

TICKETING TOOL

TEST SPECIFICATIONS

1.0 INTRODUCTION

This is simply a documentation of the software test plan for the ticket issuing system for an organization. The project goal and main objective for this system is to provide the automated ticket selling for public uses. The document will therefore cover in detail, the information about testing plan and test cases used for this project.

The target audience for this project is for public use, however, managed and run by any organization that buys and owns it. We will utilize test criteria under several testing methods consisting of white box, black box and system testing paradigm which comprises stress testing, and other testing practices.

1.1 Goals and Objectives

The main objectives are as follows:

1. Provision of 24 hour service - The system is expected to provide a service that lasts about 24 hours. Capable of providing service without stopping and going off.
2. Provision of selling tickets to clients - The system is expected to have the tickets sold in a concise and in a manageable way.
3. Provision of event creation and management - Events are created in the system and also, should be capable of managing the events created.
4. Provision of report management - Capable of report management. Able to create reports in respect to tickets, events, clients registered, so on and so forth.

1.2 Statement of Scope

This part consists of scope of work the system will be able to handle and also the product description and also the requirements needed to set up the system as well as build it.

The scope of the project is as follows:

In Scope:

1. Developing a suitable ticketing system is part of the scope.
2. Event management is and will be part of the scope. Creating events, as well as managing created events.
3. Ticket selling and issuance will be part of the scope.
4. Authentication of the users to the system is part of the scope.

Out of scope:

1. Settings management and authentication permission issuance is out of scope.
2. Development and Management of the team plan is out of scope.
3. Management of financial plan and budget allocation is out of scope.

2.0 Test Plan

In our testing process, we will be applying the same test specifications that are well described in the IEEE Standard 829 software testing documentation. Several test strategies will be used including the tech stack as well as environment, and tools to use while testing.

We will as well look at the test plan timetable which lists all the activities that should take in the testing process, that is, in respect to time. The test plan simply aligns the schedule of the testing process in order to make sure good quality assurance is met.

2.1 Software to be tested

The software here to be tested simply consists of what and where to be tested in the ticketing tool system. The exclusivities on testing comprises those tests which are not yet fully implemented and hence requires more time to implement, and merge changes.

The test inclusions are as follows:

- Authentication of the users will be managed.
- Event creation in the system will be tested.
- Management of the events will be tested.
- Ticket selling and issuance will be tested.
- Ticket status and creation of tickets will be tested.
- Settings for the system will be tested.

The test exclusions are as follows:

- High workloads on the server will not be tested.
- Debit and Credit Cards will not be tested.
- Network congestion and display will not be tested.
- SMS and Several API Gateways will not be tested.

2.2 Testing Tools and Test Environment

The environment setup needed is such of an office. Why? This is because much of the needs are kind of office tools. Testing tools are simply the tools needed in the process of testing of the system. The system being internet based, we can test it anywhere and everywhere one resides. However some requirements are needed to have before making a step of testing this software.

The tools must comprise of the following:

1. One Network Controller
2. Three network PC's, With Main Known Operating system, Windows, Mac, Linux.
3. Oracle or Microsoft MySQL server.
4. RAM: 2 GB RAM or above
5. Hard Disk: 20 GB hard disk or above.
6. Integrated Development Environment - VsCode(Recommended).
7. Several Known Browsers - Main Browser to have will be Chrome, Firefox and Safari browser.

2.3 Test Schedule:

This simply refers to the test plan of the project processes. Comprises a test plan aligned in respect to the predefined date for project development.

[INSERT TEST SCHEDULE PLAN HERE]

Fig 1.1: Test Plan Schedule.

3.0 Test Cases

Test cases consist of test methods used to facilitate the project testing process. The methods were not limited to testing paradigms of the project.

We shall have the test case methods as follows:

1. Black Box Testing

In black box testing only the functionality of the software was tested without a record to the code. If the functionality which was expected from a component is provided, then the black box testing is completed.

2. White Box Testing

White box testing is also called glass box testing and structural testing . The objective of white box testing is not to exercise all the different input or output conditions but to exercise the different programming and data structure used in the program. In white box testing internal code return in every component will be tested to check that the code written is efficient in utilizing various resources of the system like memory etc.

3. Stress Testing

Stress test is designed to confront a program with an abnormal situation. Stress testing executes the system in a manner that demands rescuing in abnormal quality, frequency, or volumes. For example:

- Input data rates may increase to determine how input function will respond
- Tests that require maximum memory or other resources are executed.

Basically, the tester wants to break the program. In stress testing the software will be tested against the boundary conditions. Various input fields will be tested against Abnormal values and also get tested to ensure that the software does not behave abnormally at any time.

4. Acceptance Testing

Acceptance testing is performed with realistic data of the client to demonstrate that the

software is working properly. In acceptance testing the software will get checked for completeness that it is ready.

5. Assertion Testing

In assertion testing the software is tested against the possible assertion. Assertions will be used to check the program and various locations whether the state of the program at a the point is the same as expected or not.