*TEST PLAN*

26/04/2022

*Be The Best Top Search Quality Engineer (Alterra Academy)*

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# **Revision History**

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 26/04/2022 | 1.0 | Automation Testing, API Testing, Web Testing, Mobile Testing | Siti Nur Kholifah |

# Table of Content

[**Revision History** 2](#_Toc103865329)

[Table of Content 3](#_Toc103865330)

[Test Plan 4](#_Toc103865331)

[1. Introduction 4](#_Toc103865332)

[a. Purpose 4](#_Toc103865333)

[b. Background 4](#_Toc103865334)

[c. Scope 4](#_Toc103865335)

[2. Requirements for Test 5](#_Toc103865336)

[3. Test Strategy 5](#_Toc103865337)

[3.1 Testing Types 5](#_Toc103865338)

[3.2 Tools 9](#_Toc103865339)

[4. Resource 9](#_Toc103865340)

[4. 1 Workers 9](#_Toc103865341)

[4. 2 System 10](#_Toc103865342)

[5. Project Milestone 10](#_Toc103865343)

[6. Deliverables 11](#_Toc103865344)

[7. Appendix A: Project Task 11](#_Toc103865345)

# Test Plan

1. Introduction

This test plan document explains how the software created can be used proceed according to a pre-determined plan. The trial is only carried out on the function of the software that has been built.

The test plan is the basis used to test the suitability of the design results build software with goals that have been set during project planning. With a well-detailed test plan, all aspects of the software in general can covered and the results of the design are in accordance with the development plan that has been made previously. In other words, a test plan can be referred to as a plan or scenario to carry out testing that will be carried out either by experts or general users.

1. Purpose

The purpose of making a test plan in general is to make it easier for developers to carry out testing so that the testing carried out becomes clear so that the results are more useful and efficient.

* Testing checks for functionality and usability of the website.
* Tests check functionality and usability of mobile applications
* To verify it fulfills its expected functionality and reliability.

1. Background

Testing will be carried out on integration testing, automation testing, CI/CD and API testing. Integration testing is a stage where the results of combining units or application components that interact in the software are tested. Automation Testing is a software testing technique that performs using special automated testing software tools to execute a test case suite. Continuous integration (CI) is integrating code into a code repository and then running tests automatically, quickly, and frequently. You can do this CI by using the commit command. While continuous delivery or continuous deployment (CD) is a practice that is carried out after the CI process is complete and all code has been successfully integrated, so that applications can be built and released automatically.

1. Scope

This document only discusses about testing (testing) the software that is built. The scope to be tested includes performance testing, functionality, API response, and the accuracy of the software to be made. In addition, testing will also be carried out on each form in the software. Testing is only done with a tester.

Website: https://qa.alta.id/

API: https://be-qa.alta.id/api

Mobile: alta-online-shop.apk

1. Requirements for Test

In this software testing, I did it using the Katalon Studio tools, Microsoft Excel to create a test scenario and role matrix, Microsoft Word to create a test plan document, Vysor for testing mobile applications.

1. Test Strategy

Strategy consists of all plans carried out to carry out testing on software built.

1. Testing Types

Web UI Types

* 1. Web UI Functionality Testing

|  |  |
| --- | --- |
| Test Object | input forms such a the register and login features can input data for processing |
| Technique | 1. test the function of the icon dan button on the form  2. test the input form with various input conditions  3. verify the result of the output are in accordance with the input |
| Completion Criteria | the output corresponds to the input made |
| Special Censideration | - |

* 1. Web UI User Interface

|  |  |
| --- | --- |
| Test Object | The purpose of testing is to ensure that all existing components can work properly. |
| Technique | 1. Login form:  Input: enter characters to fill in the login form such as password and email  Output: The login form can only accept users who have access rights.  2. Add to Cart:  Input: Click Button.  Output: can count the products according to the ones added using the button cart  3. Choose a category:  Input: Keyword  Output: issued according to choice |
| Completion Criteia | The appearance of the application is easy to use by the user |
| Special Censideration | - |

* 1. Web UI Integration Testing

|  |  |
| --- | --- |
| Test Object | the combination of units or application components that interact in the software is tested |
| Technique | 1. Perform unit testing on every feature in the application  2. combine them in a test suite |
| Completion Criteia | Ensure all report results are in accordance with what has been expected |
| Special Censideration | - |

* 1. Web UI Automation Testing

|  |  |
| --- | --- |
| Test Objective | Depends on pre-scripted tests that run automatically, its function is to compare the expected results with the actual results |
| Technique | Installing software testing on the system/application that we build.  Writing “testing code/scripts” on software testing to test each feature in the system.  “Testing code/script” written in software testing is adjusted to the needs/desired output for each feature.  Running software testing to see whether the features in the system/application “pass the test” by software testing or not. |
| Completion Criteria : | After the automation is executed, it will issue an output in the form of a report, which tests are successful or fail. |
| Special  Considerations |  |

RESTFull API Types

1. Rest API Automation Testing

|  |  |
| --- | --- |
| Test Objective | verify response according to request and analysis |
| Technique | - Create object repository  - Create scenarios and test cases  - Execute test files  - Analyze the test results tested |
| Completion Criteria : | After the automatic test results are carried out, the results obtained will come out whether an error or success |
| Special  Considerations |  |

Mobile App Types

1. Mobile App Functionality Testing

|  |  |
| --- | --- |
| Test Object | 1. input form, can input data for processing  2. Select form, can generate searches according to the keywords entered  3. Cart, can add products to cart |
| Technique | 1. test the form by entering input  2. Ensure that the report results are in accordance with the input and data in the master.  3. test all buttons |
| Completion Criteria | 1. the output is as expected  2. the data entered on the input form can be entered into the database  3. Generate reports as expected |
| Special Censideration | - |

1. Mobile App User Interface

|  |  |
| --- | --- |
| Test Object | The purpose of testing is to ensure that all existing components can work properly. |
| Technique | 1. Login form:  Input: enter characters to fill in the login form such as password and email  Output: The login form can only accept users who have access rights.  2. Add to Cart:  Input: Click Button.  Output: can count the products according to the ones added using the button cart  3. Choose a category:  Input: Keyword  Output: issued according to choice |
| Completion Criteria | The appearance of the application is easy to use by the user |
| Special Censideration | - |

1. Mobile App Integration Testing

|  |  |
| --- | --- |
| Test Object | the combination of units or application components that interact in the software is tested |
| Technique | 1. Perform unit testing on every feature in the application  2. combine them in a test suite |
| Completion Criteria | Ensure all report results are in accordance with what has been expected |
| Special Censideration | - |

1. Mobile App Automation Testing

|  |  |
| --- | --- |
| Test Objective | Depends on pre-scripted tests that run automatically, its function is to compare the expected results with the actual results |
| Technique | Installing software testing on the system/application that we build.  Writing “testing code/scripts” on software testing to test each feature in the system.  “Testing code/script” written in software testing is adjusted to the needs/desired output for each feature.  Running software testing to see whether the features in the system/application “pass the test” by software testing or not. |
| Completion Criteria : | After the automation is executed, it will issue an output in the form of a report, which tests are successful or fail. |
| Special  Considerations |  |

1. Tools

|  |  |  |
| --- | --- | --- |
| Tool Type | Tools | Version |
| Automation Testing Tools (Web UI, Rest API, Mobile App) | Katalon Studio | 8.2.5 |
| Android Control Tools | Vysor | 4.1.77 |
| Test Plan (Web UI, Rest API, Mobile App) | Microsoft Word | 2013 |
| Test Case (Web UI, Rest API, Mobile App) | Microsoft Excel | 2013 |

1. Resource
2. Workers

|  |  |  |
| --- | --- | --- |
| Workers | Minimum Resources Recommended | Specific Responsibilities/Comments |
| Test Manager / Test Project Manager | 1 | 1. Overcome all activities in the project.  2. Knowledge of the program  3. Management of system flow |
| Test Designer | 1 | Conduct a survey on usage habits |
| Tester | 1 | 1. Make a test plan.  2. Make a solution for the error that occurs |
| Implementer | 1 | Implement and test the project in  develop  Task details :  1. Try the app according to the flow  which has been made.  2. Keep records of everything  events that occur during implementation |

1. System

|  |  |
| --- | --- |
| System Resources | |
| Resources | Name |
| Web UI | https://qa.alta.id/ |
| PC  Processor  RAM  Operation System | AMD A4-9120-e  4 GB  Windows 10 Education 64-bit |
| Software Document | Microsoft Word |

|  |  |
| --- | --- |
| System Resources | |
| Resources | Name |
| Rest API | https://be-qa.alta.id/api |
| PC  Processor  RAM  Operation System | AMD A4-9120-e  4 GB  Windows 10 Education 64-bit |
| Software Document | Microsoft Word |

|  |  |
| --- | --- |
| System Resources | |
| Resources | Name |
| Mobile App | alta-online-shop.apk |
| PC  Processor  RAM  Operation System | AMD A4-9120-e  4 GB  Windows 10 Education 64-bit |
| Software Document | Microsoft Word |

1. Project Milestone

In a project, milestones are time benchmarks in the form of work activities or can be said to be projected working time. With the milestones, workers can complete the work according to the specified duration or time.

|  |  |  |
| --- | --- | --- |
| Milestone Test | Star Date | End Date |
| Plan Test | 28/4/2022 |  |
| Design Test | 28/4/2022 |  |
| Implement Test | 10/5/2022 |  |
| Execute Test | 15/5/2022 |  |
| Evaluate Test | 20/5/2022 |  |

1. Deliverables

This alta-online-shop application is available in website and mobile versions. This application provides information about the products being sold, making it easier for users to buy products according to their needs.

1. Appendix A: Project Task

|  |  |
| --- | --- |
| 1. | Plan Test |
| 2 | Identify Requirements for Test |
| 3 | Design Test |
| 4 | Identify and Describe Test Cases |
| 5 | Create Schedule |
| 6 | Implement Test |
| 7 | Record or Program Test Scripts |
| 8 | Execute Test |
| 9 | Evaluate Execution of Test |
| 10 | Evaluate Testing |
| 11 | Report Test |
| 12 | Analyzing the results |
| 13 | Investigate Unexpected Results |