QWALLITY APP

Test Plan

**Release *<1>***

***<15.05.2024> - <16.05.2024>***

VERSION HISTORY

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **ID & Version #** | **Prepared**  **By** | **Revision**  **Date** | **Approved**  **By** | **Approval**  **Date** | **Reason** |
| unique id | *person name* | *< date>* | *person name* | *<date>* | release number |
| 1 | Armine Ghazaryan | 13.05.2024 | Gohar Khachatryan | 16.05.2024 | 01 |
|  |  |  |  |  |  |

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# Introduction

## Purpose of The Test Plan Document

The purpose of this document is to communicate the testing approach that the QA team will use for the < QWALLITY APP 01> release. This document is targeted to the following reader groups:

**The QA Team**- This document will communicate internally the process used and the scope of the testing.

**The Development/Management Teams**- This document will provide a clear understanding of the testing approach to all external teams.

# Test ITEM

## Project description

The test plan is for the QWALLITY web application. QWALLITY is an application that aims to help students specialize in the field of quality assurance (QA). In the relevant sections of the application, they can perform practical tasks and develop professional skills.

It is the platform for courses, where the admin user can add/edit/delete the course, and the non-admin user can buy the courses. It consists of the following sections: Home, About us, Courses (Fundamental and Advanced), Exercises (Calculator, Black box, White box, Upload), Register, Login, My courses, Profile Page, User \_ Action, Weather.

## Items to be Tested / Not to be Tested

[In scope features. This could be newly added or updated features. Indirect features that has technical or functional dependency on newly added or updated features. Out of scope feature. Excluded product features from current Test Plan.]

|  |  |  |  |
| --- | --- | --- | --- |
| **Item to Test** | **Test Description** | **Test Date** | **Estimation** |
| #1 Registration functionality | User should register to the system with some valid data | <13/05/2024> | 5pt |
| #2 Login functionality | User must successfully log into the system | <13/05/2024> | 1pt |
| #3 Check Exercises Calculator functionality | User can calculate numbers with addition, subtraction, multiplication and division operations | <13/05/2024> | 3pt |
| #4 Check Exercises Black box functionality | User can check to the system with some validations | <13/05/2024> | 1pt |
| #5 Check Add Course functionality | Admin User can add course with Fundamental and Advance course types | <14/05/2024> | 3pt |
| #6 Check My courses functionality | When user buys a course, it displays in this section | <14/05/2024> | 1pt |
| #7 Check Courses edit/delete functionality | Admin User can edit or delete existing course | <14/05/2024> | 5pt |
| #8 Check Courses field (fundamental/advanced) buy for non admin user | User can buy existing course | <15/05/2024> | 1pt |
| #9 Check User Action functionality for non-admin user | The user can add amount to his account balance. | <15/05/2024> | 3pt |

## Items to Not be tested

|  |  |
| --- | --- |
| **Item Not to Test** | **Comment** |
| Weather | It is integrated API |
| Home Page | This section can be tested with additional time |
| About Us | This section can be tested with additional time |

## Test Approach(s)

This section describes the methodology used by the QA team

**Manual Testing Approach** – Using black box testing technique like

* Boundary Value Analysis
* Equivalence partitioning
* Decision Table Testing

We follow Agile Methodology in this project.

**Scope of GUI Testing** – Home page, About Us page

**Regular Bug Triages** – QA, Dev and BA are responsible for ensure that bugs are being prioritized on a regular basis.

**Testing Execution and Bug Tracking-** we will use Zephir scale and Jira to keep track of testing progress.

**Bug Severity and Priority Setting** – In bug reports these defined clearly in order to minimize ambiguity and ensure everyone has a common understanding.

**Description of the types of testing done and the testing period for this release** - Functionality Testing, API testing, Performance testing, Security testing

## Test Deliverables

This QA testing schedule is largely based on the development and technical publications schedules. All dates are subject to change if the development or documentation milestones are moved. Here are the key dates and testing periods.

| Milestone/Project | Completion/Execution Dates |
| --- | --- |
| Requirements Review/Estimation | <13/05/2024> |
| *Test Case preparation* | <14/05/2024> |
| *Test Case review* | <15/05/2024> |
| Manual Testing | <16/05/2024> |
| Automation script preparation |  |
| Automation code review |  |
| Regression testing(manual+automation) | <17/05/2024> |

## 

## Staffing / Training Needs

Staff: BA, PM, Dev team, QA team

API testing training, DB testing skills

# Risk and mitigation

*Test Risks / Issues*

Now let's cover all the areas that can hinder the testing progress. Basically, this section is a list of outstanding items for QA.The lack of certain skills of QA, those are required for do testing

* Due to the lack of security testing, the application can be hacked. The solution will be training or hiring a qualified person for the testing team.
* Delay from the previously scheduled time

• Performance risk

• The poor documentation or constantly changing requirement

• A lack communication between project manager \_client

ISSUES

• Organization of necessary trainings or courses

• Monitor and control the timely completion of tasks.

• Working carefully and thoroughly on code and testing

• To think that everyone's goal is one, to give a quality product and there is no competition.

• Verify all details related to requirements

• Conduct frequent manager-client contact

• Consider all possible risks

• First check that the environment is available.

# Test Environment and infrastructure

## Required Infrastructure

We will do the testing on Operating Systems Windows 10 Pro

## <https://qwallity-dev.onrender.com/>

## <https://qwallity-prod.onrender.com/>

# Roles and responsibilities

## Roles and assigned responsibilities

[Describe various roles and responsibilities given to them. E.g. Junior Tester, Senior Tester, Project Manager etc.]

|  |  |
| --- | --- |
| **Role** | **Responsibility** |
| Junior QA Engineer | Design test cases,review others test cases,  Executing test cases ,  Analyzing test case results,  Prepare bug reports. |
| Senior QA  Engineer | 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 |
| QA Lead | Collect the requirements and documentation,  Make a test plan,  Monitoring and control the testing activities, making sure that the works are performed according to the plan,  Reporting about the progress and found bugs. |
| Project Manager | Manage testing process,  Provide all the needed resources for the testing activities. |

## Test Team Leader/Manager

The QA Team Leader/Manager is responsible for the following:

**Team Management - Planning Tasks**

* Define detailed Test schedule for team.
* Provide initial test planning for the QA team.
* Define QA Team roles and responsibilities.
* Estimate effort for the various deliverables.
* Identify training requirements.
* Identify support requirements.
* Interview candidates to fulfill the various Software Tester roles.

**Team Management - Daily Tasks**

* Define QA tasks to be performed.
* Resolve management issues involving QA and the development team.
* Track ongoing QA preparation and execution tasks in a schedule tool.
* Manage the QA Team (motivation, assessment, and orientation of new members).

**Team Management - Weekly Tasks**

* Assign tasks to various team members.
* Attend applicable management meetings for the purpose of providing QA's approval of all change requests (when applicable).
* Chairs the team status meetings.

**Team Management – Ad hoc Tasks**

* Manage testing of software fixes during the Beta, Final and Regression phases of Testing.
* Identify potential testing roadblocks.
* Write performance reviews of testers.

**Team Management - Deliverables**

* Ensure quality, timeliness of the various testing deliverables as identified in this Strategy document.
* Provide comments as the internal testing reviewers for the development deliverables (Functional Specs, design docs, etc.).

## Software Tester

The software tester reports to the QA Team Leader/Manager and is responsible for writing and executing manual and automated tests. The Software Tester's responsibilities include:

**Test Plan/Matrices and Scripts Preparation**

* Research relevant documentation to become knowledgeable enough to understand how the application was designed for the purpose of writing Test Plans/Matrices and Scripts.
* Write test plans that can be easily reproduced.
* Write test scripts that are easy to maintain.
* Ensure test plans and scripts are Traceable to applicable requirements and functional design documents (Functional Specs, help text, Design Documents, etc.).
* Write test cases (required set-up, procedures and information).
* Attend testing overviews (if available).

**Independent Verification of Test Specs/Matrices and Scripts**

* Provide Test Plans/Matrices and Scripts for review by peers, development and marketing representatives.
* Incorporate review comments into Test Plans/Matrices and Scripts.
* Conduct peer reviews Test Plans/Matrices and Scripts.

**Test Execution**

* Execute the Test Plans and Matrices.
* Run the automated tests.
* Report problems by raising bugs in Siebel.
* Follow up on bugs previously submitted in Siebel.

**Analyze Results**

* Report on successful test spec/matrix completion.
* Report on successful automated test completion.
* Verify successful resolution of bug fixes by verifying the contents of the bug reports and rerunning the test where applicable.
* Identify issues that should be documented in the Readme/Release Notes.

# Test Schedule

## Milestones and schedule

[Describe the describe key milestones, deliverables, efforts, start date and end date]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Milestone** | **Deliverable** | **Effort(Person Hour)** | **Start Date** | **End Date** |
|  |  |  |  |  |
|  |  |  |  |  |
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