API Documentation for Quiz AI Backend Application

Overview

This documentation provides a comprehensive guide to the API endpoints available for the Quiz Backend Application. The application supports user authentication, quiz generation, submission evaluation, hint generation, and submission filtering.

Postman Public Workspace

Public workspace link : Click here

Authentication

The application uses JWT (JSON Web Tokens) for user authentication.

Base URL

```
http://localhost:3000/api
```

Production URL

https://play-power-lab-backend.vercel.app/api

API Endpoints

User Authentication

Register User

• Endpoint: /register

Method: POSTRequest Body:

```
{
"username": "demo123",
"password": "demo@123"
}
```

• Description: Registers a new user and returns a JWT upon successful registration.

Login User

• Endpoint: /login

Method: POST

• Request Body:

```
{
"username": "demo123",
"password": "demo@123"
}
```

• **Description:** Authenticates a user and returns a JWT token for subsequent requests.

Quiz Management

Generate Quiz

• Endpoint: /quiz/generate

• Method: POST

• Request Body:

```
{
"grade": 10,
"subject": "Maths",
"totalQuestions": 10,
"difficulty": "HARD"
}
```

• **Description:** Generates a quiz based on the provided parameters and returns a JSON object containing quiz questions.

Submission Management

Submit Quiz Responses

• Endpoint: /submission/submit

• Method: POST

• Request Body:

```
{
   "quizId": "66e6b0817000b23949547a49",
   "userId": "66e68241c31ca3cb75c87fa5",
   "responses": [
   {
      "questionId": "66e6b0817000b23949547a4a",
      "userResponse": "$400"
   },
   ...
   ]
}
```

• **Description:** Submits the user's responses to a quiz for evaluation and returns the score.

Get User Submissions

• Endpoint: /submission/getSubmissions

• Method: GET

• Request Body:

```
{
"quizId": "66e6b0817000b23949547a49",
"userId": "66e68241c31ca3cb75c87fa5"
}
```

• Description: Retrieves all submissions made by a user for a specific quiz.

Hint Generation

Generate Hint

• Endpoint: /hint/generate-hint

• Method: POST

• Request Body:

```
{
"questionId": "66e6b0817000b23949547a4d"
}
```

• **Description:** Generates and returns a hint for the specified question ID.

Submission Filtering

Filter Submissions

• Endpoint: /filters/filter

Method: POST

• Request Body:

```
{
"userId": "66e68241c31ca3cb75c87fa5",
"grade": 5,
"subject": "Maths",
"minScore": 10,
```

```
"from": "01-09-2024",
"to": "17-09-2024"
}
```

• **Description:** Filters user submissions based on specified parameters such as grade, subject, minimum score, and date range.

Interactive API Explorer

• Use the interactive API explorer tool to test the endpoints directly. Simply input the required parameters and see the responses in real-time.

Code Examples

JavaScript (using Fetch)

```
fetch('http://localhost:3000/api/register', {
  method: 'POST',
  headers: {
  'Content-Type': 'application/json',
  },
  body: JSON.stringify({
  username: 'demo123',
  password: 'demo@123'
  }),
  })
  .then(response => response.json())
  .then(data => console.log(data));
```

Python (using Requests)

```
import requests
response = requests.post('http://localhost:3000/api/register', json={
'username': 'demo123',
'password': 'demo@123'
})
print(response.json())
```