

ServiceManager Black Box Test Plan

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Introduction

To run the tests:

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

All tests files are located in the test-files/ folder.

Note that while all tests end with the statement to Close GUI, you can run Tests 1, 3-13, and 16 can be run on the same GUI 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
Test1: Test Load Vehicle Queue (Will Parker, Christine Park)	Preconditions: None Run ServiceManagerGUI from the Command Line with no argument for file to load Select the test-files/cars.txt in the resulting file chooser window <i>Check results</i> Close GUI	ServiceManagerGUI opens with 8 empty service bays in the Service Bays window (108, 106, 105, 103, 102, E01, E04, E07) and no vehicles in the queue. After selecting the cars.txt file 27 vehicles are displayed in the Vehicles Awaiting Service window listed first in order of descending tier (Platinum first, Gold second, Silver third, and no priority fourth) followed by order in the file. R Platinum HI-01345 Rhyne, Lauren E None NC-1233 Doe, Baby John	ServiceManagerGUI opens with 8 empty service bays in the Service Bays window (108, 106, 105, 103, 102, E01, E04, E07) and no vehicles in the queue. After selecting the cars.txt file 27 vehicles are displayed in the Vehicles Awaiting Service window listed first in order of descending tier (Platinum first, Gold second, Silver third, and no priority fourth) followed by order in the file. R Platinum HI-01345 Rhyne, Lauren E None NC-1233 Doe, Baby John
Test2: Filter Vehicles (Will Parker, Christine Park)	Preconditions: Test1 has passed Enter “H” in the Display Filter window <i>Check results</i> Close GUI	The Vehicles Awaiting Service list is filtered to only show vehicles belonging to Henderson, William and Hughes, Jack	The Vehicles Awaiting Service list is filtered to only show vehicles belonging to Henderson, William and Hughes, Jack
Test3: Add Platinum Standard Vehicle To Queue (Will Parker, Christine Park)	Preconditions: Test1 has passed Click Add New Vehicle Hybrid/Electric: Unchecked Customer: Parker, Will License: 867-5309 Service Tier: Platinum Click Submit <i>Check results</i> Close GUI	Will Parker’s vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Platinum tier service priority (below Fiona Richards’ car)	Will Parker’s vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Platinum tier service priority (below Fiona Richards’ car)
Test4: Add Gold Standard Vehicle To Queue (Will Parker, Christine Park)	Preconditions: Test1 has passed Click Add New Vehicle Hybrid/Electric: Unchecked Customer: Locks, Goldie License: Too-Hot Service Tier: Gold Click Submit	Goldie Locks’ vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Gold tier service priority (below Richard Wilson’s car)	Goldie Locks’ vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Gold tier service priority (below Richard Wilson’s car)

	<p><i>Check results</i> Close GUI</p>		
<p>Test5: Add Silver Standard Vehicle To Queue (Will Parker, Christine Park)</p>	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Unchecked Customer: Helsing, Van License: St-Ag Service Tier: Silver</p> <p>Click Submit</p> <p><i>Check results</i> Close GUI</p>	<p>Van Helsing's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Silver tier service priority (below Richard Bell's car)</p>	<p>Van Helsing's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Silver tier service priority (below Richard Bell's car)</p>
<p>Test6: Add Standard Vehicle with No Tier To Queue (Will Parker, Christine Park)</p>	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Unchecked Customer: Wait, Will License: No-Hurry Service Tier: None</p> <p>Click Submit</p> <p><i>Check results</i> Close GUI</p>	<p>Will Wait's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with None tier service priority (below Baby John Doe's)</p>	<p>Will Wait's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with None tier service priority (below Baby John Doe's)</p>
<p>Test7: Add Hybrid Electric Vehicle To Queue (Will Parker, Christine Park)</p>	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Checked Customer: Drone, Elon License: 2Cool4U Service Tier: Platinum</p> <p>Click Submit</p> <p><i>Check results</i> Close GUI</p>	<p>Elon Drone's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Platinum tier service priority (below Will Parker's)</p>	<p>Elon Drone's vehicle is now populated in the Vehicles Awaiting Service list at the bottom of the vehicles with Platinum tier service priority (below Will Parker's)</p>
<p>Test8: Remove Vehicles from Queue (Will Parker, Christine Park)</p>	<p>Preconditions: Tests 1 and 3-7 have passed.</p> <p>Select Will Parker's vehicle from the Vehicles Awaiting Service list</p> <p>Click Remove Selected Vehicle</p> <p>Select Goldie Locks' vehicle from the Vehicles Awaiting Service list</p> <p>Click Remove Selected Vehicle</p> <p>Select Van Helsing's vehicle from the Vehicles Awaiting Service list</p> <p>Click Remove Selected Vehicle</p> <p>Select Will Wait's vehicle from the Vehicles Awaiting Service list</p> <p>Click Remove Selected Vehicle</p>	<p>Initially there are a total of 31 vehicles in the list.</p> <p>Vehicles belong to Will Parker, Goldie Locks, Van Helsing, Will Wait, and Elon Drone are then removed from the Vehicles Awaiting Service list.</p> <p>There are 27 vehicles that are displayed in the Vehicles Awaiting Service window listed first in order of descending tier (Platinum first, Gold second, Silver third, and no priority fourth) followed by order in the file.</p> <p>R Platinum HI-01345 Rhyne, Lauren E None NC-1233 Doe, Baby John</p>	<p>Initially there are a total of 31 vehicles in the list.</p> <p>Vehicles belong to Will Parker, Goldie Locks, Van Helsing, Will Wait, and Elon Drone are then removed from the Vehicles Awaiting Service list.</p> <p>There are 27 vehicles that are displayed in the Vehicles Awaiting Service window listed first in order of descending tier (Platinum first, Gold second, Silver third, and no priority fourth) followed by order in the file.</p> <p>R Platinum HI-01345 Rhyne, Lauren E None NC-1233 Doe, Baby John</p>

	<p>Select Elon Drone's vehicle from the Vehicles Awaiting Service list</p> <p>Click Remove Selected Vehicle</p> <p><i>Check results</i></p> <p>Close GUI</p>		
Test9: Add Vehicle with No Name (Will Parker, Christine Park)	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Unchecked Customer: License: 867-5309 Service Tier: Platinum</p> <p>Click Submit</p> <p><i>Check results</i></p> <p>Click OK</p> <p>Close GUI</p>	Message: Owner name cannot be blank.	Message: Owner name cannot be blank.
Test10: Add Vehicle with No License (Will Parker, Christine Park)	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Unchecked Customer: Parker, Will License: Service Tier: Platinum</p> <p>Click Submit</p> <p><i>Check results</i></p> <p>Click OK</p> <p>Close GUI</p>	Message: License cannot be blank.	Message: License cannot be blank.
Test11: Add Vehicle with License Too Long (Will Parker, Christine Park)	<p>Preconditions: Test1 has passed</p> <p>Click Add New Vehicle</p> <p>Hybrid/Electric: Unchecked Customer: Parker, Will License: NineChars Service Tier: Platinum</p> <p>Click Submit</p> <p><i>Check results</i></p> <p>Click OK</p> <p>Close GUI</p>	Message: License cannot be more than 8 characters.	Message: License cannot be more than 8 characters.
Test12: Reassign Vehicle's Service Tier (Will Parker, Christine Park)	<p>Preconditions: Test1 has passed</p> <p>Select Blake Young's vehicle</p> <p>Click Edit Selected Vehicle</p> <p>Select Platinum as the Service Tier</p>	Blake Young's vehicle's service tier has been updated to Platinum in the Vehicles Awaiting Service list and comes after Fiona Richards vehicle in the list.	Blake Young's vehicle's service tier has been updated to Platinum in the Vehicles Awaiting Service list and comes after Fiona Richards vehicle in the list.

	Click Submit <i>Check results</i> Close GUI		
Test13: Add Service Bays (Will Parker, Christine Park)	Preconditions: Test1 has passed Click Add Service Bay 23 times <i>Check results</i> Close GUI	Service bays are added in order as shown below: 109: EMPTY E10: EMPTY 111: EMPTY 112: EMPTY E13: EMPTY 114: EMPTY 115: EMPTY E16: EMPTY 117: EMPTY 118: EMPTY E19: EMPTY 120: EMPTY 121: EMPTY E22: EMPTY 123: EMPTY 124: EMPTY E25: EMPTY 126: EMPTY 127: EMTPY E28: EMPTY 129: EMPTY 130: EMPTY No Service bay is added on 23 rd click	Service bays are added in order as shown below: 109: EMPTY E10: EMPTY 111: EMPTY 112: EMPTY E13: EMPTY 114: EMPTY 115: EMPTY E16: EMPTY 117: EMPTY 118: EMPTY E19: EMPTY 120: EMPTY 121: EMPTY E22: EMPTY 123: EMPTY 124: EMPTY E25: EMPTY 126: EMPTY 127: EMTPY E28: EMPTY 129: EMPTY 130: EMPTY No Service bay is added on 23 rd click
Test14: Fill Service Bays (Will Parker, Christine Park)	Preconditions: Test1 has passed Click Fill Service Bays <i>Check results</i> Close GUI	The service bays have been filled as below: 108: HI-01345 Rhyne, Lauren 106: NC-DUR1 Nicholson, Henry 105: SC-RT098 Richards, Fiona 103: VIRG0122 Jones, Francis 102: IL20987 Masters, Burt E01: FL-M3456 McKeel, Kenneth E04: 0987-NC Nelson, Richard E07: NC-5678 Emerson, Jane The above vehicles are no longer in the Vehicles Awaiting Service list	The service bays have been filled as below: 108: HI-01345 Rhyne, Lauren 106: NC-DUR1 Nicholson, Henry 105: SC-RT098 Richards, Fiona 103: VIRG0122 Jones, Francis 102: IL20987 Masters, Burt E01: FL-M3456 McKeel, Kenneth E04: 0987-NC Nelson, Richard E07: NC-5678 Emerson, Jane The above vehicles are no longer in the Vehicles Awaiting Service list
Test15: Finish Vehicle Repair (Will Parker, Christine Park)	Preconditions: Tests 1 and 14 have passed Select 108: HI-01345 Rhyne, Lauren from the Service Bays window Click Finish Repair of Selected Vehicle <i>Check results</i> Close GUI	The service bays are filled as below: 108: EMPTY 106: NC-DUR1 Nicholson, Henry 105: SC-RT098 Richards, Fiona 103: VIRG0122 Jones, Francis 102: IL20987 Masters, Burt E01: FL-M3456 McKeel, Kenneth E04: 0987-NC Nelson, Richard E07: NC-5678 Emerson, Jane	The service bays are filled as below: 108: EMPTY 106: NC-DUR1 Nicholson, Henry 105: SC-RT098 Richards, Fiona 103: VIRG0122 Jones, Francis 102: IL20987 Masters, Burt E01: FL-M3456 McKeel, Kenneth E04: 0987-NC Nelson, Richard E07: NC-5678 Emerson, Jane
Test16: Quit Program (Will Parker, Christine Park)	Preconditions: Test1 has passed Click Quit <i>Check results</i>	Program exits	Program exits
Test17: Load with Invalid File in Command Line	Preconditions: None Open Arguments tab under Run > Run Configurations in Eclipse. Type test-files/not_a_file.txt in the text	Error Message: Vehicle file not found. Program exits	Error Message: Vehicle file not found. Program exits

(Will Parker, Christine Park)	area Click Apply <i>Check results</i> Click OK <i>Check results</i>		
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Document Revision History

Date	Author	Change Description
7/2/20	Will Parker	• Development of initial tests evaluating main flows through software
7/19/20	Christine Park	• Updated tests and added actual test results