

Segwise Backend Assessment

Installation and Setup Guide

- Installing Docker and it's repositories

```
sudo apt install -y apt-transport-https ca-certificates curl software-properties-common
```

```
sudo mkdir -p /etc/apt/keyrings
curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg
```

```
echo \
  "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu \
    $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
```

```
sudo apt install docker.io
sudo apt install docker-compose
```

- Verify installation

```
docker --version
```

- Managing Docker as NON-ROOT User

```
sudo usermod -aG docker $USER

newgrp docker
```

- Enable and start docker

```
sudo systemctl enable docker
sudo systemctl start docker
```

Cloning Repo of APP

```
git clone https://github.com/siddharth12s/segwise.git
```

- Change directory to segwise (Project folder)

```
cd segwise
```

Create Configs.py (Environment variables file)

```
sudo nano configs.py
```

- COPY-PASTE the following database CONFIG in the FILE

```
DATABASES = {
    "default": {
        "ENGINE": "django.db.backends.postgresql",
        "NAME": "segwise_db_2",
        "USER": "segwise_user",
        "PASSWORD": "password",
        "HOST": "postgres", # Docker Image
        # "HOST": "127.0.0.1", # For local
        "PORT": "5432",
    }
}
SECRET_KEY =
"7fc27e0d108a776dd6c1b7cba2a5d7d2a105308bbc892befd81e03dfe863c950"
```

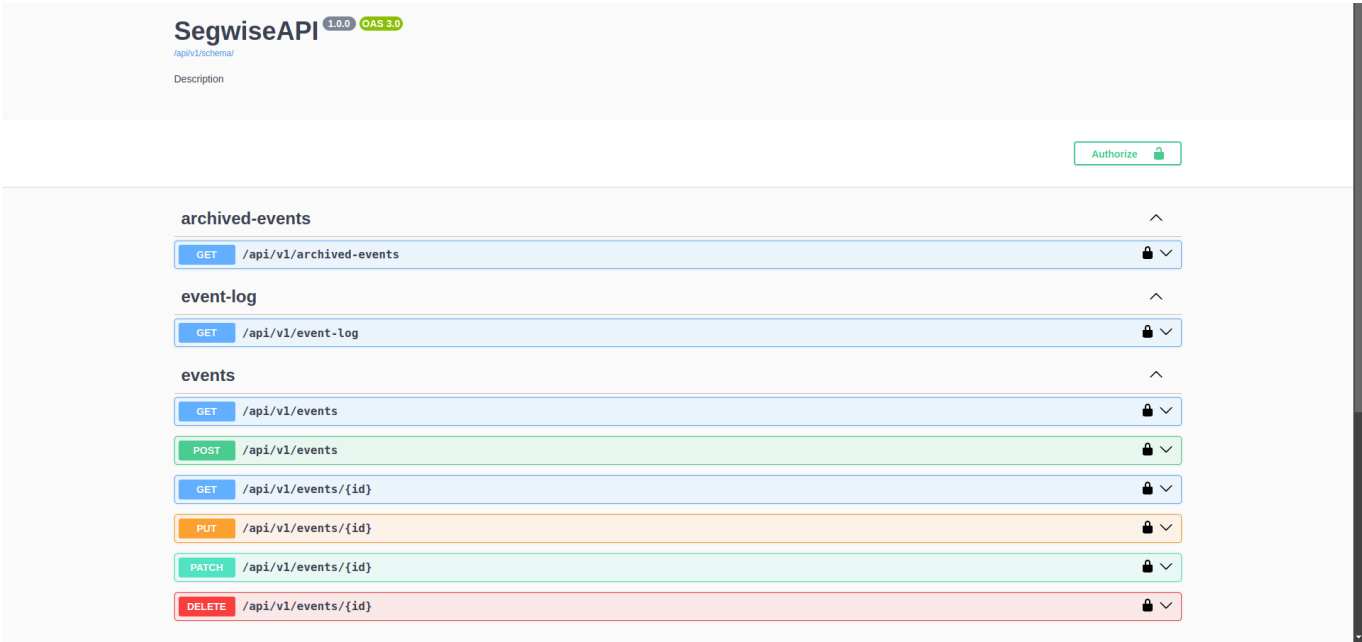
Run the DOCKER

```
docker-compose build
```

```
docker-compose up
```

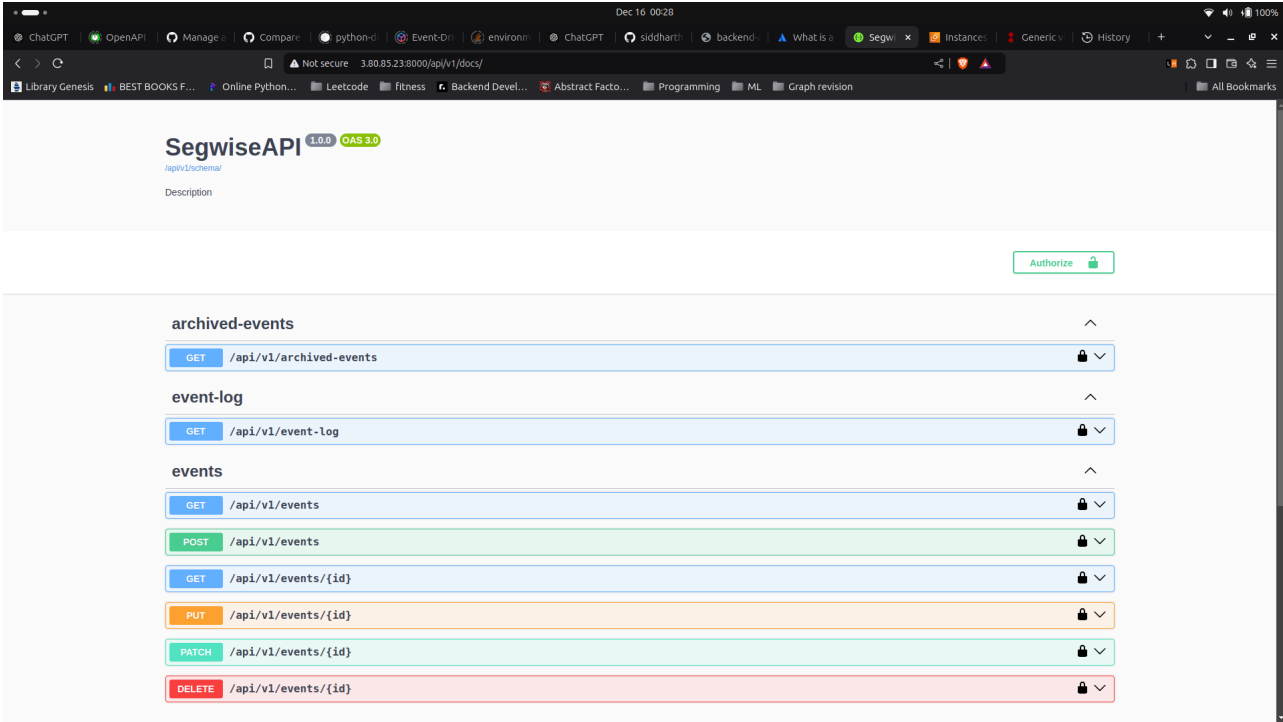
APP Interface

- Go to <http://0.0.0.0:8000/api/v1/docs> for checking out the OpenAPI Schema



Live APP

- url :- <http://3.80.85.23:8000/api/v1/docs/>



Costing

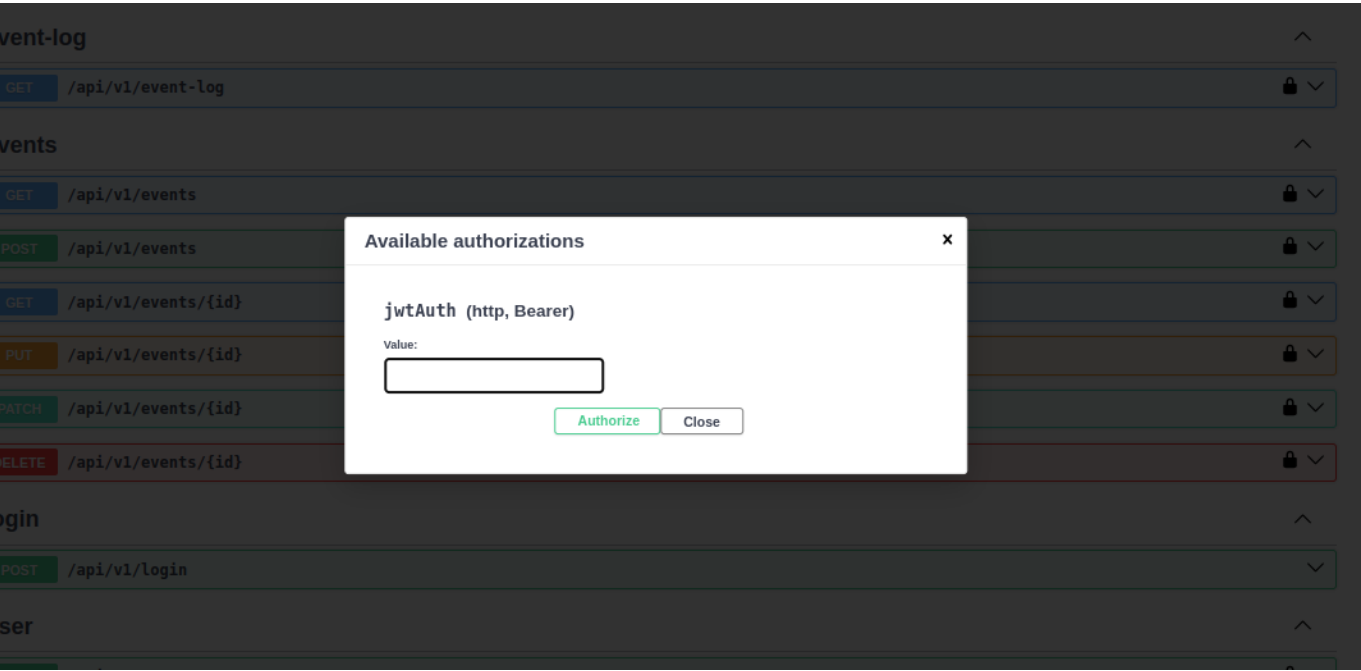
- I'm using Amazon EC2 t2.micro instance which comesup with 750 free hours.
- So, for 30 * 24 or 31 * 24 = 720 to 744 hours the effective cost would be 0\$, even for 5 API requests/day.

RESOURCES used

- ChatGPT, Stackoverflow
- <https://www.django-rest-framework.org/api-guide/generic-views/>
- Reddit for Docker queries and deployment.

Additional Features

- Added JWTAuth for the API services
- **WORKING ON LOCAL**
- **BUILD FAILED ON EC2 INSTANCE FOR AUTHENTICATION SERVICE**
- So reverted back without authentication feature



- User creation endpoint

