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:
 - o Click New -> Request.
 - · Select POST as the request type.
 - $\circ \ \ \, \text{Enter the API URL:} \ \ \text{https://student-performance-predictor-bsa6.onrender.com/predictapi} \ . \\$
- 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.
 - o 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:
 - o Click the Send button.
 - View the response in the bottom section of Postman.
- 6. Example Response:

```
{
   "predicted_score": 81.5,
   "graph": "data:image/png;base64,..."
}
```

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.
 - o 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:
 - o 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
https://student-performance-predictor-bsa6.onrender.com/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": "data:image/png;base64,..."
}
```