# 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.

|  |  |  |  |
| --- | --- | --- | --- |
| **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* | The WolfScheduler GUI loads with an empty Course Catalog, My Schedule, Course Details, and Add Event section. |
| 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* | Course catalog now contains 13 courses, with other sections in the GUI remaining empty and Add Events showing empty 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 dialog box stating “No course selected in the catalog” is displayed which prompts to click “OK” |
| 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 | Course Details are displayed when the course is chosen and clicking Add Course, displays the initially chosen course under My Schedule. |
| 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. | A dialog box stating “No course selected in the catalog” is displayed which prompts to click “OK” |
| 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 “You are already enrolled in CSC216” is displayed. | Course Details are displayed when the course is chosen and clicking Add Course leads to a dialogue box that states “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 | The new Event Lunch is displayed in My Schedule(below the previous course added) with empty fields for Name and Section. |
| 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. | A dialogue box stating “You have already created an event called Lunch” is displayed which prompts to click OK. |
| 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 | Clicking the Reset Schedule clears the My Schedule table. |
| 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. Select the 12th row of the Course Catalog table (CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM) 8. Click **Add Course** 9. *Check results* 10. Close GUI | 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 | A dialogue box stating “The course cannot be added due to a conflict.” is displayed which prompts to click OK. |
| 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*  Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged | My Schedule now displays 2 activities after removing a course. |
| 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” | The third section of the GUI, initially My Schedule, now reads “My Super Awesome 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, “” | My Super Awesome Schedule is displayed in a table format with 2 activities. |
| 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 | actual\_schedule.txt shows up under test-files with the contents being the 2 added activities. |
| 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 * 2 courses in my schedule (CSC 216-601, CSC 217-601,) all columns are filled as expected for each activity. | Revise Schedule takes the display back to the initial window where the Course Catalog is displayed and so is My Super Awesome Schedule. |
| Test16:  AddEventWithStartTimeConflict  (New) | 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. Enter the following in the Add Event section:  * Event Title: Lunch * Meeting Days: Mon * Event Start Time: 1:05PM * Event End Time: 2:00PM * Details: Lunch with Michael Scott  1. Click **Add Event** 2. *Check results* 3. Click **OK** 4. Close GUI | A pop-up dialog stating “The event 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 | A dialogue box stating “The event cannot be added due to a conflict.” is displayed which prompts to click OK. |
| Test17: AddEvntWith1MinConflict  (New) | Preconditions: Test 2 has passed   1. Select the 2nd row of the Course Catalog table (CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM) 2. Click **Add Course** 3. Enter the following in the Add Event section:  * Event Title: Wolfline bus 52 * Meeting Days: Mon, Wed * Event Start Time: 11:00AM * Event End Time: 11:25AM * Details: Route to North Campus  1. Click **Add Event** 2. *Check results* 3. Click **OK** 4. Close GUI | A pop-up dialog stating “The event cannot be added due to a conflict.” is displayed.  My Schedule displays:   1. CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM | A dialogue box stating “The event cannot be added due to a conflict.” is displayed which prompts to click OK. |
| Test18:  AddCourseWithSameMinuteConflict  (New) | Preconditions: Test 17 has passed   1. Enter the following in the Add Event section:  * Event Title: Wolfline bus 43 * Meeting Days: Mon, Tue, Wed * Event Start Time: 1:20PM * Event End Time: 1:30PM * Details: Route to Centennial  1. Click **Add Event** 2. Select the 4th row of the Course Catalog table (CSC216, 001, Software Development Fundamentals) 3. Click Add Course 4. *Check results* 5. Click **OK** 6. Close GUI | A pop-up dialog stating “The event cannot be added due to a conflict.” is displayed.  My Schedule displays:   * + - 1. CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM       2. “”, “”, Wolfline bus 43, MTW, 1:20PM-1:30PM | A dialogue box stating “The course cannot be added due to a conflict.” is displayed which prompts to click OK. |
| Test19:  AddEventWithSameDayandTimeConflict  (New) | Preconditions: Test 18 has passed   1. Select the 7th row of the Course Catalog table (CSC217, 223, Software Development Fundamentals Lab) 2. Click **Add Course** 3. Enter the following in the Add Event section:  * Event Title: Office Hour * Meeting Days: Mon, Wed, Fri * Event Start Time: 4:30PM * Event End Time: 5:30PM * Details: TA for csc116  1. Click **Add Event** 2. *Check results* 3. Click **OK** 4. Edit the following in the Add Event section:  * Event Start Time: 5:00PM * Event End Time: 6:00PM  1. Click **Add Event** 2. *Check results* 3. Click **OK** 4. Close GUI | A pop-up dialog stating “The event cannot be added due to a conflict.” is displayed.  My Schedule displays:   1. CSC 116, 002, Intro to Programming - Java, MW 11:20AM-1:10PM 2. “”, “”, Wolfline bus 43, MTW, 1:20PM-1:30PM 3. CSC 217, 223, Software Development Fundamentals Lab, W 3:00PM-4:50PM 4. “”, “”, Office Hour, MWF, 5:00PM-6:00PM | A dialogue box stating “The event cannot be added due to a conflict.” is displayed which prompts to click OK. |
| Test20:  AddCourseWithDayAndTimeConflict  (New) | Preconditions: Test 19 has passed   1. Select the 12th row of the Course Catalog table (CSC230, 001, C and Software Tools) 2. Click **Add Course** 3. *Check results* 4. Click **OK** 5. Select 2nd row of My Schedule 6. Click **Remove Activity** 7. Repeat steps 1 and 2 8. *Check results* 9. Close GUI | A pop-up dialog stating “The event cannot be added due to a conflict.” is displayed.  My Schedule displays:   1. CSC 217, 223, Software Development Fundamentals Lab, W 3:00PM-4:50PM 2. “”, “”, Wolfline bus 43, MTW, 1:20PM-1:30PM 3. “”, “”, Office Hour, MWF, 5:00PM-6:00PM 4. CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM | A dialogue box stating “The course cannot be added due to a conflict.” is displayed which prompts to click OK. |