API Testing Documentation

Using Postman

Steps to Test the API

1. **Install Postman**: Download and install Postman from https://www.postman.com/.
2. **Create a New Request**:
    - Click **New** -> **Request**.
    - Select **POST** as the request type.
    - Enter the API URL: `http://127.0.0.1:1000/predictapi`.
3. **Set Headers**:
    - Go to the **Headers** tab.
    - Add a new header:
        - **Key**: `Content-Type`
        - **Value**: `application/json`
4. **Add Body**:
    - Go to the **Body** tab.
    - Select **raw** and set the input as JSON.
    - Example input:

```
{
  "gender": "Female",
  "learning_support": "Private Coaching",
  "parent_education": "Bachelor",
  "had_lunch": "Yes",
  "course_completed": "Complete",
  "percentage_in_test1": 78,
  "percentage_in_test2": 84
}
```

5. **Send the Request**:
    - Click the **Send** button.
    - View the response in the bottom section of Postman.
6. **Example Response**:

```
{
  "predicted_score": 81.5,
  "graph": "..."
}
```

Postman Collection

Exported Collection

Here's a guide to create and export a Postman collection:

1. **Create Collection**:
    - In Postman, click **Collections** -> **New Collection**.
    - Name the collection (e.g., `Student Performance API`).
2. **Add Request**:
    - Add a request to the collection for the `/predictapi` endpoint with the steps mentioned above.
3. **Export Collection**:
    - Right-click the collection and select **Export**.
    - Choose **v2.1** format.
    - Save the exported `.json` file.

Importing the Collection

1. Provide the exported `.json` file in the project repository for users.
2. Instruct users to import the collection:
    - Open Postman.

- Click **Import** -> **Upload Files**.
- Select the provided `.json` file and import.

Using `curl` for Testing

Alternatively, test the API using the `curl` command in a terminal:

```
curl -X POST http://127.0.0.1:1000/predictapi \
-H "Content-Type: application/json" \
-d '{"gender": "Female",
"learning_support": "Private Coaching",
"parent_education": "Bachelor",
"had_lunch": "Yes", "course_completed": "Complete",
"percentage_in_test1": 78, "percentage_in_test2": 84}'
```

Expected Output

```
{
  "predicted_score": 81.5,
  "graph": "..."
}
```