

Test Strategy

*- My web server -
Software Development Company™*



Table of contents

Objective	2
Stakeholders	2
Resources	2
Equipment	2
Roles and responsibilities	3
Test manager	3
Test engineers	3
Time budget	3
Strategy	4
Testing types overview	4
Risks and mitigation	4
Milestones	5
Deliverables	5

Objective

The purpose of this document is define a strategy for evaluating the current state of the abandonware web server called "My Web Server". Namely, the evaluation aims to provide a framework for estimating whether the abandoned software may be used in the development of a easy to deploy java-web-server with minimal configuration as well as an easy integration and adaptation of the web-server, also including easy access and absolute security.

Stakeholders

The small Software Development Company (SDC) aims to redistribute this server on a wide range of IoT to present information from servers, and thus they want an easy to deploy java-web-server that can be deployed on many different devices to attract a wide range of IoT developers. The company wishes to know if the abandonware fulfills their requirements.

Resources

The development team has access and will be using the following resources:

Equipment

ID No.	OS	System
C1	Windows 10 (x64)	i7-6500 CPU @ 2.50 GHZ RAM: 8.00 GB
C2	Windows 10 (x64)	AMD A8-7410 APU @ 2.20GHz RAM: 4.00 GB
C3	Windows 10 (x64)	i7-6700HQ CPU @ 2.60GHz RAM: 16.0 GB
C4	Windows 10 (x64)	i7-7500U CPU @ 2.70GHz RAM: 8.00 GB

Other tools:

- jMeter, SmartMeter.io, Postman, and cURL
- Java IDE (Eclipse Neon or newer)
- Testing frameworks JUnit, Mockito, and Vega

Roles and responsibilities

This section describes the members of the testing team, particularly, their roles and what responsibilities each role involves and their goals.

Test manager

The test manager has the responsibility of the test planning, develop test cases and prioritize them, and writing test documentation.

Goal: Create the documentation needed, keep track of the results of the test iteration and evaluate it, modify if needed the use cases and test plan.

Test engineers

The individual testers have the responsibility of testing implementation and test execution (manual and automatic testing), participating in the creation of the test plan and communication of the results with the test leader.

Goal: Follow the agile iteration plan for each iteration, communicate the result of the iteration to the test leader and participate during the planning of the next iteration.

Time budget

The time budget for this project would be 40 working hours per 4 workers, making a total of 160 hours in 4 weeks.

Strategy

The approach in this evaluation is to make use of several testing types while taking into consideration the risks that may occur, and following a specific time schedule in order to deliver all the necessary documentation before the due date.

Testing types overview

1. Manual Testing

- **Test Objective:** Physically execute test cases without utilizing any computerization devices.
- **Approach:** The tester goes through all test cases.
- **Completion Criteria:** The tester detects any possible flaws and reports them.

2. Automated Testing

- **Test Objective:** Detect bugs through automation.
- **Approach:** Executing the tests with automated tools and scripts.
- **Completion Criteria:** The automated tests or tools pass detects flaws and reports them if found.

Risks and mitigation

This section describes potential problems, possible solutions and the impact these potential problems could have on the system.

No.	Risk	Mitigation	Impact
1	Connection loss	Stable internet connection	High
2	Security breaches	Data encryption	High
3	Data leakage	Non-disclosure agreements	Medium
4	Incompetence	Additional training (education)	Medium
5	Personal issues	Communication within the team	Medium
6	Natural disasters	Back-up valuable data	Low

Milestones

Planning and working will be done following the agile methodology. Effort hours are the sum of all members in the team.

Milestone	Start Date	End Date	Effort
Test Plan	2017-11-21	2017-12-20	20h
Test Design	2017-11-24	2017-11-29	25h
Test Implementation	2017-11-30	2017-12-08	35h
Test Execution	2017-12-11	2017-12-15	25h
Test Evaluation	2017-12-15	2017-12-20	40h

Deliverables

The current document will be delivered along with the following documents:

- Test Plan
- Test Cases
- Test Report