**Test Plan**

**1. Introduction**

The purpose of this document is to address the different standards that will apply to the integration and system testing of the Treasure cloud application. Throughout the testing process, I will be applying the test documentation specifications described in the IEEE Standard 829-198 for Software Test Documentation.

**2. Objective**

The objective of this Test Plan is to define the various Testing strategies and Testing tools for the complete Testing life cycle of this project.

**3. Scope**

As per the requirement Specifications, the main tasks are to test and validate the GUI and API integrations.

**3.1 Functions to be tested**

**3.1.1 Front end automation**

1. Sign up (Create an account)
2. Upload
3. Download
4. logout

**3.1.2 Backend Test script**

1. signup

2. login

3. recovery id

4. logout

**3.2 Functions not to be tested**

Only the above functionalities should be tested.

**4. References**

Treasure \_ QA Engineer Assignment.pdf document.

**5. Testing Process Overview**

**5.1 Test Process**

The test process to be followed by QA will be categorised in 2 ways:

* The process to be followed when sufficient time is available QA.
* The process to be followed when sufficient time is not available for QA.

**A) Process to be followed when sufficient time is available QA.**

Understanding Requirements:

* Requirement specifications will be sent by the client.
* Understanding of requirements will be carried out by QA
* Raised queries will be sent by QA to the client.
* Response to queries will be sent by the client.

Preparing Test Cases

QA will prepare test cases to cover requirements.

**Preparing Test Matrix:**

QA will be preparing a test matrix that should map test cases respective to requirements, to ensure coverage for requirements.

**Creating Test Data**

QA will prepare test data before testing.

**Executing Test cases**

The test cases will be executed by QA.

**Defect Logging And Reporting**

QA will log defects to the client via email. Reporting will be provided within the automation test.

**Retesting and regression**

This can be addressed at a later date due to the deadline.

**Delivery**

Test scripts and automation will be delivered to the client via the GitHub account of the QA.

**B) Process to be followed when sufficient time is not available for QA.**

Understanding requirement:

* Requirement specifications will be sent by the client.
* Understanding of requirements will be carried out by QA
* Raised queries will be sent by QA to the client.
* Response to queries will be sent by the client.

**Creating Test Data**

QA will prepare test data before testing.

**Executing Test cases**

QA will be doing ad-hoc testing based on the requirement and test scenarios.

**Defect Logging And Reporting**

QA will can log defects to the client via email. Reporting will be provided within the automation test.

**Retesting and regression**

This can be addressed later due to the deadline.

**Delivery**

Test scripts and automation will be delivered to the client via the GitHub account of the QA.

* 1. Bug life cycle:

All issues found while testing will be logged temporarily via email to the client.

The bug life cycle for this project is as follows:

Diagram, schematic

Description automatically generated

Bug Life Cycle

*[Image Credit:https:[//www.softwaretestingmaterial.com/bug-life-cycle/]*

1. **Test Strategy**

6.1 **Test Types**

Black box testing

This kind of testing focuses on the functional requirements of the software. It enables one to derive sets of input conditions that will fully exercise all functional requirements for a program.

7. **GUI Testing**

This will include automating the GUI part of the proposed system.

8. **API Integration Testing**

Scripts will be developed by the QA for the API backend of the system under test.

9. **Performance Testing**

This is out of scope for the project.

10. **Security Testing**

This is out of scope for this project.

11. **Automation Testing**

QA will be using Cypress as the testing tool to carry the automation.

1. **Tools**

Cypress

postman

**Test environment**

<https://app.tcloud.dev.anqlave.io/>

<https://app.tcloud.dev.anqlave.io/api/v1/swagger-ui/index.html?configUrl=/api/v1/v3/api-docs/swagger-config#/>

**Deliverable**

1. Test Plan

2. Test automation and postman script will be delivered on the QA GitHub account.

**Entry Criteria**

The test environment should be in place ready for testing.

QA should have read and played around the system under test to understand the requirements.

All test tools (cypress and postman) should be installed and ready for use.

**Suspension Criteria**

* Software or hardware problems.
* The system under test contains serious defects where there's no workaround.
* QA lacks resources to carry out the test.

**Resumption**

Once the above problems have been solved, the QA can carry out testing.

**Exit Criteria**

Once all requirement of the functional in testing scope is covered.

Once the deadline - 27th September 2021, has been reached.

Deliverables are ready

**Risk**

Domain and project knowledge

Understanding the requirements

Understanding how the backend works (backend requirement).

1. **Acronyms**

GUI: Graphical User Interface.

RTM: Requirement Traceability Matrix.