Software Engineering Group Project

User Interface Specification

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Contents

[1. Introduction 3](#_Toc96370056)

[1.1 Purpose of this Document 3](#_Toc96370057)

[1.2 Scope 3](#_Toc96370058)

[1.3 Objectives 3](#_Toc96370059)

[2. Typical users 3](#_Toc96370060)

[2.1 Quiz Maintainer 3](#_Toc96370061)

[2.2 Quiz Master 3](#_Toc96370062)

[2.3 Quiz Participant 3](#_Toc96370063)

[3. Use Cases 3](#_Toc96370064)

[3.1 Quiz Maintainer 3](#_Toc96370065)

[3.2 Quiz Master 4](#_Toc96370066)

[3.3 Quiz Participant 4](#_Toc96370067)

[4. Error Conditions 4](#_Toc96370068)

[REFERENCES 4](#_Toc96370069)

[DOCUMENT HISTORY 5](#_Toc96370070)

# Introduction

## Purpose of this Document

The purpose of this document is to define and document the use cases for the Web Quiz project.

## Scope

This document describes the Typical users as well as the use cases of the Quiz maintainer, Quiz master and Quiz Participant, as well as the error conditions.

## Objectives

The objective of this document is to clarify that each user is handled appropriately as well as recognise any errors that may occur from each user’s perspective.

# Typical users

## Quiz Maintainer

The quiz maintainer wants to create Quizzes for their Computer Science introduction to programming class based on the knowledge they have taught in their lectures. They create quizzes that have questions that vary from Multiple choice to True or False that their students can answer when they send the link out publicly. They want to have the ability to create, edit and update, delete, import, and export quizzes.

## Quiz Master

The quiz master has access to quizzes that they want to be able to send out links to as many people as they’d like to give them access to the quiz before starting it. They also want to be able to turn on or off timing and step through each question if the timer is off. Finally, if the quiz needed to be cut short, they should be able to stop the quiz even if all the questions haven’t been answered.

## Quiz Participant

The quiz participant needs to be able to access a link to a quiz that is started by the quiz master and should be able to answer each question from a shared screen. Once the quiz is complete, the participant should receive a mark indicating how well they did in the quiz.

# Diagram Description automatically generatedUse Cases

Figure : Use case diagram

## Quiz Maintainer

The quiz maintainer should be able to register with a valid email and a password that is longer than 8 characters. Then be able to log in with their new account that they just registered or registered before and be taken to a logged in view where they have access to a Start Quiz, Quizzes, and Create Quiz buttons in the navigation bar. Using the create quiz link they can title the quiz and give it a description as well as indicate how long they want each question to be. They can then pick between Multiple choice and True or False questions to make. They can enter a question and choose how many marks the question should award if it is answered correctly. As well as indicate the correct answer, for Multiple choice they can write 4 possible answers and indicate which is correct whereas with True or False they can only indicate whether the answer is True or if it is False. The quiz maintainer can choose to include an image that will display when the quiz starts. Then if they want, they can choose to change the how much time is allowed for that question. Once the questions are made the quiz maintainer can save the quiz but first, they can preview how the quiz will look when it is started by a quiz master. In this menu they can delete, edit or add more questions if they wish. Once the quiz has been saved, they can view it in the Quiz page where is where they can share the quiz to others who might want to use it with their own class. They can also import and export quizzes as well as delete and edit them if they want.

## Quiz Master

The Quiz master can access a quiz through the start quiz menu or through a link that has been sent to them. Once they are starting a quiz, they can send out a participant link to whoever they want to participate. They can choose to turn on the timer to set a time limit on each question as well as turn it off to manually progress through each question. This is the screen that participants can view. The Quiz master can also stop the quiz at any time if needed.

## Quiz Participant

The Quiz participant should be able to open the quiz link sent to them by the Quiz master which should lead them to a waiting page. Once the Quiz master has started the quiz, the participant will be sent to the first question where they can switch in between a question-and-answer view, if they want to or just an answer view which only shows the answering prompt on their device. Once the quiz is complete, they will receive a mark out of the total possible marks. If the quiz was ended early, they will get a mark out of the total questions marks that have been asked.

# Error Conditions

The first error condition is triggered when a user attempts to register without inputting an email or password. Similarly if a user tries to log in without an email or password they will trigger the same error. If they try to log in without valid credentials then they will not be given access to log in. The next error condition is if a user attempts to create a quiz without a title or description they will be asked to do so. The Multiple choice and True or False questions error conditions are similar in that they require the Quiz master to input a question, a mark and indicate the correct answer before they can add the question to the quiz.

REFERENCES

DOCUMENT HISTORY

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| 1.1 | N/A | 24/02/2022 | Use case diagrams added | Toc27 |