

ReqKeeper Black Box Test Plan

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Introduction

The ReqKeeper program is a requirement management system that allows developers to track the requirements in their software and allows them to know what is left to implement. The black box tests are 5 system-level tests that will revise if the program meets the requirements.

To run tests:

1. Right click on ReqKeeper in the Package Explorer
2. Select Run as > Java Application
3. An empty ReqKeeper will load, you must go to top left corner click on file which will have a drop down menu. From that drop down menu, you may select new, load, or quit to start implementing requirements into ReqKeeper.
4. If you choose load, a FileChooser will automatically load and all test files will be located in the test-files/folder.

Note that while all tests end with the statement to Close GUI, you can run Tests 2-5 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
Test 1: Loading GUI (jhnguye4)	Preconditions: None Run RequirementGUI. <i>Check results</i> Close GUI	Requirement GUI loads ReqKeeper is empty with no Requirements in it	Requirement GUI loads ReqKeeper is empty with no Requirements in it
Test 2: Valid File (jhnguye4)	Preconditions: None Run RequirementGUI. Top left corner click on File then Load . FileChooser will load, select: test-files/req1.xml Click Select <i>Check results</i> Close GUI	Requirement GUI loads Requirement Catalog has 6 requirements: <ul style="list-style-type: none">• ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button• ID: 1 , State: Accepted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the	Requirement GUI loads Requirement Catalog has 6 requirements: <ul style="list-style-type: none">• ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button• ID: 1 , State: Accepted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the

		<p>Accept button</p> <ul style="list-style-type: none"> • ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button 	<p>Accept button</p> <ul style="list-style-type: none"> • ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button
Test 3: Add Requirement (jhnguye4)	<p>Preconditions: None</p> <p>Run RequirementGUI.</p> <p>Top left corner click on File then Load. FileChooser will load, select: test-files/req1.xml</p> <p>Click Select</p> <p>Click Add New Requirement</p> <p>Enter Summary: "This requirement needs to be finished ASAP"</p>	<p>Requirement GUI loads</p> <p>Requirement Catalog has 7 requirements:</p> <ul style="list-style-type: none"> • ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 1 , State: Accepted, Summary: The system shall change a requirement's state from Submitted to 	<p>Requirement GUI loads</p> <p>Requirement Catalog has 7 requirements:</p> <ul style="list-style-type: none"> • ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button • ID: 1 , State: Accepted, Summary: The system shall change a requirement's state from Submitted to

	<p>Enter Test: SubmittedToAccepted</p> <p>Click Add Requirement to List</p> <p><i>Check results</i></p> <p>Close GUI</p>	<p>Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button</p> <ul style="list-style-type: none"> ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 33 , State: Submitted, Summary: This requirement needs to be finished ASAP 	<p>Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button</p> <ul style="list-style-type: none"> ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 33 , State: Submitted, Summary: This requirement needs to be finished ASAP
<p>Test 4: Delete Requirement (jhnguye4)</p>	<p>Preconditions: Test 2 and 3 Pass</p> <p>Select ID: 1 , State: Accepted, Summary: The system shall change a requirement's state from Submitted to Accepted when the user</p>	<p>Requirement GUI loads</p> <p>Requirement Catalog has 6 requirements:</p> <ul style="list-style-type: none"> ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to 	<p>Requirement GUI loads</p> <p>Requirement Catalog has 6 requirements:</p> <ul style="list-style-type: none"> ID: 0 , State: Submitted, Summary: The system shall change a requirement's state from Submitted to

	<p>supplies an estimate of the time to implement the requirement and clicks the Accept button.</p> <p>Click Delete Selected Requirement Test description (repeatable and specific)</p> <p><i>Check results</i></p> <p>Close GUI</p>	<p>Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button</p> <ul style="list-style-type: none"> ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 33 , State: Submitted, Summary: This requirement needs to be finished ASAP 	<p>Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button</p> <ul style="list-style-type: none"> ID: 2 , State: Working, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 4 , State: Completed, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 23 , State: Rejected, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 32 , State: Verified, Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button ID: 33 , State: Submitted, Summary: This requirement needs to be finished ASAP
<p>Test 5:</p> <p>No Requirement Selected (jhnguye4)</p>	<p>Preconditions: Test 2 Passed</p> <p>Make sure that no row in the Requirement Catalog table is selected (if there is a row selected, restart the GUI)</p>	<p>A pop-up dialog stating "No Requirement selected" is displayed.</p>	<p>A pop-up dialog stating "No Requirement selected" is displayed.</p>

	Click Edit Selected Requirement Check results Close GUI		
Test 6: Edit Id 0 (jhnguye4)	Preconditions: Test 2 Passed Select the Requirement that has the Id 0 Click Edit Selected Requirement <i>Check results</i> Close GUI	A panel pops up with the following information: Requirement Id: 0 Requirement State: Submitted Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button Acceptance Test Id: SubmittedToAccepted Everything else is null or empty.	A panel pops up with the following information: Requirement Id: 0 Requirement State: Submitted Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button Acceptance Test Id: SubmittedToAccepted Everything else is null or empty.
Test 7: No inputs in Submitted state (jhnguye4)	Preconditions: Test 2 and test 6 Passed Don't input anything in priority or estimate fields Click Accept Check results Close GUI	A pop-up dialog stating "Invalid priority" is displayed and goes back to Requirement catalog.	A pop-up dialog stating "Invalid priority" is displayed and goes back to Requirement catalog.
Test 8: Go to Rejected State (jhnguye4)	Preconditions: Test 2 and test 6 Passed On the drop down menu for Rejection Reason Select Infeasible Click Reject Click on Requirement 0 And select Edit Requirement Check results Close GUI	A panel pops up with the following information: Requirement Id: 0 Requirement State: Rejected Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button Acceptance Test Id: SubmittedToAccepted Rejection Reason: Infeasible Everything else is null or empty.	A panel pops up with the following information: Requirement Id: 0 Requirement State: Rejected Summary: The system shall change a requirement's state from Submitted to Accepted when the user supplies an estimate of the time to implement the requirement and clicks the Accept button Acceptance Test Id: SubmittedToAccepted Rejection Reason: Infeasible Everything else is null or empty.

Test 9: Cancel (jhnguye4)	Preconditions: Test 8 Passed Don't input anything in summary or acceptanceTestId fields Click cancel Check results Close GUI	Goes to Requirement catalog with Requirement Id still in rejected state with same summary.	Goes to Requirement catalog with Requirement Id still in rejected state with same summary.
Test 10: Valid Revise (jhnguye4)	Preconditions: Test 8 Passed For Summary text field: "new Summary" For Acceptance Test ID: "RejectedToSubmitted" Click Revise Click on Requirement 0 Click on Edit Requirement Check results Close GUI	A panel pops up with the following information: Requirement Id: 0 Requirement State: Submitted Summary: new Summary Acceptance Test Id: RejectedToSubmitted Everything else is null or empty.	A panel pops up with the following information: Requirement Id: 0 Requirement State: Submitted Summary: new Summary Acceptance Test Id: RejectedToSubmitted Everything else is null or empty.
Test 11: Invalid priority Accepted State (jhnguye4)	Preconditions: Test 10 Passed For Priority text field: 5 For Estimate: "1 hour" Click Accept Check results Close GUI	A pop-up dialog stating "Invalid command" is displayed. User is returned to Requirement Catalog still in Submitted State pop-up dialog stating "Invalid command" is displayed.	A pop-up dialog stating "Invalid command" is displayed. User is returned to Requirement Catalog still in Submitted State
Test 12: Invalid Estimate (jhnguye4)	Preconditions: Test 10 Passed For Priority text field: 2	A pop-up dialog stating "Invalid command" is displayed. User is returned to Requirement Catalog still in Submitted State	A pop-up dialog stating "Invalid command" is displayed. User is returned to Requirement Catalog still in Submitted State

	<p>For Estimate: ""</p> <p>Click Accept</p> <p>Check results</p> <p>Close GUI</p>		
<p>Test 13: Valid accepted state (jhnguye4)</p>	<p>Preconditions: Test 10 Passed</p> <p>For Priority text field: 2</p> <p>For Estimate: "1 hour"</p> <p>Click Accept</p> <p>Click on Requirement 0</p> <p>Click on Edit Requirement</p> <p>Check results</p> <p>Close GUI</p>	<p>A panel pops up with the following information: Requirement Id: 0 Requirement State: Accepted Summary: new Summary Acceptance Test Id: RejectedToSubmitted Priority: 2 Estimate: 1 hour</p> <p>Everything else is null or empty.</p>	<p>A panel pops up with the following information: Requirement Id: 0 Requirement State: Accepted Summary: new Summary Acceptance Test Id: RejectedToSubmitted Priority: 2 Estimate: 1 hour</p> <p>Everything else is null or empty.</p>
<p>Test 14: Valid working (jhnguye4)</p>	<p>Preconditions: Test 13 Passed</p> <p>For Developer: "New developer"</p> <p>Click Assign</p> <p>Click on Requirement 0</p> <p>Click on Edit Requirement</p> <p>Check results</p> <p>Close GUI</p>	<p>A panel pops up with the following information: Requirement Id: 0 Requirement State: Working Summary: new Summary Acceptance Test Id: RejectedToSubmitted Priority: 2 Estimate: 1 hour Developer: New Developer</p> <p>Everything else is null or empty.</p>	<p>A panel pops up with the following information: Requirement Id: 0 Requirement State: Working Summary: new Summary Acceptance Test Id: RejectedToSubmitted Priority: 2 Estimate: 1 hour Developer: New Developer</p> <p>Everything else is null or empty.</p>
<p>Test 15: Invalid working (jhnguye4)</p>	<p>Preconditions: Test 13 Passed</p> <p>For Developer: ""</p> <p>Click Assign</p> <p>Check results</p>	<p>A pop-up dialog stating "Invalid command" is displayed and is returned to Requirement Catalog.</p>	<p>A pop-up dialog stating "Invalid command" is displayed and is returned to Requirement Catalog.</p>

	Close GUI		
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Document Revision History

Date	Author	Change Description
6/28/2019	Jhnguye4	<ul style="list-style-type: none">Added more tests