4/21/2025

Lab Mid

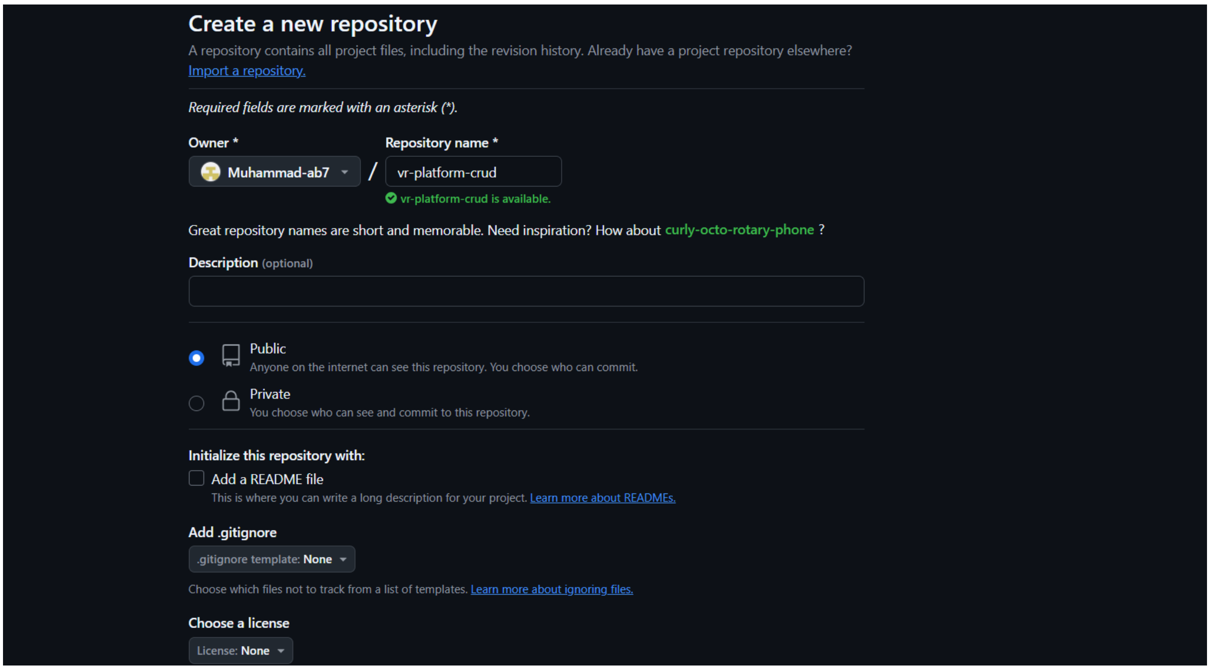
Secure Software Design and Development

(SP22-BCT-026) MUHAMMAD ABDULLAH

Link: https://github.com/Muhammad-ab7/vr-platform-crud

Implementation steps:

1. Setting up GitHub repository:



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Required fields are marked with an asterisk (*).

Owner *: Muhammad-ab7 / Repository name *: vr-platform-crud

vr-platform-crud is available.

Great repository names are short and memorable. Need inspiration? How about curly-octo-rotary-phone ?

Description (optional)

● Public
Anyone on the internet can see this repository. You choose who can commit.

○ Private
You choose who can see and commit to this repository.

Initialize this repository with:

□ Add a README file
This is where you can write a long description for your project. Learn more about READMEs.

Add .gitignore

.gitignore template: None

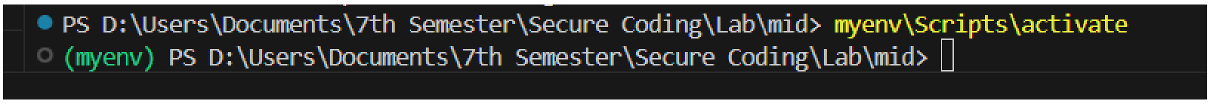
Choose which files not to track from a list of templates. Learn more about ignoring files.

Choose a license

License: None

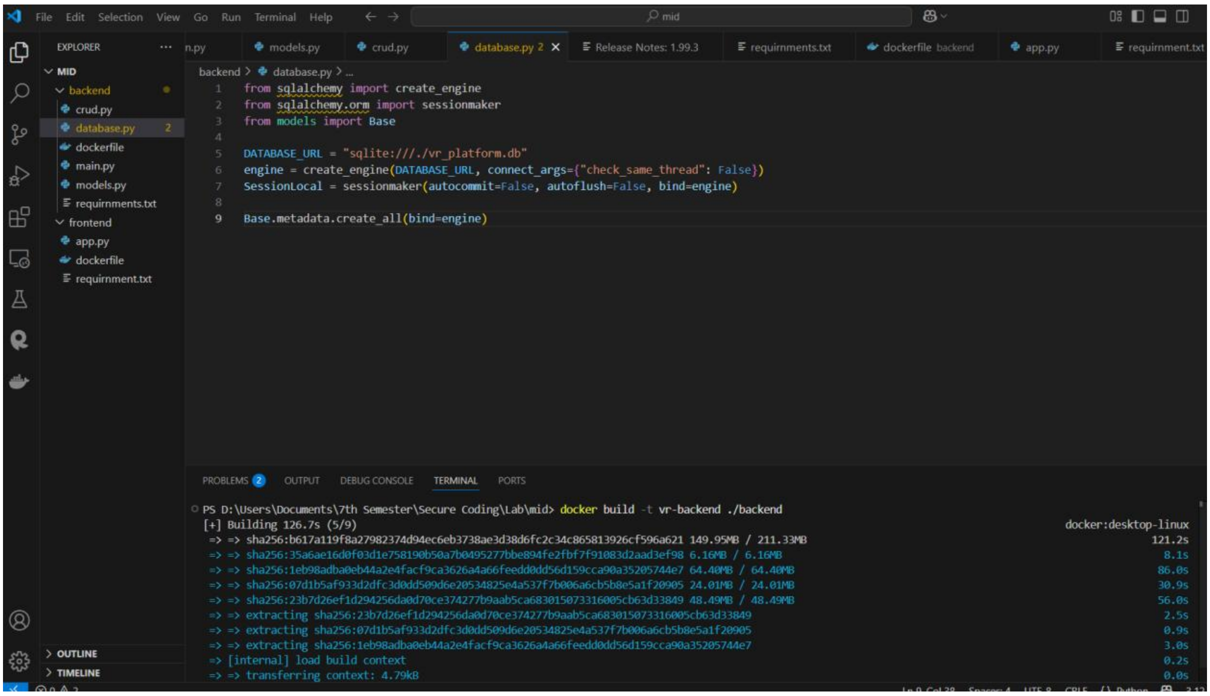
2. Setup:

2.1. Setup virtual and activating it:



```
PS D:\Users\Documents\7th Semester\Secure Coding\Lab\mid> myenv\Scripts\activate
(myenv) PS D:\Users\Documents\7th Semester\Secure Coding\Lab\mid>
```

2.2. Building backend setup:



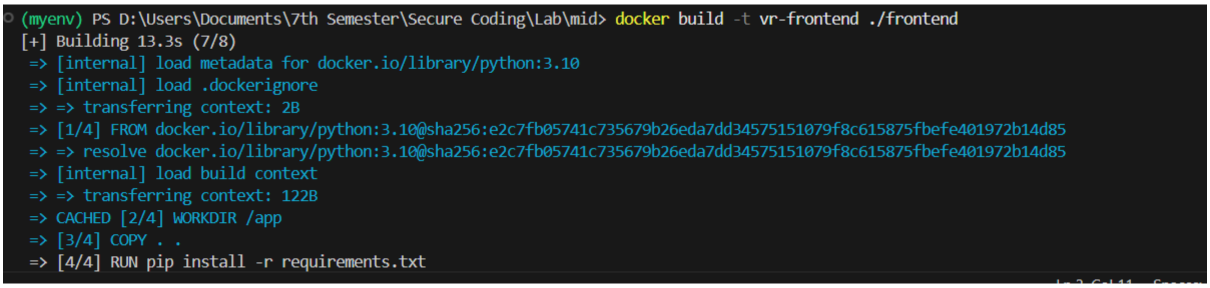
```python
from sqlalchemy import create_engine
from sqlalchemy.orm import sessionmaker
from models import Base

DATABASE_URL = "sqlite:///./vr_platform.db"
engine = create_engine(DATABASE_URL, connect_args={"check_same_thread": False})
SessionLocal = sessionmaker(autocommit=False, autoflush=False, bind=engine)

Base.metadata.create_all(bind=engine)
```

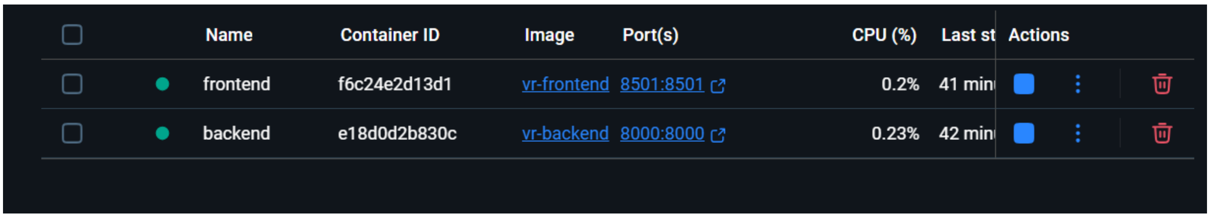
```
PS D:\Users\Documents\7th Semester\Secure Coding\Lab\mid> docker build -t vr-backend ./backend
[+] Building 126.7s (5/9)                                                                        docker:desktop-linux
 => => sha256:b617a119f8a27982374d94ec6eb3738ae3d38d6fc2c34c865813926cf596a621 149.95MB / 211.33MB        121.2s
 => => sha256:35a6ae16d0f03d1e758190b50a7b0495277bbe894fe2fbf7f91083d2aad3ef98 6.16MB / 6.16MB              8.1s
 => => sha256:1eb98adba0eb44a2e4facf9ca3626a4a66feedd0dd56d159cca90a35205744e7 64.40MB / 64.40MB           86.0s
 => => sha256:07d1b5af933d2dfc3d0dd509d6e20534825e4a537f7b006a6cb5b8e5a1f20905 24.01MB / 24.01MB           30.9s
 => => sha256:23b7d26ef1d294256da0d70ce374277b9aab5ca683015073316005cb63d33849 48.49MB / 48.49MB           56.0s
 => => extracting sha256:23b7d26ef1d294256da0d70ce374277b9aab5ca683015073316005cb63d33849                   2.5s
 => => extracting sha256:07d1b5af933d2dfc3d0dd509d6e20534825e4a537f7b006a6cb5b8e5a1f20905                   0.9s
 => => extracting sha256:1eb98adba0eb44a2e4facf9ca3626a4a66feedd0dd56d159cca90a35205744e7                   3.0s
 => [internal] load build context                                                                           0.2s
 => => transferring context: 4.79kB                                                                         0.0s
```

2.3. Building Front end:



```
(myenv) PS D:\Users\Documents\7th Semester\Secure Coding\Lab\mid> docker build -t vr-frontend ./frontend
[+] Building 13.3s (7/8)
 => [internal] load metadata for docker.io/library/python:3.10
 => [internal] load .dockerignore
 => => transferring context: 2B
 => [1/4] FROM docker.io/library/python:3.10@sha256:e2c7fb05741c735679b26eda7dd34575151079f8c615875fbefe401972b14d85
 => => resolve docker.io/library/python:3.10@sha256:e2c7fb05741c735679b26eda7dd34575151079f8c615875fbefe401972b14d85
 => [internal] load build context
 => => transferring context: 122B
 => CACHED [2/4] WORKDIR /app
 => [3/4] COPY . .
 => [4/4] RUN pip install -r requirements.txt
```

2.4. Running the docker containers:

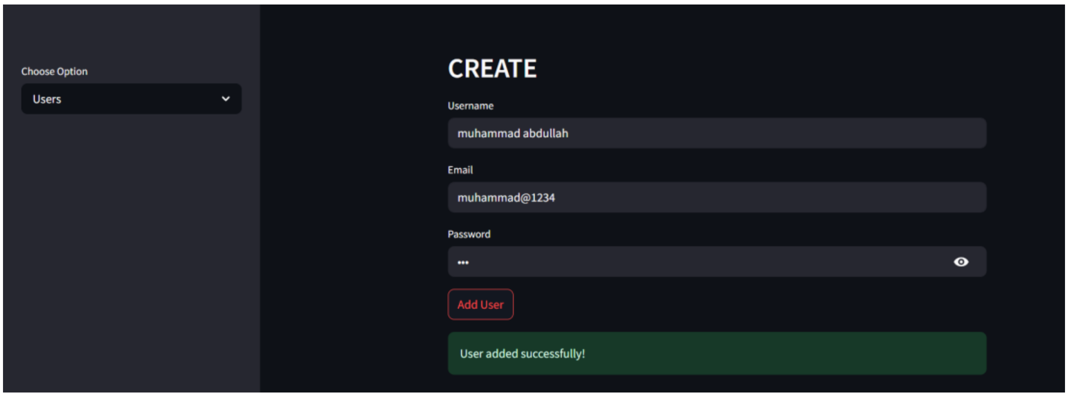


□		Name	Container ID	Image	Port(s)	CPU (%)	Last st	Actions
□	●	frontend	f6c24e2d13d1	vr-frontend	8501:8501	0.2%	41 min	
□	●	backend	e18d0d2b830c	vr-backend	8000:8000	0.23%	42 min	

3. Performing the CRUD operations:

3.1. Performing CRUD on users table:

3.1.1 Create:



Choose Option

Users

CREATE

Username

muhammad abdullah

Email

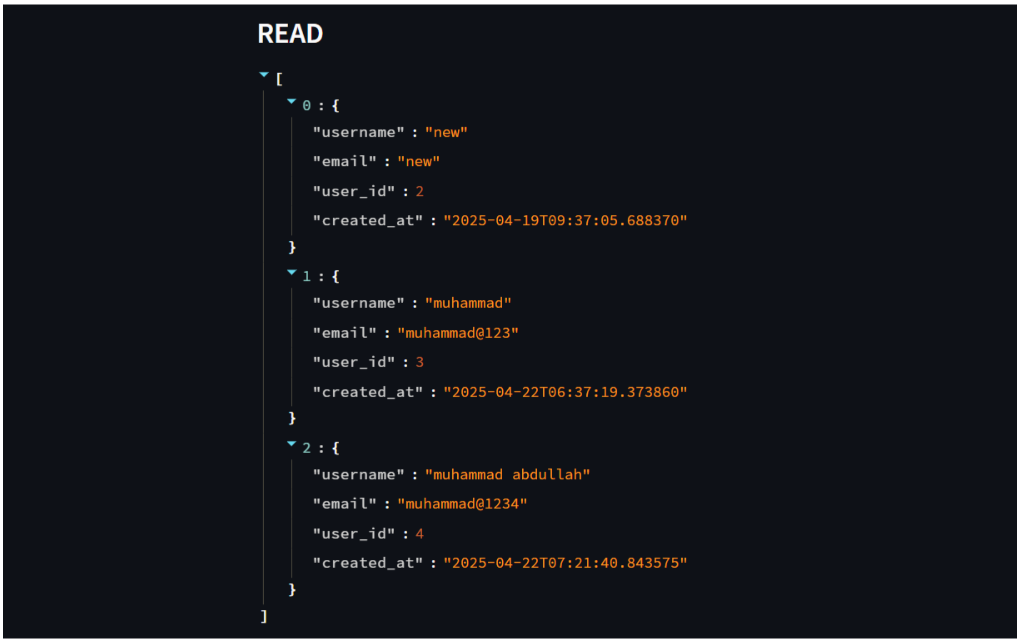
muhammad@1234

Password

•••

User added successfully!

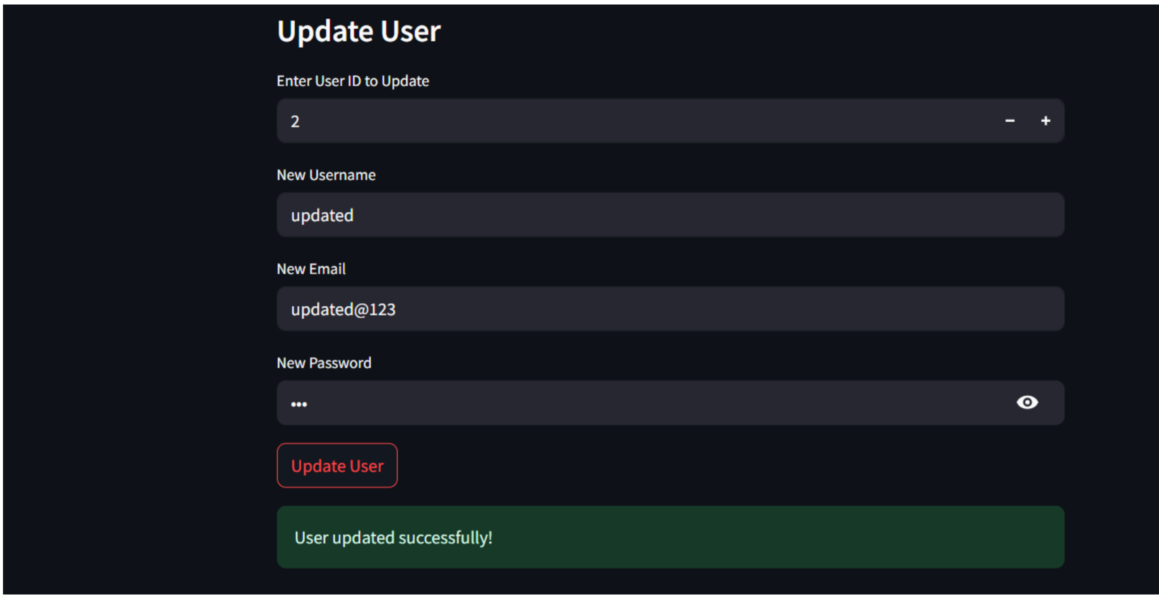
3.1.2. Read:



READ

```
[
  0 : {
    "username" : "new"
    "email" : "new"
    "user_id" : 2
    "created_at" : "2025-04-19T09:37:05.688370"
  }
  1 : {
    "username" : "muhammad"
    "email" : "muhammad@123"
    "user_id" : 3
    "created_at" : "2025-04-22T06:37:19.373860"
  }
  2 : {
    "username" : "muhammad abdullah"
    "email" : "muhammad@1234"
    "user_id" : 4
    "created_at" : "2025-04-22T07:21:40.843575"
  }
]
```

3.1.3. Update:



Update User

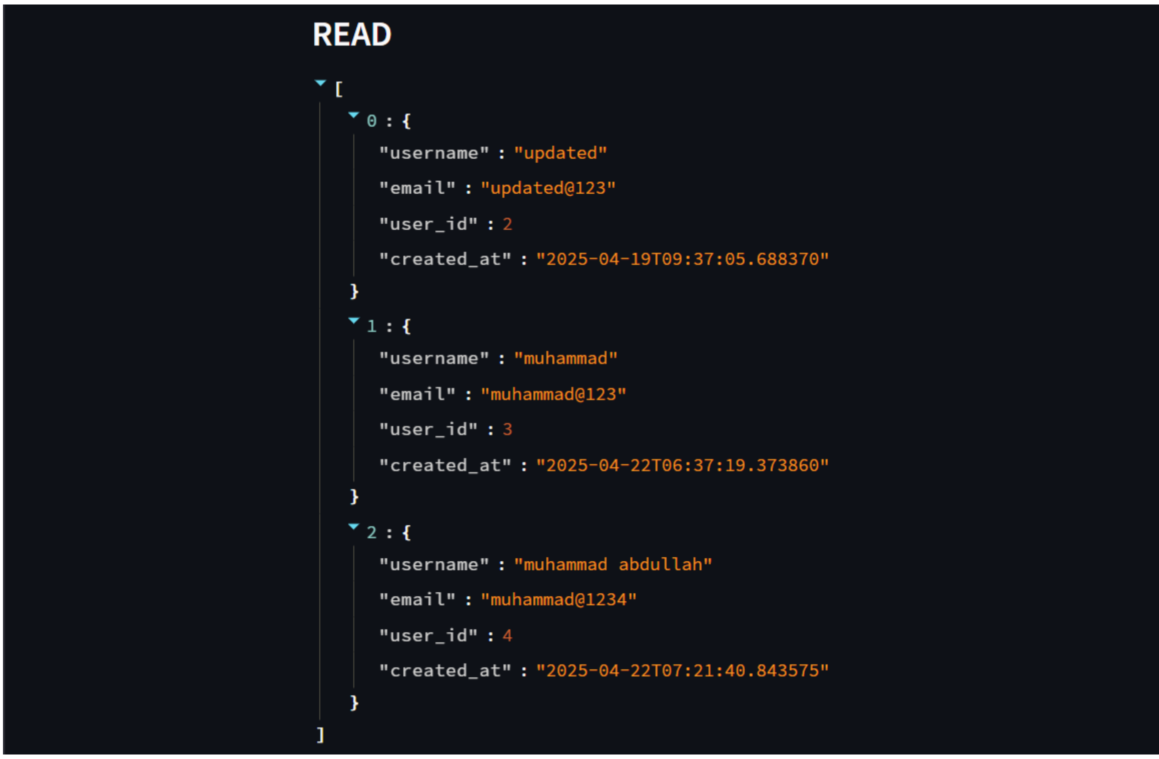
Enter User ID to Update: 2

New Username: updated

New Email: updated@123

New Password: •••

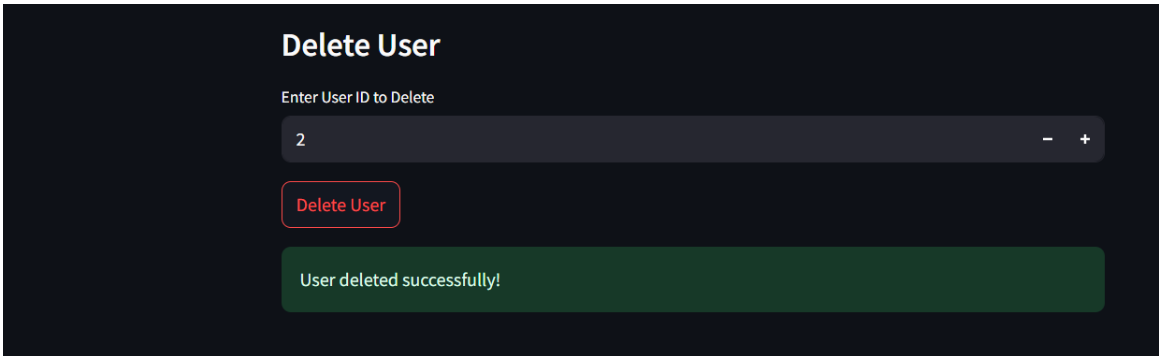
User updated successfully!



READ

```
[
  0 : {
    "username" : "updated"
    "email" : "updated@123"
    "user_id" : 2
    "created_at" : "2025-04-19T09:37:05.688370"
  }
  1 : {
    "username" : "muhammad"
    "email" : "muhammad@123"
    "user_id" : 3
    "created_at" : "2025-04-22T06:37:19.373860"
  }
  2 : {
    "username" : "muhammad abdullah"
    "email" : "muhammad@1234"
    "user_id" : 4
    "created_at" : "2025-04-22T07:21:40.843575"
  }
]
```

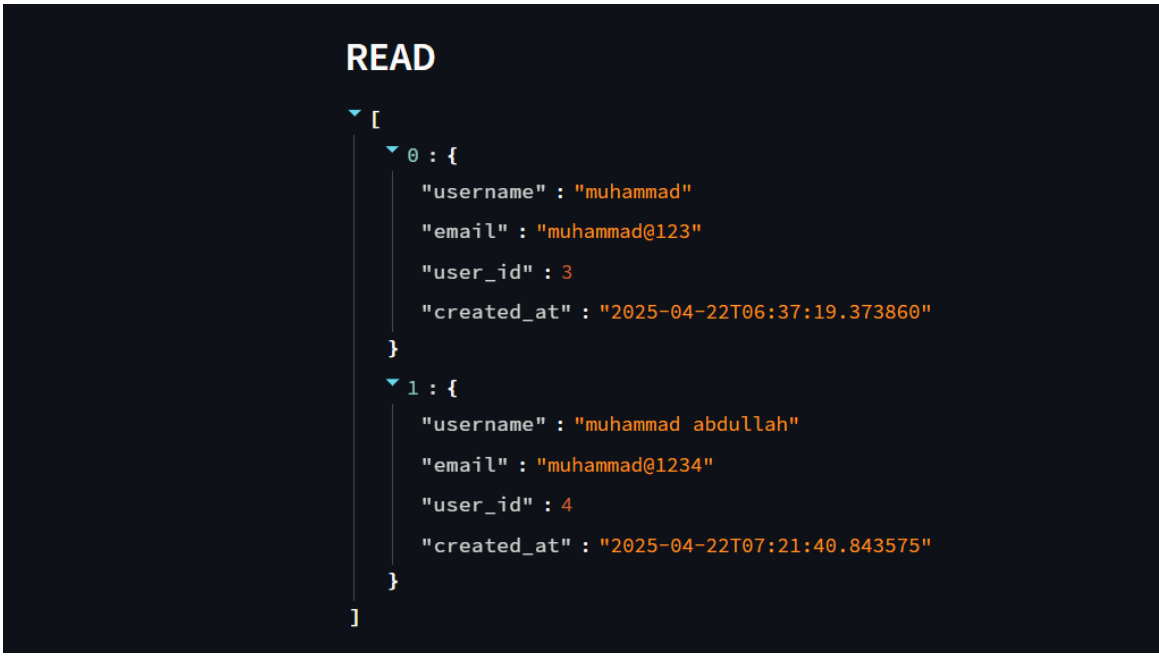
3.1.4. Delete:



Delete User

Enter User ID to Delete: 2

User deleted successfully!

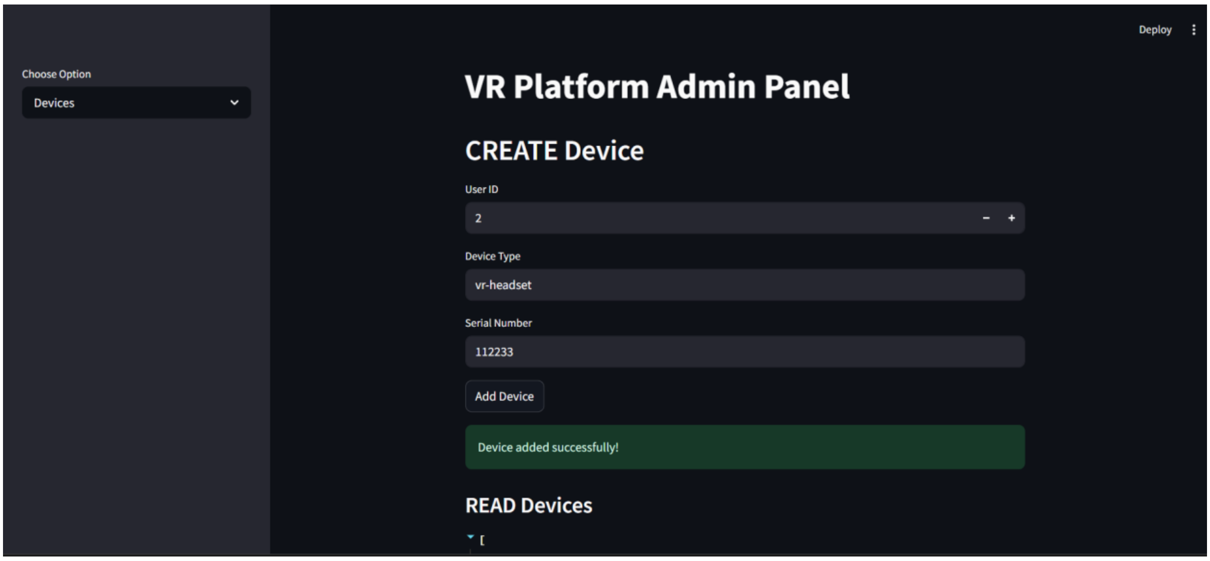


READ

```
[
  0 : {
    "username" : "muhammad"
    "email" : "muhammad@123"
    "user_id" : 3
    "created_at" : "2025-04-22T06:37:19.373860"
  }
  1 : {
    "username" : "muhammad abdullah"
    "email" : "muhammad@1234"
    "user_id" : 4
    "created_at" : "2025-04-22T07:21:40.843575"
  }
]
```

3.2. Performing CRUD on Devices table:

3.2.1. Create:



Choose Option: Devices

VR Platform Admin Panel

CREATE Device

User ID: 2

Device Type: vr-headset

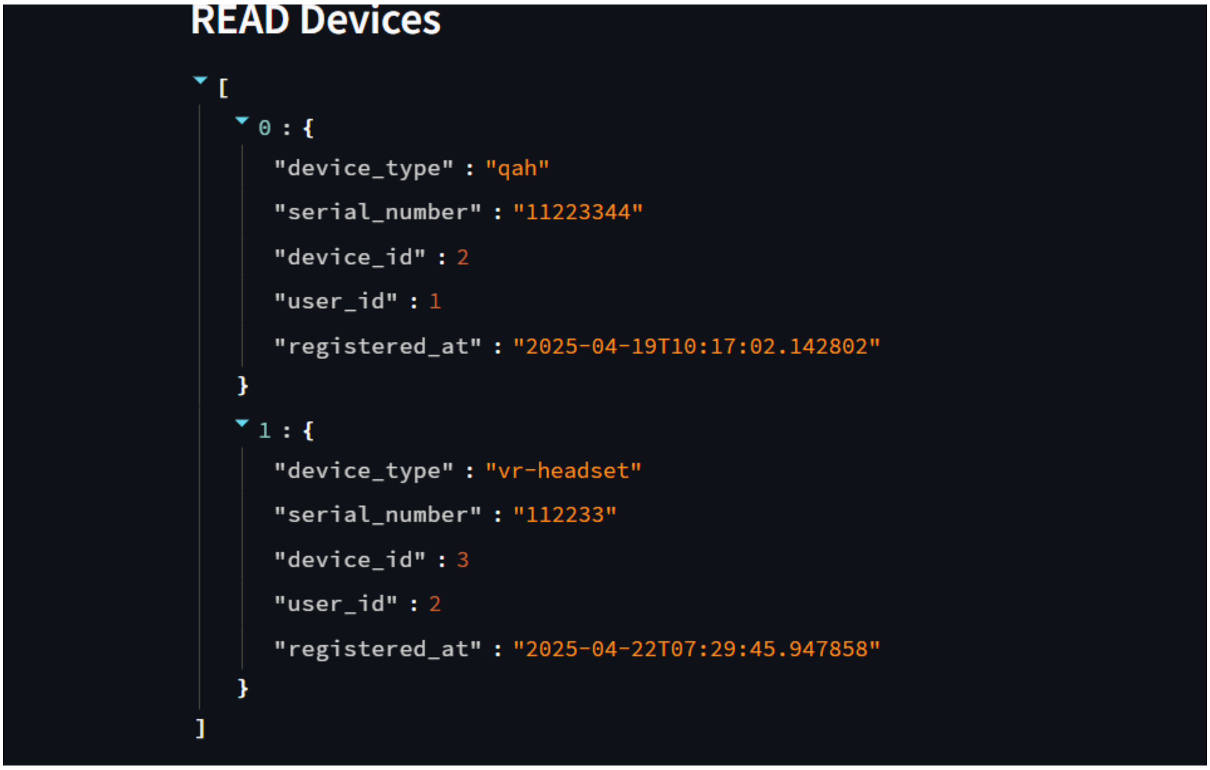
Serial Number: 112233

Device added successfully!

READ Devices

[

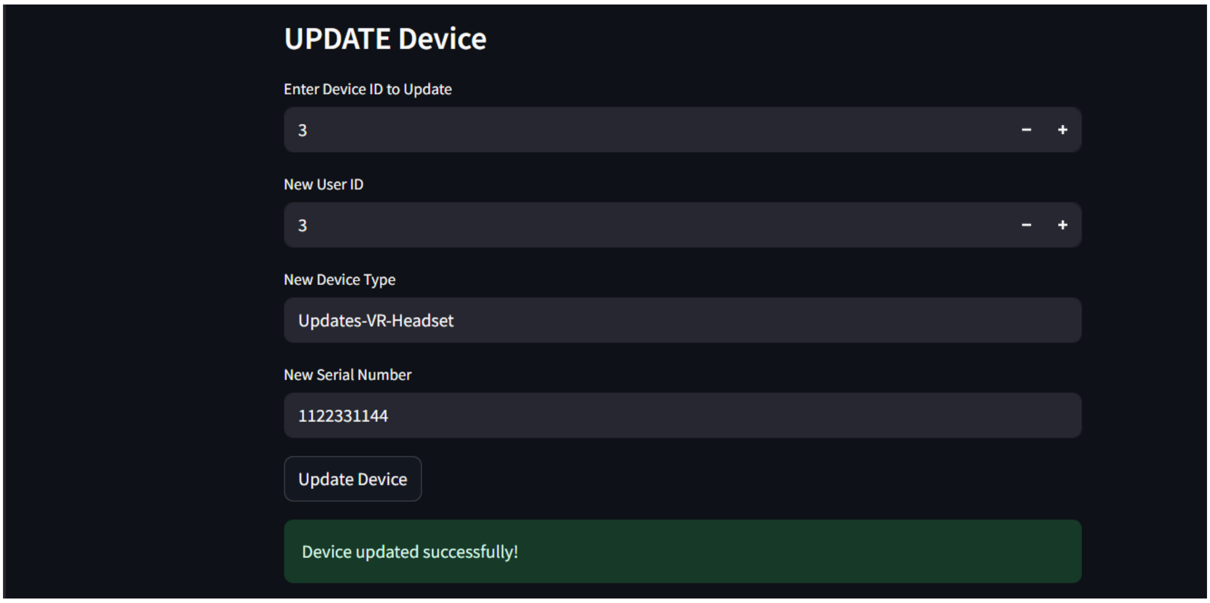
3.2.2. Read:



READ Devices

```
[
  0 : {
    "device_type" : "qah"
    "serial_number" : "11223344"
    "device_id" : 2
    "user_id" : 1
    "registered_at" : "2025-04-19T10:17:02.142802"
  }
  1 : {
    "device_type" : "vr-headset"
    "serial_number" : "112233"
    "device_id" : 3
    "user_id" : 2
    "registered_at" : "2025-04-22T07:29:45.947858"
  }
]
```

3.2.3. Update:



UPDATE Device

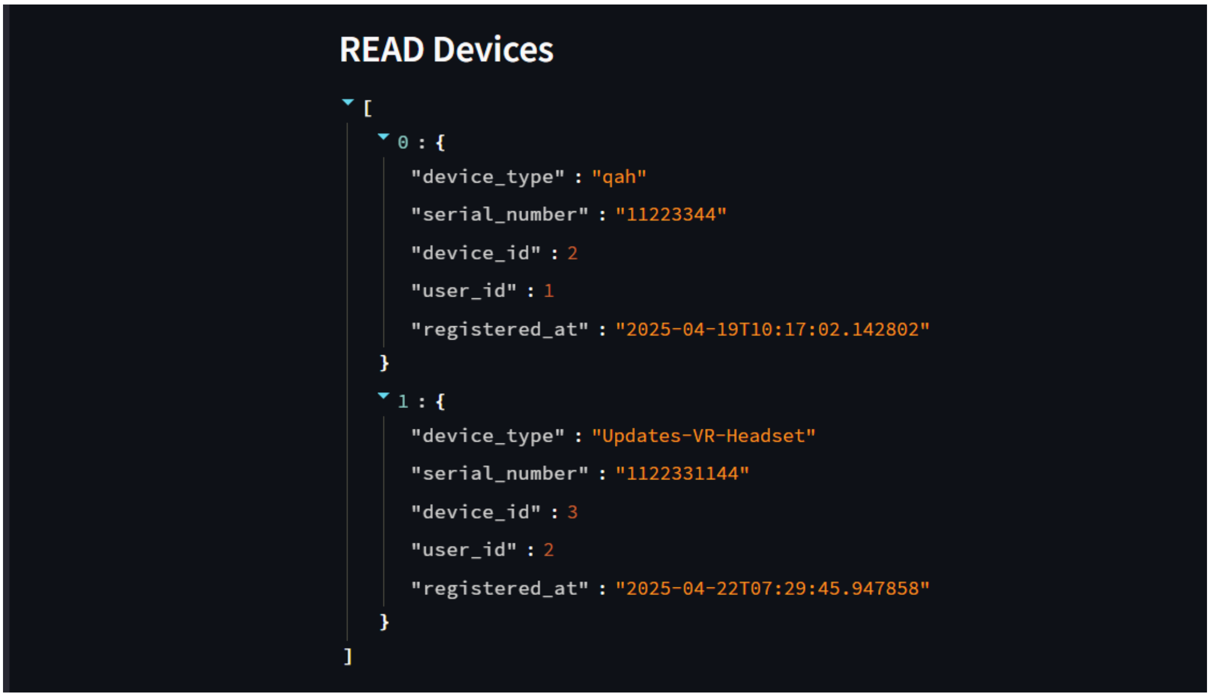
Enter Device ID to Update: 3

New User ID: 3

New Device Type: Updates-VR-Headset

New Serial Number: 1122331144

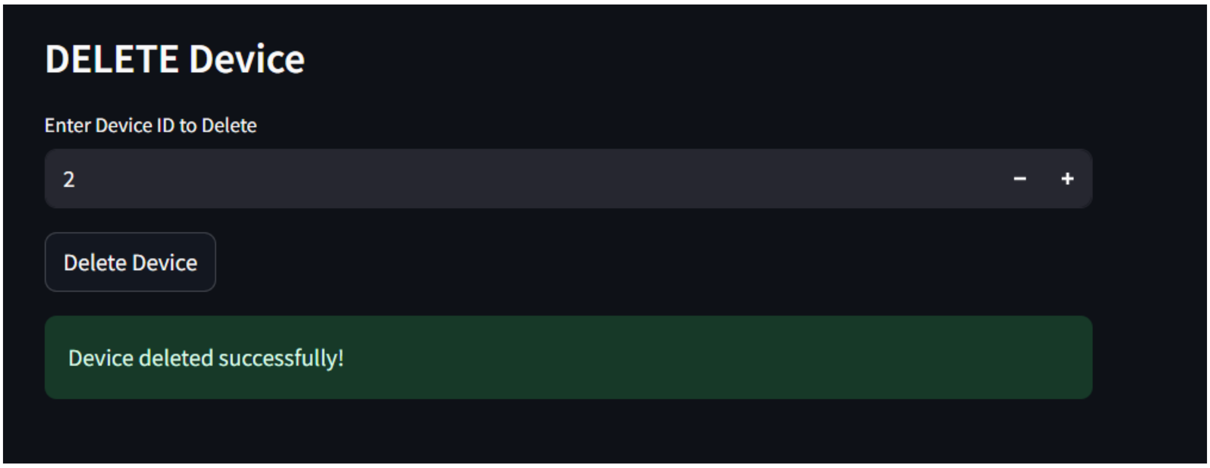
Device updated successfully!



READ Devices

```
[
  0 : {
    "device_type" : "qah"
    "serial_number" : "11223344"
    "device_id" : 2
    "user_id" : 1
    "registered_at" : "2025-04-19T10:17:02.142802"
  }
  1 : {
    "device_type" : "Updates-VR-Headset"
    "serial_number" : "1122331144"
    "device_id" : 3
    "user_id" : 2
    "registered_at" : "2025-04-22T07:29:45.947858"
  }
]
```

3.2.4. Delete:

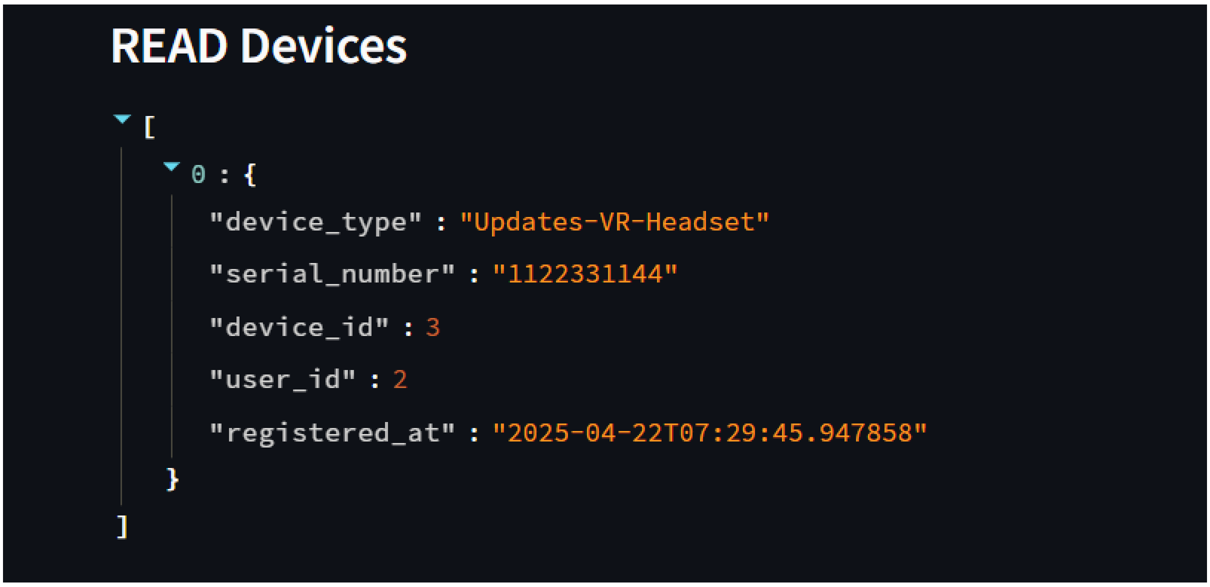


DELETE Device

Enter Device ID to Delete

2

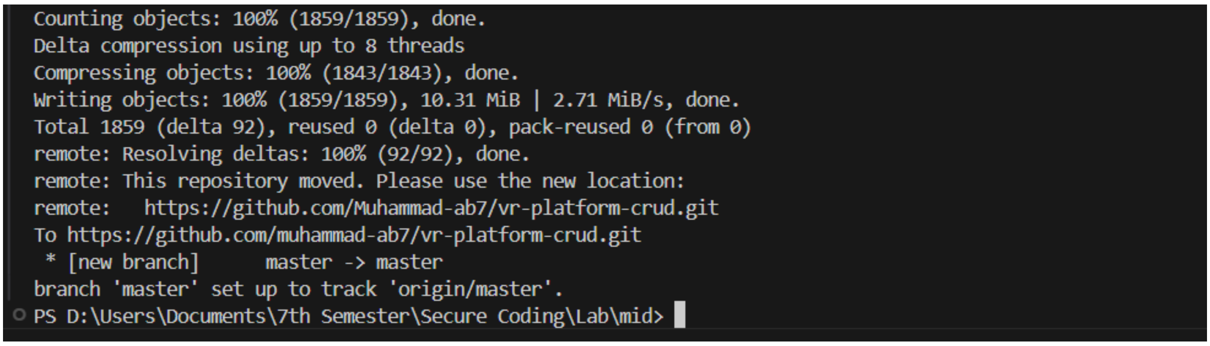
Device deleted successfully!



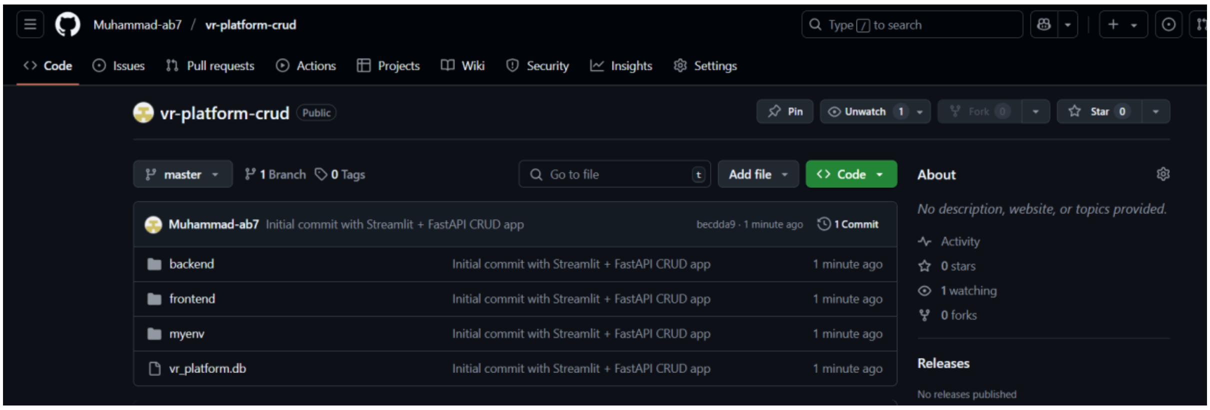
READ Devices

```
[
  0 : {
    "device_type" : "Updates-VR-Headset"
    "serial_number" : "1122331144"
    "device_id" : 3
    "user_id" : 2
    "registered_at" : "2025-04-22T07:29:45.947858"
  }
]
```

4. Pushing to github:



```
Counting objects: 100% (1859/1859), done.
Delta compression using up to 8 threads
Compressing objects: 100% (1843/1843), done.
Writing objects: 100% (1859/1859), 10.31 MiB | 2.71 MiB/s, done.
Total 1859 (delta 92), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (92/92), done.
remote: This repository moved. Please use the new location:
remote:   https://github.com/Muhammad-ab7/vr-platform-crud.git
To https://github.com/muhammad-ab7/vr-platform-crud.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
PS D:\Users\Documents\7th Semester\Secure Coding\Lab\mid>
```



vr-platform-crud Public

Muhammad-ab7 Initial commit with Streamlit + FastAPI CRUD app becdda9 · 1 minute ago 1 Commit

backend	Initial commit with Streamlit + FastAPI CRUD app	1 minute ago
frontend	Initial commit with Streamlit + FastAPI CRUD app	1 minute ago
myenv	Initial commit with Streamlit + FastAPI CRUD app	1 minute ago
vr_platform.db	Initial commit with Streamlit + FastAPI CRUD app	1 minute ago

About

No description, website, or topics provided.

Activity
0 stars
1 watching
0 forks

Releases

No releases published