

System Test Plan System Test Plan

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Introduction

Software engineers are often working on multiple projects at once. Each project has its own system test plan (STP) and set of system test cases. To eliminate the multiple documents, I am designing, implementing, and testing a STP tool that will store STPs for multiple projects in one place.

Overview

The test plan tests for an invalid file, valid file, adding a test plan, removing a test plan, and clearing the system state

System Test Plan System Test Plan Execution Information

To run the tests:

1. Right click on SystemTestPlanGUI class in the Package Explorer.
2. Select Run As > Java Application

Invalid_file.txt is an empty txt file. The valid_file.txt file used for testing contains the following:

```
! WolfScheduler
# Invalid File,Equivalence Class
* 1. Run WolfScheduler GUI
2. In the Load Course Catalog File Chooser dialog select: testfiles/invalid_course_records.txt
3. Click Select
4. Check Results
5. Close GUI
* WolfSchedulerGUI loads
Course Catalog is empty
My Schedule is empty
Course Details only shows labels
- PASS: everything is empty
- FAIL: courses are listed
- PASS: everything is empty
# Valid File,Requirements
* 1. Run WolfScheduler GUI
2. In the Load Course Catalog File Chooser dialog select: testfiles/_course_records.txt
3. Click Select
4. Check Results
5. Close GUI
* Course catalog contains 13 courses
# Add No Selection,Invalid
* Precondition: Valid File test has passed
1. Make sure that no row in the Course Catalog table is selected
2. Click Add Course
3. Check results
4. Click OK
5. Close GUI
* A pop up dialog stating "No course is selected in the catalog." is displayed.
- FAIL: no pop up displays
! PackScheduler
# T24 Add new course,Requirements
```

* Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run

1. Enter the following course information:

Course Name: CSC 236

Course Title: Computer Organization and Assembly Language

Course Section: 001

Credits: 3

Instructor Id: lasher

Start Time: 10:15AM

End Time: 11:30AM

Meeting Days: Tuesday & Thursday

Click Add Course

Click OK

* Course is added to the list in the appropriate location

- PASS: course added (Lab 5)

- FAIL: course not added b/c of invalid course name (Lab 6)

Invalid course name,Invalid

* Preconditions: PackSchedulerGUI has loaded and registrar user is logged in (T2). T23 has run

1. Enter the following course information:

Course Name: CSC236

Course Title: Computer Organization and Assembly Language

Course Section: 001

Credits: 3

Instructor Id: lasher

Start Time: 10:15AM

End Time: 11:30AM

Meeting Days: Tuesday & Thursday

Click Add Course

Click OK

* Error message: Invalid course name

- PASS: correct error message (Lab 5)

- The first line of the file starts with a '!' and is followed by the name of a test plan. If the first line doesn't start with '!', then the entire file is invalid and is not loaded.
- Lines starting with a '#' represent test cases. Test Cases have a name and the type of test case (e.g., equivalence class, boundary value, etc.)
- Lines starting with '*' represent the test description OR the expected results. A valid test case has a test description and expected results (exactly two * items). These items may span multiple lines.
- Lines representing test results in the results log start with '-'. A valid line has either PASS or FAIL, followed by a ":" and then a record of the actual results of execution. The actual results of execution can span multiple lines.
- Any text between two lines starting with ' ' and " or between two lines starting with ' ' and '#' or '-' or end of file is the expected results. This text may include any character except for '!' or '#' or " or '-'. Formatting of the text should be retained when reading/writing.
- The smallest file contains only a test plan name. It is ok to have a test plan with no test cases.

Test ID	Description	Expected Results	Actual Results
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Test 1: Invalid File (Mari Kilgus)	Preconditions: None 1) Run SystemTestPlanGUI 2) Click File 3) Select Load Test Plan(s) 4) From the file chooser dialog, select test-files/test-plans3.txt 5) Click Select 6) <i>Check Results</i> 7) Click OK 8) Close GUI	<ul style="list-style-type: none"> • SystemTestPlanGUI loads • An alert pops up with the message "Unable to load file." 	<ul style="list-style-type: none"> • SystemTestPlanGUI loads • An alert pops up with the message "Unable to load file."
Test 2: Valid File (Mari Kilgus)	Preconditions: The user is in the main window of the application. 1) Run SystemTestPlanGUI 2) Click File 3) Select Load 4) From the file chooser dialog, select test-files/test-plans1.txt 5) Click Select 6) <i>Check Results</i> 7) Close GUI	<p>The Current Test Plan dropdown menu contains three test plans:</p> <ul style="list-style-type: none"> • Failing Tests • PackScheduler • WolfScheduler <p>The currently selected test plan is Failing Tests. Number of Failing Tests is 3. Three test cases are displayed in the test case section with the following IDs:</p> <ul style="list-style-type: none"> • T24 Add New Course • Invalid course name • Add No Selection 	<p>The Current Test Plan dropdown menu contains three test plans:</p> <ul style="list-style-type: none"> • Failing Tests • PackScheduler • WolfScheduler <p>The currently selected test plan is Failing Tests. Number of Failing Tests is 3. Three test cases are displayed in the test case section with the following IDs:</p> <ul style="list-style-type: none"> • T24 Add New Course • Invalid course name • Add No Selection
Test 3: Add Test Plan (Mari Kilgus)	Preconditions: The user is in the main window of the application. 1) Click Add Test Plan 2) <i>Check Results</i>	<ul style="list-style-type: none"> • A pop up titled "Create New Test Plan" is displayed with the label "Test Plan Name?" 	<ul style="list-style-type: none"> • A pop up titled "Create New Test Plan" is displayed with the label "Test Plan Name?"

	3) Enter “Shopping Cart Simulation” 4) Click OK 5) <i>Check Results</i> 6) Close GUI	<ul style="list-style-type: none"> The Current Test Plan is “Shopping Cart Simulation” and the test case list is empty 	<ul style="list-style-type: none"> The Current Test Plan is “Shopping Cart Simulation” and the test case list is empty
Test 4: Remove Test Plan (Mari Kilgus)	Preconditions: Test 2 & 3 have passed 1) Select “Shopping Cart Simulation” from the Current Test Plan dropdown and click Remove Test Plan 2) <i>Check Results</i> Close GUI	The Current Test Plan dropdown menu contains three test plans: <ul style="list-style-type: none"> Failing Tests PackScheduler WolfScheduler The currently selected test plan is Failing Tests. Number of Failing Tests is 3. Three test cases are displayed in the test case section with the following IDs: <ul style="list-style-type: none"> T24 Add New Course Invalid course name Add No Selection 	The Current Test Plan dropdown menu contains three test plans: <ul style="list-style-type: none"> Failing Tests PackScheduler WolfScheduler The currently selected test plan is Failing Tests. Number of Failing Tests is 3. Three test cases are displayed in the test case section with the following IDs: <ul style="list-style-type: none"> T24 Add New Course Invalid course name Add No Selection
Test 5: Clear System State (Mari Kilgus)	Preconditions: Test 2 has passed. 1) Click File 2) Click Clear Test Plan(s) 3) <i>Check Results</i> 4) Click OK 5) Close GUI	<ul style="list-style-type: none"> Pop up window appears with message “Test plans are unsaved. Would you like to save before cleaning?” 	<ul style="list-style-type: none"> Pop up window appears with message “Test plans are unsaved. Would you like to save before cleaning?”
Test 6: Clear System State (Mari Kilgus)	Preconditions: Test 5 has passed. 1) Click File 2) Click Clear Test Plan(s) 3) <i>Check Results</i> 4) Click OK 5) Close GUI	<ul style="list-style-type: none"> Current Test Plan shows “Failing Tests” selected from the dropdown Number of failing tests is 0 	<ul style="list-style-type: none"> Current Test Plan shows “Failing Tests” selected from the dropdown Number of failing tests is 0

		<ul style="list-style-type: none"> There are no test cases displayed 	<ul style="list-style-type: none"> There are no test cases displayed
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Document Revision History

Date	Author	Change Description
10/16/2021	Mari Kilgus	<ul style="list-style-type: none"> Wrote 5 tests for System Test Plan
11/11/2021	Mari Kilgus	<ul style="list-style-type: none"> Filled in actual results and