# 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* | * WolfSchdulerGUI loads * Course Catalog is empty * My Schedule is empty * Course Details only shows labels   *Add Event section is empty* |
| 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* | WolfSchdulerGUI loads  Course Catalog contains 13 classes with correct name, section, title, and meeting information.  My Schedule is empty  Course Details only shows labels  *Add Event only shows 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 pop-up dialog stating “No course selected in the catalog.” is displayed. |
| 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   * 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 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 pop-up dialog stating “No item selected in the schedule.” is displayed. |
| 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   * 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. |
| 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 | My Schedule table contains:   * CSC 216, 001, Software Development Fundamentals, TH 1:30PM-2:45PM   “”, “”, Lunch, MW 11:30AM-12:30PM |
| 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 pop-up dialog stating “You have already created an event called Lunch.” is displayed. |
| 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 is empty |
| 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 12th row of the Course Catalog table (CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM) 6. Click **Add Course** 7. Enter the following in the Add Event section:  * Event Title: Exercise * Meeting Days: Sun, Mon, Tue, Thu, Fri * Event Start Time: 8:00AM * Event End Time: 9:00AM * Details: Cardio days  1. Click **Add Event** 2. Select the 11th row of the Course Catalog table (CSC 226, 001, Discrete Mathematics for Computer Scientists) 3. Click **Add Course** 4. *Check results* 5. Close GUI | My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM * “”, “”, Exercise, UMTHF 8:00AM-9:00AM * CSC 226, 001, Discrete Mathematics for Computer Science, MWF 9:35AM-10:25AM | My Schedule displays with 4 course and 1 event with correct name, section, title, and meeting information |
| Test 9: Remove  Modified | Preconditions: Test 2 and Test 8 have passed  Select the 3rd row of the Course Catalog (CSC116, 003, Intro to Programming - Java)  Click **Add Course**  Enter the following in the Add Event section:  Event Title: Play game  Meeting Days: Mon, Tue, Wed, Thu, Fri  Event Start Time: 5:00PM  Event End Time: 6:00PM  Details:  Click **Add Event**  Click the CSC 116, 003 in My Schedule  Click **Remove Activity**  Click the row with Play game title in My Schedule  Click **Remove Activity**  *Check results*  Close GUI | Course CSC 116, 003 add in my schedule  Event Play game add on my schedule with MTWHF 5:00PM-6:00PM  Course CSC 116, 003 disappear from My Schedule  Event Play game disappear from My Schedule  Now My Schedule displays:   * CSC 216, 601, Software Development Fundamentals, Arranged * CSC 217, 601, Software Development Fundamentals Lab, Arranged * CSC 230, 001, C and Software Tools, MW 11:45AM-1:00PM * “”, “”, Exercise, UMTHF 8:00AM-9:00AM * CSC 226, 001, Discrete Mathematics for Computer Scientists, MWF 9:35AM-10:25AM | Successfully add Course CSC 116, 003 and Event Play game  Successfully remove Course CSC 116, 003 and Event Play game  My Schedule still left with 4 Course and 1 Event. |
| 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 label on the third section of the GUI now contains the text “My Super Awesome Schedule” instead of “My Schedule” |
| Test 14:  Correct Display Message  New | Preconditions: Test 2 and Test 8 have passed  Enter the following in the Add Event section:  Event Title: Play game  Event Meeting days:  Event Start Time: 5:00PM  Event End Time: 6:00PM  Details:  Click Add Event  Check Result  Close GUI | Pop up window with message “The event must occur on at least one day.” | Pop up window with message “The event must occur on at least one day.” |
| Test 15:  Empty event title  New | Preconditions: Test 2 and Test 8 have passed  Enter the following in the Add Event section:  Event Title:  Event Meeting days:  Event Start Time: 5:00PM  Event End Time: 6:00PM  Details:  Click Add Event  Check Result  Close GUI | Pop up window with message “Invalid title.” | Pop up window with message “Invalid title.” |
| Test 16:  Event time  New | Preconditions: Test 2 and Test 8 have passed  Enter the following in the Add Event section:  Event Title: Play game  Event Meeting days: M  Event Start Time: 5:00PM  Event End Time: 4:00PM  Details:  Click Add Event  Check Result  Close GUI | Pop up window with message “Invalid meeting days and times.” | Pop up window with message “Invalid meeting days and times.” |
| Test 17:  Add Course Conflict  New | Preconditions: Test 2 and Test 8 have passed  Select the 2nd row of the Course Catalog table (CSC 116, 001, Intro to Programming - Java, MW 11:20AM-1:10PM)  Check Result  Close GUI | Pop up window with message” The course cannot be added due to a conflict.” | Pop up window with message” The course cannot be added due to a conflict.” |
| Test 18:  Conflict Event  New | Preconditions: Test 2 and Test 8 have passed  Enter the following in the Add Event section:   * Event Title: Lunch * Meeting Days: Mon, Tue, Wed, Thu, Fri * Event Start Time: 11:45AM * Event End Time: 1:00PM * Details:   Close GUI | Pop up window with message “The event cannot be added due to a conflict.” | Pop up window with message “The event cannot be added due to a conflict.” |
| Test 11: Finalize | Preconditions: Test 2 and Tests 8-10 have passed  Add Event:   * Event Title: Study * Meeting Days: Mon, Tue, Wed, Thu, Fri * Event Start Time: 6:00PM * Event End Time: 9:00PM * Details:   Click Add Event  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 230, 001, C and Software Tools, 3, dbsturgi, MW 11:45AM-1:00PM, “” * “”, “”, Exercise, “”, “”, UMTHF 8:30AM-9:00AM, Cardio days * CSC 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM, “” * “”, “”, Study, “”, “”, MTWHF 6:00PM-9:00PM | Schedule Title: “My Super Awesome Schedule”  Schedule Table display 4 courses and 2 event with all correct information |
| Test 12: Export | Preconditions: Test 2 and Tests 8-11 have passed  Click **Export Schedule**  Select test-files folder. Enter the filename final\_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 final\_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  Exercise,UMTHF,800,900,Cardio days  CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025  Study,MTWHF,1800,2100 | In Eclipse, right click on the WolfScheduler project and select **Refresh.**  Open the test-files folder and open final\_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  Exercise,UMTHF,800,900,Cardio days  CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025  Study,MTWHF,1800,2100 |
| Test 13: Revise | 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 * 4 courses in my schedule (CSC 216-601, CSC 217-601, CSC 230-001, CSC 226-001) and 2 event (Exercise and Study) - all 4 columns are filled as expected for each activity. | 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) and 2 event (Exercise and Study) - all 4 columns are filled as expected for each activity. |