**Software Testing Document**

for

TalkBox

Prepared by Muhammad Danial Qureshi

York University

EECS2311 Software Development Project

04. February 2019

**Contents**

**Revision History 1**

1. **Introduction 2**
   1. Purpose . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
   2. Testing Checklist . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
   3. Test Case Derivation . . . . . . . . . . . . . . . . . . . . .. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
   4. Test Case Sufficiency . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
   5. Test Case Implementation . . . . . . . . . . . . . . . . . . . . . . . . … . . . . . . . . . . . . . . . . . . . . 2

1.6 Test Coverage . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

**2. Overall Description 4**

2.1 Testing Documents Description . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

**3. Testing Checklist 5**

3.1 TalkBox Configuration Application . . . . . . . . . . . . . . …….. . . . . . . . . . . . . . . . . . . . 5

3.2 TalkBox Simulator Application . . . . . . . . . . . . . . . . . . ………. . . . . . . . . . . . . . . . . . 6

**4. Test Case Derivation 7**

4.1 How Test Cases Were Derived: TalkBox Configuration Application . . . ... . . . . . . . . 7

4.2 How Test Cases Were Derived: TalkBox Simulator Application . . . . . . . . . . . . . . . . 7

**5. Test Case Sufficiency 8**

5.1 Why Test Cases Are Sufficient: TalkBox Configuration Application .. . . . . . . . . . . . 8

5.2 Why Test Cases Are Sufficient: TalkBox Simulator Application . . . . . . . . . . . . . . . . 8

**6. Test Case Implementation 9**

6.1 How Are Test Cases Implemented . . . . . . . . . . . . . . . . . . . . . . . …….. . . . . . . . . . . . 9

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision** | **Date** | **Author(s)** | **Description** |
| 1.0 | 04.02.2019 | M.Qureshi | Chapter 1- Introduction |
| 2.0 | 04.02.2019 | M.Qureshi | Chapter 3 – Testing Checklist |
| 3.0 |  |  |  |
| 4.0 |  |  |  |

**Chapter 1**

**Introduction**

**1.1 Purpose**

This document provides information on test cases for the TalkBox application. This document covers the several test cases the application has, as well as justified derivation of each of these test cases. Test case derivation is justified thoroughly for both the simulator component of the TalkBox, as well as the configuration application component. The sufficiency of each test case is provided through this document as well alongside test coverage.

**1.2 Testing Checklist**

There are two testing checklists in the Testing Checklist chapter, one for the TalkBox configuration application and another for the TalkBox simulator application. These checklists are broken into two subsections of the chapter.

**1.3 Testing Case Derivation**

In the Test Case Derivation chapter of this document, a through description of how each testcase was derived is provided. There are two subsections to the Test Case Derivation chapter, one for the configuration application and another for the simulator application. In each of these subsections the respective applications test case derivation is provided.

**1.4 Testing Case Sufficiency**

In the Test Case Sufficiency chapter of this document, a justification for each test case from the Test Case Derivation chapter is provided. There are two subsections to the Test Case Sufficiency chapter, one for the configuration application and another for the simulator application. In each of these subsections the respective applications test cases are justified with proven sufficiency

**1.5 Testing Case Implementation**

In the Test Case Implementation section of this document, a description of how each test case is implemented is provided. There are two subsections to the Test Case Implementation chapter, one for the configuration application and another for the simulator application. In each of these subsections, the respective applications test case implementations are shown and justified.

**1.5 Test Coverage**

In the Test Coverage chapter of this document, . . . .

**Chapter 2**

**Overall Description**

**2.1 Testing Documents Description**

Throughout this document there are several chapters that show different test cases as well as the respective derivation, sufficiency, and implementation of each of these test cases. A test coverage is also provided in this document. An understanding of the testing done and developed during the making of the TalkBox are thoroughly explored and conveyed throughout this document.

**Chapter 3**

**Testing Checklist**

**3.1 TalkBox Configuration Application**

|  |  |  |
| --- | --- | --- |
| **Tests** | **Pass / Fail** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**3.2 TalkBox Simulator Application**

|  |  |  |
| --- | --- | --- |
| **Tests** | **Pass / Fail** | **Comments** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Chapter 4**

**Test Case Derivation**

**4.1 How Test Cases Were Derived: TalkBox Configuration Application**

**4.2 How Test Cases Were Derived: TalkBox Simulator Application**

**Chapter 5**

**Test Case Sufficiency**

**5.1 Why Test Cases Are Sufficient: TalkBox Configuration Application**

**5.2 Why Test Cases Are Sufficient: TalkBox Simulator Application**

**Chapter 6**

**Test Case Implementation**

**6.1 How Are Test Cases Implemented**