Test Strategy

My Web Server

1. Background and main objective

Software Development Company (SDC) aims to redistribute an easy deployed java web server for IOT-devices that can attract attention from IOT developers. SDC management has found an abandonware called "My Web Server" that may fit the need. One test lead from SDC have been assigned to evaluate the state of "My Web Server" for maximum one work week. The test project should give a recommendation if it is interesting enough to proceed further with this project and the findings will be reported back to the SDC management.

- Background scenario
- Existing requirements from before

2. Stakeholders & test objectives

The following have been identified as the stakeholders of this project and their testing objectives.

Stakeholder	Testing Objectives
SDC - Test lead	To evaluate requirements, use cases, scenarios and current state and share information with other stakeholders.
SDC - Management	To test that server is simple to deploy on different IOT-devices, and that it follows the requirements that is stated in the existing requirements document to get a product that can attract attention from wide range of IOT developers.
Customer IOT-Developers	Server have minimum configuration.
End-users	Server is easily accessible and absolute secure.

3. Resources

The test project will have the following resource available in this iteration.

Resource type	Resource
Human resources	1 Test Lead
Time	20 hours
Equipment	Windows desktop computer
	Raspberry Pi 3 Model B
Software	Apache JMeter
	IntelliJ IDE
	Git Bash Terminal
	Firefox Browser

Java Runtime Environment
Java SDK
Postman

4. Strategy

Since there is a lack of documentation what this server support and how it works a basic exploratory testing is needed to better understand the system and to possibly detect errors upfront.

And since there is already a good portion of automated unit tests in this project these will be regression tested to get a feeling of how some of the functional requirements are being met.

In this iteration the focus will be on the test the application to evaluate if the existing project is good enough to proceed to later iterations or if SDC should look for other web servers instead. We should test the existing requirements as the management of SDC wants to be done. The new tests should target the system and be performed manually. We should also add performance test to test the performance of server and compliance test to test that it follows standards and certificates.

Since the human resources and time resources are very limited for this test iteration the IOT-developers and end-users goals must be postponed to later iterations. We need to first understand the server and then evaluate the already existing use cases and requirements. This needs to be prioritized to first see if "My Web Server" is stable and good enough to before subjective tests like easily accessible can be done.

If the project gets a go ahead the suggestion is however in later iterations include IOT-developers and end-users into the project, have interviews to get a better understanding of what is important for them and make a new test plan after that.