

Docker Assignment

[Github link: <https://github.com/piyu2409/Dockerassignment>]

Software/Plugins/Language Used :

- Python
- Flask Web Framework
- Postman
- Mysql
- Docker

Implementation :

- I have done all installations.
e.g. flask and its dependencies, postman
- Create the folder Structure in that one folder contain REST API(CRUD) operations and another folder contain mysql file. In first folder i have write all configuration and business logic for REST API. In second folder i have write sql file to create database and table.
- Write Dockerfile which contain all code and mysql.

● Build Dockerfile :

```
sudo docker build -t flask_api .
```

- **Run MYSQL container:**

```
sudo docker run -it -h localhost --name flask_app -e  
MYSQL_ROOT_PASSWORD=priyanka -e MYSQL_DATABASE=restapi -e  
MYSQL_USER=root@localhost -e MYSQL_PASSWORD=priyanka -e -d  
mysql:5.7
```

1. `sudo docker ps`

Get the container Id

2. `sudo docker exec -it <container id> /bin/bash`

3. `mysql -u root -p`

1. Use restapi;

2. `CREATE TABLE IF NOT EXISTS user(id INT PRIMARY KEY,name
VARCHAR(25) NOT NULL,age INT NOT NULL,department
VARCHAR(25) NOT NULL,subject VARCHAR(25) NOT NULL);`

(ps:I did the steps 1 to 3 because table is not created in mysql container...i tried to solve but cant solve it...)

- **Run dockerfile:**

```
sudo docker run -it -p 8080:8080 --link flask_app flask_api:latest
```

Flow diagram:

