Software Engineering Group Project

Test Specification

|  |  |
| --- | --- |
| Author: | Rafał Tiffert [rat24] |
| Config Ref: | SE.GP02.TESTSPEC |
| Date: | 8th March 2022 |
| Version: | 1.1 |
| Status: | Release |

Department of Computer Science

Aberystwyth University

Aberystwyth

Ceredigion

SY23 3DB

Copyright © Aberystwyth University 2022

CONTENTS

CONTENTS 2

1. Introduction 3

1.1 Purpose of this Document 3

1.2 Scope 3

1.3 Objectives 3

2. Test Table 4

2.1 Functional Requirements 4

2.2 External Interface Requirements 12

2.3 Security Requirements 13

2.4 Performance Requirement 16

REFERENCES 17

DOCUMENT HISTORY 17

# Introduction

## Purpose of this Document

The purpose of this document is to test all of the project functionalities in order to find and prevent errors.

## Scope

This document describes all of the essential test for the project functional requirements, external interface requirements, performance requirements and security requirements. These requirements are based off the **WebQuiz Requirements Specification [1].** These tests were also created with the **UI Specification Document [2]** in mind.

## Objectives

Objectives of this particular document are:

* List all of the essential tests
* Find and prevent all errors

# Test Table

## Functional Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | *Test Content* | Input | Output | Pass Criteria |
| SE-F-001 | FR1 | *Check if the title to the new quiz is given* | Hit ‘Create new quiz’, enter ‘new quiz title’, enter ‘introductory text’ | New quiz has been created | Data is stored correctly |
| SE-F-002 | FR1 | *Check if the title to the new quiz is given* | Hit ‘Create new quiz’, enter ‘new quiz title’ | New quiz has been created | Data is stored correctly |
| SE-F-003 | FR1 | *Check if the title to the new quiz is given* | Hit ‘Create new quiz’, enter ‘ ‘ | Title can’t be NULL | System displays "Title is required" error message. |
| SE-F-004 | FR2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘question text’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘indication\_1’, ‘mark for answer correct answer’ | New question has been added | Data is stored correctly |
| SE-F-005 | FR2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘question text’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘indication\_1, indication\_2’, ‘mark for answer correct answers’ | New question has been added | Data is stored correctly |
| SE-F-006 | FR2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘indication\_1, indication\_2’, ‘mark for answer correct answers’ | Question text can’t be NULL | System displays "Question text is required" error message. |
| SE-F-007 | FR2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘’, ‘ ’, ‘indication\_1, indication\_2’, ‘mark for answer correct answers’ | Question answer can’t be NULL | System displays " Question must have at least one answer " error message. |
| SE-F-008 | FR2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘question text’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘’, ‘mark for answer correct answers’ | Question indication can’t be NULL | System displays "The correct answer indication is required " error message. |
| SE-F-009 | F2.1 | *Check if the new question has the question text, two or more possible answers, an indication of which answers are correct, a mark for each (by default zero)* | Hit ‘Create new question’, enter ‘question text’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘indication\_1, indication\_2’, ‘ ’ | Mark for the correct answer can’t be 0 | System displays " Mark for the correct answer can’t be 0" error message. |
| SE-F-010 | F2.2 | *Check if the question format is correct (text or formatted code)* | Enter question text ‘Lorem ipsum‘ | New question has been created | Data is stored correctly. |
| SE-F-011 | F2.2 | *Check if the question format is correct (text or formatted code)* | Enter question text ‘{code}‘ | New question has been created | Data is stored correctly. |
| SE-F-012 | F2.3 | *Check if the answer format is correct (text or formatted code)* | Enter question text ‘Lorem ipsum‘ | Answer has been created | Data is stored correctly. |
| SE-F-013 | F2.3 | *Check if the answer format is correct (text or formatted code)* | Enter question text ‘{code}‘ | Answer has been created | Data is stored correctly. |
| SE-F-014 | F2.4 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.jpg) | Picture has been added | Data is stored correctly. |
| SE-F-015 | F2.4 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.png) | Only JPG extension is allowed | System displays "JPG picture format is required" error message. |
| SE-F-016 | F2.4 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.gif) | Only JPG extension is allowed | System displays "JPG picture format is required" error message. |
| SE-F-017 | F2.5 | *Check if the picture size is correct (100x100px)* | Upload question picture 100x100px | Picture has been added | Data is stored correctly. |
| SE-F-018 | F2.5 | *Check if the picture size is correct (100x100px)* | Upload question picture 100x250px | Picture size must be 100x100px | System displays "Wrong picture size" error message. |
| SE-F-019 | F3.1 | *Check if the new question has the question text, an indication of whether the answer should be true or false and a mark for each (by default zero)* | Hit ‘Create new true or false question’, enter ‘question text’, ‘true/false’, ‘mark for the question’ | Question has been added | Data is stored correctly. |
| SE-F-020 | F3.1 | *Check if the new question has the question text, an indication of whether the answer should be true or false and a mark for each (by default zero)* | Hit ‘Create new true or false question’, ‘’, ‘true/false’, ‘mark for the question’ | Question can’t be NULL | System displays "Question text is required" error message. |
| SE-F-021 | F3.1 | *Check if the new question has the question text, an indication of whether the answer should be true or false and a mark for each (by default zero)* | Hit ‘Create new true or false question’, enter ‘question text’, ‘’, ‘mark for the question’ | Question indication can’t be NULL | System displays "Question need to be declared whether is true or false" error message. |
| SE-F-022 | F3.1 | *Check if the new question has the question text, an indication of whether the answer should be true or false and a mark for each (by default zero)* | Hit ‘Create new true or false question’, enter ‘question text’, ‘true/false’, ‘’ | Question has been added | Data is stored correctly. |
| SE-F-023 | F3.2 | *Check if the question format is correct (text or formatted code)* | Enter question text ‘Lorem ipsum‘ | New question has been created | Data is stored correctly. |
| SE-F-024 | F3.2 | *Check if the question format is correct (text or formatted code)* | Enter question text ‘{code}‘ | New question has been created | Data is stored correctly. |
| SE-F-025 | F3.3 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.jpg) | Picture has been added | Data is stored correctly. |
| SE-F-026 | F3.3 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.png) | Only JPG extension is allowed | System displays "JPG picture format is required" error message. |
| SE-F-027 | F3.3 | *Check if the picture format is correct (JPG)* | Upload question picture (picture.gif) | Only JPG extension is allowed | System displays "JPG picture format is required" error message. |
| SE-F-028 | F3.4 | *Check if the picture size is correct (100x100px)* | Upload question picture 100x100px | Picture has been added | Data is stored correctly. |
| SE-F-029 | F3.4 | *Check if the picture size is correct (100x100px)* | Upload question picture 100x250px | Picture size must be 100x100px | System displays "Wrong picture size" error message. |
| SE-F-030 | F4.1 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to all questions’, enter ‘45’ | Time has been changed | New time for a question is set. |
| SE-F-031 | F4.2 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to particular questions’, select question, enter ‘45’ | Time has been changed | New time for a question is set |
| SE-F-031 | F4.3 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to particular questions’, select question, enter ‘0’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-032 | F4.4 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to particular questions’, select question, enter ‘-10’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-033 | F4.5 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to particular questions’, select question, enter ‘-0,1’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-034 | F4.6 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to all questions’, enter ‘0’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-035 | F4.7 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to all questions’, enter ‘-10’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-036 | F4.8 | *Check if the input value is correct (positive number)* | Hit ‘edit time’, select ‘to all questions’, enter ‘5,20’ | Input has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-037 | F5.1 | *Check if user is the quiz maintainer* | (Quiz Maintainer) Hit edit quiz, select question, hit delete | Question has been deleted | Question has been deleted from the quiz. |
| SE-F-038 | F5.2 | *Check if user is the quiz maintainer* | (Quiz Master)  Will not see this option | - | - |
| SE-F-039 | F5.3 | *Check if user is the quiz maintainer* | (Quiz Participant)  Will not see this option | - | - |
| SE-F-040 | F6.1 | *Check if user is the quiz maintainer* | (Quiz Maintainer) Hit edit quiz, select question, hit edit | Question has been changed | Question has been updated. |
| SE-F-041 | F6.2 | *Check if user is the quiz maintainer* | (Quiz Participant)  Will not see this option | - | - |
| SE-F-042 | F6.3 | *Check if user is the quiz maintainer* | (Quiz Master)  Will not see this option | - | - |
| SE-F-043 | F7.1 | *After creating the quiz must appear on the quiz list* | Create new quiz, hit save, as a Quiz Master list all quizzes | New quiz appeared on the list | Data stored correctly |
| SE-F-044 | F7.2 | *After updating the quiz when you open the details you should see the updated data* | Edit existing quiz, change question or/and answers, hit save | Quiz has been updated | Quiz has been updated |
| SE-F-045 | F7.3 | *After deleting the quiz must disappeared from the quiz list* | Select quiz, hit delete, hit ‘yes’ | Quiz has been deleted | Question has been deleted from the quiz. |
| SE-F-046 | F8.1 | *Check if user is the quiz maintainer* | (Quiz Maintainer) Hit list all quizzes | Quizzes has been listed | All existing quizzes has been listed |
| SE-F-047 | F8.2 | *Check if user is the quiz maintainer* | (Quiz Participant)  Will not see this option | - | - |
| SE-F-048 | F8.3 | *Check if user is the quiz maintainer* | (Quiz Master)  Will not see this option | - | - |
| SE-F-049 | F8.4 | *Check if all quizzes can be ordered by date ascending* | Hit list all quizzes, select order by date ascending | Quizzes has been listed in ascending date order | All existing quizzes has been listed in ascending data order |
| SE-F-047 | F8.5 | *Check if all quizzes can be ordered by date descending* | Hit list all quizzes, select order by date descending | Quizzes has been listed in descending date order | All existing quizzes has been listed in descending data order |
| SE-F-048 | F8.6 | *Check if all quizzes can be ordered alphabetically* | Hit list all quizzes, select alphabetical order | Quizzes has been listed in alphabetical order | All existing quizzes has been listed in alphabetical order |
| SE-F-049 | F9.1 | *Check if by clicking the link the quiz is displayed in an un-started state* | Quiz Master click the link provided by the Quiz Maintainer | Quiz lobby is displayed | Quiz is displayed in an un-started state |
| SE-F-050 | F10.1 | *Check if the Quiz Master can generate a session web link* | Quiz Master click generate session web link button | Session web link has been generated | Valid session link has been generated |
| SE-F-051 | F10.2 | *Check if the session web link provides access for quiz participants* | Quiz Master sends a session web link to quiz participants. Quiz participants click the link. | Quiz participants are redirected to quiz lobby | Quiz lobby is displayed on participant’ screens |
| SE-F-052 | F11.1 | *Check if the Quiz Master is able to view a Shared Screen* | While quiz is running the Quiz Master click ‘Shared Screen’ button | Shared screen is displayed | Quiz participants are able to see shared screen |
| SE-F-053 | F11.2 | *Check if the Quiz Master is not allowed to answer questions* | The Quiz Master in shared screen mode click answer ‘a’. | Nothing happened – button is not clickable | Quiz Master can’t do any action |
| SE-F-054 | F11.2 | *Check if the Quiz Master is not allowed to answer questions* | The Quiz Master in shared screen mode click answer FALSE. | Nothing happened – button is not clickable | Quiz Master can’t do any action |
| SE-F-055 | F12.1 | *Check if quizzes are not timed by default* | The Quiz Master start the quiz without making any changes in quiz settings. | The quiz is running without question time limit. | Question timer is disabled |
| SE-F-056 | F12.2 | *Check if Quiz Master is able to switch on quiz timing* | The Quiz Master in un-started state click the quiz settings and switch timing on with default time. | The quiz is running with a 30 second question time limit. | Question timer is ON, set up for 30 seconds |
| SE-F-057 | F12.3 | *Check if Quiz Master is able to switch on quiz timing* | The Quiz Master in un-started state click the quiz settings and switch timing on and set 20 seconds time limit. | The quiz is running with a 20 second question time limit. | Question timer is ON, set up for 20 seconds |
| SE-F-058 | F12.4 | *Check if Quiz Master is able to switch on quiz timing* | The Quiz Master in un-started state click the quiz settings and switch timing on and set 4 seconds time limit. | Time has to be in range from 5 to 120 | System displays "enter value in range 5-120" error message. |
| SE-F-059 | F12.5 | *Check if quiz move to the next question after the time has elapsed* | The Quiz Master in un-started state click the quiz settings and switch timing on with default time. Quiz Master starts a quiz, after 30 seconds automatically moves to the next question. | Quiz has moved to the next question. | Next question has been displayed |
| SE-F-060 | F12.6 | *Check if quiz move to the next question after the time has elapsed* | The Quiz Master in un-started state click the quiz settings and switch timing on with default time. Quiz Master starts a quiz, after 20 seconds automatically moves to the next question. | Quiz has moved to the next question. | Next question has been displayed |
| SE-F-061 | F13.1 | *Check if the Quiz Master can start a quiz* | Quiz Master in un-started state click ‘start quiz button’ | Quiz has been started | Quiz started |
| SE-F-062 | F14.1 | *Check if the quiz Master can step trough questions manually (only forward)* | While quiz is running, Quiz Master click ‘next question’ button | Quiz has moved to the next question | Next question is displayed |
| SE-F-063 | F14.2 | *Check if the quiz Master can step trough questions manually (only forward)* | While quiz is running, Quiz Master tried to go back to the previous question – there is no option for that | Quiz has stayed on the current question | Moving through question is possible only forward |
| SE-F-064 | F15.1 | *Check if the Quiz Master may stop the quiz prematurely and that results are shown* | After Quiz Participants answered for the first question Quiz Master click ‘stop and show results’ button | The quiz has been stopped and the result are showed | Results are displayed in the correct format |
| SE-F-065 | F15.2 | *Check if the Quiz Master may stop the quiz prematurely and that results are shown* | After Quiz Participants answered for the third question Quiz Master click ‘stop and show results’ button | The quiz has been stopped and the result are showed | Results are displayed in the correct format |
| SE-F-066 | F16.1 | *Check if results are displayed on each of Participant screen* | After Quiz Master has stopped the quiz prematurely | Result are displayed on each of Quiz Participant’s screen | Each Quiz Participant is able to see the results on their own device |
| SE-F-067 | F16.2 | *Check if the result are calculated correctly and the M value is the total possible for the questions presented* | After Quiz Master has stopped the quiz prematurely on the first question and result are displayed | Result are displayed on each of Quiz Participant’s screen | Results are displayed, calculated properly and showing x out of 1 correct answers. 1 is M value |
| SE-F-068 | F16.3 | *Check if the result are calculated correctly and the M value is the total possible for the questions presented* | After Quiz Master has stopped the quiz prematurely on the second question and result are displayed | Result are displayed on each of Quiz Participant’s screen | Results are displayed, calculated properly and showing x out of 2 correct answers. 2 is M value |
| SE-F-069 | F16.4 | *Check if the result are calculated correctly and the M value is the total possible for the questions presented* | After Quiz Master has stopped the quiz prematurely on the fifth question and result are displayed | Result are displayed on each of Quiz Participant’s screen | Results are displayed, calculated properly and showing x out of 5 correct answers. 5 is M value |
| SE-F-070 | F17.1 | *Check if the quiz has not started, the quiz participant will see the quiz title and introductory text and a status message saying the quiz has not started* | Quiz Participants joined the quiz lobby by clicking the link provided by Quiz Master | In Quiz lobby is displayed: quiz title, introductory text, status message. | Required information are displayed |
| SE-F-071 | F17.2 | *Check if the quiz has started the Quiz Participant will see this status message change to indicated that the quiz has started* | Quiz Master click ‘start’ button | The indicated message has changed to ‘quiz has started’ | The indicated message has changed |
| SE-F-072 | F17.3 | *Check if on the question screen is displayed: current question number, total number of questions, current question, possible answers, submit button* | Quiz Master click ‘start’ button. First question is displayed | On each Quiz Participant’s screen is displayed: 1/M – question, ‘Is Aberystwyth in Wales?’, True and False buttons, submit button. | Required information are displayed |
| SE-F-073 | FR18.1 | *Check if the quiz Participant is able to split the question-and-answer parts of the screen* | While quiz is running the Quiz Participant click ‘only answers’ button | Only answered are displayed on the screen | Proper data displayed |
| SE-F-074 | FR19.1 | *Check if the quiz Maintainer is able to download a quiz to a text file* | (Quiz Maintainer)  Hit list all quizzes, select quiz and click download | Quiz has been downloaded | Data stored correctly |
| SE-F-075 | FR19.2 | *Check if the quiz Maintainer is able to download a quiz to a text file* | (Quiz Master)  Will not see this option | - | - |
| SE-F-076 | FR19.3 | *Check if the quiz Maintainer is able to download a quiz to a text file* | (Quiz Participant)  Will not see this option | - | - |
| SE-F-077 | FR19.4 | *Check if web link is included* | (Quiz Maintainer)  Hit list all quizzes, select quiz and click download | Quiz has been downloaded | Web link is included |
| SE-F-078 | F20.1 | *Check if after importing the text file new quiz has been created* | (Quiz Maintainer)  Hit list all quizzes, click import quiz, choose ‘quiz 1’ file and submit | Quiz has been imported | Data stored correctly |
| SE-F-079 | F20.2 | *Check if the unique web link included in text file corresponds to an existing quiz, then the existing quiz is replaced* | (Quiz Maintainer)  Hit list all quizzes, click import quiz, choose ‘quiz 1’ file and submit | Quiz has been replaced | Web link included |

## External Interface Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | Test Content | Input | Output | Pass Criteria |
| SE-E-001 | EIR1.1 | The page is loaded in less then 5 seconds so google robots will be able to index this site. | Open the page | Page is displayed | Page was loaded in less then 5 seconds |
| SE-E-002 | EIR2.1 | Website is responsive – displayed well on PC, laptop, tablet and smartphone | Open the page on Personal Computer | Page is displayed | Page is displayed as planned, everything is visible and structure is correct |
| SE-E-003 | EIR2.2 | Website is responsive – displayed well on PC, laptop, tablet and smartphone | Open the page on laptop | Page is displayed | Page is displayed as planned, everything is visible and structure is correct |
| SE-E-004 | EIR2.3 | Website is responsive – displayed well on PC, laptop, tablet and smartphone | Open the page on tablet | Page is displayed | Page is displayed as planned, everything is visible and structure is correct |
| SE-E-005 | EIR2.4 | Website is responsive – displayed well on PC, laptop, tablet and smartphone | Open the page on smartphone | Page is displayed | Page is displayed as planned, everything is visible and structure is correct |

## Security Requirements

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | Test Content | Input | Output | Pass Criteria |
| SE-E-001 | SR1.1 | (Registration): Unique login is provided | Click Login -> Register, enter login ‘user\_1’, enter password ‘Qwertyui’,  Repeat password ‘Qwertyui’, hit ‘Create’ | Your account has been created | Username is unique |
| SE-E-002 | SR1.2 | (Registration): Unique login is provided | Click Login -> Register, enter login ‘user\_1’, enter password ‘Qwertyui’,  Repeat password ‘Qwertyui’, hit ‘Create’ | Account with this username already exist | System displays " account with this username already exist " error message. |
| SE-E-003 | SR1.3 | (Registration): the password meets the security requirements (min 8 characters, one capital letter) | Click Login -> Register, enter login ‘user\_2’, enter password ‘Qwertyui’,  Repeat password ‘Qwertyui’, hit ‘Create’ | Your account has been created | Password meets security requirements |
| SE-E-004 | SR1.4 | (Registration): the password meets the security requirements (min 8 characters, one capital letter) | Click Login -> Register, enter login ‘user\_2’, enter password ‘qwertyui’,  Repeat password ‘qwertyui’, hit ‘Create’ | Password must be at least 8 characters long and contain one capital letter | System displays " password must be at least 8 characters long and contain one capital letter " error message. |
| SE-E-005 | SR1.5 | (Registration): the password meets the security requirements (min 8 characters, one capital letter) | Click Login -> Register, enter login ‘user\_2’, enter password ‘Qwerty’,  Repeat password ‘Qwerty’, hit ‘Create’ | Password must be at least 8 characters long and contain one capital letter | System displays " password must be at least 8 characters long and contain one capital letter " error message. |
| SE-E-006 | SR1.6 | (Registration): Password is provided twice | Click Login -> Register, enter login ‘user\_3’, enter password ‘Qwertyui’,  Repeat password ‘Qwertyui’, hit ‘Create’ | Your account has been created | Password meets security requirements |
| SE-E-007 | SR1.7 | (Registration): Password is provided twice | Click Login -> Register, enter login ‘user\_3’, enter password ‘Qwertyui’, hit ‘Create’ | Repeat your password | System displays "password must be provided twice" error message. |
| SE-E-008 | SR1.8 | (Registration): Provided password are the same | Click Login -> Register, enter login ‘user\_4’, enter password ‘Qwertyui’,  Repeat password ‘Qwertyui’, hit ‘Create’ | Your account has been created | Password meets security requirements |
| SE-E-009 | SR1.9 | (Registration): Provided password are the same | Click Login -> Register, enter login ‘user\_4’, enter password ‘Qwertyui’,  Repeat password ‘Qwer’, hit ‘Create’ | Passwords don’t match | System displays "passwords don’t match, please try again" error message. |
| SE-E-010 | SR1.10 | (Login): User provided login | Click Login, enter username ‘user\_1’, enter password ‘Qwertyui’, hit login | Welcome user\_1 | Successfully logged in |
| SE-E-011 | SR1.11 | (Login): User provided login | Click Login, enter username ‘’, enter password ‘Qwertyui’, hit login | Enter your username | System displays "Username is required" error message. |
| SE-E-012 | SR1.12 | (Login): User provided password | Click Login, enter username ‘user\_1’, enter password ‘Qwertyui’, hit login | Welcome user\_1 | Successfully logged in |
| SE-E-013 | SR1.13 | (Login): User provided password | Click Login, enter username ‘user\_1’, enter password ‘’, hit login | Enter your password | System displays "password is required" error message. |
| SE-E-0014 | SR1.14 | (Login): User’s login and password match with records in the DB | Click Login, enter username ‘user\_1’, enter password ‘Qwertyui’, hit login | Welcome user\_1 | Successfully logged in |
| SE-E-015 | SR1.15 | (Login): User’s login and password match with records in the DB | Click Login, enter username ‘user\_2’, enter password ‘Qwertyui’, hit login | Invalid username or password | System displays " Invalid username or password " error message. |
| SE-E-016 | SR1.16 | (Login): User’s login and password match with records in the DB | Click Login, enter username ‘user\_1’, enter password ‘Qwe’, hit login | Invalid username or password | System displays " Invalid username or password " error message. |

## Performance Requirement

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Test Ref | Req being tested | Test Content | Input | Output | Pass Criteria |
| SP-E-001 | PR1.1 | Any user input should be appropriately reflected on the screen within one second, subject to appropriate network performance. | Hit ‘Create new question’, enter ‘question text’, ‘question answer 1’, ‘question answer 2’, ‘question answer 3’, ‘indication\_1’, ‘mark for answer correct answer’ | Everything is filled by the user | User input was visible for the user within one second |
| SP-E-002 | PR2.1 | All software produced should run correctly in the latest version of standard Web browsers (Edge, Firefox, Safari, Chrome) | Open the quiz page in Firefox | Main page | Everything is loaded properly |
| SP-E-003 | PR2.2 | All software produced should run correctly in the latest version of standard Web browsers (Edge, Firefox, Safari, Chrome) | Open the quiz page in Edge | Main page | Everything is loaded properly |
| SP-E-004 | PR2.3 | All software produced should run correctly in the latest version of standard Web browsers (Edge, Firefox, Safari, Chrome) | Open the quiz page in Safari | Main page | Everything is loaded properly |
| SP-E-005 | PR2.4 | All software produced should run correctly in the latest version of standard Web browsers (Edge, Firefox, Safari, Chrome) | Open the quiz page in Chrome | Main page | Everything is loaded properly |

REFERENCES

[1] QA Document Requirements Specification for WebQuiz

[2] QA Document SE.GP02.UISPEC – User Interface Specification

DOCUMENT HISTORY

| *Version* | *Issue No.* | *Date* | *Changes made to document* | *Changed by* |
| --- | --- | --- | --- | --- |
| 1.0 | N/A | 08/03/22 | N/A - original version | Rat24 |
| 1.1 | #7 | 28/03/2022 | Use 2022 for the copyright, Fixed document header, fixed references | Olh20 |