

Java Programming Project 1

Project: Online Quiz Application

Duration: 7 Days

Project Overview

The Online Quiz Application is a console-based quiz system. Users will be presented with a series of questions, choose answers, and receive feedback on their performance. The project will cover fundamental concepts such as data structures, user input handling, and conditional statements. Through this, you'll gain valuable experience in Java development.

Project Objectives

Before stating the scope of work needed for this project, it's essential first to identify all of its objectives. Noting the goals that this project is aiming to achieve will help in determining its inclusions and limits.

- **Learn Java Basics:** Reinforce your understanding of core Java concepts, including variables, loops, and arrays.
- **Interactive Programming:** Implement user input handling to create an engaging quiz-taking experience.
- **Data Structures:** Utilize data structures like lists to organize and manage quiz questions efficiently.
- **Conditional Statements:** Apply conditional statements to evaluate user responses and provide feedback.
- **Project Workflow:** Gain experience in planning, coding, and testing a small-scale project.

Requirements and Features

- **Question Class:** Create a class to represent quiz questions with attributes such as question text, options, and the correct answer.

- **Quiz Class:** Develop a class to manage a collection of questions, allowing for easy retrieval during the quiz.
- **User Interaction:** Implement a user-friendly interface for taking the quiz, presenting questions, and capturing user responses.
- **Scoring:** Calculate and display the user's score at the end of the quiz.
- **Input Validation:** Ensure proper validation of user input to handle potential errors gracefully.