Database Table (Search Functionality for Table)

Test plan

Version 1.0

4/24/2020

Document Control

Approval

The Guidance Team and the customer shall approve this document.

Document Change Control

|  |  |
| --- | --- |
| Initial Release: | 1.0 |
| Current Release: | 4/8/2020 |
| Indicator of Last Page in Document: | $ |
| Date of Last Review: | 4/8/2020 |
| Date of Next Review: |  |
| Target Date for Next Update: |  |

Distribution List

This following list of people shall receive a copy of this document every time a new version of this document becomes available:

Guidance Team Members: Dr. Roach

Customer: Dr. Roach

Software Team Members:

Change Summary

The following table details changes made between versions of this document

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Modifier | Description |
| 1.0 | 4/2/2020 | Patricia Guajardo | Creation and adding of Section 1 |
| 1.1 | 4/8/2020 | Patricia Guajardo | Adding of rest of sections |
|  |  |  |  |

Note: The template presented in this document was taken from:

Donaldson, S., and S. Siegel, *Successful Software Development*. Upper Saddle River, NJ: Prentice Hall, 2001, pp. 321-323.

Note: The template presented in this document was taken from: Donaldson, S., and S. Siegel, *Successful Software Development*. Upper Saddle River, NJ: Prentice Hall, 2001, pp. 321-323 and modified by Humberto Mendoza and Steve Roach.

Supplementary information is from:

Pfleeger, S. *Software Engineering, Theory and Practice*. Upper Saddle River, NJ: Prentice Hall, 1998, p. 365.

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# Introduction

The purpose of testing this software is for the purpose of software quality assurance, where the application passes all required functionality and obtain the documented actual results of all tests made. The application consists of the using of configuration data stored within XML tables, of which through a table editor, the application allows the user to view, edit, add, and delete data, except for the database schema. The editor also provides options to search within the database table, such as for a specific text with specific properties, which will be the main functionality that is to be tested for this case of the test plan.

## Purpose

Purpose of this document is to provide a written report of the tests and types of tests performed for the provided application, as well as the results of each of these tests performed. For this application, the test plan will focus its attention as a system test plan that describes the system from the customer’s point of view and will encompass black box type of testing. For these sets of tests, the test plan will focus on the functionality of the editable functions towards the tables and ensure the proper assumed behavior is performed by the application when given certain inputs.

## Scope

The scope of the test plan is to create and execute a set of planned tests unto our current application, in order to ensure the application’s functionality and behavior to different scenarios concludes a passing state. Each test done will be documented as well as the actual results that occur during the test along, in comparison to the expected results of the application.

## System Overview

The application being tested entails a table editor from a database that is configurable via an XML database table file input, of which this editor allows all full functionality of creating, reading, update, and delete data within the table that was obtained from the input database file. This application will allow the user to use different options within the application to allow the user to execute different functions to the table, such as search functionality and replacing text.

## Suspension and Exit Criteria

In order to indicate that we have completed testing the application properly, we shall test the application and attempt to reach a 90% level of tests passing, if and only if, the remainder of the executed fail test cases are minor issues encountered that do no inhibit the application’s progress or execution. Once again, for this case, the application will need to pass 90% of the test cases only for the editing of the table functionality, to ensure the correct assumed behaviors are properly executed.

## Document Overview

The remainder of the document will provide information and guidance concerning the following:

Section 2 where the test plan focuses on the test items and features of the applications, of which for this case we are focusing on the testing of the functionality of the editing of the table or the Edit items in the file menu of the application.

Section 3 will focus its attention on the testing approach taken when testing the application, steps taken, and criticality of each of these tests that shall be performed on the application to attempt to cover fully the feature we are testing for the application.

## References

[1] Spec.docx, Dr. Roach.

# Test Items and Features

The following section will describe the test items/features that will be addressed and approached whilst testing the application to ensure the application performs correctly. Testing will focus on the editable functionality or options within the Edit section in the file menu, which will include the undoing a function, copying a row, pasting a row, insert row, delete row, and search functionality, which will also include testing each of their keyboard shortcuts as well. Through these items, we will be ensuring the proper pop-ups or messages are displayed to the user, whether it be an error or provided the user with information in concerns to a certain action they attempted to execute.

# Testing Approach

The following will include a test suite that will focus on which tests will be performed as well as their criticality for each respective test case that is to be performed.

Table 1: Test Plan

|  |  |  |
| --- | --- | --- |
| **TEST SUITE SF** | | |
| **Description of Test Suite** |  | |
| **Test Case Identifier** | **Objective** | **Criticality** |
| SF 01 | **Search for via Text Input** | **High** |
| SF 02 | **Replace all searched items** | **High** |
| SF 03 | **Search filters by items that match case** | **High** |
| SF 04 | **Searches in specific column only** | **High** |
| SF 05 | **Search filters my matching whole words** | **Low** |
| SF 06 | **Search filters with all checked checkboxes** | **Low** |
| SF 07 | **Replace one searched item** | **High** |

# Test Specifications

The purpose of this section is keep a documented history on all the test cases that are to be performed for the Search functionality and ensure each function is properly tested and provide test results.

## Test 1

**Objective:** Search via a text input

**Notes:** Text could also be different inputs of characters and insuring those different characters are identified within the table when searching.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: SF 01 | | | | Current Status: Pending | | |
| Test title: Search Text Input | | | | | | |
| Testing approach: The following test will entail the testing of the search functionality through text inputs, of which different valid existing and valid non-existing inputs could be entered into the textbox, using black box testing techniques. | | | | | | |
| STEP  1  2  3  4  5  6 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input (such as T3$t, alpha numeric string, or integer) within the “Search” textbox and click “Find”. | PURPOSE  Purpose of this test is to ensure the application does indeed provide the results through the table of the text input. | | | EXPECTED RESULTS  The TTC XML Editor application should display only a table with the content that relates to the text input entered. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed TBD: | | | |

## Test 2

**Objective: Replace all searched items**

**Notes:** User shall be able to replace all the searched text.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: SF 02 | | | | Current Status: Pending | | |
| Test title: Replace Searched Items | | | | | | |
| Testing approach: Test ensures that all items that were searched via text input are found and replaced with another text input. | | | | | | |
| STEP  1  2  3  4  5  6 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Enter another valid text to search in the “*Replace*” textbox and click “*Replace* *All*” button. | PURPOSE  Test ensures all searched text items are replaced with new text input. | | | EXEPCTED RESULTS  TTC XML Editor application should replace all text items with new text input. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

## Test 3

**Objective: Search filters by items that match case**

**Notes:** N/A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: SF 03 | | | | Current Status: Pending | | |
| Test title: Match Case Search Filter | | | | | | |
| Testing approach: Test entails ensuring that when the “Match Case” checkbox is selected and the user inputs a valid text to search for, the table will filter with the text input and only text that matches the case. | | | | | | |
| STEP  1  2  3  4  5  6  7 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input with all characters uppercase within the “Search” textbox.  Check the “Match Case” checkbox and click “Find”. | PURPOSE  The purpose of this test is make sure the search functionality searches for the correct text with the same pattern. | | | EXEPCTED RESULTS  TTC XML Editor application should display all text in data that match the search text case input. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

## Test 4

**Objective: Search items in specific column only**

**Notes:** N/A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: SF 04 | | | | Current Status: Pending | | |
| Test title: Specific Column Search | | | | | | |
| Testing approach: This test will focus on testing the search functionality, by entering a valid text input and selecting the “This Column Only” checkbox item. | | | | | | |
| STEP  1  2  3  4  5  6  7 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input within the “Search” textbox.  Check the “This Column Only” checkbox and click “Find”. | PURPOSE  The purpose of this test is to ensure searching functionality works properly for a specified column only. | | | EXEPCTED RESULTS  Searching of input text should only be applied in the specified column only. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

## Test 5

**Objective: Search filters by matching whole words**

**Notes:** N/A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: 5 | | | | Current Status: Pending | | |
| Test title: Whole Word Match Search Filter | | | | | | |
| Testing approach: The test will entail the testing of the search filter in which we will select the “Match Whole Words” filter and ensure that the application searches specifically for the whole word entered. | | | | | | |
| STEP  1  2  3  4  5  6 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input within the “Search” textbox.  Check the “Match Whole Words” checkbox and click “Find”. | PURPOSE  Ensuring that search function searches specifically and only for the whole word. | | | EXEPCTED RESULTS  TTC XML Editor application should only display the data text that displays the whole words that were specified and matched. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

## Test 6

**Objective: Search Filters with all checked boxes**

**Notes:** N/A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: 6 | | | | Current Status: Pending | | |
| Test title: All Filters Applied Search | | | | | | |
| Testing approach: The test will entail the selected all checkbox filters within the search window and clicking on the “Find” button. | | | | | | |
| STEP  1  2  3  4  5  6 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input within the “Search” textbox.  Check the “Match Whole Words”, “Match case”, “This Column Only” checkboxes and click “Find”. | PURPOSE  Purpose of the test is to ensure all filters will be applied when the user attempts to search and will provide the assumed behavior. | | | EXEPCTED RESULTS  TTC XML Editor application should display all data text matches to the search text input and all added filters. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

## Test 7

**Objective: Replace one search item**

**Notes:** N/A

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: 7 | | | | Current Status: Pending | | |
| Test title: Replace One Search Item | | | | | | |
| Testing approach: The test will entail the replacing of a search text with its new text, but ensuring only one is changed. | | | | | | |
| STEP  1  2  3  4  5  6 | OPERATOR ACTION  Run the dbEdit.jar application.  In the top *File* menu, click on the *Open* option, search and select for the TEST\_DB.xml file    Ensure the application displays the following and select a table to begin test.    After selecting a table, in the top *File* menu, click on the *Edit* option and select Search.    Ensure *Search* window appears and enter a valid text input within the “Search” textbox.    Ensure Search window appears and enter a valid text input within the “Search” textbox.  Enter another valid text to search in the “Replace” textbox and click “Replace” button. | PURPOSE  Purpose of the test is to ensure only one searched text is replaced at a time. | | | EXEPCTED RESULTS  TTC XML Editor application should replace only one searched text item at a one time. | COMMENTS  Ensure to test with the following XML files as well, which are included within folder as well:  TEST\_DB\_BIG\_TABLE.XML  TEST\_DB\_CONSTRAINT\_TABLE.XML  TEST\_DB\_TYPE\_TABLE.XML |
| Concluding Remarks: N/A | | | | | | |
| Testing Team:  Team 5 | | | Date Completed: TBD | | | |

# Test Schedule

The following will provide a testing schedule as to which tester is to test at which time.

|  |  |  |
| --- | --- | --- |
| **Task and date** | **People** | **Description** |
| Test 1 TBA | TBA | Documentation and testing of Test 1 |
| Test 2 TBA | TBA | Documentation and testing of Test 1 |
| Test 3 TBA | TBA | Documentation and testing of Test 1 |
| Test 4 TBA | TBA | Documentation and testing of Test 1 |
| Test 5 TBA | TBA | Documentation and testing of Test 1 |
| Test 6 TBA | TBA | Documentation and testing of Test 1 |