**FINAL SPECIFICATION DOCUMENT**

**Online quiz Portal**

**Table of contents**

1.Project and developer details

2.Sprints planned and the tasks achieved

3.Algorithms and flowcharts of the application

4.Core concepts used in the project

5.Links to the GitHub repository to verify the project completion

***1.Project and developer details***

**Project objective:**

To create an online quiz portal with multiple REST APIs where users can browse different quizzes, attempt them, and find their scores and standings.

***2.Sprints planned and the tasks achieved***

For developing this application, I have considered 3 sprints each of 3 hrs.

1st 3-hour:

* Deciding the flow of the application
* Defining class names and functions within
* Preparing the eclipse IDE to start code

2nd 3-hour:

* Writing code for the problem statement proposed
* Code is split into several classes and each class output is checked side by side

3rd 3-hour:

* Testing the application that is developed with varies inputs.
* Pushing the code to GitHub
* Creating a word document that specifies the application capabilities and user interactions.

***3.Algorithms and flowcharts of the application***

# 3.1Admin User Scenario

* The admin wants to create an online quiz for the website users.
* The admin created a set of questions along with their answers.
* Admin opens login API and logs in with the admin username and password.
* Once admin is authenticated, an access token is generated that can be used to add and modify quizzes, questions, and users.
* The admin creates a quiz by providing a name and an id.
* For creating a new quiz, the admin user enters a quiz id and selects questions from the database using the question id.
* After adding the questions, the admin runs the API and makes the quiz available to its users.
* Once the quiz is released, website users can start taking it.

# Participants Scenario

* The user uses the register API to create an account, which provides an access token.
* After registering an account, the user logs in with the access token to take any quiz.
* The user browses various quizzes created by Admin using the get All Quizzes API.
* The user attempts the quiz using quizid and gives the possible answers.
* The user views whether the provided answers are right or wrong. The correct answer is highlighted differently so that they are easily identified.
* After completing the quiz, the user checks the scores and compares their standings with other users

***4.Core concepts used in the project and Tools used***

***4.1 Core Concepts***

* Spring boot
* MySql
* Restful webservices

***4.2 Tools used***

* Postman
* Tomcat server
* MySQL

***5.Links to the GitHub repository to verify the project completion***

<https://github.com/AishwaryaSivakumar48/springbootdemos/tree/main/OnlineQuizPortal-REST>