ProductBacklog System Test Plan

Document Author(s): Bagya Maharajan

Date: 9/21/2021

Introduction

The System Test Plan provides test cases that exercise several paths through the ProductBacklog requirements, with a focus on checking for conflicts between activities.

To run the tests:
1. Right click on ProductBacklogGUI class in the Package Explorer.
2. Select Run As > Java Application

The FileChooser will load automatically.

All tests files are located in the test-files/ folder and the contents of the files used in testing are below:

valid_product_records.txt

```
# Shopping Cart Simulation
* 1,Backlog,Express Carts,F,jep,unowned,false
- [Backlog] Express carts always choose the shortest line. If there are
multiple shortest lines, an express cart chooses the one with the smallest
index.
* 2,Owned,Regular Carts,F,jep,sesmith5,false
- [Backlog] Regular carts always choose the shortest line excluding the
express register line (at index 0). If there are multiple shortest lines, a
regular cart chooses one with the smallest index.
- [Owned] Adding to sesmith5 backlog.
* 3,Processing,Java Swing,KA,sesmith5,sesmith5,false
- [Backlog] Learn more about Swing to debug GUI.
- [Owned] Adding to sesmith5 backlog.
- [Processing] Found Swing tutorials at
http://docs.oracle.com/javase/tutorial/uiswing/start/.
* 5,Verifying,Calculating Wait Time,B,jdyoung2,sesmith5,false
- [Backlog] Special carts are failing system tests associated with wait time.
- [Owned] Adding to sesmith5 backlog.
- [Processing] Replicated failure locally in unit test.
- [Verifying] Implementation complete. Requires peer inspection.
* 8,Done,Special Carts,F,jep,sesmith5,true
- [Backlog] Special carts always choose the shortest special register line.
If there are multiple shortest special register lines, a special cart
chooses one with the smallest index.
- [Owned] Adding to sesmith5 backlog.
- [Processing] Created hierarchy to prepare for other cart types.
- [Verifying] Implementation complete. Requires peer inspection.
- [Done] No problems found during inspection.
* 10,Rejected,Flatbed carts,F,jep,unowned,false
- [Backlog] Add flatbed carts to simulation.
- [Owned] Rejected. Flatbed carts won't fit through physical register
stations.
# WolfScheduler
* 2,Rejected,Weekly Repeat,F,sesmith5,unowned,false
```

```
- [Backlog] Events should have a weekly repeat of every 1, 2, 3, or 4 weeks.
- [Owned] Weekly repeat is unnecessary when creating ideal week.
* 5,Backlog,Add Event,F,sesmith5,unowned,false
- [Backlog] Users can create events to identify places during their week
where they have scheduled activities other than class.
* 6,Done,Add Course,F,sesmith5,jctetter,true
- [Backlog] Users can add courses to their schedule.
- [Owned] Assigning to jctetter.
- [Processing] Creating Course class.
- [Processing] Adding error checking on course name.
- [Processing] Adding tests for Course.
- [Verifying] Request peer review.
- [Done] Updates meet requirements and test pass.
```

invalid_product_records.txt

```
/ Shopping Cart Simulation
+ 1,Backlog,Express Carts,F,jep,unowned,false
+ -50,Owned,Regular Carts,F,jep,sesmith5,false
- [Backlog] Regular carts always choose the shortest line excluding the
express register line (at index 0). If there are multiple shortest lines, a
regular cart chooses one with the smallest index.
- [Owned] Adding to sesmith5 backlog.
+ 3,Processed,Java Swing,KA,sesmith5,sesmith5,false
- [Backlog] Learn more about Swing to debug GUI.
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* 5,Backlog,Add Event,F,sesmith5,unowned,false
- [Backlog] Users can create events to identify places during their week
where they have scheduled activities other than class.
* 6,Done,Add Course,F,sesmith5,jctetter,true
- [Backlog] Users can add courses to their schedule.
- [Owned] Assigning to jctetter.
- [Processing] Creating Course class.
```

```
- [Processing] Adding error checking on course name.
- [Processing] Adding tests for Course.
- [Verifying] Request peer review.
- [Done] Updates meet requirements and test pass.
```

Test ID	Description	Expected Results	Actual Results
Test1: InvalidFile (UC 0)	**Preconditions: None** 1. Run ProductBacklog GUI 2. From the file menu, select **Load** 3. From the file chooser, select: test-files/empty_tasks.txt 4. *Check results* 5. Close GUI	ProductBacklogGUI loads with no active products displayed and displays the message "Unable to load file."	A pop-up box with the expected error message prompts to click OK.
Test2: ValidFile (UC 1)	**Preconditions: None** 1. Run ProductBacklog GUI 2. From the file menu, select **Load** 3. From the file chooser, select: test-files/tasks1.txt 4. *Check results* 5. Close GUI	ProductBacklogGUI loads. Current product is displayed as Shopping Cart Simulation and its tasks are displayed with details- Task ID, Task State, Task Type, and Task Title as follows: Task ID | Task State | Task Type | Task Title 1 | Backlog | Feature | Express Carts 2 | Owned | Feature | Regular Carts 3 | Processing | Knowledge Acquisi... | Java Swing 5 | Verifying | Bug | Calculating Wait Ti... 8 | Done | Feature | Special Carts 10 | Rejected | Feature | Flatbed carts	The current product is displayed as "Shopping Cart" with all of its tasks and task details.
Test3: AddandEdit Product (UC 4 and 5)	**Preconditions: Test 2 has passed** 1. Click **Add Product** on the ProductBacklog GUI 2. Enter product name as "CalC" and click **OK** 3. *Check results* 4. Select the product CalC from the **Current Product** dropdown and click the **Edit** button 5. Edit the name to " Calculator" with the initial whitespaces and click **OK** 6. *Check results*	Step 2 results: The drop-down menu for Current Product now shows "CalC" at the bottom of the list. The Current Product drop-down now lists "Calculator" as a product at the bottom of the list	The current product is now listed as "Calculator"
Test4: AddTask (UC 7 and 9)	**Preconditions: Test 3 has passed** 1. Select "Calculator" from the **Current Product** drop-down 2. Click the **Add Task** button 3. Choose or Enter the following details: **Title-"Addition", Task Type- "Bug", Task Creator: "schrute", Task note: "round**	The notes read: -[Backlog] round up when adding 2 real numbers The Active Product- Calculator shows its tasks with the following details: • Task ID: 1 • Task State: Backlog • Task Type: Bug	The active product displays the one added task with the right details.

	up when adding 2 real numbers" 4. Click **Add Task To Backlog** 5. *Check results*	• Task Title: Addition	
Test5: EditTaskInBacklogState (UC 12)	Preconditions: Test 4 has passed **1.** With the Active Product as "Calculator", select the task with the title "Addition" and click **Edit Task** 2. In the section named **Note** in the user interface enter "assigning task" 3. Fill in **Owner** to be "halpert" and click **Claim Task** *4. Check results*	The notes are updated to read: -[Backlog] round up when adding 2 real numbers -[Owned] assigning task The Active Product- Calculator shows its tasks with the following details: • Task ID: 1 • Task State: Owned • Task Type: Bug • Task Title: Addition	The current product's task is now updated with the right details and the Task State is Owned.

Document Revision History

Date	Author	Change Description
09/21/2021	Bagya Maharajan	• Completed System Test Plan
10/13/2021	Bagya Maharajan	• Filled Actual results for P1P2