DB- Group 04 – Team 5

Test plan

Version 3.0

04/23/2020

Document Control

Approval

The Guidance Team shall approve this document.

Document Change Control

|  |  |
| --- | --- |
| Initial Release: | 1.0 |
| Current Release: | 3.0 |
| Indicator of Last Page in Document: | #### |
| Date of Last Review: | 04/23/2020 |
| Date of Next Review: | 04/24/2020 |
| Target Date for Next Update: | 04/24/2020 |

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

Reviewers:

Alan Balderas

Ali Nouri

Software Team Members:

Briana Sanchez

Change Summary

The following table details changes made between versions of this document

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Modifier | Description |
| 1.0 | 04/08/2020 | Briana S. | Section 1 complete |
| 1.1 | 04/09/2020 | Briana S. | Section 2 complete |
| 1.2 | 04/12/2020 | Briana S. | Completed first version of test plan. |
| 2.0 | 04/20/2020 | Briana S. | Fixed document based on Alan’s feedback. |
| 2.1 | 04/20/2020 | Briana S. | Fixed document based on Ali’s feedback. |
| 3.0 | 04/23/2020 | Briana S. | Fixed document based on feedback from reviewers. |

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.

Table of Contents

[Document Control ii](#_Toc38295800)

[Approval ii](#_Toc38295801)

[Document Change Control ii](#_Toc38295802)

[Distribution List ii](#_Toc38295803)

[Change Summary ii](#_Toc38295804)

[1. Introduction 5](#_Toc38295805)

[1.1. Purpose 5](#_Toc38295806)

[1.2. Scope 5](#_Toc38295807)

[1.3. System Overview 5](#_Toc38295808)

[1.4. Suspension and Exit Criteria 5](#_Toc38295809)

[1.5. Document Overview 5](#_Toc38295810)

[1.6. References 5](#_Toc38295811)

[2. Test Items and Features 6](#_Toc38295812)

[3. Testing Approach 7](#_Toc38295813)

[4. Test Compare 8](#_Toc38295814)

[4.1. Test CMV\_1 8](#_Toc38295815)

[4.2. Test CMV\_2 9](#_Toc38295816)

[4.3. Test CMV\_3 10](#_Toc38295817)

[5. Test Duplicate Rows 13](#_Toc38295818)

[5.1. Test DPR\_1 13](#_Toc38295819)

[5.2. Test DPR\_2 14](#_Toc38295820)

[5.3. Test DPR\_3 15](#_Toc38295821)

[6. Test Schedule 17](#_Toc38295822)

[7. Appendix 18](#_Toc38295823)

# Introduction

The system that will be tested is a database viewer and editor that stores XML files. Allowing users to view and edit the data of the file but not modify the schema. The XML files that are being saved are databases, describing the tables that the database has.

## Purpose

The purpose of the Test Plan Document is to go over minimal test cases to check functionality of a specific part of the system. This document is used to describe the project test plan to describe the overall strategy for testing and scheduling tests. This document will also serve as a record to show team members what tests failed, indicating a bug.

## Scope

This test plan will focus on comparing files to other versions and check for duplicate rows for the current version of the system.

## System Overview

In this system, configuration data is stored in XML tables. The system provides a simple editor to allow access to view and modify the data. The editor does not allow modification of the database schema.

A database is a set of flat files organized as rows and columns. A collection of related files is contained in a database. The database is organized in XML documents. There are two kinds of XML documents: a database description and the data tables. The description file contains a description of the data tables: the table name and columns for each table.

## Suspension and Exit Criteria

TBD

## Document Overview

*Section 2 Test Items and Features* will describe the test items and the features to be tested.

*Section 3 Testing Approach* will describe the approach to be used to the test the system.

*Section 4-5* XX will provide information on the test cases including test input, specific test procedures, outcomes, test methods, description of the test case.

*Section 6 User Interface Testing* will describe tests that focus on interaction of the user with the system.

*Section 7 Test Schedule* will describe the schedule for the testcases including the date, the people, and the description for each test.

*Section 8 Appendix will provide screenshots/images referenced to throughout the document.*

## References

Spec.docx: Could be found in the GitHub repo.

# Test Items and Features

Primarily in this testing document will be focusing on only black box testing. The following are the test items that will be tested in this document:

*File/Compare* function allows a user to compare two versions of a table. This compare can be restricted to selected columns by using the Options/Column Selection feature. The output is rather crude and is not intended for large change lists.

*File/Check* for Duplicate Rows should list rows that have identical contents. This check is restricted to the columns selected in Options/Select Columns.

# Testing Approach

This system will be tested using black box testing. The reason why this will be the only type of testing is because we do not have access to the code. There will be two test suites, they are partitioned into the number of units tested which are the compare and check for duplicate rows functionality. These tests will need the required files mentioned in each test case as well as a OS with a Java compiler.

Table 1: Test Plan

|  |  |  |
| --- | --- | --- |
| **TEST SUITE CMV** | | |
| **Description of Test Suite** | **This test suite will test the functionality of Comparing two versions of a table.** | |
| **Test Case Identifier** | **Objective** | **Criticality** |
| CMV\_1 | To test the compare feature works when there are identical versions. | **High** |
| CMV\_2 | To test the compare feature works when there is a difference between two versions. | **High** |
| CMV\_3 | To test the compare feature when there is a difference between two versions but with column restrictions. | **High** |

Table 2: Test Plan

|  |  |  |
| --- | --- | --- |
| **TEST SUITE DPR** | | |
| **Description of Test Suite** | **This test suite will test the functionality of listing rows that have identical content.** | |
| **Test Case Identifier** | **Objective** | **Criticality** |
| DPR\_1 | To test the duplicate row feature when there are identical rows. | **High** |
| DPR\_2 | To test the duplicate row feature when there are no identical rows | **High** |
| DPR\_3 | To test the duplicate row feature when there is no identical rows and column restrictions. | **High** |

# Test Compare

## Test CMV\_1

**Objective: The objective of this test, will be to test the compare feature works when there are identical versions.**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_BIG\_TABLE.XML

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: CMV\_1 | | | | Current Status: Pending | | |
| Test title: Testing comparing feature on two similar versions. | | | | | | |
| Testing approach: Black box testing. | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | | | EXEPCTED RESULTS  The system will open with no table found. | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | | | “File Search Path” pop-up window will appear. |  |
| 4 | Click on the “TEST\_DB\_BIG\_TABLE.XML” file and click open. | To select the table to test. | | | “TEST\_DB\_BIG\_TABLE.XML” table will appear in another window. |  |
| 5 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 6 | Click on the “Compare table to another version” option from the drop-down menu. |  | | | “Open” pop-up window will appear. |  |
| 7 | Click on the “TEST\_DB\_BIG\_TABLE.XML” file and click open. | To test same file comparison. | | | “Compare Result” pop-up window appears.  Message includes:  “File compare shows 0 mismatchs” | Note that since we made no changes to the file, this will result to no mismatches. |
| Concluding Remarks:  N/A | | | | | | |
| Testing Team:  Briana Sanchez | | | Date Completed:  TBD | | | |

## Test CMV\_2

**Objective: The objective of this test, will be to test the compare feature works when there is a difference between two versions**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_TYPE\_TABLE.XML

TEST\_DB\_\_TYPE\_TABLE\_V2.XML

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: CMV\_2 | | | | Current Status: Pending | | |
| Test title: Testing comparing feature on two different versions. | | | | | | |
| Testing approach: Black box testing. | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | | | EXEPCTED RESULTS  The system will open with no table found. | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | | | “File Search Path” pop-up window will appear. |  |
| 4 | Click on the “TEST\_DB\_TYPE\_TABLE.XML” file and click open. | To select the table to test. | | | “TEST\_DB\_TYPE\_TABLE.XML” table will appear in another window. |  |
| 5 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 6 | Click on the “Compare table to another version” option from the drop-down menu. |  | | | “Open” pop-up window will appear. |  |
| 7 | Click on the “TEST\_DB\_BIG\_TABLE\_V2.XML” file and click open.  Please refer to the comment section for reasoning. | To test different versions with different data file comparison. | | | “Compare Result” pop-up window will appear.  Message includes:  “File compare shows 1 mismatchs”  “Table Compare Display” pop-up window will appear use Figure 1 in the appendix to verify results. | For testing purposes, we have provided you the same table, with different data in one column. |
| Concluding Remarks:  N/A | | | | | | |
| Testing Team:  Briana Sanchez | | | Date Completed:  TBD | | | |

## Test CMV\_3

**Objective: The objective of this test, will be to test the compare feature works when there is a difference between two versions but with column restrictions.**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_TYPE\_TABLE.XML

TEST\_DB\_\_TYPE\_TABLE\_V2.XML

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: CMV\_2 | | | | Current Status: Pending | | |
| Test title: Testing comparing feature on two different versions and column restriction. | | | | | | |
| Testing approach: Black box testing. | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | | | EXEPCTED RESULTS  The system will open with no table found. | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | | | “File Search Path” pop-up window will appear. |  |
| 4 | Click on the “TEST\_DB\_TYPE\_TABLE.XML” file and click open. | To select the table to test. | | | “TEST\_DB\_TYPE\_TABLE.XML” table will appear in another window. |  |
| 5 | Click on the “Options” option on the top left. |  | | | Drop down menu will appear. |  |
| 6 | Select “Column Selection” option from drop down. |  | | | “Enable/Disable Columns” pop-up window will appear in another window. |  |
| 7 | All the enabled column should be checked,  Un-check the FIELD\_SMALLINT .  Close the window by clicking the “X” on the upper right hand corner. | To set column restrictions. | | | “Enable/Disable Columns” pop-up window will disappear. |  |
| 8 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 9 | Click on the “Compare table to another version” option from the drop-down menu. |  | | | “Open” pop-up window will appear. |  |
| 10 | Click on the “TEST\_DB\_BIG\_TABLE\_V2.XML” file and click open.  Please refer to the comment section for justification. | To test different versions with different data in one column restriction file comparison. | | | “Compare Result” pop-up window will appear.  Message includes:  “File compare shows 0 mismatchs” | For testing purposes, we have provided you the same table, with different data in one column. Since we toggle this column off, we should not get a mismatch |
| Concluding Remarks:  N/A | | | | | | |
| Testing Team:  Briana Sanchez | | | Date Completed:  TBD | | | |

# Test Duplicate Rows

## Test DPR\_1

**Objective: The objective of this test, will be to test the duplicate row feature when there are identical rows.**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_CONSTRAINT\_TABLE.XML

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: DPR\_1 | | | | | Current Status: Pending | |
| Test title: Testing duplicate row feature with identical rows. | | | | | | |
| Testing approach: Black box testing. | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | EXEPCTED RESULTS  The system will open with no table found. | | | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | Drop down menu will appear. | | |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | “File Search Path” pop-up window will appear. | | |  |
| 4 | Click on the “TEST\_DB\_\_CONSTRAINT\_TABLE.XML” file and click open. | To select the table to test. | “TEST\_DB\_CONSTRAINT\_TABLE.XML” table will appear in another window. | | | This table has identical rows. |
| 5 | Click on the “File” option on the top left. |  | Drop down menu will appear. | | |  |
| 6 | Click on the “Check For Duplicate Rows” option from the drop-down menu. |  | “Duplicate Check” pop-up window will appear.  Message includes:  “3 duplicates found.”  (3) ERROR: Duplicate Rows pop-up windows will appear, compare to Figure 2 in the appendix. | | | Since this table has 3 duplicate rows, it should show three errors. |
| Concluding Remarks:  N/A | | | | | | |
| Testing Team:  Briana Sanchez | | | | Date Completed:  TBD | | |

## Test DPR\_2

**Objective: The objective of this test, will be to test the duplicate row feature when there is no identical rows.**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_CONSTRAINT\_TABLE\_V3.XML

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Test No.: DPR\_2 | | | | | Current Status: Pending | | |
| Test title: Testing duplicate row feature with no identical rows. | | | | | | | |
| Testing approach: Black box testing. | | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | EXEPCTED RESULTS  The system will open with no table found. | | | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | Drop down menu will appear. | | |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | “File Search Path” pop-up window will appear. | | |  |
| 4 | Click on the “TEST\_DB\_CONSTRAINT\_TABLE\_V3.XML” file and click open.  Refer to the comment section for clarification | To select the table to test. | “TEST\_DB\_CONSTRAINT\_TABLE\_V3.XML” table will appear in another window. | | | This version of the table has been provided for testing purposes only. It ensures that there are no duplicates in the rows. |
| 5 | Click on the “File” option on the top left. |  | Drop down menu will appear. | | |  |
| 6 | Click on the “Check for duplicate rows” option from the drop-down menu. |  | “Compare Result” pop-up window will appear.  Message includes:  “0 duplicates found” | | |  |
| Concluding Remarks:  N/A | | | | | | | |
| Testing Team:  Briana Sanchez | | | | Date Completed:  TBD | | | |

## Test DPR\_3

**Objective: The objective of this test, will be to test the duplicate row feature when there is no identical rows and column restrictions.**

**Notes:** Before starting this test suite please ensure that you have java compiler installed on the working machine and the following files in the directory you are working from:

DbEdit.jar

TEST\_DB\_\_CONSTRAINT\_TABLE\_V3.XML

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: DPR\_3 | | | | Current Status: Pending | | |
| Test title: Testing duplicate row feature with no identical rows and column restrictions. | | | | | | |
| Testing approach: Black box testing. | | | | | | |
| STEP  1 | OPERATOR ACTION  Run dbEdit.jar | PURPOSE  Open the software. | | | EXEPCTED RESULTS  The system will open with no table found. | COMMENTS |
| 2 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 3 | Click on the “Open” option on the drop-down menu. | To open a table to test. | | | “File Search Path” pop-up window will appear. |  |
| 4 | Click on the “TEST\_DB\_CONSTRAINT\_TABLE\_V3.XML” file and click open.  Refer to the comments section for clarification. | To select the table to test. | | | “TEST\_DB\_CONSTRAINTS\_TABLE\_V3.XML” table will appear in another window. | This version of the table has been provided for testing purposes only. It ensures that there are no duplicates in the rows. |
| 5 | Click on the “Options” option on the top left. |  | | | Drop down menu will appear |  |
| 6 | Select “Column Selection” option from drop down. |  | | | “Enable/Disable Columns” pop-up window will appear. |  |
| 7 | All the enabled column should be checked,  Un-check the DESCRIPTION.  Close the window by clicking the upper right corner “X”. | To set column restrictions. | | | “Enable/Disable Columns” pop-up window will disappear. | Although this version does not have row duplicates, by disabling this column there will be 3 row duplicates. |
| 8 | Click on the “File” option on the top left. |  | | | Drop down menu will appear. |  |
| 9 | Click on the “Check For Duplicate Rows” option from the drop-down menu. |  | | | “Compare Result pop-up” window will appear.  Message includes:  “File compare shows 0 mismatchs”  (3) ERROR: Duplicate Rows pop-up windows will appear, compare to Figure 2 in the appendix. |  |
| Concluding Remarks:  N/A | | | | | | |
| Testing Team:  Briana Sanchez | | | Date Completed:  TBD | | | |

# Test Schedule

TBD

|  |  |  |
| --- | --- | --- |
| **Task and date** | **People** | **Description** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

# Appendix

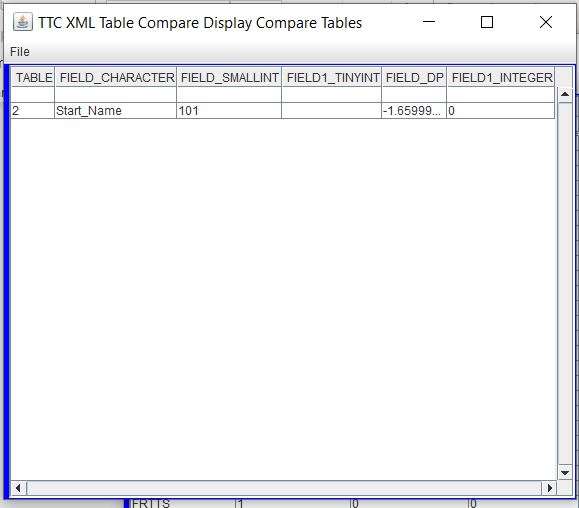


Figure 1

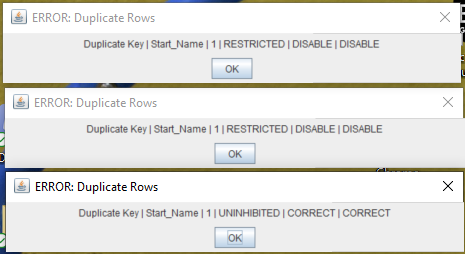


Figure 2

**####**