

API Testing with Postman

Download the studentApp.zip file

Unzip into one folder. You can find the file name
studentApp.jar

To Start the application use following steps

Steps 1. Open CMD and go to folder that file is located.

Steps 2. Type command `java -jar studentApp.jar`

Application will start on by default port 8080

URL: <http://localhost:8080/student/list>

Run application on different port:-

`java -jar studentApp.jar --server.port=8085`

URL: <http://localhost:8085/student/list>

API Testing with Postman

URL: <http://localhost:8080/student/list>

baseURL : <http://localhost:8080> + Resource : /student + EndPoint : /list

GET Request

Get All Students :

GET /student/list

CURL command

curl --location --request GET '<http://localhost:8080/student/list>'

Response: All student with status code 200 OK.

Get single student by Id which is available

GET /student/1

CURL command

curl --location --request GET '[http://localhost:8080/student/1?="](http://localhost:8080/student/1?=)'

Verify error message if ID is not available

GET /student/101

CURL command

curl --location --request GET '[http://localhost:8080/student/101?="](http://localhost:8080/student/101?=)'

Response: status code 404 Not Found.

```
{
  "id": 1,
  "firstName": "Vernon",
  "lastName": "Harper",
  "email": "egestas.rhonus.Proin@massaQuisqueporttitor.org",
  "programme": "Financial Analysis",
  "courses": [
    "Accounting",
    "Statistics"
  ]
}
```

```
{
  "error": "Not Found!"
}
```

API Testing with Postman

URL: <http://localhost:8080/student/list>

Search students by programme:

GET /student/list?programme=Financial Analysis

CURL:

```
curl --location --request GET
```

```
'http://localhost:8080/student/list?programme=Financial%20Analysis'
```

Response: Only "programme": "Financial Analysis", Students will display with status code 200 ok

Search students by programme and with limit parameter

GET /student/list?programme=Computer Science&limit=2

CURL:

```
curl --location --request GET
```

```
'http://localhost:8080/student/list?programme=Computer%20Science&limit=2'
```

Response:

It's displayed only two student who are involved in Computer Science.

API Testing with Postman

URL: <http://localhost:8080/student>

POST Request (Create new student)

POST /student

CURL command

```
curl --location --request POST 'http://localhost:8080/student' \  
--header 'Content-Type: application/json' \  
--header 'Content-Type: text/plain' \  
--data-raw '{  
  "firstName": "vernon",  
  "lastName": "Harper",  
  "email": "primetesting@gmail.com",  
  "programme": "Financial Analysis",  
  "courses": [  
    "Accounting",  
    "Statistics"  
  ]  
'
```

Response:

```
{  
  "msg": "Student added"  
}
```

Status code 201 Created

API Testing with Postman

URI:- `http://localhost:8080/student`

Verify error message “Email address already exists”

CURL command:

```
curl --location --request POST 'http://localhost:8080/student' \  
--header 'Content-Type: application/json' \  
--header 'Content-Type: text/plain' \  
--data-raw '{  
  "firstName": "vernon",  
  "lastName": "Harper",  
  "email": "primetesting@gmail.com",  
  "programme": "Financial Analysis",  
  "courses": [  
    "Accounting",  
    "Statistics"  
  ]  
'
```

Response:

```
{  
  "error": "Email address already exists"  
}
```

Status code 500

API Testing with Postman

URI:- <http://localhost:8080/student>

Verify error message “Please correct the following errors”

POST /student Send request with email = null

CURL Command:

```
curl --location --request POST 'http://localhost:8080/student' \  
--header 'Content-Type: application/json' \  
--header 'Content-Type: text/plain' \  
--data-raw '{  
  "firstName": "Jay",  
  "lastName": "Vaghani",  
  "email": "",  
  "programme": "Computer Science",  
  "courses": [  
    "Java",  
    "Scal"  
  ]  
}'
```

Response:

Status code : 500 internal server error.

```
{  
  "error": "Please correct the following errors",  
  "fieldErrors": {  
    "email": "may not be empty"  
  }  
}
```

API Testing with Postman

URI:- `http://localhost:8080/student/1`

PUT Request

`PUT /student/101`

CURL Command:

```
curl --location --request PUT 'http://localhost:8080/student/1' \  
--header 'Content-Type: application/json' \  
--header 'Content-Type: text/plain' \  
--data-raw '{  
  "firstName": "vernon",  
  "lastName": "Harper",  
  "email": "primetesting3@gmail.com",  
  "programme": "Financial Analysis",  
  "courses": [  
    "Accounting",  
    "Statistics"  
  ]  
}'
```

Response:

Status code : 200 created.

```
{  
  "msg": "Student Updated"  
}
```

API Testing with Postman

URI:- `http://localhost:8080/student/1`

PATCH Request:

`PATCH /student/10`

CURL Command:

```
curl --location --request PATCH 'http://localhost:8080/student/10' \  
--header 'Content-Type: application/json' \  
--header 'Content-Type: text/plain' \  
--data-raw '{  
    "email": "test@gmail.com"  
}'
```

Response:

Status code : 200 ok.



API Testing with Postman

URI:- `http://localhost:8080/student/10`

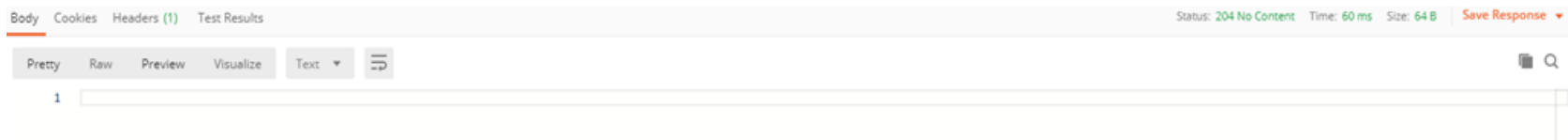
DELETE Request:

`DELETE /student/10`

CURL Command

```
curl --location --request DELETE 'http://localhost:8080/student/10' \  
--header 'Content-Type: application/json' \  
--data-raw ""
```

Response



OPTIONS METHOD (Helper Method)

`OPTIONS /student`

Allow → POST

`OPTIONS /student/1`

Allow → PUT,DELETE,PATCH,GET,HEAD