2HandBook

Master Test Plan

Version 1.1

Revision History

| **Date** | **Version** | **Description** | **Author** |
| --- | --- | --- | --- |
| 07/8/2023 | <1.0> | Propose the Master Test Plan | Trần Phúc Hải |
| 16/8/2023 | <1.1> | Append the Master Test Plan | Trần Phúc Hải |
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Master Test Plan

# 1. Introduction

## 1.1 Purpose

* The purpose of this document is to devise a plan to initiate and supervise testing strategies for the project 2HandBook to verify that the software meets the program specifications and user requirements.
* This document contains the following objectives:
  + Determine the components or functionalities to be tested.
  + Identify hardware requirements for testing activities.
  + Propose and describe testing strategies to be applied.
  + List the tools needed for software testing.
* This document is written and supervised by testers in the team and shared with the related shareholders including developers and user testers.

# 2. Target Test Items

## 2.1 Features

## 2.2 Areas

* *Functional testing*: Validate the software system against the functional requirements/specifications.
* *Usability testing*:
  + UI components like text, photos, symbols, colors are pleasing to the eye.
  + UI works smoothly enough without errors of display like unexpected behaviors or missing elements, etc.
  + UI is easy to understand and use for the vast majority of target user types.
* *Compatibility testing*: Run the system on different web browsers to make sure that the website is able to boot with sufficient features, as well as measure the performance. The website should run without noticeable lags.

## 2.3 Techniques

* *Defect testing*: Discover situations in which the behavior of the software is incorrect, undesirable or does not conform to its specification.
* *Verification*: Verify that the software conforms to its specification.
* *Dynamic software testing*: The system is executed with test data and its operational behavior is observed.
* *Partition testing*: Identify groups of inputs that have common characteristics and should be processed in the same way.
* *Equivalence partitioning*: Divide the input domain of a system into partitions or classes that are expected to produce the same output or behavior.
* *Guideline-based testing*: Guidelines reflect previous experience of the kinds of errors that programmers often make when developing components.

# 3. Environmental Needs

## 3.1 Hardware Requirements

| **Requirement** | **Minimum Specification** |
| --- | --- |
| Processor | Core i3 or equivalent |
| Memory | 2GB  Recommended: 4GB |
| Disk Space | 1GB  Recommended: 2GB |
| Display | 1440x900px  Recommended: 1920x1080px |

## 3.2 Software in the Test Environment

The following base software elements are required in the test environment for this Test Plan.

| Software/Tool Name | Purpose | Version |
| --- | --- | --- |
| Visual Studio Code | IDE | 1.42 or newer |
| Google Chrome | Web browser for testing | 26 or newer |
| Microsoft Edge | Web browser for testing | 12 or newer |
| Opera | Web browser for testing | 15 or newer |
| Firefox | Web browser for testing | 21 or newer |

## 3.3 Productivity and Support Tools

The following tools will be employed to support the test process for this *Test Plan*.

| **Software/Tool Name** | **Purpose** | **Version** |
| --- | --- | --- |
| GitHub | Source code management for testing | Web version 2023 |
| GitHub Desktop | Source code management for testing | 3.1.8 or newer |
| Google Doc | Documenting Master Test Plan | Web version 2023 |
| Google Sheets | Documenting test cases | Web version 2023 |

# 4. Responsibilities, Staffing, and Training Needs

## 4.1 People and Roles

This table shows the staffing assumptions for the test effort.

| **Human Resources** | | |
| --- | --- | --- |
| **Role** | **Minimum Resources Recommended**  **(number of full-time roles allocated)** | **Specific Responsibilities or Comments** |
| Test Manager | Trần Phúc Hải | Provides management oversight.  Responsibilities include:   * Planning and logistics * Agree mission * Identify motivators * Acquire appropriate resources * Present management reporting * Advocate the interests of test * Evaluate effectiveness of test effort |
| Tester | Hoàng Anh Trà  Nguyễn Thanh Bình  Trần Phúc Hải  Nguyễn Đức Tuấn  Đinh Quý Triều | Implements and executes the tests.  Responsibilities include:   * Implement tests and test suites * Execute test suites * Log results * Analyze and recover from test failures * Document incidents |