

# Node Js Assignment

## Project Description:

You will be building a Node.js application that allows users to create and participate in timed quizzes. The application should have a RESTful API that provides functionalities for creating and retrieving quizzes.

## Functionalities:

Create a Quiz: Users should be able to create a quiz by sending a POST request to the API with the following fields:

question: the text of the question

options: an array of the answer options for the question

rightAnswer: the index of the correct answer in the options array

startDate: the date and time when the quiz should start

endDate: the date and time when the quiz should end

Get Active Quiz: Users should be able to retrieve the active quiz (the quiz that is currently within its start and end time).

Get Quiz Result: After the 5 minute of end time of a quiz, users should be able to retrieve the result of the quiz. The result is basically the right answer

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## Requirements:

The application should be built using Node.js and any relevant frameworks.

The quizzes created by users should be stored in a database of your choice (e.g., MongoDB, MySQL, etc.).

The API should have the following endpoints:

POST /quizzes - to create a new quiz

GET /quizzes/active - to retrieve the active quiz (the quiz that is currently within its start and end time)

GET /quizzes/:id/result - to retrieve the result of a quiz by its ID

GET /quizzes/all - to retrieve the all quizzes

The API should be well-documented, and the code should be well-organized and easy to read.

The API should implement error handling for all endpoints and return appropriate error responses.

**The API should have a status field for each quiz:**

inactive: before the start time of the quiz

active: during the time when the quiz is available

finished: after the end time of the quiz

The status field should be updated automatically by the application based **on the start and end time of each quiz.**

**Bonus Points:**

- Implement rate-limiting to prevent abuse of the API.
- Implement caching to reduce the response time of frequently accessed data.

**Submission:** You will be required to submit the following:

- A link to the Github repository containing your application code.
- A link to the hosted API.
- Video for API or postman collection with a deployed link.

Note : you can use Cron Job

For any concerns email or call at  
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