Test Plan

Table of Contents

1. Introduction:

In this test plan, the main aim is to show the objectives of the project, the scope and the testing aproach used to conducts the test cases for the SDC company's project.

2. Objectives:

- Show the given requirements for the project's tests.
- Show the the testing approach that will be used to fulfill these requirements.
- Review and define the future threats in the code provided using test cases.
- Show the results of these test cases in a test report.

3. Scope:

The tests that will be conducted will be unit tests, load tests, and function tests. These test will have the aim of fulfilling the reccomended requirements listed below if the system allows it.

4. Requirements:

The list below shows the testing targets (what will be tested);

- Req1: "The web server should be responsive under high load."
- Req2: "The web server must follow minimum requirements for HTTP 1.1"
- Req3: "The web server must work on Linux, Mac, Windows*."
- Req4: "The source code should be released under GPL-2.0."
- Req5: "The access log should be viewable from a text editor."

5. <u>Testing Approach</u>

In this section, an explanation of how the test types will be conducted to fulfill the recommended requirements, will be shown.

- **Load Testing**

<u>Aim of the test:</u> - Ensure that the project behaves properly when using different workloads

<u>How it will be fulfilled:</u> - Using JMeter while executing the project and while changing up the data files to see if the completion of the tests is done within an appropriate time.

- **Function Testing**

<u>Aim of the test:</u> - Making sure the server functions correctly using different commands. This is done to identify the testing targets.

<u>How it will be fulfilled:</u> - Using different input data (valid and invalid) when running the use cases provided beforehand. In case of a failure, the result will be reported.

- **Unit Testing**

<u>Aim of the test:</u> - See if the existing test suits are functioning correctly.

<u>How it will be fulfilled:</u> - Executing every existing JUnit test suit. In case of a failure, the result will be reported.

Some test types won't be conducted in this project's case since they server with no function. Examples of these unneeded tests are, acceptance tests, recovery tests, API tests and stress tests.

6. Responsibilities:

All the different test types that were presented before, will be done iteratively by one tester from the SDC company. This is done to fulfill the test strategy.

- Iteration 1: Unit testing and Function testing: From 1/11/2020 until 5/11/2020

- Iteration 2: Load testing: From 7/11/2020 until 10/11/2020

7. Reference

https://docs.google.com/document/d/1fgQngHIZ4_aGIeB2S9YOBCghcBN9EEKBiaN-71MbGac/edit