FINÁLNÍ PROJEKT
č.1

ENGETO

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ZADÁNÍ

Cílem finálního projektu je otestovat funkčnost aplikace, která slouží k manipulaci s daty o studentech. Aplikace má rozhraní REST-API, které umožňuje vytvoření, smazání a získání dat..

Přístupové údaje:

Databáze	database: Host: Username:
REST-API	http://108.143.193.45:8080/api/v1/students/

Poznámky:

Nezapomeňte, že v IT se data musí někde uložit a poté získat. Proto ověřte, že data jsou správně uložena a získávána z databáze.

TESTOVACÍ SCÉNÁŘE

Na základě uvedených testovacích scénářů jsem ověřil(a) funkčnost aplikace.

Test - získání dat o studentovi s id - 219
Abstract:
GET data about existing student

Test data preparation:
Existing student id=219
SELECT * FROM student where id=219;
'219', '34', 'jjohn34@yourmail.com', '', 'JOSHUA'

Steps:
1)GET http://108.143.193.45:8080/api/v1/students/219
2)Press Send button
3)Check the response status

Expected result:
Status code 200OK

 # Test - získání dat o neexistujícím studentovi s id - 214
Abstract:
GET data about non-existing student

Test data preparation:
non-existing student id=214
SELECT * FROM student from id=214;

Steps:
1)GET http://108.143.193.45:8080/api/v1/students/214
2)Press Send button
3)Check the response status

Expected result:
Status code 404

Response:

{
"timestamp": "2024-07-01T17:45:01.908+00:00",
"status": 500,
"error": "Internal Server Error",
"message": "",
"path": "/api/v1/students/190%0A"
}

Test - úspěsné založení nového studenta
Abstract:
POST - successful creation of new student

Test data preparation:

{
"id": 1404,
"firstName": "Johny",
"lastName": "DEPP",
"email": "johnydepp@gmail.com",
"age": 61
}

Steps:
1)POST http://108.143.193.45:8080/api/v1/students/
2)Set the body in JSON format
3)FIll the data in the template with prepared data
4)Press Send Button
5)Check the response status

Expected Result:
1. In the SQL database will be new record
2. Status code 201 created

Unhappy Test - chybějícího povinného parametru dotazu
Abstract:
POST - Validation of all mandatory attributes

Test data preparation:
```
{
   "firstName": "",
   "lastName": "",
   "email": "",
   "age":
}
```

Steps:
1)POST http://108.143.193.45:8080/api/v1/students/
2)Set the body in JSON format
3)Use the template with empty variables
4)Press Send Button
5)Check the response status

Expected result:
400 Bad Request

Unhappy Test - Testování věkového rozmezí (1-150) pro založení nového studenta
Abstract:
POST - Testing age range

Test data preparation:
```
{
   "firstName": "lucas",
   "lastName": "lucas",
   "email": "lucas@lucas.lcs",
   "age": 151
}
```

Steps:
1)POST http://108.143.193.45:8080/api/v1/students/
2)Set the body in JSON format
3)FIll the data in the template with prepared data
4)Press Send Button
5)Check the response status

Expected result:
400 bad request

Unhappy Test - *chybějícího povinného parametru dotazu (firstName, lastName 3-50 znaku, email musi být ve validním formátu)*
Abstract:
POST - Testing criteria for creating new student - first name, last name and email

Test data preparation:

```
{
   "firstName": "lu",
   "lastName": "cas",
   "email": "lucaslucas",
   "age": 25
}
```


Steps:
1)POST http://108.143.193.45:8080/api/v1/students/
2)Set the body in JSON format
3)FIll the data in the template with prepared data
4)Press Send Button
5)Check the response status

Expected result:
400 bad request

Test - smazání veškerých dat o existujícím studentovi
Abstract:
DELETE - All data about particular student

Data preparation:
Existing student: id=264

```
{
   "id": 264,
   "firstName": "John",
   "lastName": "JOSHUA",
   "email": "jjohn34@yourmail.com",
```

"age": -35
}

Steps:
1)DELETE http://108.143.193.45:8080/api/v1/students/264
2)Press Send Button
3) Check the databse if user is really deleted

Expected result:
1. All data about particular student are REMOVED
2. status code 200 OK

Test - smazání veškerých dat o neexistujícím studentovi
Abstract:
DELETE - non-existing student

Data preparation:
Non-existing student: id=1

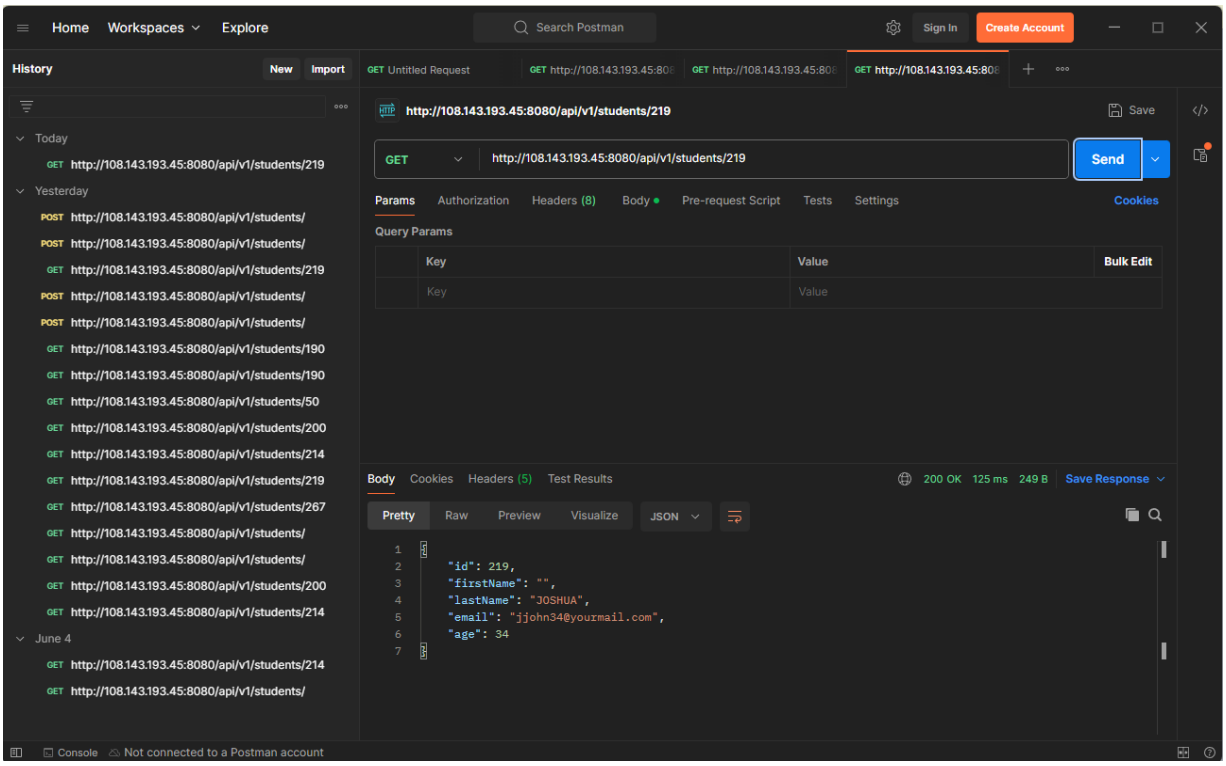
1)DELETE http://108.143.193.45:8080/api/v1/students/1
2)Press Send Button

Expected result:
Status code 404

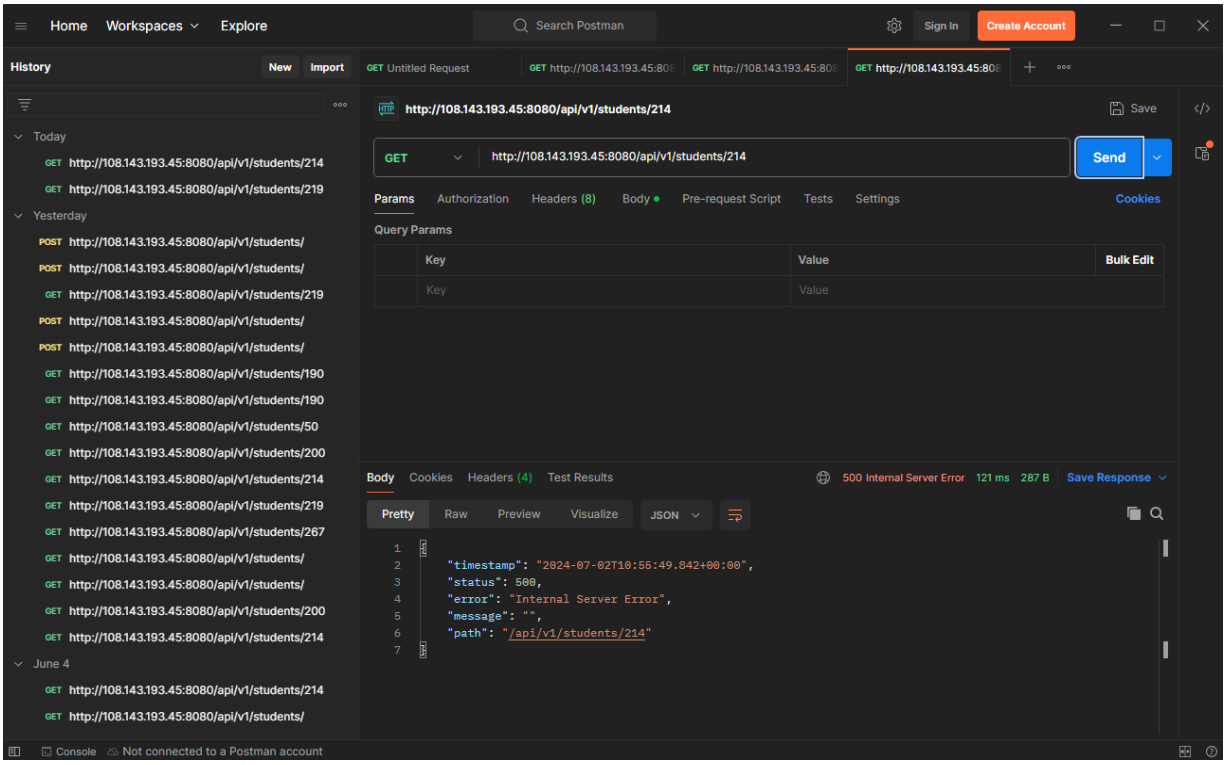
EXEKUCE TESTŮ

Testovací scénáře jsem provedl(a), přikládám výsledky testů.

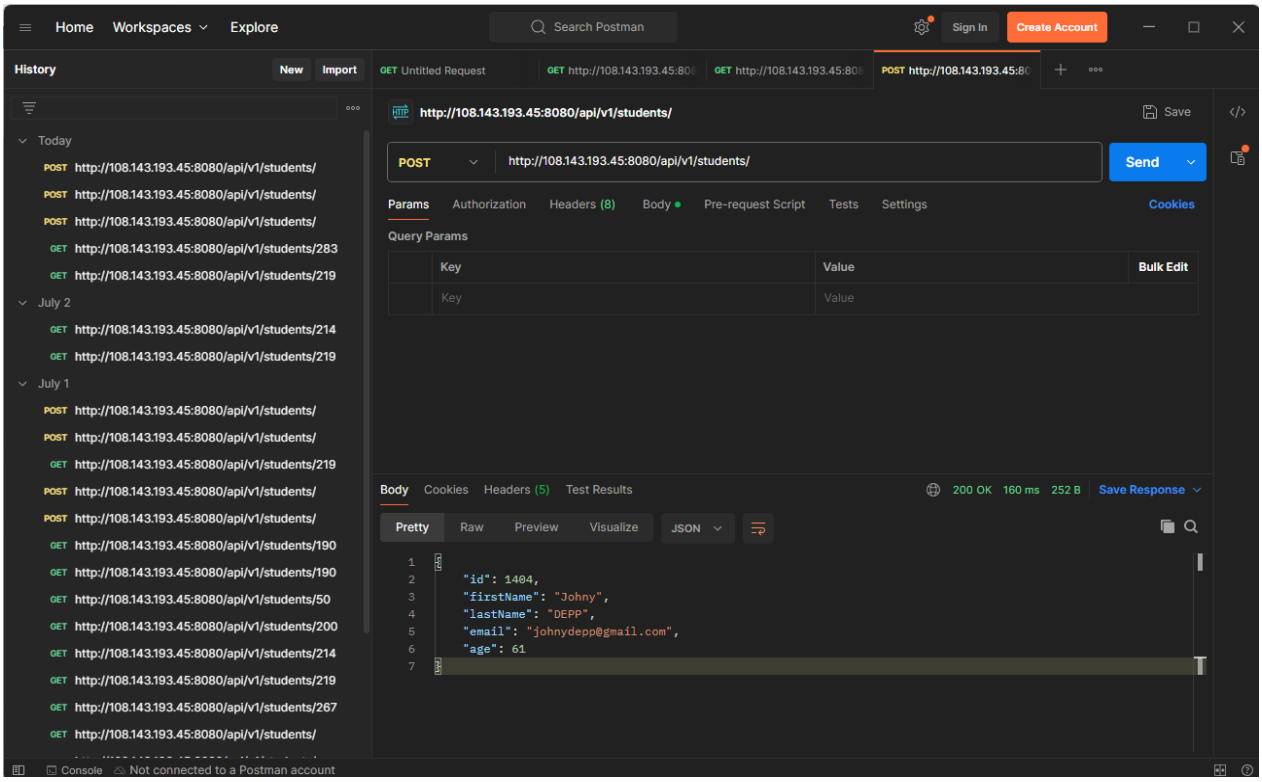
Result for: GET data about existing student

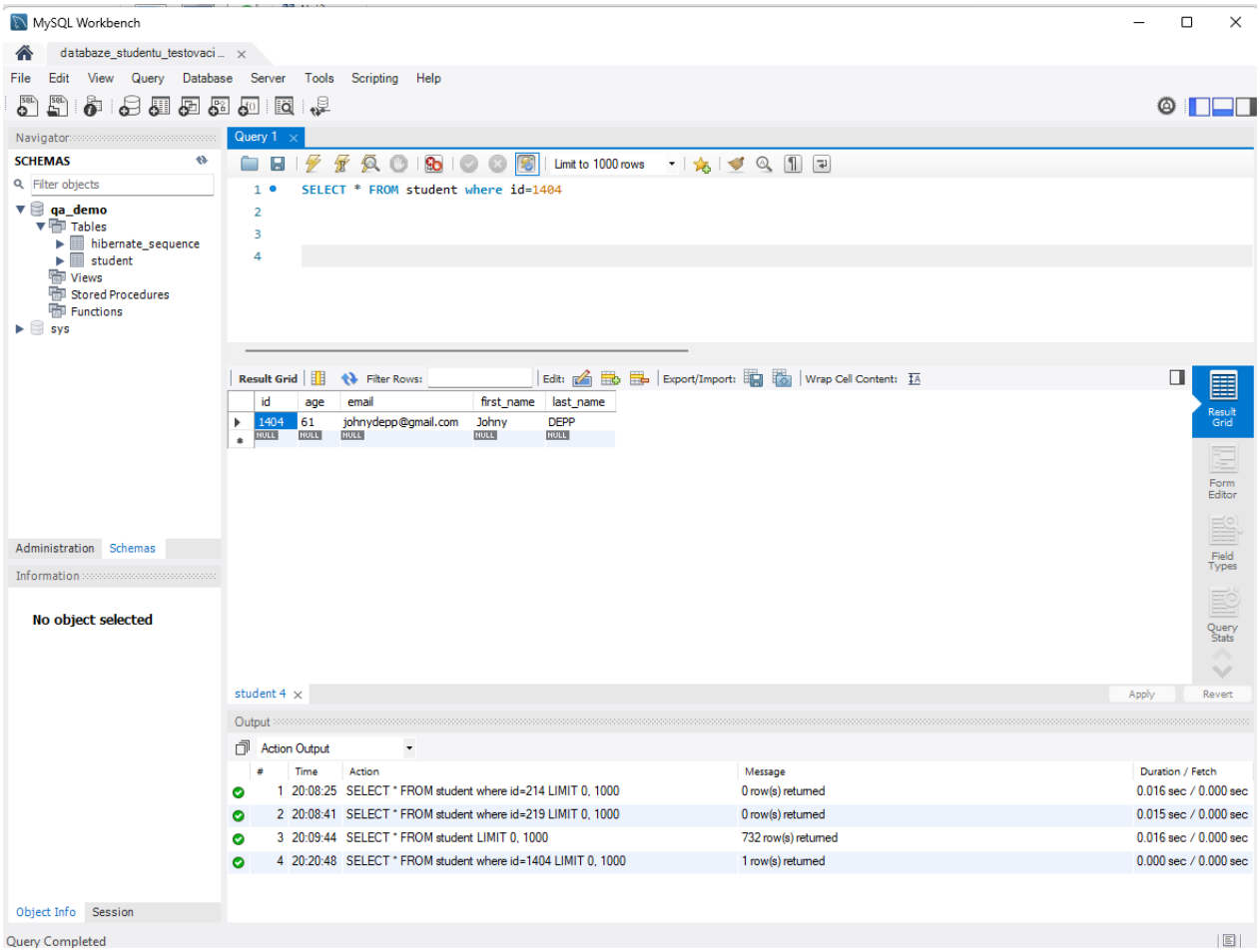


Result for: GET data about non-existing student

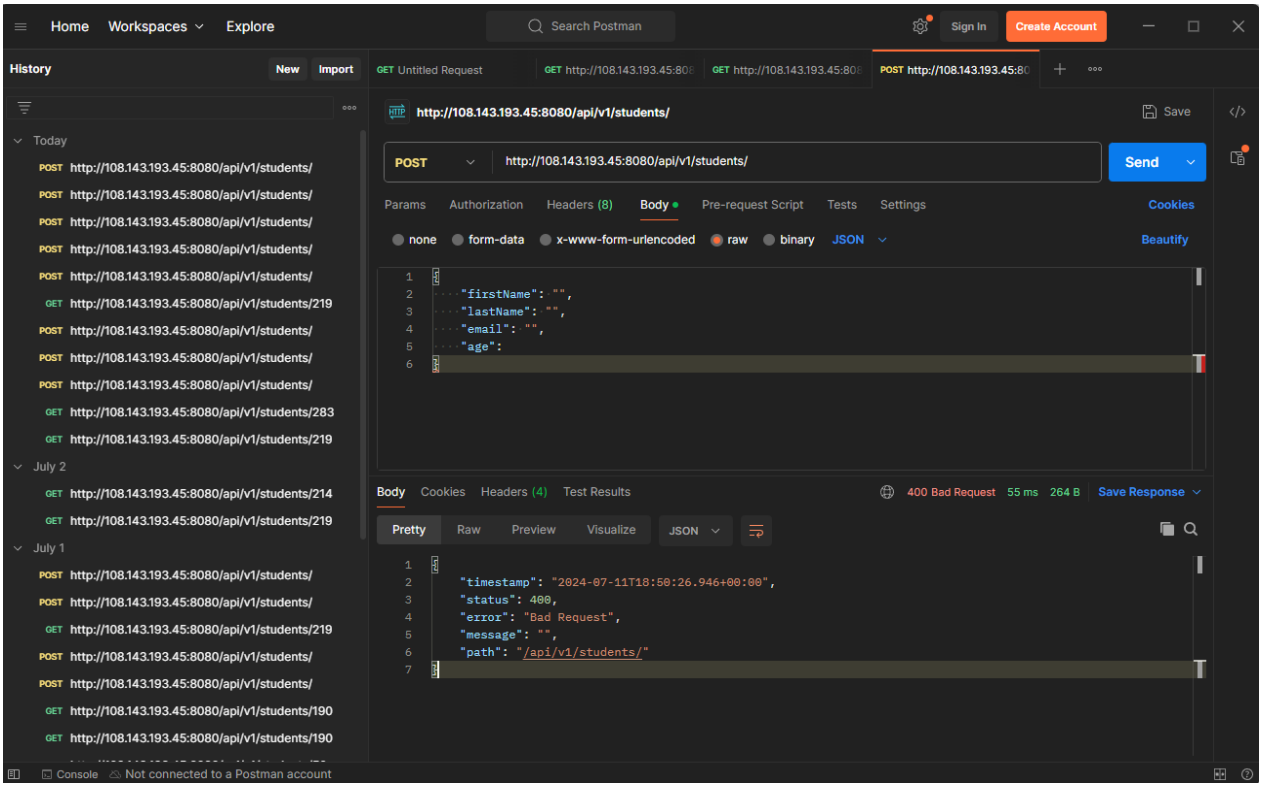


Result for: Creating new student

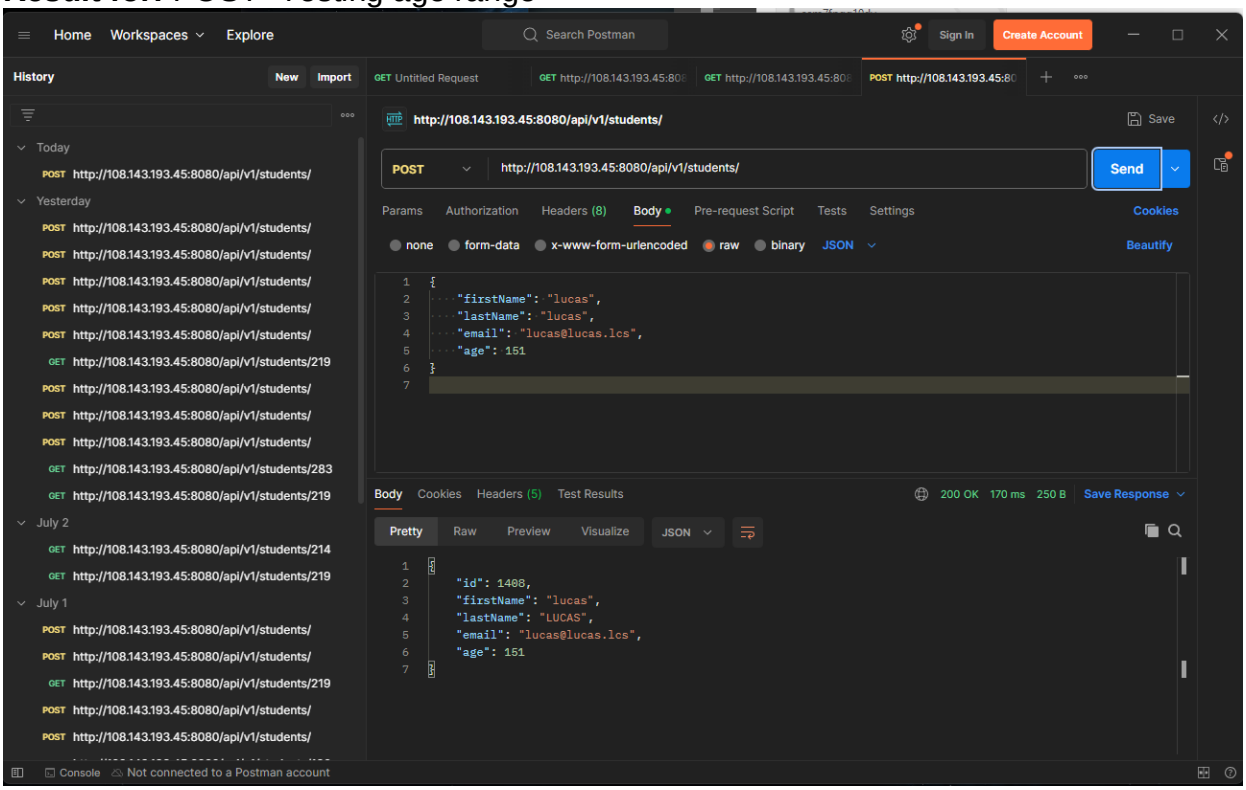




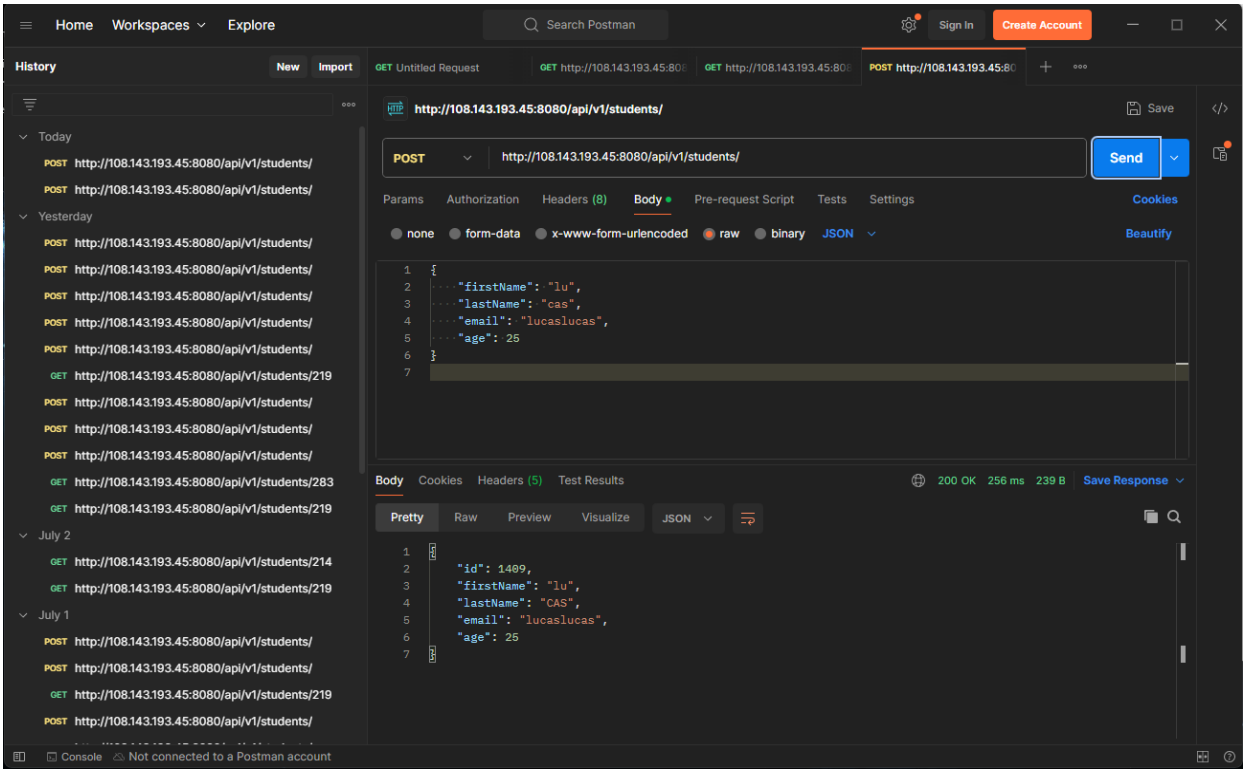
Result for: POST unhappy - Validation of all mandatory attributes



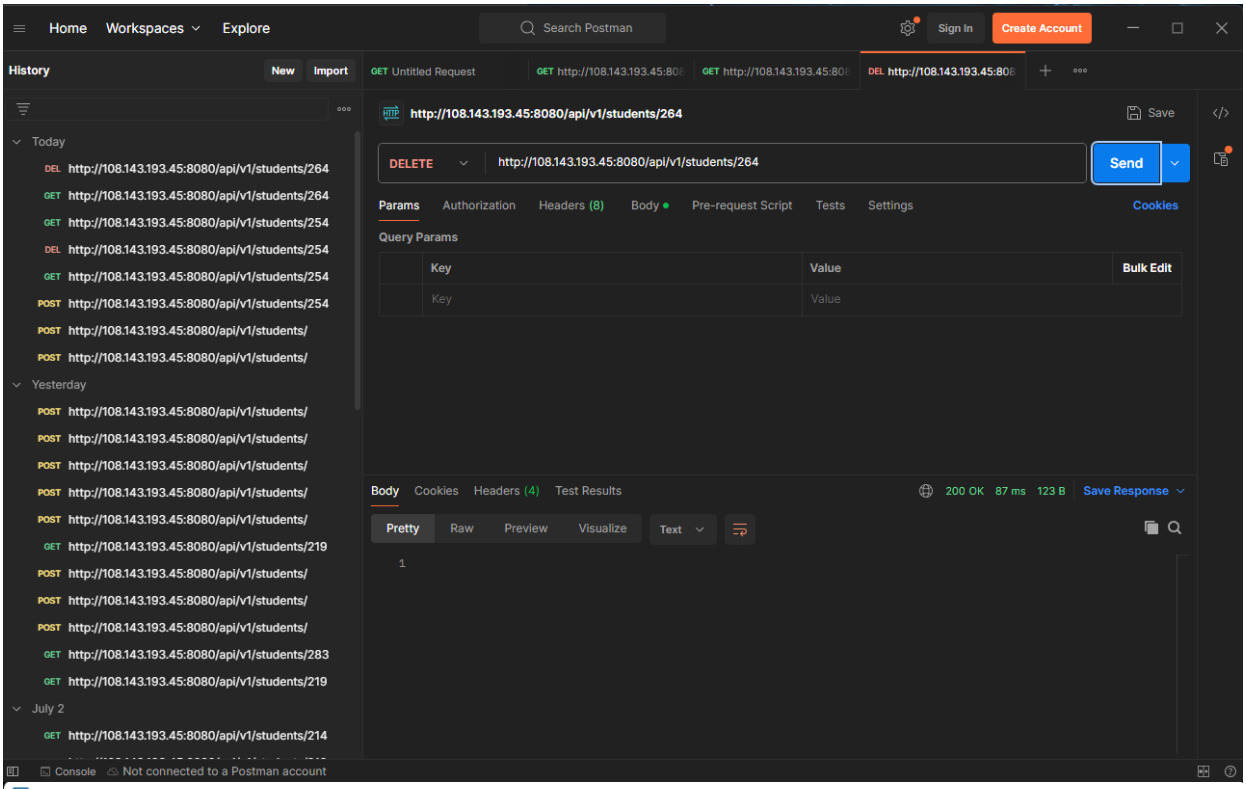
Result for: POST- Testing age range

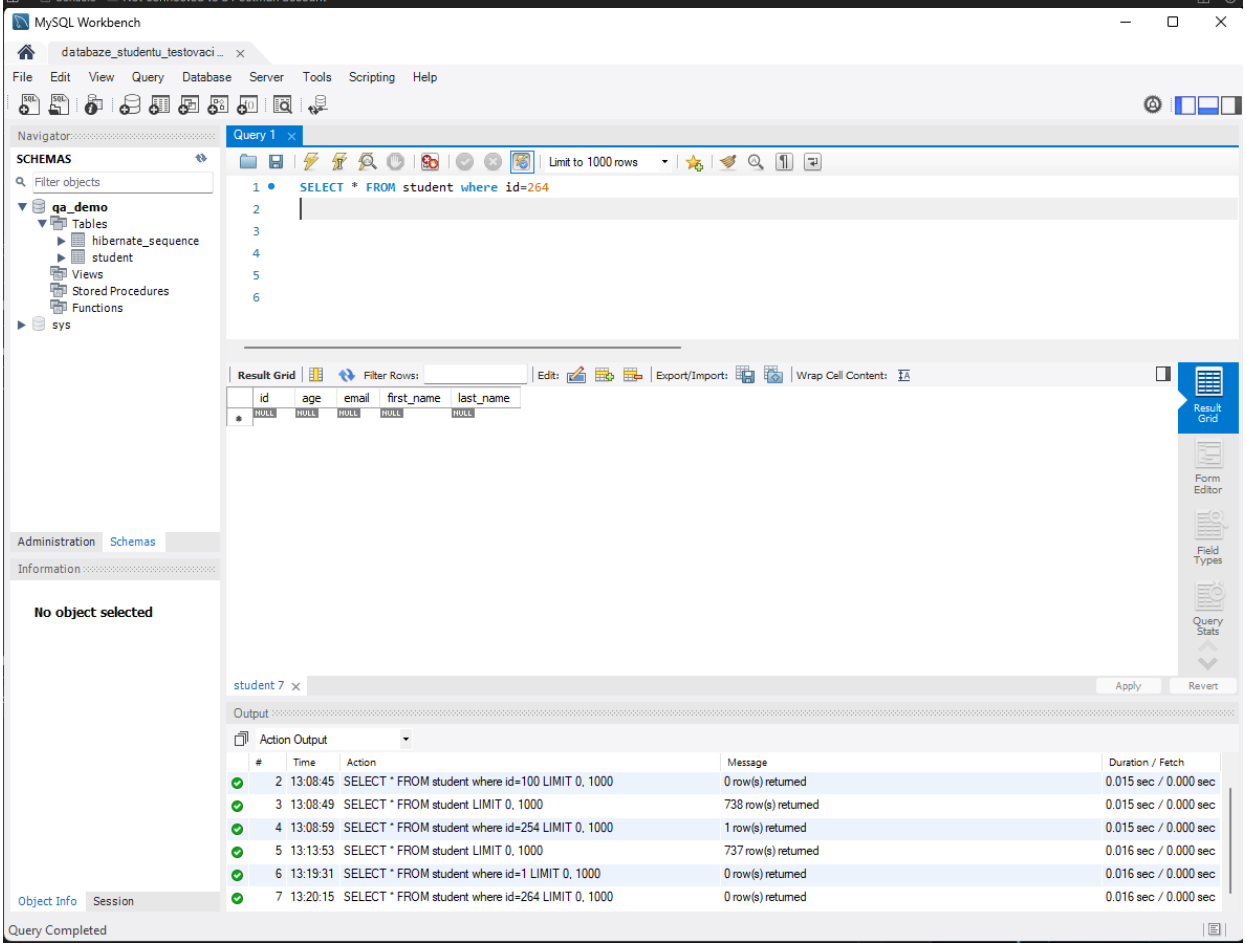


Result for: POST- Testing criteria for creating new student - first name, last name and email

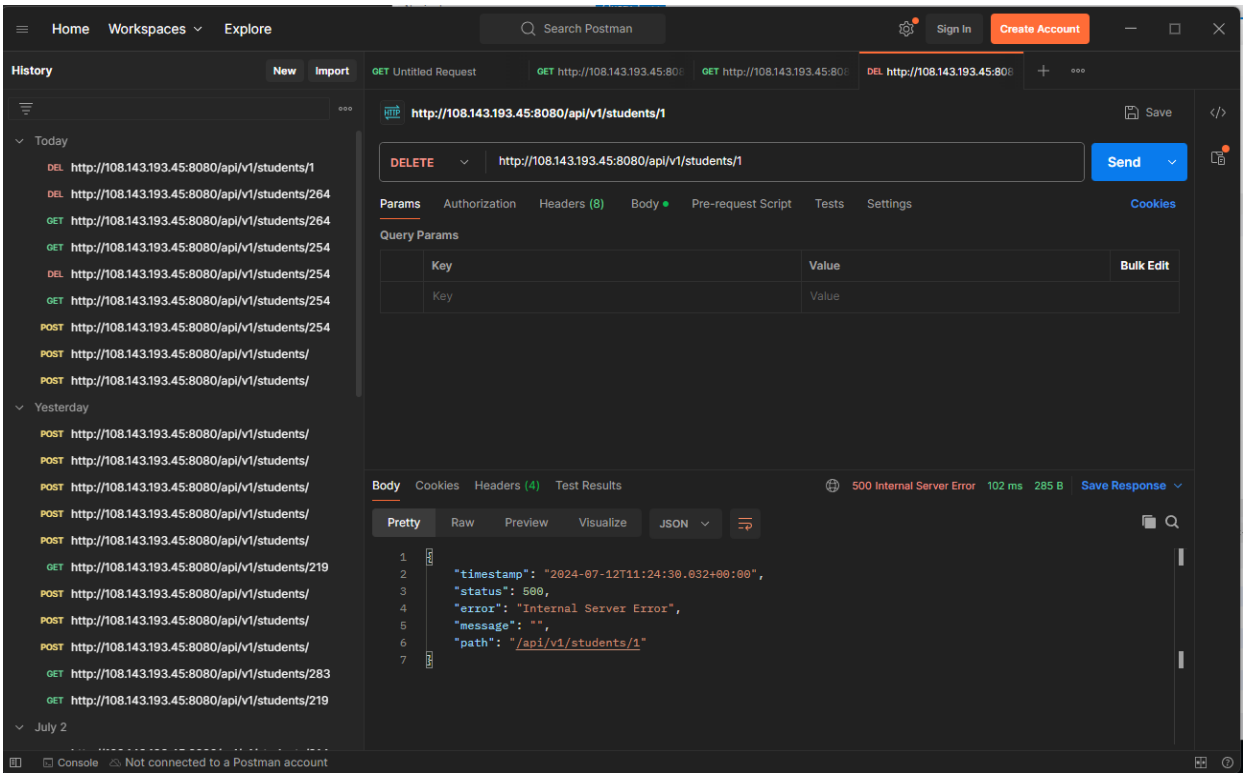


Result for: DELETE - All data about particular student


Home
Workspaces
Explore
Search Postman
Sign In
Create Account
History
New
Import
Today
DEL http://108.143.193.45:8080/api/v1/students/264
GET http://108.143.193.45:8080/api/v1/students/264
GET http://108.143.193.45:8080/api/v1/students/254
DEL http://108.143.193.45:8080/api/v1/students/254
GET http://108.143.193.45:8080/api/v1/students/254
POST http://108.143.193.45:8080/api/v1/students/254
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
Yesterday
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
GET http://108.143.193.45:8080/api/v1/students/219
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
POST http://108.143.193.45:8080/api/v1/students/
GET http://108.143.193.45:8080/api/v1/students/283
GET http://108.143.193.45:8080/api/v1/students/219
July 2
GET http://108.143.193.45:8080/api/v1/students/214
GET Untitled Request
http://108.143.193.45:8080/api/v1/students/264
Save
DELETE
http://108.143.193.45:8080/api/v1/students/264
Send
Params
Authorization
Headers (8)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
Key
Value
Bulk Edit
Body
Cookies
Headers (4)
Test Results
200 OK
87 ms
123 B
Save Response
Pretty
Raw
Preview
Visualize
Text
Console
Not connected to a Postman account


MySQL Workbench
databaze_studentu_testovaci ...
File
Edit
View
Query
Database
Server
Tools
Scripting
Help
Navigator
SCHEMAS
Filter objects
qa_demo
Tables
hibernate_sequence
student
Views
Stored Procedures
Functions
sys
Administration
Schemas
Information
No object selected
Object Info
Session
Query 1
Limit to 1000 rows
1 SELECT * FROM student where id=264
2
3
4
5
6
Result Grid
Filter Rows:
Edit:
Export/Import:
Wrap Cell Content:
id
age
email
first_name
last_name
NULL
Result Grid
Form Editor
Field Types
Query Stats
student 7
Apply
Revert
Output
Action Output
Time Action Message Duration / Fetch
2 13:08:45 SELECT * FROM student where id=100 LIMIT 0, 1000 0 row(s) returned 0.015 sec / 0.000 sec
3 13:08:49 SELECT * FROM student LIMIT 0, 1000 738 row(s) returned 0.015 sec / 0.000 sec
4 13:08:59 SELECT * FROM student where id=254 LIMIT 0, 1000 1 row(s) returned 0.015 sec / 0.000 sec
5 13:13:53 SELECT * FROM student LIMIT 0, 1000 737 row(s) returned 0.016 sec / 0.000 sec
6 13:19:31 SELECT * FROM student where id=1 LIMIT 0, 1000 0 row(s) returned 0.016 sec / 0.000 sec
7 13:20:15 SELECT * FROM student where id=264 LIMIT 0, 1000 0 row(s) returned 0.016 sec / 0.000 sec
Query Completed

Result for: DELETE - non-existing student



BUG REPORT

Na základě provedených scénářů jsem objevil(a) uvedené chyby aplikace.

GET - Incorrect status code when finding non-existing student (500 instead of 404)
POST - Incorrect status code when creating new student (200 instead of 201)
POST - Last name always appears in uppercase
POST - Age range 1-150 is not working
POST - 3-50 range of symbols for first name and last name is not working
POST - Email can be created in invalid format
DELETE - Incorrect status code when deleting non existing student (500 instead of 404)