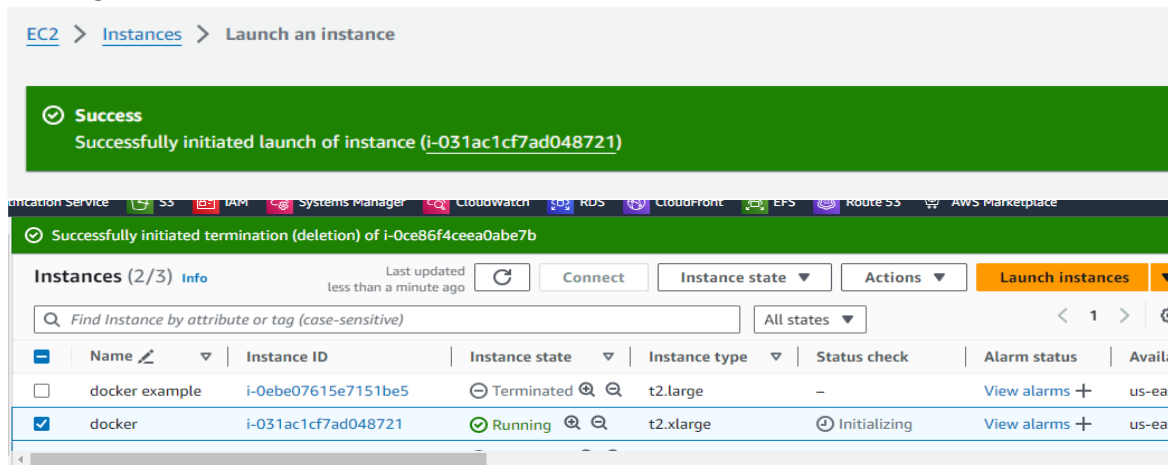


## Student app project using docker

Creating a instance



Login to the user using the command

Ssh -I keyname username@public ip

```
hivam@DESKTOP-1BLG2M6:~$ ssh -i gargi.pem ubuntu@35.172.228.213
The authenticity of host '35.172.228.213 (35.172.228.213)' can't be established.
ED25519 key fingerprint is SHA256:3TDyvNQhxxPwttZrQSDUUFU896z5FJwT0tUom/pszPQ.
This key is not known by any other names
```

After login go to the root

Cloning the directory from the documentation using command git clone

Git clone <https://github.com/rajatpzade/CDECB39-Demo.git>

```
ubuntu@ip-172-31-24-47:~$ sudo -i
root@ip-172-31-24-47:~# git clone https://github.com/rajatpzade/CDECB39-Demo.git
Cloning into 'CDECB39-Demo'...
remote: Enumerating objects: 329, done.
remote: Counting objects: 100% (184/184), done.
remote: Compressing objects: 100% (138/138), done.
remote: Total 329 (delta 99), reused 125 (delta 43), pack-reused 145 (from 1)
Receiving objects: 100% (329/329), 31.94 KiB | 4.56 MiB/s, done.
Resolving deltas: 100% (163/163), done.
root@ip-172-31-24-47:~# ls
CDECB39-Demo  snap
root@ip-172-31-24-47:~# |
```

Getting docker started by activating ./docker.sh file (permission- chmod o+x docker.sh)

```
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-24-47:~/CDECB39-Demo# ls
README.md  Students-Docker  docker.sh  dockerfile  index.html
root@ip-172-31-24-47:~/CDECB39-Demo# |
```

In DB give execution permission to the Dockerfile Build the

file and create a container `docker build -t students-db .`

`docker run -d -p 3306:3306 --name students-db students-db`

```
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker# cd DB
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB# ls
Dockerfile  init-db.sql
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB# chmod o+x Dockerfile
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB# ^C
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB# docker build -t students-db .
[+] Building 8.7s (4/6)
```

```
=> => naming to docker.io/library/students-db
1 warning found (use docker --debug to expand):
- SecretsUsedInArgOrEnv: Do not use ARG or ENV instructions for sensitive data (ENV "MYSQL_ROOT_PASSWORD") (line 5)
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB# docker run -d -p 3306:3306 --name students-db students-db
e645ed716fccf16911c8434154b6d197e78a5f44afea8d906dba85f050448e63
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/DB#
```

In BE execution permission to the Dockerfile

Build the file and create a container `docker`

`build -t students-backend .`

`docker run -d -p 8080:8080 --name students-backend --link students-db students-backend link`

the db with the backend

```
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/BE# vim context.xml
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/BE# ll
total 16
-rwxr-xr-x 2 root root 4096 Sep 19 10:13 ./
-rwxr-xr-x 5 root root 4096 Sep 19 10:09 ../
-rw-r--r-x 1 root root 829 Sep 19 10:09 Dockerfile*
-rw-r--r-- 1 root root 1529 Sep 19 10:13 context.xml
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/BE# vim Dockerfile
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/BE# docker build -t students-backend .
[+] Building 0.9s (5/16)
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 869B
=> [internal] load metadata for docker.io/library/ubuntu:20.04
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> [6/9] ADD https://s3-us-west-2.amazonaws.com/studentapi-cit/student.war /opt/apache-tomcat-9.0.95/webapps/
=> [1/9] FROM docker.io/library/ubuntu:20.04@sha256:fa17826afb526a9fc7250e0fbcbfd18d03fe7a54849472f86879d8bf562c62
=> => resolve docker.io/library/ubuntu:20.04@sha256:fa17826afb526a9fc7250e0fbcbfd18d03fe7a54849472f86879d8bf562c62
=> => sha256:fa17826afb526a9fc7250e0fbcbfd18d03fe7a54849472f86879d8bf562c629e 1.34kB / 1.34kB
=> => sha256:85c08a37b74bc18a7b3f8cf89aabd51c525cdbc193a753f7907965e310ec2 424B / 424B
=> => sha256:9df6d6105df2788299e5cbbf3df09aa6b3b5a10b784b214c35a035f76deb4ba 2.30kB / 2.30kB
=> => sha256:602d8ad51b8130f3fcd71cb936dea612ebc799666136abf2e5914585b3178a4a 27.51MB / 27.51MB
```

In FE execution permission to the Dockerfile

Build the file and create a container

Give public ip in the index.html file

```
lt="" width="1200" height="630" /></p>
<p></p>
<h2 style="text-align: center;"><a href="http://35.172.228.213:8080/student/"><strong>Enter to Student Application</strong></a></h2>
<p></p>
<p></p>
~
~
```

`docker build -t students-frontend .` `docker run -d -p 80:80 --name`

`students-frontend students-frontend`

```
=> extracting sha256:ca0b1a23d1f073e4c09e02be001f0b9ec50f4d0404f171a07c002ee4720
=> extracting sha256:509789394c2a1986127ea7ef8f677c619dae6aa7157672578e1ba02ef602a485
=> [2/2] COPY ./index.html/ /usr/local/apache2/htdocs/
=> exporting to image
=> exporting layers
=> writing image sha256:015a70a36431c5abcbea36d57ce05233dc383cd540c403d8db1dfee082331be2
=> naming to docker.io/library/students-frontend
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/FE# docker run -d -p 80:80 --name students-frontend students-frontend
26a13843b6c613199ae89b072516c375136f927e4e8b445437ef11a6b86ca7de5
root@ip-172-31-24-47:~/CDECB39-Demo/Students-Docker/FE# |
```

hit the public ip on the web



after going to student application

← → ↻ ⚠ Not secure 35.172.228.213:8080/student/

## Student Registration Form

Student Name	<input type="text"/>
Student Address	<input type="text"/>
Student Age	<input type="text"/>
Student Qualification	<input type="text"/>
Student Percentage	<input type="text"/>
Year Passed	<input type="text"/>

Successfully adding the data

[Register Student](#)

### Students List

Student ID	Student Name	Student Address	Student Age	Student Qualification	Student Percentage	Student Year Passed	Edit	Delete
1	shirvan	godambaradi	21	graduating	65	2025	<a href="#">edit</a>	<a href="#">delete</a>