

Threetier studentapp

Steps

Backend:

- 1) `docker run -d -p 3306:3306 -e MYSQL_ROOT_PASSWORD=1234 mysql:latest`
- 2) `docker ps`
- 3) `docker images`
- 4) `docker exec -it id mysql -u root -p1234 (id=container id)`
- 5) `> create database studentapp;`
`> use studentapp;`
`> (paste create table code)`
`> sesc students;`
`> exit`
- 6) `git clone (https link of github)`
- 7) `ls`
- 8) `cd (repo name)`
- 9) `ls`
- 10) `docker images`
- 11) `docker tag id (backend name):latest`
- 12) `docker images`
- 13) `ls`
- 14) `docker run -d -p 8080:8080 (backend name)`
- 15) `cd ..`

Frontend:

- 1) Cd frontend/
- 2) ls
- 3) docker build .
- 4) docker tag id (frontend name):latest
- 5) docker Images
- 6) docker run -d -p 80:80 (frontend name)

Backend:

```
root@ip-172-31-47-12:~# docker run -d -p 3306:3306 -e MYSQL_ROOT_PASSWORD=1234 mysql:latest
Unable to find image 'mysql:latest' locally
latest: Pulling from library/mysql
9a5c778f631f: Pull complete
9e77c3a95bf2: Pull complete
8b279a2086e0: Pull complete
c8bfbcd7882: Pull complete
d35b074b68ec: Pull complete
beea5014e6af: Pull complete
dc3791a61558: Pull complete
52f9323b9f0e: Pull complete
7f7391eab49b: Pull complete
8d2f04b287ee: Pull complete
Digest: sha256:9d1c923e5f66a89607285ee2641f8a53430a1ccd5e4a62b35eb8a48b74b9ff48
Status: Downloaded newer image for mysql:latest
3eda38f9332d4f0fe59fe5c487e4773962caa65b18c3c69206fab53693d1eb58
root@ip-172-31-47-12:~# docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS                               NAMES
3eda38f9332d   mysql:latest   "docker-entrypoint.s..." 3 minutes ago   Up 3 minutes   0.0.0.0:3306->3306/tcp, :::3306->3306/tcp, 33060/tcp   hopeful_heyrovsky
root@ip-172-31-47-12:~# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
mysql          latest   019814493c7a   8 weeks ago   632MB
root@ip-172-31-47-12:~# doxker exec -it 3ed mysql -u root -p1234
Command 'doxker' not found, did you mean:
  command 'docker' from deb docker.io (24.0.5-0ubuntu1~22.04.1)
  command 'docker' from deb podman-docker (3.4.4+ds1-1ubuntu1.22.04.2)
```

i-Oca6104c092ad959c (treetier_studentapp)

PublicIPs: 18.232.106.251 PrivateIPs: 172.31.47.12

```
mysql> create database studentapp;
Query OK, 1 row affected (0.00 sec)

mysql> use studentapp;
Database changed
mysql> CREATE TABLE if not exists students(student_id INT NOT NULL AUTO_INCREMENT,
-> student_name VARCHAR(100) NOT NULL,
-> student_addr VARCHAR(100) NOT NULL,
-> student_age VARCHAR(3) NOT NULL,
-> student_qual VARCHAR(20) NOT NULL,
-> student_percent VARCHAR(10) NOT NULL,
-> student_year_passed VARCHAR(10) NOT NULL,
-> PRIMARY KEY (student_id)
-> );
Query OK, 0 rows affected (0.03 sec)

mysql> desc students;
```

Field	Type	Null	Key	Default	Extra
student_id	int	NO	PRI	NULL	auto_increment
student_name	varchar(100)	NO		NULL	
student_addr	varchar(100)	NO		NULL	
student_age	varchar(3)	NO		NULL	
student_qual	varchar(20)	NO		NULL	
student_percent	varchar(10)	NO		NULL	

```
mysql> exit
Bye
root@ip-172-31-47-12:~# git clone https://github.com/Arohi1308/threetier_Studentapp.git
Cloning into 'threetier_Studentapp'...
remote: Enumerating objects: 43, done.
remote: Counting objects: 100% (43/43), done.
remote: Compressing objects: 100% (38/38), done.
remote: Total 43 (delta 5), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (43/43), 100.51 KiB | 6.70 MiB/s, done.
Resolving deltas: 100% (5/5), done.
root@ip-172-31-47-12:~# ls
snap threetier_Studentapp
root@ip-172-31-47-12:~# cd threetier_Studentapp/
root@ip-172-31-47-12:~/threetier_Studentapp# cd backend/
root@ip-172-31-47-12:~/threetier_Studentapp/backend# ls
Dockerfile context.xml student.war
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker build .
[+] Building 43.2s (16/16) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 629B
=> [internal] load metadata for docker.io/library/centos:7
=> [internal] load .dockerignore
```

```

=> => exporting layers
=> => writing image sha256:7c9fa460680d4c0ae18186b950136093022b72a22006209e51dffa3a87f914935
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker images
REPOSITORY      TAG          IMAGE ID      CREATED       SIZE
<none>          <none>       7c9fa460680d  About a minute ago  670MB
mysql           latest       019814493c7a  8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker tag 7c9 arohi/backend:latest
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker images
REPOSITORY      TAG          IMAGE ID      CREATED       SIZE
arohi/backend    latest       7c9fa460680d  2 minutes ago  670MB
mysql           latest       019814493c7a  8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker run -d -p 8080:8080 arohi/backend
16f724147903e771e1a8f2f381f0af644bb21eb7774cb9c9a9e7ab012132c4f1
root@ip-172-31-47-12:~/threetier_Studentapp/backend#

```

Output:

← → ↻ ⚠ Not secure 18.232.106.251:8080/student/

Student Registration Form

Student Name

Student Address

Student Age

Student Qualification

Student Percentage

Year Passed

register

← → ↻ ⚠ Not secure 18.232.106.251:8080/student/viewStudents ☆ 📱 🌐 ⋮

[Register Student](#)

Students List

Student ID	StudentName	Student Addr	Student Age	Student Qualification	Student Percentage	Student Year Passed	Edit	Delete
1	aro	pune	22	BE	98	23	edit	delete

Frontend:

```

root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
<none>        <none>    7c9fa460680d   About a minute ago  670MB
mysql         latest    019814493c7a   8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker tag 7c9 arohi/backend:latest
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
arohi/backend  latest    7c9fa460680d   2 minutes ago  670MB
mysql         latest    019814493c7a   8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/backend# docker run -d -p 8080:8080 arohi/backend
16f724147903e771e1a8f2f381f0af644bb21eb7774cb9c9a9e7ab012132c4f1
root@ip-172-31-47-12:~/threetier_Studentapp/backend# cd ..
root@ip-172-31-47-12:~/threetier_Studentapp# ls
README.md  backend  frontend
root@ip-172-31-47-12:~/threetier_Studentapp# cd frontend/
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# ls
Dockerfile  index.html
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker build .
[+] Building 22.1s (8/8) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 204B

```

```

root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
<none>        <none>    e140cf8c118f   23 seconds ago  478MB
arohi/backend  latest    7c9fa460680d   11 minutes ago  670MB
mysql         latest    019814493c7a   8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker tag e14 arohi/frontend
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
arohi/frontend latest    e140cf8c118f   About a minute ago  478MB
arohi/backend  latest    7c9fa460680d   12 minutes ago  670MB
mysql         latest    019814493c7a   8 weeks ago    632MB
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker run -d -p 8080:8080 arohi/frontend
10cdd2a6749b2898a651618e2731c132fc0a5a7a07dae6eddf687c222f7c12
docker: Error response from daemon: driver failed programming external connectivity on endpoint quizzical_kirch (0869df631d8e35a1974ee55bb92e9190fafe87cd4ecd9720bdb28
9822614ac67): Bind for 0.0.0.0:8080 failed: port is already allocated.
root@ip-172-31-47-12:~/threetier_Studentapp/frontend# docker run -d -p 80:80 arohi/frontend
5cdclaa80cd99c9a85a87f8355654f2a216f3572dac18dee0ad68b263d48386
root@ip-172-31-47-12:~/threetier_Studentapp/frontend#

```

Output:



