11:AM, “Math tutoring”  Select **Add Event**  Check *results*  Close GUI | My Schedule displays:   * CSC 116, 001, MW, 9:10AM-11:00AM   A pop-up dialog stating, “The event cannot be added due to a conflict.” is displayed. | **Test Passed - My Schedule displayed the newly added course, CSC 116, with its appropriate meeting information and details. After attempting to add an event with a time overlap, a pop-up dialog appeared. It displayed a message, stating “The event cannot be added due to a conflict.”** |
| Test 18: Conflicting End Time Equals Start Time  (New) | Preconditions: None  Add an event with the information: “Study group”, MWF, 3:00PM, 4:30PM, “Chemistry Review”  Select **Add Event**  Add an event with the information: “Tutoring”, MH, 4:30PM, 6:00PM, “Math tutoring”  Select **Add Event**  Check *results*  Close GUI | My Schedule displays:   * Study group, MWF, 3:00PM-4:30PM, Chemistry Review   A pop-up dialog stating, “The event cannot be added due to a conflict.” is displayed. | **Test Passed - My Schedule displayed the newly added event, Study group, with its appropriate meeting information and details. After attempting to add an event that begins at the same time Study group ends, a pop-up dialog appeared. It displayed a message, stating “The event cannot be added due to a conflict.”** |
| Test 19: No Conflict Arranged Meeting Times  (New) | Preconditions: None  Select Row 6 of the Course Catalog: CSC 216 601  Select **Add Course**  Select Row 10 of the Course Catalog: CSC 217 601  Select **Add Course**  Check *results*  Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged | **Test Passed - My Schedule displayed both newly added courses, CSC 216 and 217, with their appropriate meeting information and details. No error or pop-up message appeared after doing this as both courses have a meeting time of Arranged. This means no conflict arises when adding both courses to the schedule.** |
| Test 20: No Conflict – Same Times Different Days  (New) | Preconditions: None  Select Row 12 of the Course Catalog: CSC 230 001  Select **Add Course**  Enter the event information: “Soccer”, TH, 11:45AM-1:00PM, “Practice”  Select **Add Course**  Check *results*  Close GUI | My Schedule displays:   * CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM * Soccer TH 11:45AM-1:00PM | **Test Passed - My Schedule displayed both the newly added course and event, CSC 230 and soccer, with their appropriate meeting information and details. No error or pop-up message appeared after doing this as both activities have the same meeting time but different meeting days. This means no conflict arises when adding both activities to the schedule.** |