

DEVOPS TASK- 2

1) Installation of Docker:

CODE :

```
sudo apt install docker.io
Docker --version sudo systemctl
start docker sudo systemctl
enable docker
sudo systemctl status docker
```

SCREENSHOT:

```
root@LAPTOP-6V70H2B0:~# apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
docker.io is already the newest version (26.1.3-0ubuntu1-24.04.1).
The following packages were automatically installed and are no longer required:
  libdw-intel libpciaccess0 libsensors-config libsensors5
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 9 not upgraded.
root@LAPTOP-6V70H2B0:~# docker --version
Docker version 26.1.3, build 26.1.3-0ubuntu1-24.04.1
root@LAPTOP-6V70H2B0:~# sudo systemctl start docker
root@LAPTOP-6V70H2B0:~# sudo systemctl enable docker
root@LAPTOP-6V70H2B0:~# sudo systemctl status docker
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
   Active: active (running) since Thu 2025-03-20 06:44:32 UTC; 1h 32min ago
   TriggeredBy: ● docker.socket
     Docs: https://docs.docker.com
    Main PID: 9561 (dockerd)
      Tasks: 30
     Memory: 62.0M (-)
    CGroup: /system.slice/docker.service
            └─ 9561 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock
               10253 /usr/bin/docker-proxy -proto tcp -host-ip 0.0.0.0 -host-port 70 -container-ip 172.17.0.2 -com
               10261 /usr/bin/docker-proxy -proto tcp -host-ip :: -host-port 70 -container-ip 172.17.0.2 -com
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185997971Z" level=warning msg="WARNIN>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185409232Z" level=warning msg="WARNIN>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185440810Z" level=warning msg="WARNIN>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185455819Z" level=warning msg="WARNIN>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185498240Z" level=info msg="Docker o>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.185845402Z" level=info msg="Daemon h>
Mar 20 06:44:32 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:44:32.379205869Z" level=info msg="API list>
Mar 20 06:44:32 LAPTOP-6V70H2B0 systemd[1]: Started docker.service - Docker Application Container Engine.
Mar 20 06:45:16 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:45:16.405475078Z" level=info msg="Layer sh>
Mar 20 06:45:16 LAPTOP-6V70H2B0 dockerd[9561]: time="2025-03-20T06:45:16.550116975Z" level=info msg="Layer sh>
lines 1-23/23 (END) ...skipping...
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: enabled)
```

2) Fork a copy of a GitHub repo which contains the necessary files which will result in the clone of that repo in our own repository

AranganathanPrakash / capstone

Type to search

<> Code

Pull requests

Actions

Projects

Security

Insights

capstone (Public)

forked from sriram-R-krishnan/devops-build

Watch 0

Fork 74

Star 0

main 5 Branches 0 Tags

Go to file

Add file

<> Code

This branch is 32 commits ahead of sriram-R-krishnan/devops-build:main.

AranganathanPrakash Update docker-compose.yml 221ba5b · 2 days ago 33 Commits

build	Add files via upload	last year
Dockerfile	Create Dockerfile	10 months ago
Jenkinsfile	Create Jenkinsfile	10 months ago
build.sh	Update build.sh	10 months ago
deploy.sh	Update deploy.sh	3 days ago
docker-compose.yml	Update docker-compose.yml	2 days ago

About

No description, website, or topics provided.

Activity

0 stars

0 watching

74 forks

Report repository

Releases

No releases published

Packages

No packages published

Languages

HTML 65.7%

Shell 18.1%

Sharan-Prasath / devops1

Type to search

<> Code

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

devops1 (Public)

forked from AranganathanPrakash/capstone

Pin

Watch 0

Fork 0

Star 0

main 1 Branch 0 Tags

Go to file

Add file

<> Code

This branch is 7 commits ahead of AranganathanPrakash/capstone:main.

Contribute

Sync fork

Sharan-Prasath Update deploy.sh 2b6a1eb · 17 hours ago 40 Commits

build	Add files via upload	last year
Dockerfile	Create Dockerfile	10 months ago
Jenkinsfile	Create Jenkinsfile	10 months ago
build.sh	Update build.sh	18 hours ago
deploy.sh	Update deploy.sh	17 hours ago
docker-compose.yml	Update docker-compose.yml	18 hours ago

README

About

No description, website, or topics provided.

Activity

0 stars

0 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

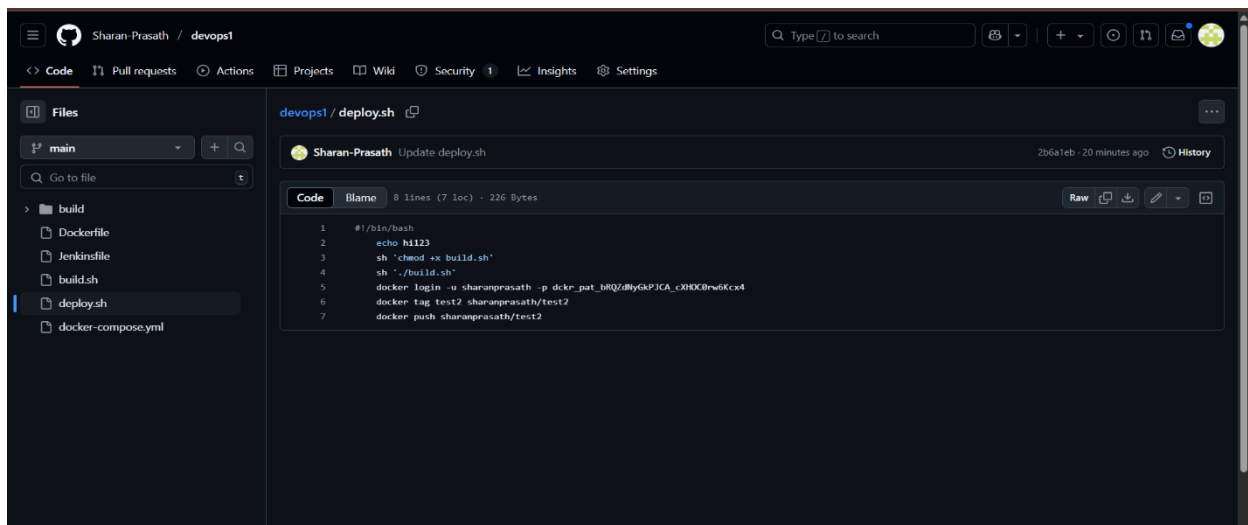
Languages

HTML 65.9%

Shell 17.9%

- 3) Then change the token and repo name of the docker Hub in the deploy.sh file which is in our repository.

SCREENSHOT :

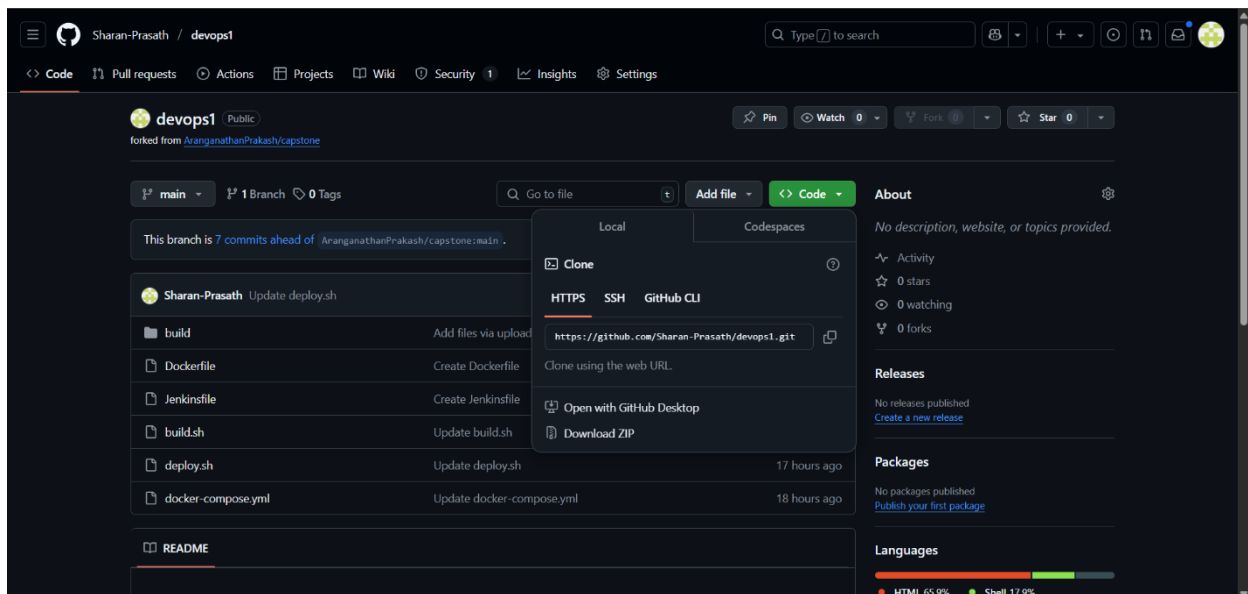


The screenshot shows the GitHub web interface for a repository named 'devops1' by user 'Sharan-Prasath'. The left sidebar displays the file tree with 'main' as the selected branch. The 'build' directory is expanded, showing files: 'Dockerfile', 'Jenkinsfile', 'build.sh', 'deploy.sh' (highlighted), and 'docker-compose.yml'. The main content area shows the 'devops1 / deploy.sh' file, which was updated by 'Sharan-Prasath' 20 minutes ago. The file content is as follows:

```
1 #!/bin/bash
2 echo h1123
3 sh 'chmod +x build.sh'
4 sh './build.sh'
5 docker login -u sharanprasath -p dckr_pat_hRQZdlyGKPJCA_cXHXCbrw6Ecx4
6 docker tag test2 sharanprasath/test2
7 docker push sharanprasath/test2
```

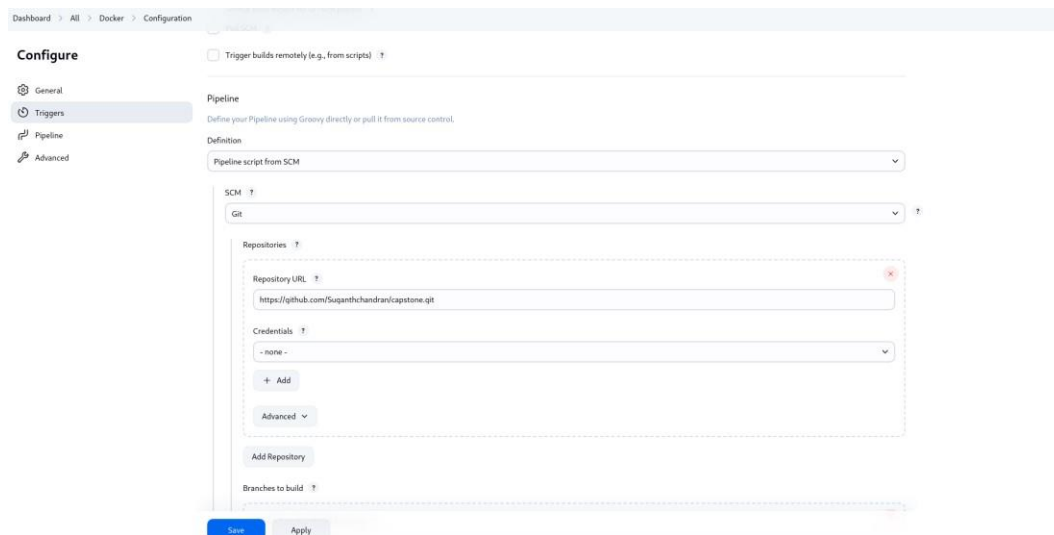
- 4) Then copy the GitHub link of the repository and go to Jenkins.

SCREENSHOT:



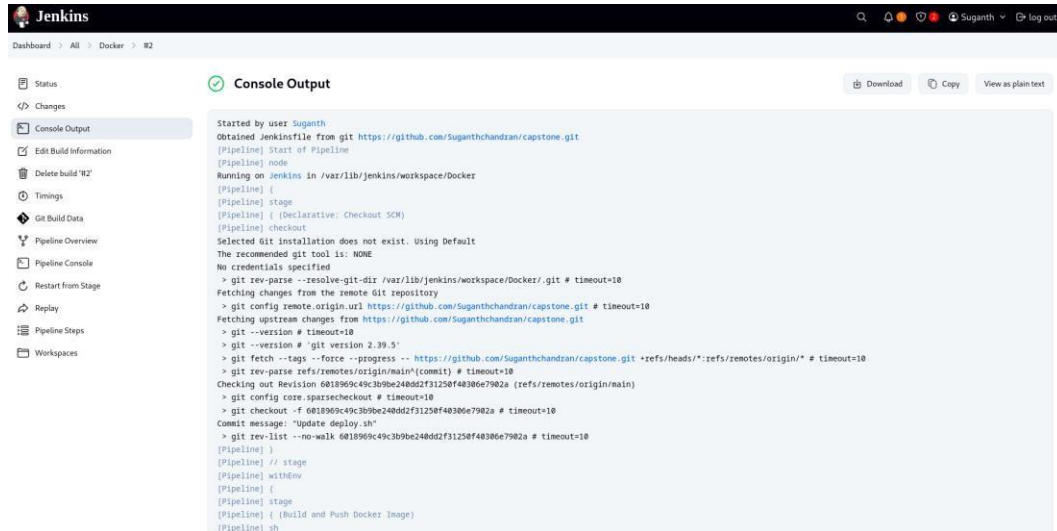
- 5) In Jenkins, create a new item (Job) with a type pipeline and add the copied GitHub url to it with the correct branch and Jenkinsfile.

SCREENSHOT:



- 6) After Creating the job, build it and it will give the console output and the docker image will be created.

SCREENSHOT:



- 7) Now Built this docker image in the terminal with desired port number to it.

CODE:

docker images

docker run -itd -p 70:80 test1

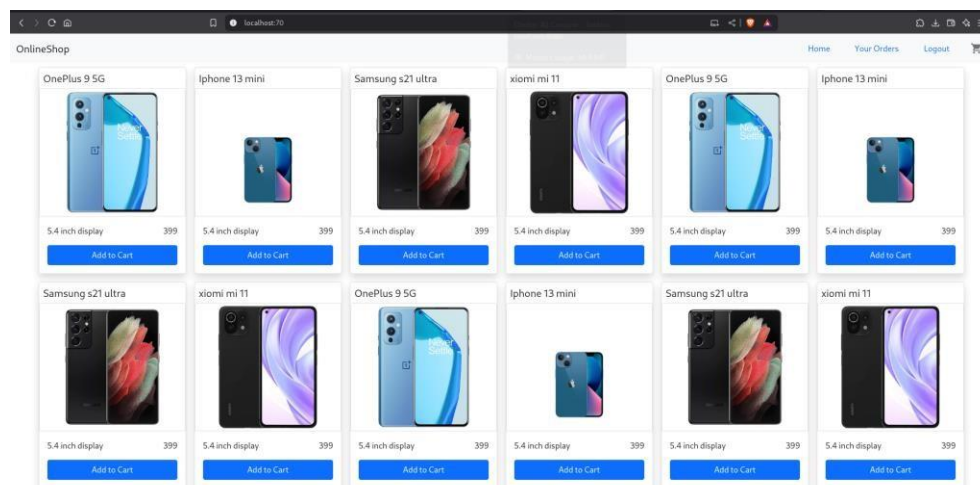
SCREENSHOT:

```
root@Sharan: /home/sharan x + v
sharan@Sharan:~$ docker images
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied
sharan@Sharan:~$ sudo docker images
[sudo] password for sharan:
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
test          latest   09ba399847f9   5 hours ago   192MB
<none>        <none>   6edc86199a76   5 hours ago   192MB
hello-world   latest   74cc54e27dc4   8 weeks ago   10.1kB
sharan@Sharan:~$ sudo usermod -aG docker jenkins
sharan@Sharan:~$ sudo systemctl restart jenkins
sharan@Sharan:~$ sudo systemctl restart docker
sharan@Sharan:~$ docker images
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied
sharan@Sharan:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
test          latest   09ba399847f9   5 hours ago   192MB
<none>        <none>   6edc86199a76   5 hours ago   192MB
hello-world   latest   74cc54e27dc4   8 weeks ago   10.1kB
sharan@Sharan:~$ sudo su
root@Sharan: /home/sharan# docker images
docker: unknown command: docker images

Run 'docker --help' for more information
root@Sharan: /home/sharan# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
test          latest   09ba399847f9   5 hours ago   192MB
<none>        <none>   6edc86199a76   5 hours ago   192MB
hello-world   latest   74cc54e27dc4   8 weeks ago   10.1kB
```

- 8) Go to the Browser and search for localhost:<PORT_NUMBER> and the respective application will be hosted.

SCREENSHOT:



- 9) But, Instead of running the image by manually , we can also write the command for running in a file called docker-compose.yml

CODE:

version: '3'

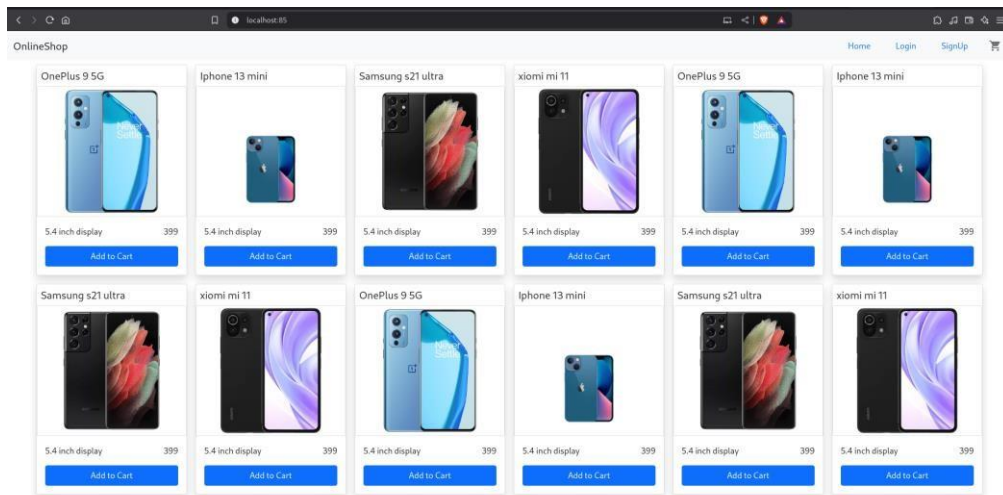
services: react-

capstone:

image: "test1"

ports: - "85:80"

SCREENSHOT:



By Creating this, we no need to run the image by manually. (It will automatically run)