
TALKBOX TEST PLAN

Version 0.5

02/24/2019

TABLE OF CONTENTS

1 INTRODUCTION	3
1.1 Purpose of The Test Plan Document	3
1.2 Test Suspension / Resumption Criteria	3
2 FUNCTIONAL TESTING	3
2.1 Items to be Tested / Not Tested	3
2.2 Test Approach(s)	4
2.3 Test Pass / Fail Criteria.....	4
2.4 Test Entry / Exit Criteria	4
2.5 Test Suspension / Resumption Criteria	4
3 PERFORMANCE TESTING	4
3.1 Test Risks / Issues	4
3.2 Items to be Tested / Not Tested	5
3.3 Test Approach(s)	5
3.4 Test Pass / Fail Criteria.....	5
3.5 Test Entry / Exit Criteria	5
3.6 Test Suspension / Resumption Criteria	5
4 LIST OF ISSUES.....	6
5 COVERAGE.....	7
6 APPENDIX A: REFERENCES.....	7

note that while all responsibility of testing is noted under peter, all group members participated in testing during the development of any feature.

1 INTRODUCTION

1.1 PURPOSE OF THE TEST PLAN DOCUMENT

The Test Plan document documents and tracks the necessary information required to effectively define the approach to be used in the testing of the project's product. The Test Plan document is created during the Planning Phase of the project. Its intended audience is the project manager, project team, and testing team. The Test Plan document is created to ensure that there are little to no issues with any software that is released for consumption.

1.2 TEST SUSPENSION / RESUMPTION CRITERIA

If a problem or error was found that was vital to operation of the system and the various tests that were being performed, all tests were put to an immediate halt until such issues were resolved. Smaller problems such as an incorrect implementation of a method that did not affect the entire system's performance did not halt the testing process but were instead noted and to be fixed later.

2 FUNCTIONAL TESTING

2.1 ITEMS TO BE TESTED / NOT TESTED

Item to Test	Test Description	Test Date	Responsibility
GUI	Ensuring the interface worked on monitors of various sizes and resolutions. Testing all the various buttons and their functions.	2/24/2019	Peter
Voice Recording	Testing the voice recording feature with several different microphones and on different devices. Also used various volume ranges and recording lengths.	2/24/2019	Peter
Configuration	Tested the configuration of the buttons and button sets, adding and removing buttons, as well as finding implementation errors that can be abused.	2/24/2019	Peter
Sound Playback	Ensure all buttons produced the intended sound.	2/24/2019	Peter

2.2 TEST APPROACH(S)

The approach used to test these various items was to go use every feature of the program in every way currently possible. Every test was repeated multiple times and some tests were run continuously to ensure that no problems occurred only after a certain timeframe had past. Several people were also invited to come test the software and were asked to note any issues and push the program to its limits.

2.3 TEST PASS / FAIL CRITERIA

A successful test was defined by no issues being found and the system working as intended. A failed test was one that determined that something needed to be changed to provide a different result/implementation than the system in its current state.

2.4 TEST ENTRY / EXIT CRITERIA

When a feature was believed to have been completed it entered the function testing phase. After a feature had been tested thoroughly and all issues having been resolved, it exited this testing phase until another change was made or until the project reached completion.

2.5 TEST SUSPENSION / RESUMPTION CRITERIA

When alarming issues are found with the program, testing is halted, and the issue is addressed. These issues include ones that broke what the entire system was intended to do. If the issue was fixed and no immediate occurrence of the problem was visible, testing resumed.

3 PERFORMANCE TESTING

3.1 TEST RISKS / ISSUES

Current issues with the performance of the system are that it cannot be tested on lower end devices. We currently do not know the minimum requirements to run the program as intended. This is not expected to be a large problem as the program is currently not very resource intensive, however attempts to find these limitations will be performed in the future.

3.2 ITEMS TO BE TESTED / NOT TESTED

Item to Test	Test Description	Test Date	Responsibility
GUI	Ensure that the GUI works smoothly.	2/24/2019	Peter
Configuration	Ensure that the configuration menu works smoothly.	2/24/2019	Peter
Voice recording	Ensure that the quality of the sound recorded is acceptable given the microphone used.	2/24/2019	Peter
Sound playback	Ensure that all sound is played smoothly and is not choppy.	2/24/2019	Peter

3.3 TEST APPROACH(S)

Buttons were pressed in quick succession and the program was run in ways that were intended to crash, lag, or break the program.

3.4 TEST PASS / FAIL CRITERIA

The test was successful if the program ran smoothly and was unsuccessful if there was any lag or crashing of the system.

3.5 TEST ENTRY / EXIT CRITERIA

Once a function/feature had passed the function testing phase it moved onto the performance testing phase. Once all tests were completed and the program was confirmed to run smoothly, it exited performance testing.

3.6 TEST SUSPENSION / RESUMPTION CRITERIA










When the performance of any feature/function of our program is found to be unsatisfactory, development of any features that are based of said function will be halted until the issue with performance can be fixed. After the issue is resolved the development of all features halted due to the issue will continue.

[illegible]

5 COVERAGE

It was determined that currently only function and performance testing was required, however more tests are going to be implemented in the future.

After testing all the features of the program, the coverage looked as follows:

▼  talkAppV1	 95.1 %	2,139	111	2,250
>  Sound.java	 81.6 %	160	36	196
>  ConfigurationGUI.java	 97.3 %	1,282	35	1,317
>  TalkBox.java	37.1 %	13	22	35
>  TalkBoxGui.java	 97.4 %	684	18	702

(Note that when only testing specific features/functions the coverage was much lower. This allowed us to determine what code was running as well as to determine what was causing errors and issues.)

6 APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Currently empty but will be kept for future use.

Document Name and Version	Description	Location