Software Testing Document
for
TalkBox

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Contents

Revision History

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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 as 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

Recorder Class Tests:

Tests	Pass / Fail	Comments
setup()	pass	Setting up objects and fields.
testInitialFields()	pass	Testing the initial fields of recording class
testRecording()	pass	Testing recording an audio file using the system and saving it to a directory
testButtons()		Testing the feature of changing the amount of buttons of the application

Simulator Preview (SimPreview) Class Tests:

Tests	Pass / Fail	Comments
setup()	pass	Setting up objects and fields.
testingUpdatingButtons()	pass	Testing update button method for the sim preview
testPlayingSound ()	pass	Testing audio output of application audio files
TestErrorPlayinSound()	Pass	Testing failure to play audio file due to wrong file or mic not found
testPlayinMissingSoundFile()	Pass	Testing playing audio if file is missing

PlayEditToggle Class Tests:

Tests	Pass / Fail	Comments
setup()	pass	Setting up objects and fields.
testingUpdatingButtons()	pass	Testing update button method for the sim preview
testPlayingSound ()	pass	Testing audio output of application audio files
TestErrorPlayinSound()	Pass	Testing failure to play audio file due to wrong file or mic not found
testPlayinMissingSoundFile()	Pass	Testing playing audio if file is missing

ProfilesPanelTest Class Tests:

Tests	Pass / Fail	Comments
setup()	pass	Setting up objects and fields.
testingUpdatingButtons()	pass	Testing update button method for the sim preview
testPlayingSound ()	pass	Testing audio output of application audio files
TestErrorPlayinSound()	Pass	Testing failure to play audio file due to wrong file or mic not found
testPlayinMissingSoundFile()	Pass	Testing playing audio if file is missing

TalkBoxConfig Class Tests:

Tests	Pass / Fail	Comments
setup()	pass	Setting up objects and fields.
testingUpdatingButtons()	pass	Testing update button method for the sim preview
testPlayingSound ()	pass	Testing audio output of application audio files
TestErrorPlayinSound()	Pass	Testing failure to play audio file due to wrong file or mic not found
testPlayinMissingSoundFile()	Pass	Testing playing audio if file is missing

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