Test Plan Document – Milestone 2

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Project Leader: Michael Le

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For approval: Michael Le

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Revision History

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**1. Introduction**

**1.1 Purpose**

The purpose of this Test Plan is designed to prescribe the approach, scope, resources, and schedule of all Short-Term Assistance App testing activities.

The test plan identifies the following: test cases, test features, testing type, testing personnel responsibility, resources, schedule, and risk associate with the test plan.

#### **1.2 Scope**

**1.2.1 In scope**

All the Mnemosyne mobile application features, defined in the software requirement specification, shall be tested. The features to be tested are:

1. Record Speech
2. Save and Retain Text
3. Voice Recognition Training
4. Record Speech of User only
5. Visual Options
6. Searching Text
7. Training Videos
8. Send notification to users

QA tests are too tedious or complex for human testers; as a result, that automated testing will be executed alongside manual testing to assure quality and faster release of the product.

In the Mnemosyne project, two types of testing should be conducted.

Unit Testing: Functional of the program is broken down into testable behaviors that can test as individual units.

Integration Testing: The model of each component of the software combined and test it all together as a group.

**1.2.2 Out of Scope**

Features and functionalities not included in the Software Requirement Specification shall not be tested. Features and functionalities not be tested are

1. User Interface
2. Database logical
3. Hardware Interface
4. Communication Interface
5. Software Interface

**1.3 Test Objective**

The test objective is to verify the functionality of the Short Memory Assistance App. Therefore, the project should focus on testing features such as Speech to Text Converter, Search bar, User voice recognition, training videos, etc. On guaranteeing all these operations can generally work in the natural business environment. Furthermore, this software test plan aims to communicate a detailed plan for running development tests to the development team and stakeholders.

**1.4 Intended Audience**

The appropriate audience for this test plan document includes the following: Project Manager, Project Team, and the testing team.

**1.5 Roles and Responsibilities**

This test plan document contains the resource requirements. In addition, below are the details of the roles and associated responsibilities of team members.

|  |  |  |  |
| --- | --- | --- | --- |
| Number |  | Role | Responsibilities |
| 1 | Damion Sevilla | Tester | Identifies and describes test tools/techniques.  Verify and assess the test approach.  Execute the test.  Log results.  Report defects or bugs. |
| 2 | Debashis, Austin, Didimus | Developers | Implement test cases, test programs, and test suites |
| 3 | Michael Le | Project Manager | Define directions and acquire appropriate resources |
| 4 | Prince | BA | Performs quality assurance and check to confirm whether the testing process is meeting specified requirements. |

**1.6 Testing Schedule**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Members** |  | **Estimated Effort** |
| Create Test Specification | BA | Prince | 8 hours |
| Perform Task Execution | Tester, Test Administrator | Damion Sevilla | 20 hours |
| Test Report | Tester | Damion Sevilla | 5 hours |
| Test Delivery | Tester | Damion Sevilla | 3 hours |

**1.7 Key Milestone**

Activity Milestone

Task Execution Completed Task Execution

Test Report Completed Test Report

**1.8 Testing Approach**

In the Mnemosyne project, two types of testing should be conducted:

Unit Testing: Individual units or modules of the software will be tested individually.

Integration Testing: Individual units are combined and tested as a group.

**1.9 Test Automation**

Test automation tools are used to test models of the software. The JUnit tool will be used to execute the test cases, while the Junit test suite will be used to conduct integration testing.

**2. Test Cases & Functional Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **Test Case #** | **Test Case Description** | **Pre-requisites** | **Test Steps** |
| 1 | Verify that speech is converted to text | Test Case 3 successful | 1. Start recording speech using the programmed phrase. 2. View the screen to see if the speech is converted |
| 2 | Verify that text files are saved | Test Case 1 successful | 1. Follow Test Case 1 2. Choose the option to save the text in a file. 3. View the saved text files to verify the new file is saved. |
| 3 | Verify software recognizes distinct phrases | Test Case 5 successful | 1. Use the trigger phrase to start the voice-to-text conversion. 2. Verify that Test Case 1 can start with the trigger phrase/word. |
| 4 | Verify the software recognizes only the user’s voice in the conversation | The app starts up and is running | 1. Start a conversation with another person. 2. Use specific phrases for tracking speech conversion. 3. Watch the screen to see if only the user’s voice is converted to text |
| 5 | Verify the settings/options menu is functional | The app starts up and is running | 1. Choose the settings/options button to open up that portion of the app. 2. Change accessibility settings and verify if the changes are made. |
| 6 | Verify the search bar is functional | Test Case 2 is successful | 1. Click on the search bar and enter in a keyword. 2. Choose the search option. 3. Verify that related text files are shown from the search. |
| 7 | Verify the training videos are functional | Test case 5 Successful | 1. Open Settings menu 2. Select the training videos option. 3. Click on one of the training videos. 4. Verify the training videos run properly |
| 8 | Verify Notifications | Test case 5 successful | 1. Open settings menu. 2. Set a time for the notification banner. 3. Verify that the notification appears at the designated time. |

**3. Testing Criteria**

**3.1 Suspension Criteria**

Testing shall be suspended for a test case when a defect causes testing to come to a halt.

**3.2 Resumption Criteria**

Resumption of testing will occur when the defect is presumably fixed.

**3.3 Test Completeness**

Testing will be complete when the test cases have all been concluded, and upon completing the steps, all of the tested portions of the software run as expected and required.

**3.4 Test Deliverables**

The test deliverables will include:

* Test Plan
* Test Report
* Defect Report

**4. Resource & Environment Needs**

**4.1 Testing Tools**

* Requirement Tracking Tool
* JUnit Tool

**4.2 Testing Environment**

The following mobile software operating systems are required.

* All mobile phones that support the Android operating system
* All mobile phones that support the iOS operating system

**Appendix A: Terms/ Acronyms**

**TERM/ACRONYM** **DEFINITION**

API Application Program Interface

QA Quality Assurance

**Appendix B: References**

Guru99. (2021). *Test Plan Template: Sample Document with Web Application Example*. Guru99. <https://www.guru99.com/test-plan-for-project.html>.

**Appendix C: Test Execution Template**

|  |  |
| --- | --- |
|  |  |
| **Test Name:** |  |
| **Test Start Date & Time:** |  |
| **Test End Date & Time:** |  |
| **Test Conductor:** |  |
| **Software Versions:** |  |
| **Test Environment:** |  |
|  |  |
| **Witnesses:** |  |
|  |  |
| **Deviations:** |  |
|  |  |
|  |  |
|  |  |
| **Issues Opened:** |  |
|  |  |
|  |  |
| **Action Items Opened:** |  |
|  |  |
|  |  |
|  |  |
| **Status:** | ***Pass***  ***Pass w/exceptions***  ***Fail*** |
| **Test Conductor Signature/ Date:** |  |
| **Witness Signature/ Date:** |  |
| **Customer Signature/ Date:** |  |