

# Online Test Application

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## Description

The Online Test Application is a web-based application that enables users to take online quizzes, review their answers, and see their results immediately. The system has three main modules: Quiz, Review, and Result. Questions are accepted in JSON format and can be rendered on the client side. The application allows users to create new questions and displays results with correct and incorrect answers highlighted.

## Features

1. **Take Quiz:** Users can take quizzes with multiple-choice questions.
2. **Review Answers:** Users can see which answers they got right or wrong.
3. **Display Results:** The application shows the total number of questions, correct answers, and the score as a percentage.

## Running the Application

### Prerequisites

- Node.js installed on your machine.
- A code editor (e.g., Visual Studio Code).

### Steps to Run

1. **Clone or Download the Repository:** Ensure you have the application files (including `server.js` and `index.html`).
2. **Setup the Server:**
  - Navigate to the directory containing `server.js` in your terminal.

Run the following commands to initialize the project and install necessary packages:

```
npm init -y
```

```
npm install express body-parser cors
```

- Create a directory named `public` and place `index.html` inside it.

3. **Start the Server:** Run the following command in your terminal: `node server.js`
4. **Serve the HTML File:**
  - Open `index.html` in Visual Studio Code.
  - Install the "Live Server" extension if you haven't already.
  - Right-click on `index.html` and select "Open with Live Server".
5. **Open the Application:**
  - Your default browser should open `index.html` served by Live Server.

## Using the Application

### Taking the Quiz

1. **Load the Quiz:** The quiz will load automatically when you open the application.
2. **Answer Questions:** Select your answers for each question.
3. **Submit the Quiz:** Click the "Submit Quiz" button to see your results.

## Code Overview

### `server.js`

- Sets up an Express server to serve the quiz data and handle submissions.
- Contains endpoints:
  - GET `/questions`: Returns the current quiz questions.
  - POST `/questions`: Accepts new questions and adds them to the quiz.
  - POST `/submit`: Evaluates submitted answers and returns the results with correct answers.

### `index.html`

- Contains the structure and styling for the quiz interface.
- Includes a form for creating new questions.
- JavaScript to fetch quiz data, submit answers, and display results.

### JavaScript Functions

- `renderQuiz(data)`: Renders quiz questions on the page.
- `submitQuiz()`: Submits quiz answers and processes the results.
- `displayResult(result, correctAnswers)`: Displays the quiz results, highlighting correct and incorrect answers.

Github Repo: [https://github.com/FrTrainingSakshamBhupal/CourseEndProject-QA\\_Platform](https://github.com/FrTrainingSakshamBhupal/CourseEndProject-QA_Platform)