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* | WolfSchedulerGUI Loads successfully  No courses are displayed in the course catalog  Course details are blank  My Schedule has no activities in it. |
| 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* | WolfSchedulerGUI Successfully loads.  The Course Catalog is populated with 13 courses:   * 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 completely blank.  Course details are blank.  Add event boxes are empty. |
| 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 box is displayed 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 | Course details are populated with the selected course:   * Name: CSC 216 * Section: 001 * Title: Software Development Fundamentals * Instructor: sesmith5 * Credits: 3 * Meeting: TH 1:30PM-2:45PM   The course was successfully added on 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 pop-up box appears 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 “You are already enrolled in CSC216” is displayed. | Course details are populated with the selected course:   * Name: CSC 216 * Section: 002 * Title: Software Development Fundamentals * Instructor: ixdoming * Credits: 3 * Meeting: MW 1:30PM-2:45PM   When trying to add the course, a pop-up box appears 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 | The event was successfully added on my schedule.  My schedule now has one course and one event. |
| 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. | When trying to add the event a pop-up box displays, “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 | My schedule table gets completely cleared of all activities. |
| 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 11:20 AM-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. 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. 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:  1. Click **Add Event** 2. *Check results* 3. Close GUI | CSC 216, 601, Software Development Fundamentals, Arranged, was successfully added to the schedule.  CSC 217, 601, Software Development Fundamental Lab, Arranged, was successfully added to the schedule.  CSC 116, 002, Intro to Programming - Java, MW 11:20 AM - 1:10PM was successfully added to the schedule.  Pop-up displaying, “The course cannot be added due to a conflict.”  Exercise UMTHF 8:00 AM - 9:00AM was successfully added to the schedule.  CSC 226, 001, Discrete Mathematics for Computer Scientists MWF 9:35AM - 10:25AM was successfully added to the schedule.  Pop-up displaying, “The event cannot be added due to a conflict” | Everything was successfully added besides CSC 230, and Lunch due to conflicting times. |
| 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* | 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 | Intro to Programming CSC 116 was successfully removed from my schedule leaving:   * 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 |
| 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 schedule title was successfully updated to “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, “” * “”, “”, Exercise, “”, “”, UMTHF 8:30AM-9:00AM, Cardio days * CSC 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM, “” | The Schedule title is still labeled, “My Super Awesome Schedule”.  Schedule Table states:   * CSC 216, 601, Software Development Fundamentals, 3, jctetter, Arranged, “” * CSC 217, 601, Software Development Fundamentals Lab, 1, sesmith5, Arranged, “” * “”, “”, Exercise, “”, “”, UMTHF 8:30AM-9:00AM, Cardio days * CSC 226, 001, Discrete Mathematics for Computer Scientists, 3, tmbarnes, MWF 9:35AM-10:25AM, “” |
| 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  Exercise,UMTHF,800,900,Cardio days  CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025 | A file named “actual\_schedule.txt” has been created.  Inside the file is the complete schedule:  CSC 216,Software Development Fundamentals,601,3,jctetter,A  CSC 217,Software Development Fundamentals Lab,601,1,sesmith5,A  Exercise,UMTHF,800,900,Cardio days  CSC 226,Discrete Mathematics for Computer Scientists,001,3,tmbarnes,MWF,935,1025 |
| 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) and 1 event (Exercise) - all 4 columns are filled as expected for each activity. | My schedule kept all previous added activities.  In my schedule I still have 3 courses, and 1 event.  13 Courses are still listed in the catalog. |
| Test 14:  conflictingCourses  (New) | Preconditions: None  Run WolfSchedulerGUI  Load file from test-files/course\_records.txt  Click CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM from the course catalog  Click “Add Course”  Click CSC 116 002 Intro to Programming Java MW 11:20 AM - 1:10PM  Click “Add Course”  Check Results | WolfSchedulerGUI successfully runs and loads with 13 courses.  CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM is successfully added to the course catalog  Pop-up stating, “Failed to add CSC 116 002 Intro to Programming Java to the schedule. Reason: Conflicting times.” | CSC 230 was successfully added to my schedule, but CSC 116 failed to be added due to a time conflict. |
| Test 15:  conflictingStartTimeWithCourseAndEvent  (New) | Preconditions: None  Run WolfSchedulerGUI  Load file from test-files/course\_records.txt  Click CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM from the course catalog  Click “Add Course”  In the Add Event option add the following event:  Event Title: Lunch  Meeting Times: MW 11:45AM - 12:30PM  Event Details: Gotta eat bro  Check Results | WolfSchedulerGUI successfully runs and loads with 13 courses.  CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM is successfully added to the course catalog  Pop-up stating, "Failed to add Lunch to the schedule. Reason: Conflicting times.” | The course was successfully added on my schedule, but the event failed to add due to a time conflict. |
| Test 16:  conflictingEndTimeWithCourseAndEvent  (New) | Preconditions: None  Run WolfSchedulerGUI  Load file from test-files/course\_records.txt  Click CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM from the course catalog  Click “Add Course”  In the Add Event option add the following event:  Event Title: Lunch  Meeting Times: MW 1:00PM - 1:30PM  Event Details: Gotta eat bro  Check Results | WolfSchedulerGUI successfully runs and loads with 13 courses.  CSC 230 001 C and Software Tools MW 11:45AM - 1:00PM is successfully added to the course catalog  Pop-up stating, "Failed to add Lunch to the schedule. Reason: Conflicting times.” | CSC 230 001 C and Software Tools was added to the schedule.  The event lunch was not able to be added due to a time conflict. |
| Test 17:  conflictingStartTimeWithEvents  (New) | Preconditions: None  Run WolfSchedulerGUI  Load file from test-files/course\_records.txt  In the Add Event option add the following event:  Event Title: Lunch  Meeting Times: MW 11:50 AM - 1:00 PM  Event Details: Gotta eat bro  In the Add Event option add the following event:  Event Title: Snack  Meeting Times: MW 11:50AM - 12:30 PM  Event Details: Snack time  Check results | WolfSchedulerGUI successfully runs and loads with 13 courses.  Lunch is successfully added onto the schedule.  Pop-up stating, “Failed to add Snack onto the schedule. Reason: Conflicting times.” | Lunch was added onto my schedule, but the snack event failed to be added due to a time conflict. |
| Test 18:  conflictingEndTimeWithEvents  (New) | Preconditions: None  Run WolfSchedulerGUI  Load file from test-files/course\_records.txt  In the Add Event option add the following event:  Event Title: Lunch  Meeting Times: MW 11:50AM - 1:00PM  Event Details: Gotta eat bro  In the Add Event option add the following event:  Event Title: Snack  Meeting Times: MW 1:00PM - 1:30PM  Event Details: Snack time  Check results | WolfSchedulerGUI successfully runs and loads with 13 courses.  Lunch is successfully added onto the schedule.  Pop-up stating, “Failed to add Snack onto the schedule. Reason: Conflicting times.” | Lunch was added onto my schedule, but the snack event failed due to a time conflict. |