Project Backlog System Test Plan

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Introduction: Each of these tests are meant to test the 5 major functionalities of Product Backlog. Those functionalities are Startup, Managing State, Products, Tasks, and Shutdown. In total there are 13 tests and most of them test the different paths when editing tasks. However, some of the test require the use of managing the state so if a test for fails to pass then the rest won't either. Some of these tests may continue after another so it's best to try again do all of them at once. But it's still possible to do them one by one. In general if a test has something for preconditions then it will mostly likely mean that the tests will uses the previous tests or it needs that previous test to pass in order to do the current test. The user should follow what the description for each test says and then look at the expected to see if they did the test correctly. If the user wants to easily restart a test they can either close the GUI or use the clear function to remove all products and tasks.

Test ID	Description	Expected Results	Actual Results
Test 1: Startup and Load Valid File: (Daniel Avisse)	**Preconditions: None** 1. Run ProductBacklogGUI 2. On the top left Click File and then load. 3. Select task1.txt 4. Check Results	• ProductBacklogGUI loads • ProductBacklog is currently empty with no products or tasks • Once the file is loaded a list of products should be available with task also available once a product is selected.	• ProductBacklogGUI loads • The GUI is loaded with no products are tasks. • Once the file is loaded two products are added with tasks associated with each product. **Results Match Expected (Success)**
Test 2: Quit (Daniel Avisse)	**Preconditions: Test 1** 1. Run ProductBacklogGUI 2. On the top left Click File and then load. 3. Select task1.txt 4. On the top left Click File and then quit 5. Enter the file name ProductBacklog_QuitTest.txt. 6. Check Results	• ProductBacklogGUI loads • ProductBacklog is currently empty with no products or tasks • Once the file is loaded a list of products should be available with task also available once a product is selected. • ProductBacklogGUI is closed once quit is click and a new file is created.	• ProductBacklogGUI loads • The GUI is loaded with no products are tasks. • Once the file is loaded two products are added with tasks associated with each product. • The quit button is pressed and a popup asking for file name shows up. • The file name ProductBacklog_QuitTest.txt is inputted and a new file is created matching the original file that was used to load the products. **Results Match Expected (Success)**
Test 3:	**Preconditions: None**	• ProductBacklogGUI	• ProductBacklogGUI

			loads
Add, Edit, Select, and Remove Product (Daniel Avisse)	1. Run ProductBacklogGUI 2. Click Add Product 3. Enter the name Calculator 4. Check Results 5. Click Edit Product 6. Change the name to Scientific Calculator 7. Check Results 8. Select Scientific Calculator 9. Click Delete Product 10. Check Results	• ProductBacklog is currently empty with no products are tasks. • A new product is created called Calculator with no tasks. • The name of the product is edited and now displays Scientific Calculator. • The product is then selected and then removed. • ProductBacklog now has no products or task.	• The GUI is loaded with no products are tasks. • The add product button is pressed and the name Calculator is typed. The current product is now Calculator. • The edit product button is pressed and the name of Calculator is changed to Scientific Calculator. • The delete product is then pressed and Scientific Calculator is no longer listed. **Results Match Expected (Success)**

Test 4: Add Task, Delete Task, and Save File (Daniel Avisse)	**Preconditions: Test 1 has passed**
	
	1. Run ProductBacklogGUI
	
	2. On the top left Click File and then load.
	
	3. Select task1.txt
	
	4. Check Results
	
	5. Select the product Shopping Cart Simulation.
	
	6. Click Add Task
	
	7. Add the following information for task.
	   • Title: Double Basket Shopping Carts
	   • Task Type: Feature
	   • Task Creator: Daniel
	   • Task Notes: - [Backlog] Double Basket allow for the shopper to hold more items.
	8. Click Add Task to Backlog
	
	9. Check Results
	
	10. Select the task titled Special
		• ProductBacklogGUI loads
		
		• ProductBacklog is currently empty with no products or tasks
		• Once the file is loaded a list of products should be available with task also available once a product is selected.
		
		• The product Shopping Cart Simulation is selected and the associated tasks load.
		
		• The new task titled Double Basket Shopping Cart is listed in ProductBacklog and the current state is "Backlog."
		
		• The task titled Special Carts is removed and no longer listed.
		
		• A new file called STP_ProductBacklog.txt is created with the new
			• ProductBacklogGUI loads
			
			• The GUI is loaded with no products are tasks.
			
			• Once the file is loaded two products are added with tasks associated with each product.
			
			• The add task button is then pressed and the information is added. The new task titled Double Basket Shopping Carts is listed with the other tasks and the current State is Backlog.
			
			• The task titled Special Carts is selected and then removed. The task is no longer listed.
			
			• The product backlog is then saved and a new file titled

	Carts. 11. Click Delete Task. 12. Check Results 13. Click File and then Save. 14. Enter the name STP_ProductBacklog.txt 15. Check Results.	task Double Basket Shopping Cart included and the Special Cart task removed.	STP_ProductBacklog.txt is created with Double Basket Shopping Carts added and Special Carts removed. **Results Match Expected (Success)**
Test 5: Edit Task In Backlog to Rejected (Daniel Avisse)	**Preconditions: Test 1 and Test 4 have passed** 1. Run ProductBacklogGUI 2. On the top left Click File and then load. 3. Select task1.txt 4. Check Results 5. Select the product Shopping Cart Simulation. 6. Click Add Task 7. Add the following information for task. • Title: Shopping Cart Hero • Task Type: Feature • Task Creator: Daniel • Task Notes: - [Backlog] A game where you can see how far you can fly with a shopping cart. 8. Click Add Task to Backlog 9. Check Results 10. Select the task Shopping Cart Hero and click edit Task 11. Enter the following for the note. • -[Rejected] Rejected. Shopping Cart Simulation is supposed to be a realistic simulation of shopping carts. We are not creating a game. 12. Click Reject Task 13. Check Results	• ProductBacklogGUI loads • ProductBacklog is currently empty with no products or tasks • Once the file is loaded a list of products should be available with task also available once a product is selected. • The product Shopping Cart Simulation is selected and the associated tasks load. • The new task titled Shopping Cart Hero is listed in ProductBacklog and the current State is "Backlog." • In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying claim task, reject task, and cancel. • Once the new note is added and the reject task button is pressed the Shopping Cart Hero task should now be listed with the state "Rejected." • All the added notes should appear when	• ProductBacklogGUI loads • The GUI is loaded with no products are tasks. • Once the file is loaded two products are added with tasks associated with each product. • The add task button is then pressed and the information is added. The new task titled Shopping Cart Hero is listed with the other tasks and the current State is Backlog. • The edit task button is pressed and the GUI changes with three buttons saying claim task, reject task, and cancel. The note is added and reject task is pressed. • The task titled Shopping Cart Hero is now displayed with it being in the Rejected state. • Clicking the edit task button again all the notes that were added for the task appear and the owner is set to unowned. **Results Match Expected (Success)**

		you try to edit the task again and the task should have no owner.	

Test 6: Edit Task from Backlog to Done (Daniel Avisse)	**Preconditions: Test 1 and Test 4 have passed**
	
	1. Run ProductBacklogGUI
	
	2. On the top left Click File and then load.
	
	3. Select task1.txt
	
	4. Check Results
	
	5. Select the product Shopping Cart Simulation.
	
	6. Click Add Task
	
	7. Add the following information for task.
	   • Title: Double Basket Shopping Carts
	   • Task Type: Feature
	   • Task Creator: Daniel
	   • Task Notes: - [Backlog] Double Basket allows for the shopper to hold more items.
	8. Click Add Task to Backlog
	
	9. Check Results
	
	10. Select the task Double Basket Shopping Carts and click edit Task
	
	11. Enter the following.
	   • Owner: Joe
	   • Note: -[Owned] Adding Joe to the owner of this task.
	12. Click Claim Task
	
	13. Check Results
	
	14. Select the task Double Basket Shopping Carts and click edit Task
	
	15. Enter the following note:
	   • -[Processing] Creating designs for Double Basket Shopping Cart.
	16. Click Process Task
		• ProductBacklogGUI loads
		
		• ProductBacklog is currently empty with no products or tasks
		
		• Once the file is loaded a list of products should be available with task also available once a product is selected.
		
		• The product Shopping Cart Simulation is selected and the associated tasks load.
		
		• The new task titled Double Basket Shopping Carts is listed in ProductBacklog and the current State is "Backlog."
		
		• In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying claim task, reject task, and cancel.
		
		• Once the new note is added and the claim task button is pressed the Double Basket Shopping Carts task should now be listed with the state "Owned."
		
		• In the edit task option, the GUI should change with the information of the task listed and then four buttons on the bottom saying process
			• ProductBacklogGUI loads
			
			• The GUI is loaded with no products are tasks.
			
			• Once the file is loaded two products are added with tasks associated with each product.
			
			• The add task button is then pressed and the information is added. The new task titled Double Basket Shopping Carts is listed with the other tasks and the current State is Backlog.
			
			• The edit task button is pressed and the GUI changes to have three buttons that say claim task, reject task, and cancel. The information is added and the claim task button is pressed.
			
			• The task titled Double Basket Shopping Carts is now displayed with it being in the Owned state.
			
			• The edit task button is pressed again and the GUI changes to have four buttons that say process task, reject task, Backlog task, and cancel. The note is added and process task is pressed.
			
			• The task titled Double Basket Shopping Carts is now displayed with it being in the Processing state.

	17. Check Results	task, reject task, Backlog task, and cancel.	• The edit task button is pressed again and the GUI changes to have five buttons that say add note, verify task, complete task, Backlog task, and cancel. The note is added and the verify task button is pressed.
	18. Select the task Double Basket Shopping Carts and click edit Task	• Once the new note is added and the process task button is pressed the Double Basket Shopping Carts task should now be listed with the state "Processing."	
	19. Enter the following note: • -[Verifying] Designs are complete. Ready for inspection. 20. Click Verify Task		
	21. Check Results		
	22. Select the task Double Basket Shopping Carts and click edit Task	• In the edit task option, the GUI should change with the information of the task listed and then five buttons on the bottom saying add note, verify task, complete task, Backlog task, and cancel.	• The task titled Double Basket Shopping carts is now displayed with it being in the Verifying state.
	21. Enter the following note: • -[Done] Designs are good and complete. 22. Click Task Verified		• The edit task button is pressed again the GUI changes to have three buttons that say return task to owner, task verified, and cancel. The note is added and the task verified button is pressed.
	23. Check Results	• Once the new note is added and the verify task button is pressed the Double Basket Shopping Carts task should now be listed with the state "Verifying."	
		• In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying return task to owner, task verified, and cancel.	• The task titled Double Basket Shopping Carts is now displayed with it being in the Done State.
			• Clicking the edit task button again all the notes that were added for the task appear and Joe is still the current owner. **Results Match Expected (Success)**
		• Once the new note is added and the task verified button is pressed the Double Basket Shopping Carts task should now be listed with the state "Done."	
		• All the added notes should appear when you try to edit the task again and the task	

		should still have Joe as the owner.	
Test 7: Edit Task from Done to Backlog (Daniel Avisse)	**Preconditions: Test 1, Test 4, and Test 6 have passed** 1. Using the task from the previous task select the task Double Basket Shopping Carts and click edit Task 2 Enter the following note. • -[Backlog] Moving to Backlog for further implementation. 3. Click Backlog Task 4. Check Results	• In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying return task to owner, backlog task, and cancel. • Once the new note is added and the Backlog task button is pressed the Double Basket Shopping Carts task should now be listed with the state "Backlog." • All the added notes should appear when you try to edit the task again and the task should have no owner.	• The edit task button is pressed and the GUI changes to have three buttons that say return task to owner, backlog task, and cancel. The note is added and the backlog task button is pressed. • The task titled Double Basket Shopping carts is now displayed with it being in the Backlog state. • Clicking the edit task again the notes that were added for the task appear and the owner of the task is set to unowned. **Results Match Expected (Success)**
Test 8: Edit Task from Backlog to Owned to Backlog (Daniel Avisse)	**Preconditions: Test 1 and Test 4 have passed** 1. Run ProductBacklogGUI 2. On the top left Click File and then load. 3. Select task1.txt 4. Check Results 5. Select the product Shopping Cart Simulation. 6. Click Add Task 7. Add the following information for task. • Title: Tiny Shopping Carts • Task Type: Feature • Task Creator: Landon • Task Notes: - [Backlog] Smaller shopping carts for people who don't need a regular one. 8. Click Add Task to Backlog 9. Check Results	• ProductBacklogGUI loads • ProductBacklog is currently empty with no products or tasks • Once the file is loaded a list of products should be available with task also available once a product is selected. • The product Shopping Cart Simulation is selected and the associated tasks load. • The new task titled Tiny Shopping Carts is listed in ProductBacklog and the current State is "Backlog." • In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying claim	• ProductBacklogGUI loads • The GUI is loaded with no products are tasks. • Once the file is loaded two products are added with tasks associated with each product. • The add task button is then pressed and the information is added. The new task titled Tiny Shopping Carts is listed with the other tasks and the current State is Backlog. • The edit task button is pressed and the GUI changes to have three buttons that say claim task, reject task, and cancel. The information is added and the claim task button is pressed. • The task titled Tiny

	10. Select the task Tiny Shopping Carts and click edit Task
	
	11. Enter the following.
	    • Owner: Joe
	    • Note: -[Owned] Adding Joe to the owner of this task.
	12. Click Claim Task
	
	13. Check Results
	
	14. Select the task Tiny Shopping Carts and click edit Task
	
	15. Enter the following note:
	    • -[Backlog] Removing Joe from this Joe.
	16. Click Backlog Task
	
	17. Check Results
		task, reject task, and cancel.
		
		• Once the new note is added and the claim task button is pressed the Tiny Shopping Carts task should now be listed with the state "Owned."
		
		• In the edit task option, the GUI should change with the information of the task listed and then four buttons on the bottom saying process task, reject task, Backlog task, and cancel.
		
		• Once the new note is added and the Backlog task button is pressed the Tiny Shopping Carts task should now be listed with the state "Backlog."
		
		• All the added notes should appear when you try to edit the task again and the task should have no owner.
			Shopping Carts is now displayed with it being in the Owned state.
			
			• The edit task button is pressed again and the GUI changes to have four buttons that say process task, reject task, backlog task, and cancel. The note is added and backlog task is pressed.
			
			• The task titled Tiny Shopping Carts is now displayed with it being in the Backlog state.
			
			• Clicking the edit task button again all the notes that were added appear showing that Joe was once the owner of the task but currently the task is unowned.
			Results Match Expected (Success)

Test 9: Edit Task from Backlog to Processing and Process Multiple Times (Daniel Avisse)	**Preconditions: Test 1, Test 3, and Test 8 have passed**
	
	1. Using the task from the previous test select the task Tiny Shopping Carts and click edit Task
	
	2. Enter the following.
	    • Owner: Sarah
	    • Note: -[Owned] Adding Sarah to the owner of this task.
	3. Click Claim Task
	
	4. Check Results
	
	5. Select the task Tiny Shopping Carts and click edit Task
		• In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying claim task, reject task, and cancel.
		
		• Once the new note is added and the claim task button is pressed the Tiny Shopping Carts task should now be listed with the state "Owned."
		
		• In the edit task option,
			• The edit task button is pressed and the GUI changes to have three buttons that say claim task, reject task, and cancel. The information is added and the claim task button is pressed.
			
			• The task titled Tiny Shopping Carts is now displayed with it being in the Owned state.
			
			• The edit task button is pressed again and the GUI changes to have four buttons that say process task, reject

	6. Enter the following note:
	  • -[Processing] Deciding on specific size measurements for Tiny Shopping Carts
	7. Click Process Task
	
	8. Check Results
	
	9. Select the task Tiny Shopping Carts and click edit Task
	
	10. Enter the following note:
	  • -[Processing] Comparing Tiny Shopping Cart size to other carts
	11. Click Add Note
	
	12. Check Results
	
	13. Select the task Tiny Shopping Carts and click edit Task
	
	14. Enter the following note:
	  • -[Processing] Creating model for Tiny Shopping Cart
	15. Click Add Note
	
	16. Check Results
		the GUI should change with the information of the task listed and then four buttons on the bottom saying process task, reject task, Backlog task, and cancel.
		
		• Once the new note is added and the process task button is pressed the Tiny Shopping Carts task should now be listed with the state "Processing."
		
		• In the edit task option, the GUI should change with the information of the task listed and then five buttons on the bottom saying add note, verify task, complete task, Backlog task, and cancel.
		
		• Once the new note is added and the add note button is pressed the Tiny Shopping Carts task should stay in the state "Processing." This should happen every time we click add note in the processing state.
		
		• All the added notes should appear when you try to edit the task again and the task should have Sarah as the owner.
			task, backlog task, and cancel. The note is added and process task is pressed.
			
			• The task titled Tiny Shopping Carts is now displayed with it being in the Processing state.
			
			• The edit task button is pressed again and the GUI changes to have five buttons that say add note, verify task, complete task, Backlog task, and cancel. The note is added and the add note button is pressed.
			
			• The task titled Tiny Shopping Carts is now displayed with it being in the Processing State.
			
			• The edit task button is pressed again and the GUI remains the same with the same 5 buttons. The note is added and add note is pressed. The process is then repeated one more time.
			
			• The task titled Tiny Shopping Carts is displayed with it still staying in the Processing State.
			
			• Clicking the edit task button again all the notes that were added appear showing that Joe was once the owner of the task and that Sarah is currently the owner working on the task.
			Results Match Expected (Success)

Test 10: Edit Task from	**Preconditions: Test 1, Test 3, Test 8, and Test 9 have passed**	• In the edit task option, the GUI should change with the information of	• The edit task button is pressed again and the GUI changes to have

Processing to Verifying to Processing (Daniel Avisse)	1. Using the task from the previous test select the task Tiny Shopping Carts and click edit Task 2. Enter the following note. • Note: -[Verifying] Models are complete. Waiting for verification. 3. Click Verify Task 4. Check Results 5. Select the task Tiny Shopping Carts and click edit Task 6. Enter the following note: • -[Processing] Verification failed. Models too big. 7. Click Return to owner 8. Check Results	the task listed and then five buttons on the bottom saying add note, verify task, complete task, Backlog task, and cancel. • Once the new note is added and the verify task button is pressed the Tiny Shopping Carts task should now be listed with the state "Verifying." • In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying return task to owner, task verified, and cancel. • Once the new note is added and the return to owner button is pressed the Tiny Shopping Carts task should return to the state "Processing." • All the added notes should appear when you try to edit the task again and the task should have Sarah as the owner.	five buttons that say add note, verify task, complete task, Backlog task, and cancel. The note is added and the verify task button is pressed. • The task titled Tiny Shopping Carts is now displayed with it being in the Verifying State. • The edit task button is pressed again and the GUI changes to have three buttons that say return task to owner, task verified, and cancel. The note is added and the return to owner buttons is pressed. • The task titled Tiny Shopping Carts is displayed with it going back to the Processing State. • Clicking the edit task button again all the notes that were added appear showing that Joe was once the owner of the task and that Sarah is currently the owner working on the task. **Results Match Expected (Success)**
Test 11: Edit Task from Processing to Done (Daniel Avisse)	**Preconditions: Test 1, Test 3, Test 8, Test 9, and Test 10 have passed** 1. Using the task from the previous test select the task Tiny Shopping Carts and click edit Task 2. Enter the following note. • Note: -[Processing] Redid models Should be correct size. 3. Click Verify Task. 4. Check Results	• In the edit task option, the GUI should change with the information of the task listed and then five buttons on the bottom saying add note, verify task, complete task, Backlog task, and cancel. • Once the new note is added and the verify task button is pressed the Tiny Shopping Carts	• The edit task button is pressed again and the GUI changes to have five buttons that say add note, verify task, complete task, Backlog task, and cancel. The note is added and the verify task button is pressed. • The task titled Tiny Shopping Carts is now displayed with it being in the Verifying State.

	5. Select the task Tiny Shopping Carts and click edit Task 6. Enter the following note: • -[Verifying] Verification complete. Model is good. 7. Click task verified. 8. Check Results	task should now be listed with the state "Verifying." In the edit task option, the GUI should change with the information of the task listed and then three buttons on the bottom saying return task to owner, task verified, and cancel. • Once the new note is added and the task verified button is pressed the Tiny Shopping Carts task should now be listed with the state "Done." • All the added notes should appear when you try to edit the task again and the task should have Sarah as the owner.	• The edit task button is pressed again and the GUI changes to have three buttons that say return task to owner, task verified, and cancel. The note is added and the task verified button is pressed. • The task titled Tiny Shopping Carts is displayed with it going back to the Done State. • Clicking the edit task button again all the notes that were added appear showing that Joe was once the owner of the task and that Sarah is currently the owner working on the task. **Results Match Expected (Success)**
Test 12: Save Product Backlog (Daniel Avisse)	**Preconditions: Test 1, Test 3, Test 8, Test 9, Test 10, Test 11 have passed** 1. Using the product backlog from the previous tests go to the top left and click file and save. 2. Enter the file name STP_ProductBacklog2.txt 3. Check results.	• A new file titled STP_ProductBacklog2.txt should be created. • In the file the task titled Tiny Shopping Carts should be listed with all the notes, Sarah as the owner and the verification set to true.	• The file titled STP_ProductBacklog2.txt is created • In the file the task titled Tiny Shopping Carts is listed. All the notes are there which each state listed for them. Sarah is also the current owner of the task and the verification for the task is set to true. **Results Match Expected (Success)**
Test 13: Clear Products (Daniel Avisse)	**Preconditions: None** 1. Make sure that the Product Backlog is filled with Products and task. You can use any previous test or just add some new products and tasks. 2. On the top left Click file and then clear. 3. Check results.	• The GUI contains some products and tasks. • Once the clear button is pressed all the products and tasks that were listed are now gone.	• The GUI is currently contains some products and tasks. • The clear button is then pressed and all the products and tasks that were previously listed are no longer there. **Results Match Expected (Success)**

Document Revision History

Date	Author	Change Description
9/18/2021	Daniel Avisse	• Added 6 new test that test different functionalities of ProductBacklog.
9/22/2021	Daniel Avisse	• Add a couple more test to cover more paths
10/12/2021	Daniel Avisse	• Adjusted some tests, add two more tests, and added the actual results for all tests.