

QWALLITY APP

[*http://qwallity.herokuapp.com/*](http://qwallity.herokuapp.com/)

**TEST PLAN**

Release 1

*08/15/22 - 08/18/22*

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# Introduction

The purpose of this document is to communicate the testing approach that the QA team will use for the “QWALLITY APP - 1” release. This document will communicate internally the process used and the scope of the testing and will provide a clear understanding of the testing approach to all external teams.

# Test ITEM

***2.1 Project description***

Qwallity app is an application that aims to help students who apply to QWALLITY to specialize in Quality Assurance (QA).

It consists of the following sections: Register, Login, Account, My courses, Exercises (Calculator, Black box, White box), Courses (Fundamental and Advanced), About us, Home.

Sections have their own functionality and corresponding validations.

While passing the relevant course, the student will be able to access the application and perform practical tasks in the relevant section, thus developing professional skills.

**2.2 Items to be Tested / Not to be Tested**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item to Test** | **Description** | **Test Date** | **Estimation** |
| Check Registration functionality | User should register to the system with some validations | 08/16/2022 | Complex (5pt) |
| Check Login functionality | Page is for Login to the system | 08/16/2022 | Simple (1pt) |
| Check Courses adding functionality | User can add course with Fundamental and Advance course types | 08/16/2022 | Moderate (3pt) |
| Courses edit/delete functionality | User can edit or delete existing course | 08/17/2022 | Complex (5pt) |
| Check Exercises Calculator functionality | User can calculate numbers with addition, subtraction, multiplication and division operations | 08/17/2022 | Simple (1pt) |
| Check Exercises Black box functionality | User can check to the system with some validations | 08/17/2022 | Moderate (3pt) |
| Check Exercises White box functionality | User can edit Calculator’s operations or validations with code changing | 08/17/2022 | Simple (1pt) |
| Check My courses functionality | When user buys a course, it displays in this section and it is editable | 08/17/2022 | Simple (1pt) |

**2.3 Items Not be tested**

|  |  |
| --- | --- |
| **Item Not to test** | **Comments** |
| Home | This section can be tested with additional time |
| About Us | This section can be tested with additional time |
| Account | Need a clarification with a client about fields and they functionality |

***2.4 Test Approaches***

We follow Agile Methodology in this project.

Our Team will use the TestRail management tool to manage, track, and organize software testing efforts, as well as the Jira Software tool for making teams plan, assign, track, report, and manage work. Manual testing will be implemented with;

Experience based Techniques like

* Error Guessing
* Checklist

Black Box Techniques like

* Boundary Value Analysis
* Equivalence partitioning
* Decision Table Testing

We will apply types of testing belonging to the techniques mentioned above like UI Testing, Functional testing, Performance testing, Security testing, Ad-hoc testing.

***2.4.1 Entry Criteria***

* Requirements Document should be available (both functional and nonfunctional)
* Acceptance criteria defined.

***2.4.2 Exit Criteria***

* All tests planned are executed
* Defects logged and tracked to closure

Test results should meet requirements at least 90 % for testing to be considered successful and acceptable and go to release, otherwise,

* developing team have to do bug fixing
* QA team have to do re-testing.

***2.5 Test Deliverables***

|  |  |
| --- | --- |
| **Milestone/Project** | **Completion/Execution Dates** |
| Requirements Review/Estimation | 08/15/22 |
| Preparation of Test Cases | 08/16/22 |
| Review of Test Cases | 08/16/22 |
| Test case execution/Manual Testing | 08/17/22 |
| Test Cycle Closure | 08/17/22 |

***2.6 Staffing / Training Needs***

In order to perform Regression testing with Automated testing tools;

* testing team need to take appropriate training for leveling up, therefore, testing deadline must be extended
* we need to hire the experienced member to join the Testing team.

# RISK AND MITIGATION

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk** | **Probability** | **Impact** | **Priority = Probability\* Impact** | **Mitigation** |
| Testing some sections will be incomplete because Testing Team do not have Author access | 3 (High) | 3 (High) | 9 (High) | Ask the development team for their help getting Author access |
| Lack of required skill within the team | 3 (High) | 3 (High) | 9 (High) | Select the experienced member to join the Testing Team |
| Testing time may not be sufficient to complete it by the deadline | 2 (Medium) | 3 (High) | 6 (High) | Need to increase the testing time or limit the areas for testing to particularly important and functional areas |
| The testing team did not receive a proper Requirements document, so the finished application may not fully meet the customer's needs | 3 (High) | 3 (High) | 9 (High) | Ask Test Lead/Manager for full Requirement document |

# Test Environment and infrastructure

We will do the testing on Operating Systems Browsers

* Google Chrome 104.0.5112.99
* Microsoft Edge 104.0.1293.54
* Opera 88.0. 4412.40
* Windows 10 Pro 64-bit
* iOS 15.6
* Android 12

For web-based testing we use Lenovo IdeaPad L3 device and for mobile testing we use iPhone 13 Pro and Galaxy Note 20 Ultra devices.

# Roles and responsibilities

|  |  |
| --- | --- |
| **Role** | **Responsibility** |
| All the members | Analyze software requirement specification to become knowledgeable enough to understand how the Qwallity app was designed for the purpose of writing Test Plans/Cases |
| Test Lead/Manager | Tasked with the overall responsibility for the test effort's success, resource planning and management, resolution of issues that impede the test effort |
| Senior QA | Create the test specification, detailed summary of what scenarios will be tested, how they will be tested, how often they will be tested, and so on |
| Test administrator | Build up the test environment, software and hardware configuration that allows testing teams to run Test Cases |
| Junior QA 1 | Execute the Test Plan, run Test Cases, report defect by raising bugs in Jira, follow up on bugs previously submitted in Jira |
| Junior QA 2 | Making Test Summary report, report on successful manual test completion |

# 

# Test Schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestones** | **Deliverable** | **Effort (Person Hour)** | **Start Date** | **End Date** |
| Requirement Review/Estimation | Requirement Traceability Matrix (RTM) | 13 hours | 08/15/2022 | 08/15/2022 |
| Preparation of Test Cases | Test plan/strategy document, Effort estimation document | 10 hours | 08/15/2022 | 08/16/2022 |
| Review of Test Cases | Test Cases, Test Data | 3 hours | 08/15/2022 | 08/16/2022 |
| Test case execution/Manual Testing | Completed RTM with execution status, Test cases updated with results, Bug/Issue reports | 20 hours | 08/16/2022 | 08/17/2022 |
| Test Cycle Closure | Test Summary Report | 2 hours | 08/17/2022 | 08/17/2022 |