Test Plan

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Test Plan

I. Scope

This test plan is for testing an abandoned open-source software whether it can use for redistributing on a wide range of Internet Of Things (IoT) for Software Development Company (SDC). The requirement section addresses the requirement that we will test in this iteration. The prioritization section clarifies the part of the system that is important. The section of Out of scope defines the tests will not do for this iteration, and these parts will be tested in the next iterations.

1. Requirement

1. Supplementary Specification

Req 1. The web server should be responsive under high load.
Req 2. The web server must follow minimum requirements for HTTP 1.1
Req 3. The web server must work on Linux, Mac, Windows*.
Req 4. The source code should be released under GPL-2.0.
Req 5. The access log should be viewable from a text editor.

2. Use Cases

- UC1 Start Server
- UC2 Stop Server
- UC3 Request shared resource

2. Prioritization

For this iteration, we focus on testing the use cases scenario and manual test as the high priority, so the test objects are mainly requirement 3 and all use cases. And due to the limitation of the equipment and tester, in this iteration for requirement 3, we mainly focus on the Mac OS system.

3. Out of scope

Due to the time limitation and the prioritization addressed above, a non-functional test will be done during the next iteration.
Since the software test will not have access to a Linux environment and limited Windows, the requirement of the webserver to work in a Windows and Linux environment will be tested during the next iteration.
In this iteration, we focus on manual tests, and because of the time limitation, the requirements that need testing by Jmeter are not the most important for this iteration.

II. Test Methodology

Test level and technology
In this iteration, the plan for this test focuses on the manual test, acceptance test, and stress test.

For IoT developer and SDC company, we plan to do manual testing for most of the use cases and some of the requirements, by running the program manually and comparing the result to the expected output. And we will also implement stress testing by JMeter for high load testing and acceptance testing for other requirements.

The end user's requirement that customers want easy access and absolute security is not covered in this iteration, and we should test it in the next iteration.

III. Responsible

Since there is only one person in the test group, the tester is responsible for learning web server knowledge and JMeter and also all the testing work including developing all test cases, executing all test cases, and writing all documents.

IV. Risk Analysis

Risk

1. The tester doesn't have knowledge about web servers.
2. Since there is only one person in the test group, if the tester gets sick, it will affect work a lot.
3. Having limited people in the test group and limited time for testing.

Mitigation strategy

1. Before starting the test, the tester should have enough time to understand the basic knowledge about web servers.
2. Starting the test early and making sure to have enough time for the tester to get better.
3. Focus on manual tests in this iteration, and put other tests into the next iteration.