

Capstone project documentation

[sharmi2504/capstone-project \(github.com\)](https://sharmi2504/capstone-project) [my github URL]

13.126.61.124:80 [deploy site URL]

Installing the necessary software's & services for this task:

1. Git
2. Docker
3. Docker compose
4. Java
5. Jenkins

Before install git, we have to launch an instance. select ubuntu

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name
capstone Add additional tags

Amazon Machine Image (AMI)

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	SUSE Li	Browse more AMIs Including AMIs from AWS, Marketplace and the Community
--------------	-------	--------	---------	---------	---------	--

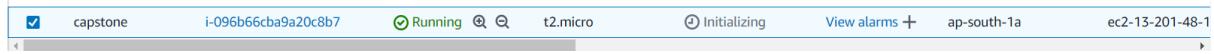
Ubuntu Server 22.04 LTS (HVM), SSD Volume Type Free tier eligible

ami-0c2af51e265bd5e0e (64-bit (x86)) / ami-0c938b21c7e598cd0 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Description

Ubuntu Server 22.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Architecture 64-bit (x86) ▾ AMI ID ami-0c2af51e265bd5e0e Verified provider



Connect that instance

1. Git installation:

```
sudo apt update
```

```
sudo apt install git -y
```

```
git --version
```

```
sudo apt update
```

```
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [3668 B]
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [249 kB]
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [108 kB]
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [8632 B]
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [9220 B]
Get:44 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [208 kB]
Get:45 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [40.7 kB]
Get:46 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [420 B]
Get:47 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [10.6 kB]
Get:48 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [2808 B]
Get:49 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 B]
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [344 B]
Fetched 28.2 MB in 6s (5082 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
47 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-32-39:~$ sudo apt install git -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
git is already the newest version (1:2.43.0-1ubuntu7.1).
git set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 47 not upgraded.
ubuntu@ip-172-31-32-39:~$ git --version
git version 2.43.0
ubuntu@ip-172-31-32-39:~$
```

Clone the given repo

```
git clone https://github.com/sriram-R-krishnan/devops-build
```

```
ubuntu@ip-172-31-32-39:~$ git clone https://github.com/sriram-R-krishnan/devops-build
Cloning into 'devops-build'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 21 (delta 0), reused 0 (delta 0), pack-reused 18
Receiving objects: 100% (21/21), 720.09 KiB | 15.00 MiB/s, done.
ubuntu@ip-172-31-32-39:~$
```

```
ubuntu@ip-172-31-32-39:~$ mkdir caspstone1
ubuntu@ip-172-31-32-39:~$ cd caspstone1/
ubuntu@ip-172-31-32-39:~/caspstone1$
```

2. Docker installation:

```
sudo apt update
```

```
sudo apt install docker.io
```

```
sudo docker version
```

```
sudo usermod -aG docker ubuntu
```

```
sudo systemctl status docker
```

```
sudo apt update
```

```
ubuntu@ip-172-31-32-39:~$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
47 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

```
sudo apt install docker.io
```

```
ubuntu@ip-172-31-32-39:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-buildx docker-compose-v2 docker-doc rinse zfs-
The following NEW packages will be installed:
  bridge-utils containerd dns-root-data dnsmasq-base docker.io pigz runc ubuntu-fan
0 upgraded, 8 newly installed, 0 to remove and 47 not upgraded.
Need to get 76.8 MB of archives.
After this operation, 289 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 pigz amd64 2.8-1 [65.6 kB]
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 bridge-utils amd64 1.7.1-1ubuntu2 [33.9 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 runc amd64 1.1.12-0ubuntu3 [8599 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 containerd amd64 1.7.12-0ubuntu4 [38.6 MB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 dns-root-data all 2023112702-willsync1 [4450 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 dnsmasq-base amd64 2.90-2build2 [375 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 docker.io amd64 24.0.7-0ubuntu4 [29.1 MB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 ubuntu-fan all 0.12.16 [35.2 kB]
Fetched 76.8 MB in 1s (56.2 MB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 67739 files and directories currently installed.)
```

```
sudo docker version
```

```
ubuntu@ip-172-31-32-39:~$ sudo docker version
Client:
  Version:          24.0.7
  API version:      1.43
  Go version:       go1.22.2
  Git commit:       24.0.7-0ubuntu4
  Built:            Wed Apr 17 20:08:25 2024
  OS/Arch:          linux/amd64
  Context:          default

Server:
  Engine:
    Version:          24.0.7
    API version:      1.43 (minimum version 1.12)
    Go version:       go1.22.2
    Git commit:       24.0.7-0ubuntu4
    Built:            Wed Apr 17 20:08:25 2024
    OS/Arch:          linux/amd64
    Experimental:    false
  containerd:
    Version:          1.7.12
    GitCommit:
  runc:
    Version:          1.1.12-0ubuntu3
    GitCommit:
  docker-init:
```

```
sudo usermod -aG docker ubuntu
```

```
GitCommit:
ubuntu@ip-172-31-32-39:~$ sudo usermod -aG docker ubuntu
ubuntu@ip-172-31-32-39:~$ █
```

```
sudo systemctl status docker
```

```
ubuntu@ip-172-31-32-39:~$ 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 2024-08-08 06:50:22 UTC; 28min ago
TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
  Main PID: 2556 (dockerd)
    Tasks: 8
   Memory: 32.6M (peak: 33.2M)
     CPU: 442ms
   CGroup: /system.slice/docker.service
           └─2556 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.soc
```

```
sudo systemctl start docker
```

```
ubuntu@ip-172-31-46-99:~$ sudo usermod -aG docker ubuntu
ubuntu@ip-172-31-46-99:~$ newgrp docker
ubuntu@ip-172-31-46-99:~$ sudo systemctl start docker
ubuntu@ip-172-31-46-99:~$ sudo systemctl enable docker
ubuntu@ip-172-31-46-99:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:1408fec50309afee38f3535383f5b09419e6dc0925bc69891e79d84cc4cdcec6
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.
```

To try something more ambitious, you can run an Ubuntu container with:
\$ docker run -it ubuntu bash

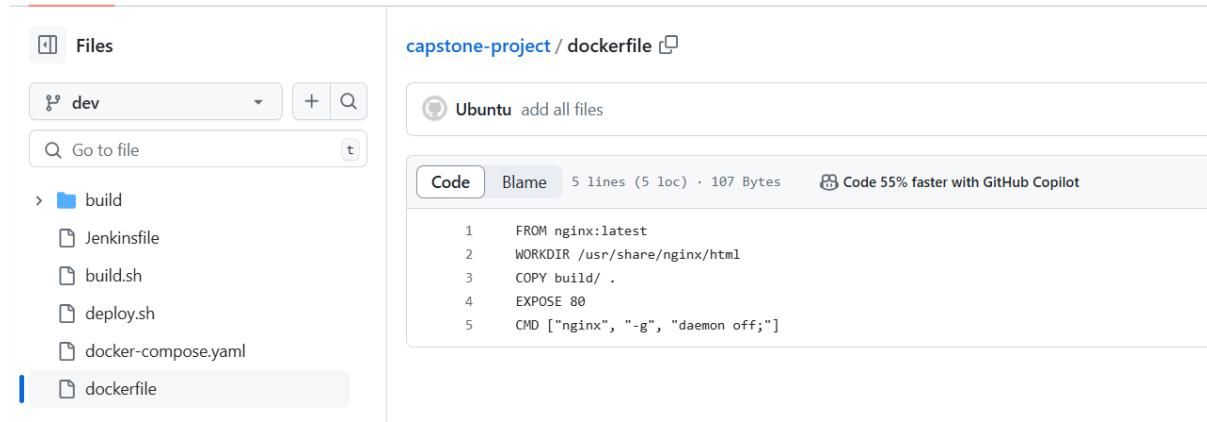
Share images, automate workflows, and more with a free Docker ID:
<https://hub.docker.com/>

For more examples and ideas, visit:
<https://docs.docker.com/get-started/>

```
ubuntu@ip-172-31-46-99:~$ docker images
REPOSITORY      TAG      IMAGE ID      CREATED      SIZE
hello-world    latest    d2c94e258dcb   15 months ago   13.3kB
```

docker file:

```
vi dockerfile
```



The screenshot shows a GitHub Copilot interface for a 'capstone-project' repository. On the left, there's a file browser with a 'dev' folder containing Jenkinsfile, build.sh, deploy.sh, docker-compose.yaml, and dockerfile. The right side shows the contents of the dockerfile:

```
FROM nginx:latest
WORKDIR /usr/share/nginx/html
COPY build/
EXPOSE 80
CMD ["nginx", "-g", "daemon off;"]
```

Convert docker file into docker image:

```
docker build -t nginximage .
```

```
ubuntu@ip-172-31-46-99:~$ vi dockerfile
ubuntu@ip-172-31-46-99:~$ cd devops-build/
ubuntu@ip-172-31-46-99:~/devops-build$ vi dockerfile
ubuntu@ip-172-31-46-99:~/devops-build$ docker build -t nginximage .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 3.415MB
Step 1/5 : FROM nginx:latest
--> a72860cb95fd
Step 2/5 : WORKDIR /usr/share/nginx/html
--> Using cache
--> 834607514a93
Step 3/5 : COPY build/ .
--> 9a869321475c
Step 4/5 : EXPOSE 80
--> Running in 2db9e8a75aea
Removing intermediate container 2db9e8a75aea
--> e144c57ce161
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
--> Running in 60c950b6a23f
Removing intermediate container 60c950b6a23f
--> 6ba82f9c1767
Successfully built 6ba82f9c1767
Successfully tagged nginximage:latest
ubuntu@ip-172-31-46-99:~/devops-build$ docker images
```

docker images

```
ubuntu@ip-172-31-46-99:~/devops-build$ docker images
REPOSITORY      TAG          IMAGE ID      CREATED        SIZE
nginximage       latest        6ba82f9c1767   25 seconds ago  190MB
nodeimage        latest        d44d4a7a0b69   27 minutes ago  188MB
<none>          <none>       ae52f8af4119   27 minutes ago  81.1MB
nginx            latest        a72860cb95fd   6 weeks ago    188MB
hello-world      latest        d2c94e258dcf   15 months ago   13.3kB
node             12.2.0-alpine  f391dabf9dce   5 years ago    77.7MB
```

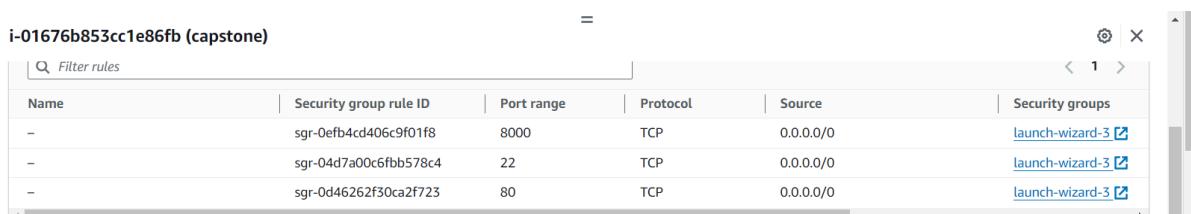
```
docker run -d --name mynginxcontainer -p 80:80 nginximage
```

```
ubuntu@ip-172-31-46-99:~/devops-build$ docker run -d --name mynginxcointainer -p 80:80 nginximage
1c82a7a8e8f05bcd8fce44d66e1bdae6fcfd163163fe1cad573c78c81a4adb25f
```

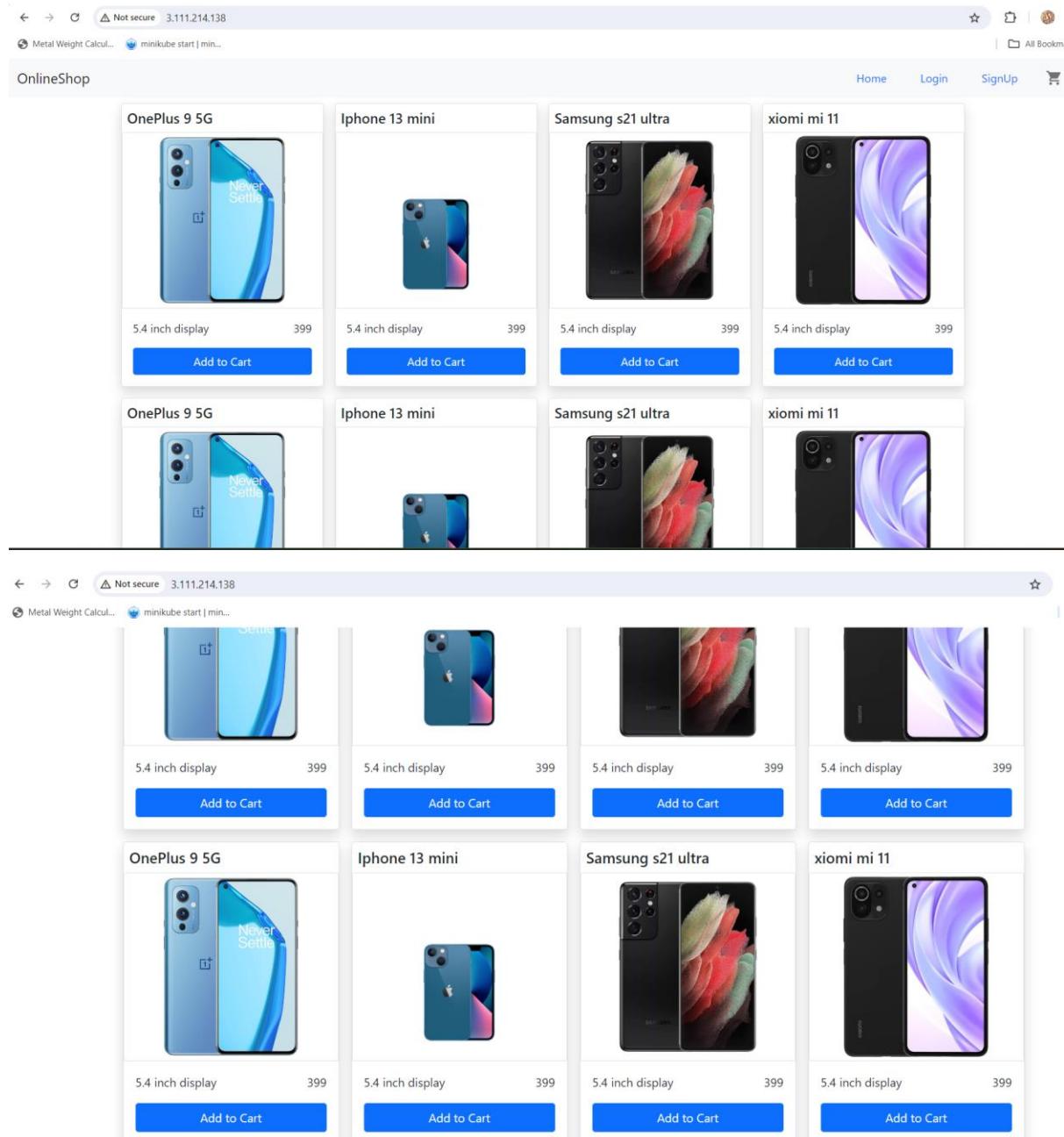
docker ps

```
ubuntu@ip-172-31-46-99:~/devops-build$ docker ps
CONTAINER ID   IMAGE      COMMAND           CREATED        STATUS         PORTS          NAMES
1c82a7a8e8f0   nginximage "/docker-entrypoint..."  5 seconds ago   Up 3 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp   mynginxcointainer
ae71713569e8   nodeimage  "/docker-entrypoint..."  25 minutes ago  Up 25 minutes  0.0.0.0:8000->80/tcp, :::8000->80/tcp   nginxcointainer
```

Open the port no :80 in ec2. Copy and paste the ip address



Output page of given application:



3. Docker compose installation:

```
sudo apt update
```

```
sudo curl -L "https://github.com/docker/compose/releases/download/1.29.2/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
```

```
sudo chmod +x /usr/local/bin/docker-compose
```

```
docker-compose --version
```

```
sudo apt update [ update ubuntu machine]
```

```
ubuntu@ip-172-31-46-99:~$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1930 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [341 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [17.8 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2301 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [396 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1110 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [25.9 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [43.3 kB]
Get:13 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1712 kB]
Get:14 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [283 kB]
Get:15 http://security.ubuntu.com/ubuntu jammy-security/main amd64 c-n-f Metadata [13.1 kB]
Get:16 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2226 kB]
Get:17 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [383 kB]
Fetched 11.0 MB in 3s (3177 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
29 packages can be upgraded. Run 'apt list --upgradable' to see them.
```

```
sudo curl -L "https://github.com/docker/compose/releases/download/1.29.2/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
```

```
ubuntu@ip-172-31-46-99:~$ sudo curl -L "https://github.com/docker/compose/releases/download/1.29.2/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose
  % Total    % Received % Xferd  Average Speed   Time     Time      Current
                                 Dload  Upload   Total   Spent    Left  Speed
0    0     0    0    0     0      0  --:--:--  0:00:01  0:00:01  --:--:-- 12.3M
100 12.1M 100 12.1M 0    0  8033k      0  0:00:01  0:00:01  --:--:-- 12.3M
```

```
sudo chmod +x /usr/local/bin/docker-compose
```

```
ubuntu@ip-172-31-46-99:~$ sudo chmod +x /usr/local/bin/docker-compose
ubuntu@ip-172-31-46-99:~$ docker-compose --version
docker-compose version 1.29.2, build 5becea4c
```

```
docker-compose --version
```

Docker compose file for node js:

get into folder devops-build. Then write this

```
ubuntu@ip-172-31-46-99:~$ cd devops-build/
ubuntu@ip-172-31-46-99:~/devops-build$ vi docker-compose.yaml
```

```
vi docker-compose.yaml
```

```
version: '3'

services:
  webcontainer:
    image: nginximage
    ports:
      - "80:80"
```

```

version: '3'
services:
  webcointainer:
    image: projectimage
    ports:
      - "80:80"

```

Give permission for this file:

Chmod 777 docker-compose.yaml [give permission for the docker-compose.yaml file]

```

ubuntu@ip-172-31-46-99:~/devops-build$ vi docker-compose.yaml
ubuntu@ip-172-31-46-99:~/devops-build$ chmod 777 docker-compose.yaml

```

Execute the docker-compose.yaml :

docker-compose up -d

```

ubuntu@ip-172-31-46-99:~/devops-build$ docker-compose up -d
Starting devops-build_webcointainer_1 ... done

```

docker ps

```

ubuntu@ip-172-31-46-99:~/devops-build$ docker ps
CONTAINER ID        IMAGE               COMMAND                  CREATED             STATUS              PORTS                 NAMES
4elec10be231        nginximage        "/docker-entrypoint..."   10 minutes ago    Up 10 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp   devops-build_webcointainer_1

```

Bash scripting:

- **build.sh**
- **deploy.sh**

Build.sh file:

```

ubuntu@ip-172-31-46-99:~/devops-build$ vi build.sh

```

```

#!/bin/bash
#build the docker image
docker build -t projectimage .
#build script file

```

Your docker login details [create the new docker hub account]

```
ubuntu@ip-172-31-46-99:~/devops-build$ docker login
Log in with your Docker ID or email address to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com/ to create one.
You can log in with your password or a Personal Access Token (PAT). Using a limited-scope PAT grants better security and is required for organizations using SSO.
Learn more at https://docs.docker.com/go/access-tokens/
Username: sharmi2504
Password:
WARNING! Your password will be stored unencrypted in /home/ubuntu/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
ubuntu@ip-172-31-46-99:~/devops-build$
```

deploy.sh:

deploy.sh file:

```
ubuntu@ip-172-31-46-99:~/devops-build$ vi deploy.sh
```

The screenshot shows a GitHub code editor interface. On the left, there's a sidebar with a 'Files' tab, a dropdown menu set to 'dev', and a search bar. Below these are navigation buttons for 'Go to file' and a 't' icon. Under the 'Files' tab, there's a tree view of files: 'build' (containing Jenkinsfile, build.sh, deploy.sh, docker-compose.yaml, dockerfile), 'dev' (containing .gitignore, .github, .travis.yml, Dockerfile, package-lock.json, package.json, README.md, .env), and 'scripts' (containing .gitattributes, .gitignore, .travis.yml, Dockerfile, package-lock.json, package.json, .env). The 'deploy.sh' file is selected and highlighted in the tree view. On the right, the main pane shows the code for 'capstone-project / deploy.sh'. The code is a bash script that logs into Docker Hub, builds the project if the branch is 'dev', and pushes the image to Docker Hub. It includes logic for both 'dev' and 'master' branches. The code editor has tabs for 'Code' (selected), 'Blame', and 'Code 55% faster with GitHub Copilot'.

```
#!/bin/bash
docker login -u sharmi2504 -p dckr_pat_95Q5F6VWmpfq_5dLNHHeqxN2XZI
if [ $GIT_BRANCH = "dev" ]; then
    # Build your project
    sh 'chmod +x build.sh'
    sh './build.sh'
    docker tag projectimage sharmi2504/dev
    docker push sharmi2504/dev
elif [ $GIT_BRANCH = "master" ]; then
    sh 'chmod +x build.sh'
    sh './build.sh'
    docker tag projectimage sharmi2504/prod
    docker push sharmi2504/prod
fi
```

Create new repo in git:

Home

<> Start writing code

Start a new repository for sharmi2504

A repository contains all of your project's files, revision history, and collaborator discussion.

Repository name *

capstone project

Your new repository will be created as capstone-p.

The repository name can only contain ASCII letters, digits, and the characters ., - and _.

Public

Anyone on the internet can see this repository

Private

You choose who can see and commit to this repository

Create a new repository

Give public repo

```
ubuntu@ip-172-31-46-99:~/devops-build$ cd
```

After create repo. you get this https link. copy and paste it in clone command

```
ubuntu@ip-172-31-46-99:~$ git clone https://github.com/sharmi2504/capstone-project.git
Cloning into 'capstone-project'...
warning: You appear to have cloned an empty repository.
```

```
ubuntu@ip-172-31-46-99:~$ git clone https://github.com/sharmi2504/capstone-project.git
Cloning into 'capstone-project'...
warning: You appear to have cloned an empty repository.
ubuntu@ip-172-31-46-99:~$ ls
capstone-project devops-build dockerfile
ubuntu@ip-172-31-46-99:~$ cd devops-build/
ubuntu@ip-172-31-46-99:~/devops-build$
```

Here capstone-project directory created repo in GitHub. get into that dir . them move that all files from devops-build to capstone-project dir . in our own repo we push all our files.

```
ubuntu@ip-172-31-46-99:~$ cd devops-build/
ubuntu@ip-172-31-46-99:~/devops-build$ ls
build build.sh deploy.sh docker-compose.yaml dockerfile
ubuntu@ip-172-31-46-99:~/devops-build$ mv * /home/ubuntu/capstone-project
ubuntu@ip-172-31-46-99:~/devops-build$ cd ..
ubuntu@ip-172-31-46-99:~$ cd capstone-project/
ubuntu@ip-172-31-46-99:~/capstone-project$ ls
build build.sh deploy.sh docker-compose.yaml dockerfile
ubuntu@ip-172-31-46-99:~/capstone-project$
```

```
create mode 100644 build/favicon.ico
create mode 100644 build/index.html
create mode 100644 build/logo192.png
create mode 100644 build/logo512.png
create mode 100644 build/manifest.json
create mode 100644 build/robots.txt
create mode 100644 build/static/css/main.cf5c13c5.css
create mode 100644 build/static/css/main.cf5c13c5.css.map
create mode 100644 build/static/js/787.2f5360e2.chunk.js
create mode 100644 build/static/js/787.2f5360e2.chunk.js.map
create mode 100644 build/static/js/main.f1c48542.js
create mode 100644 build/static/js/main.f1c48542.js.LICENSE.txt
create mode 100644 build/static/js/main.f1c48542.js.map
create mode 100755 deploy.sh
create mode 100755 docker-compose.yaml
create mode 100644 dockerfile
```

git add . [add all files in our repo]

git commit -m "add all files"

```
ubuntu@ip-172-31-46-99:~/capstone-project$ git add .
ubuntu@ip-172-31-46-99:~/capstone-project$ git commit -m "add all files"
[main (root-commit) 13ef6f8] add all files
  Committer: Ubuntu <ubuntu@ip-172-31-46-99.ap-south-1.compute.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
```

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
19 files changed, 198 insertions(+)
create mode 100755 build.sh
create mode 100644 build/_redirects
create mode 100644 build/asset-manifest.json
create mode 100644 build/favicon.ico
create mode 100644 build/index.html
create mode 100644 build/logo192.png
create mode 100644 build/logo512.png
create mode 100644 build/manifest.json
create mode 100644 build/robots.txt
create mode 100644 build/static/css/main.cf5c13c5.css
```

All files move in that repo [capstone-project]. then created dev branch. Inside dev branch we add all files.

Create dev branch in git:

git checkout -b dev [Create dev branch]

```
ubuntu@ip-172-31-46-99:~/capstone-project$ git checkout -b dev
Switched to a new branch 'dev'
```

```
ubuntu@ip-172-31-46-99:~/capstone-project$ ls
build  build.sh  deploy.sh  docker-compose.yaml  dockerfile
```

git add . [add all files in our repo]

git commit -m "add all files"

```
ubuntu@ip-172-31-46-99:~/capstone-project$ git add .
ubuntu@ip-172-31-46-99:~/capstone-project$ git commit -m "add all files"
On branch dev
nothing to commit, working tree clean
```

git push -u origin dev [push all files in our repo]

```
ubuntu@ip-172-31-46-99:~/capstone-project$ git push -u origin dev
Username for 'https://github.com': sharmi2504
Password for 'https://sharmi2504@github.com':
Enumerating objects: 25, done.
Counting objects: 100% (25/25), done.
Compressing objects: 100% (24/24), done.
Writing objects: 100% (25/25), 720.19 KiB | 4.56 MiB/s, done.
Total 25 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/sharmi2504/capstone-project.git
 * [new branch]      dev -> dev
Branch 'dev' set up to track remote branch 'dev' from 'origin'.
ubuntu@ip-172-31-46-99:~/capstone-project$
```

Copy and paste the token in password

```
ubuntu@ip-172-31-46-99:~/capstone-project$ git push -u origin dev
Username for 'https://github.com': sharmi2504
Password for 'https://sharmi2504@github.com':
Enumerating objects: 25, done.
Counting objects: 100% (25/25), done.
Compressing objects: 100% (24/24), done.
Writing objects: 100% (25/25), 720.19 KiB | 4.56 MiB/s, done.
Total 25 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/sharmi2504/capstone-project.git
 * [new branch]      dev -> dev
Branch 'dev' set up to track remote branch 'dev' from 'origin'.
ubuntu@ip-172-31-46-99:~/capstone-project$
```

capstone-project Public

Pin Unwatch 1

dev 1 Branch 0 Tags Go to file Add file Code

Ubuntu add all files	13ef6f8 · 24 minutes ago	1 Commit
build	add all files	24 minutes ago
build.sh	add all files	24 minutes ago
deploy.sh	add all files	24 minutes ago
docker-compose.yaml	add all files	24 minutes ago
dockerfile	add all files	24 minutes ago

README

All files pushed to our repo.

4. Jenkins installation:

sudo apt-get update

```
ubuntu@ip-172-31-46-99:~$ sudo apt-get update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1941 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [343 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [17.7 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2314 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [397 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1110 kB]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [25.9 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [43.3 kB]
Fetched 6448 kB in 2s (3193 kB/s)
Reading package lists... Done
```

sudo apt-get install -y openjdk-11-jdk

```
ubuntu@ip-172-31-46-99:~$ sudo apt-get install -y openjdk-11-jdk
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
alsa-topology-conf alsu-ucm-conf at-spi2-core ca-certificates-java dconf-gsettings-backend dconf-service fontconfig-config fonts-dejavu-core
fonts-dejavu-extra gsettings-desktop-schemas java-common libasound2 libasound2-data libatk-bridge2.0-0 libatk-wrapper-java-jni libatk1.0-0
libatk1.0-data libatspi2.0-0 libavahi-client3 libavahi-common-data libavahi-common3 libcurl5 libdconf1 libdrm-amdgpu libdrm-intel libdrm-nouveau2
libdrm-radeon1 libfontconfig1 libfontenc1 libgif7 libgl libgl1-amber-dri libgl1-mesa-dri libglapi-mesa libglvnd libgbx-mesa0 libgbx0 libgraphite2-3
libharfbuzz0b libice-dev libice6 libjpeg-turbo8 libjpeg8 liblcms2-2 liblilmv15 libpciaccesso libpcsslib1 libpthread-stubs0-dev libsnsensors-config libsnsensors5
libsm-dev libsm libx11-dev libx11-xcb libxau-dev libxaw7 libxcb-drivers libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-randr0 libxcb-shm0
libxcb-sync1 libxcb-xfixes0 libxcb1-dev libxcbcompositel libxdmcp-dev libxfixes3 libxft2 libxi6 libxinerama1 libxbkbfile1 libxmu6 libxpm4 libxrandr2 libxrender1
libxshmfence1 libxt-dev libxt6 libxtst6 libxv1 libxf86dg1 libxf86vm1 openjdk-11-jdk openjdk-11-jre-headless session-migration
x11-common x11-utils xproto-dev xorg-sgml-doctools xtrans-dev
```

```
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
```

```
https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
```

```
ubuntu@ip-172-31-46-99:~$ sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
  https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
--2024-08-10 06:37:02--  https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.154.133, 2a04:4e42:24::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.154.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 3175 (3.1K) [application/pgp-keys]
Saving to: '/usr/share/keyrings/jenkins-keyring.asc'

/usr/share/keyrings/jenkins-keyring.asc  100%[=====] 3175/3175
2024-08-10 06:37:02 (22.5 MB/s) - '/usr/share/keyrings/jenkins-keyring.asc' saved [3175/3175]
```

```
echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
```

```
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
```

```
/etc/apt/sources.list.d/jenkins.list > /dev/null
```

```
ubuntu@ip-172-31-46-99:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \
  https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
  /etc/apt/sources.list.d/jenkins.list > /dev/null
```

```
sudo apt-get update
```

```
ubuntu@ip-172-31-46-99:~$ sudo apt-get update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Hit:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease
Ign:4 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:5 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:6 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:7 http://security.ubuntu.com/ubuntu jammy-security InRelease
Get:8 https://pkg.jenkins.io/debian-stable binary/ Packages [27.6 kB]
Fetched 30.4 kB in 1s (36.9 kB/s)
Reading package lists... Done
```

```
sudo apt-get install Jenkins
```

```
ubuntu@ip-172-31-46-99:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 13 not upgraded.
Need to get 91.4 MB of archives.
After this operation, 94.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.462.1 [91.2 MB]
Fetched 91.4 MB in 6s (16.4 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 98349 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.462.1_all.deb ...
Unpacking jenkins (2.462.1) ...
```

```

Get:1 http://ap-south-1.ec                               jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.462.1 [91.2 MB]
Fetched 91.4 MB in 6s (16.4 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 98349 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.462.1_all.deb ...
Unpacking jenkins (2.462.1) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up jenkins (2.462.1) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.10.2-1) ...
Scanning processes...
Scanning linux images...

Running kernel seems to be up-to-date.

No services need to be restarted.

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.

```

sudo systemctl start Jenkins

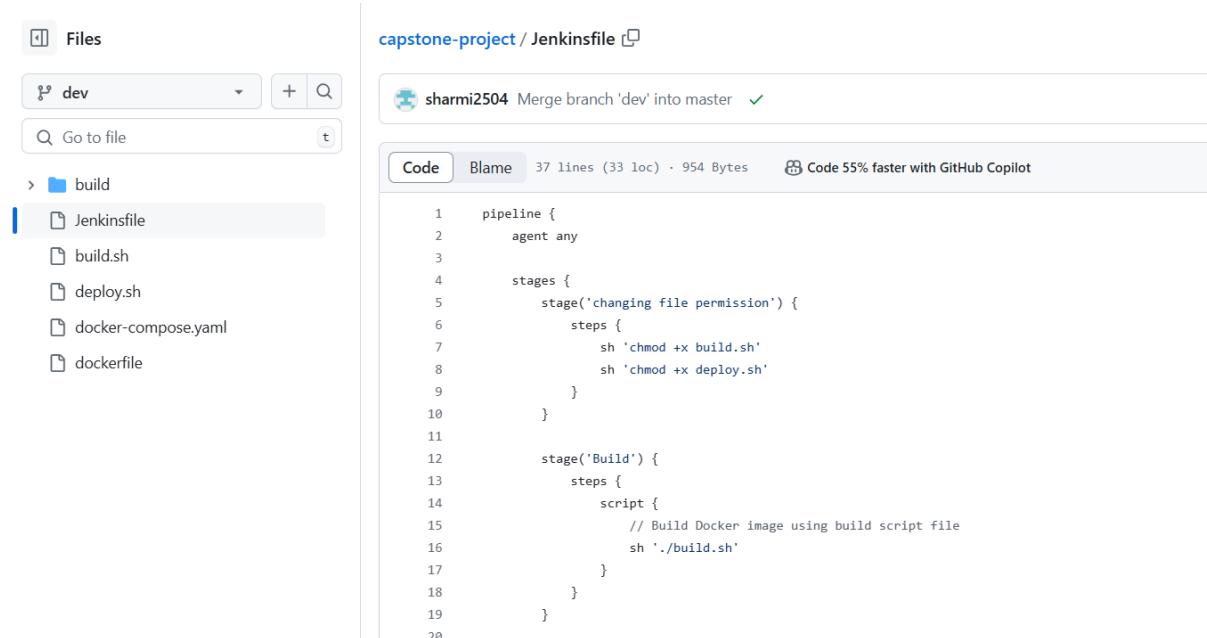
```
ubuntu@ip-172-31-46-99:~$ sudo systemctl start jenkins
```

sudo systemctl status Jenkins

```
ubuntu@ip-172-31-46-99:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
  Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
  Active: active (running) since Sat 2024-08-10 06:41:04 UTC; 4min 53s ago
    Main PID: 4951 (java)
      Tasks: 37 (limit: 1120)
     Memory: 284.6M
        CPU: 17.882s
       CGroup: /system.slice/jenkins.service
               └─4951 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war
```

```
ubuntu@ip-172-31-46-99:~/capstone-project$ vi jenkinsfile
```

Jenkins file:



```

1  pipeline {
2      agent any
3
4      stages {
5          stage('changing file permission') {
6              steps {
7                  sh 'chmod +x build.sh'
8                  sh 'chmod +x deploy.sh'
9              }
10         }
11
12         stage('Build') {
13             steps {
14                 script {
15                     // Build Docker image using build script file
16                     sh './build.sh'
17                 }
18             }
19         }
20     }

```

```

21         stage('Login') {
22             steps {
23                 withCredentials([usernamePassword(credentialsId: 'docker-password-id', passwordVariable: 'DOCKER_PASSWORD', usernameVariable: 'DOCKER_USERNAME')])
24                     sh 'echo $DOCKER_PASSWORD | docker login -u $DOCKER_USERNAME --password-stdin'
25             }
26         }
27     }
28     stage('Deploy') {
29         steps {
30             script {
31                 sh './deploy.sh'
32             }
33         }
34     }
35 }
36 }
```

Setup Jenkins dashboard:

Add port no:8080 for access the Jenkins browser. Because it is a GUI tool

i-01676b853cc1e86fb (capstone)

Security

▼ Security details

IAM Role	Owner ID
-	009160054942
Security groups	
<input checked="" type="checkbox"/> sg-027f215b54446ce7c (launch-wizard-3)	

Click edit inbound rule

Inbound rules <small>Info</small>					
Security group rule ID	Type <small>Info</small>	Protocol <small>Info</small>	Port range <small>Info</small>	Source <small>Info</small>	Description - optional <small>Info</small>
sgr-0efb4cd406c9f01f8	Custom TCP	TCP	8000	Custom	0.0.0.0/0 <small>X</small>
sgr-04d7a00c6fb578c4	SSH	TCP	22	Custom	0.0.0.0/0 <small>X</small>
sgr-0d46262f30ca2f723	HTTP	TCP	80	Custom	0.0.0.0/0 <small>X</small>
-	Custom TCP	TCP	8080	Anywh...	0.0.0.0/0 <small>X</small>

Add rule

Click add rule → save rules. Copy ip address. Paste the address [65.2.31.200:8080]. give the Jenkins port number.

i-01676b853cc1e86fb (capstone)

Details | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance summary [Info](#)

Instance ID [i-01676b853cc1e86fb \(capstone\)](#)

IPv6 address -

Public IPv4 address copied [65.2.31.200 | open address](#)

Instance state [Running](#)

Copy ip address. Paste the address [65.2.31.200:8080]. give the Jenkins port number. Jenkins page opened.

[Open Jenkins in browser:](#)

Not secure 65.2.31.200:8080/login?from=%2F

:alcul... 🛡️ minikube start | min... 🚗 React App

Getting Started

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

`/var/lib/jenkins/secrets/initialAdminPassword`

Please copy the password from either location and paste it below.

Administrator password

Continue

Get above password

`sudo cat /var/lib/jenkins/secrets/initialAdminPassword` [get password for Jenkins]

```
ubuntu@ip-172-31-46-99:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
ef6201f275444ca8a144737522e1fa6d
ubuntu@ip-172-31-46-99:~$
```

ef6201f275444ca8a144737522e1fa6d [copy the password in above]

Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log ([not sure where to find it?](#)) and this file on the server:

`/var/lib/jenkins/secrets/initialAdminPassword`

Please copy the password from either location and paste it below.

Administrator password

.....|

Continue



Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started

Getting Started

** Ionicons API
Folders

Folders	OWASP Markup Formatter	Build Timeout	Credentials Binding
Timestamper	Workspace Cleanup	Ant	Gradle
Pipeline	GitHub Branch Source	Pipeline: GitHub Groovy Libraries	Pipeline Graph View
Git	SSH Build Agents	Matrix Authorization Strategy	PAM Authentication
LDAP	Email Extension	Mailer	Dark Theme

** - required dependency

Getting Started

Instance Configuration

Jenkins URL:

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Jenkins 2.462.1 Not now **Save and Finish**

Getting Started

Jenkins is ready!

Your Jenkins setup is complete.

[Start using Jenkins](#)

Before creating the job installed docker plugin in Jenkins and install docker in ec2 also.

The image shows two screenshots of the Jenkins interface. The top screenshot is the 'Sign in to Jenkins' page, featuring a cartoon Jenkins head logo on the left and a form on the right with fields for 'Username' (admin) and 'Password' (redacted). The bottom screenshot is the 'Welcome to Jenkins!' dashboard, showing a sidebar with 'New Item', 'Build History', 'Manage Jenkins' (which is selected), and 'My Views'. The main area displays sections for 'Build Queue' (empty), 'Set up a distributed build' (with links for 'Create a job', 'Set up an agent', 'Configure a cloud', and 'Learn more about distributed builds'), and 'Build Executor Status' (showing 1 Idle and 2 Idle executors).

Dashboard > Manage Jenkins

Manage Jenkins

Building on the built-in node can be a security issue. You should set up distributed builds. See the documentation [Set up agent](#) [Set up cloud](#) [Dismiss](#)

System Configuration

- System** Configure global settings and paths.
- Tools** Configure tools, their locations and automatic installers.
- Plugins** Add, remove, disable or enable plugins that can extend the functionality of Jenkins.

- Nodes** Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- Clouds** Add, remove, and configure cloud instances to provision agents on-demand.
- Appearance** Configure the look and feel of Jenkins

Security

- Security** Secure Jenkins; define who is allowed to access/use the system.
- Credentials** Configure credentials
- Credential Providers** Configure the credential providers and types

Dashboard > Manage Jenkins > Plugins

Plugins

Search: docker

Install

Install	Name	Released
<input type="checkbox"/>	Docker 1.6.2	16 days ago
<input type="checkbox"/>	Docker Commons 439.va_3cb_0a_6a_fb_29	11 mo ago
<input type="checkbox"/>	Docker Pipeline 580.vc0c340686b_54	29 days ago

Dashboard	>	Manage Jenkins	>	Plugins
Plugins				
 Updates	bouncycastle API	 Success		
 Available plugins	Instance Identity	 Success		
 Installed plugins	Pipeline: SCM Step	 Success		
 Advanced settings	Pipeline: Groovy	 Success		
 Download progress	Pipeline: Job	 Success		
	Jakarta Activation API	 Success		
	Jakarta Mail API	 Success		
	Apache HttpComponents Client 4.x API	 Success		
	Mailer	 Success		
	Pipeline: Basic Steps	 Success		
	Gradle	 Success		
	Pipeline: Milestone Step	 Success		
	Pipeline: Build Step	 Success		
	Pipeline: Groovy Libraries	 Success		
	Pipeline: Stage Step	 Success		
	Joda Time API	 Success		
	Pipeline: Model API	 Success		
	Pipeline: Declarative Extension Points API	 Success		
	Branch API	 Success		
	Pipeline: Multibranch	 Success		
	Pipeline: Stage Tags Metadata	 Success		
	Pipeline: Input Step	 Success		
	Pipeline: Declarative	 Success		
	Pipeline	 Success		

Give docker permission for Jenkins. then only we have to build the docker image.

```
ubuntu@ip-172-31-46-99:~$ docker --version
Docker version 24.0.7, build 24.0.7-0ubuntu2~22.04.1
ubuntu@ip-172-31-46-99:~$ sudo usermod -aG docker jenkins
ubuntu@ip-172-31-46-99:~$ sudo systemctl restart jenkins
ubuntu@ip-172-31-46-99:~$ █
```

After give restart Jenkins, refresh the Jenkins page. again, ask Jenkins login and password.

Add credentials:

we have to pass the credentials for the Doctor Hub. to push your image to the docker hub registry. You need to do a docker login. So, for docker login. You have to give the username and password. So, your Jenkins have to do the docker login.

Add credentials

Click dashboard → manage Jenkins → credentials

Dashboard > Manage Jenkins

You are running Jenkins on Java 11, support for which will end on or after Sep 30, 2024. Refer to [the documentation](#) for more details.

No builds in the queue.

Build Executor Status

1 Idle
2 Idle

System Configuration

System Configure global settings and paths.

Nodes Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

Tools Configure tools, their locations and automatic installers.

Clouds Add, remove, and configure cloud instances to provision agents on-demand.

Plugins Add, remove, disable or enable plugins that can extend the functionality of Jenkins.

Appearance Configure the look and feel of Jenkins

Security

Security Secure Jenkins; define who is allowed to access/use the system.

Credentials Configure credentials

Users Create/delete/modify users that can log in to this Jenkins.

Credential Providers Configure the credential providers and types

Dashboard > Manage Jenkins > Credentials

Credentials

T P Store ↓

Domain

Stores scoped to Jenkins

P Store ↓

Domains



System

(global)

Icon: S M L

Dashboard > Manage Jenkins > Credentials > System >

System

+ Add domain

Domain ↓

Description



Global credentials (unrestricted)

Credentials that should be available irrespective of domain specification to requirements matching.

Icon: S M L

Global credentials (unrestricted)

[+ Add Credentials](#)

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
This credential domain is empty. How about adding some credentials?			

Icon: S M L

New credentials

Kind

Username with password

Scope ?

Global (Jenkins, nodes, items, all child items, etc)

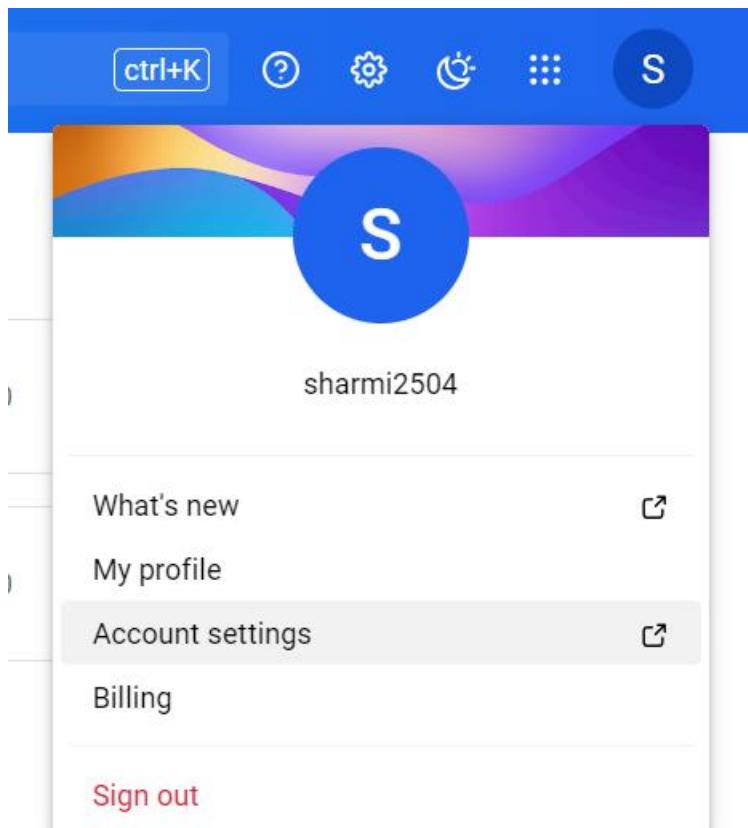
Username ?

sharmi2504

 Treat username as secret ?

Password ?

Above username is dockerhub user name. For password we generate tokens like github.



Password

You can change your password by initiating a reset via email. [Reset password](#)

Security

Two-factor authentication

Two factor authentication is disabled.



Personal access tokens

There is 1 personal access token associated with your account.



Create access token

A personal access token is similar to a password except you can have many tokens and revoke access to each one at any time. [Learn more ↗](#)

Access token description

capstone jenkins docker

Access permissions

Public Repo Read-only

Public Repo Read-only tokens allow to view, search, and pull images from any public repositories.

[Cancel](#) [Generate](#)



Create access token

A personal access token is similar to a password except you can have many tokens and revoke access to each one at any time. [Learn more ↗](#)

Access token description

capstone jenkins docker

Access permissions

Read, Write, Delete

Read, Write, Delete tokens allow you to manage your repositories.

[Cancel](#) [Generate](#)

Copy the token, paste it in Jenkins

Username ?

Treat username as secret ?

Password ?

ID ?

Description ?

Dashboard > Manage Jenkins > Credentials > System > Global credentials (unrestricted) >

Global credentials (unrestricted)

+ Add Credentials

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
 dockerhub	sharmi2504/***** (docker credentials)	Username with password	dockercredentials 

Icon: S M L

Now create the job in Jenkins:

Dashboard >

- + New Item
-  Build History
-  Manage Jenkins
- My Views

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Build Queue 	Create a job 
No builds in the queue.	
Build Executor Status 	Set up a distributed build
1 Idle	Set up an agent 
2 Idle	Configure a cloud 
	Learn more about distributed builds 

New Item

Enter an item name

capstone

Select an item type



Freestyle project

Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.



Pipeline

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.



Multi-configuration project

Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.



Folder

OK

General

Description

capstone project

Plain text [Preview](#)

Discard old builds [?](#)

Do not allow concurrent builds

Do not allow the pipeline to resume if the controller restarts

GitHub project

Project url [?](#)

`https://github.com/sharmi2504/capstone-project.git`

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

None

Git

Repositories ?

Repository URL ?

https://github.com/sharmi2504/capstone-project.git

Credentials ?

- none -

+ Add ▾

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/sharmi2504/capstone-project.git

Credentials ?

- none -

- none -

sharmi2504/******** (docker credentials)

Advanced ▾

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/sharmi2504/capstone-project.git

Credentials ?

sharmi2504/******** (docker credentials)

+ Add ▾

Dashboard > capstone > Configuration

Configure

General Advanced Project Options Pipeline

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

*/dev

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add ▾

Script Path ?

Jenkinsfile

Save Apply

This screenshot shows the Jenkins Pipeline configuration page for a project named 'capstone'. The 'Pipeline' tab is selected. Under 'Branches to build', the 'Branch Specifier' is set to '*/dev'. The 'Script Path' is set to 'Jenkinsfile'. There are buttons for 'Save' and 'Apply' at the bottom.

Dashboard > capstoneproject >

capstoneproject

Status Changes capstone project

Build Now

Configure

Delete Pipeline

GitHub

Stages

Rename

Pipeline Syntax

Permalinks

Webhook in git:

Connect Jenkins to GitHub:

- **Configure GitHub webhook to trigger builds on push events.**
- **Go to GitHub repository settings -> Webhooks -> Add webhook -> Jenkins URL .**

This screenshot shows the Jenkins dashboard for a project named 'capstoneproject'. It includes links for 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'GitHub', 'Stages', 'Rename', and 'Pipeline Syntax'. The 'Status' link is currently active. Below these are 'Permalinks' and a section titled 'Webhook in git:' followed by instructions for connecting Jenkins to GitHub.

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

General

Repository name

capstone-project [Rename](#)

Template repository
Template repositories let users generate new repositories with the same directory structure and files. [Learn more](#)

Require contributors to sign off on web-based commits
Enabling this setting will require contributors to sign off on commits made through GitHub's web interface. Sign contributors to affirm that their commit complies with the repository's terms, commonly the [Developer Certificate of Origin](#). [Learn more about signing off on commits](#).

Default branch

The default branch is considered the "base" branch in your repository, against which all pull requests are automatically made, unless you specify a different branch.

dev [Edit](#) [Delete](#)

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Webhooks

Add webhook

Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our [Webhooks Guide](#).

✓ <http://35.154.54.3:8080/github-webhook/> (push)
Last delivery was successful. [Edit](#) [Delete](#)

sharmi2504 / capstone-project

Type [] to search

Code Issues Pull requests Actions Projects Security Insights Settings

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

Webhooks / Manage webhook

Settings Recent Deliveries

We'll send a POST request to the URL below with details of any subscribed events. You can also specify which data format you'd like to receive (JSON, x-www-form-urlencoded, etc). More information can be found in our developer documentation.

Payload URL *

http://3.111.217.168:8080/github-webhook/

Content type *

application/x-www-form-urlencoded

Secret

SSL verification

By default, we verify SSL certificates when delivering payloads.

Enable SSL verification Disable (not recommended)

Microsoft Edge

Create master branch in github:

```
ubuntu@ip-172-31-46-99:~$ ls
capstone-project  devops-build  dockerfile
ubuntu@ip-172-31-46-99:~$ cd capstone-project/
ubuntu@ip-172-31-46-99:~/capstone-project$ ls
build  build.sh  deploy.sh  docker-compose.yaml  dockerfile  jenkinsfile
ubuntu@ip-172-31-46-99:~/capstone-project$ git branch master
ubuntu@ip-172-31-46-99:~/capstone-project$ git checkout master
Switched to branch 'master'
ubuntu@ip-172-31-46-99:~/capstone-project$ git branch
  dev
  main
* master
ubuntu@ip-172-31-46-99:~/capstone-project$ git pull origin master
fatal: couldn't find remote ref master
ubuntu@ip-172-31-46-99:~/capstone-project$ git push origin master
Username for 'https://github.com': sharmi2504
Password for 'https://sharmi2504@github.com':
Enumerating objects: 28, done.
Counting objects: 100% (28/28), done.
Compressing objects: 100% (27/27), done.
Writing objects: 100% (28/28), 720.53 KiB | 4.24 MiB/s, done.
Total 28 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), done.
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:     https://github.com/sharmi2504/capstone-project/pull/new/master
remote:
```

```

remote: Create a pull request for 'master' on GitHub by visiting:
remote:     https://github.com/sharmi2504/capstone-project/pull/new/master
remote:
To https://github.com/sharmi2504/capstone-project.git
 * [new branch]      master -> master
ubuntu@ip-172-31-46-99:~/capstone-project$ git pull origin master
From https://github.com/sharmi2504/capstone-project
 * branch            master      -> FETCH_HEAD
Already up to date.
ubuntu@ip-172-31-46-99:~/capstone-project$ git merge dev
Already up to date.
ubuntu@ip-172-31-46-99:~/capstone-project$ 

```

Pipeline:

The screenshot shows a Jenkins pipeline interface. At the top, there's a command-line terminal window displaying a successful Git pull and merge operation. Below it is a navigation bar with links like 'Dashboard' and 'Build History'. The main area shows a table of pipelines, with 'capstone' being the selected one. The pipeline details page for 'capstone' includes sections for 'Status' (green checkmark), 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'GitHub', 'Stages', 'Rename', and 'Pipeline Syntax'. A 'Permalinks' section lists several build links. At the bottom, a 'Build History' section shows a single entry for build #45, dated Aug 17, 2024, at 8:55 AM.

S	W	Name	Last Success	Last Failure	Last Duration
		capstone	2 days 0 hr #45	2 days 2 hr #42	10 sec

Status

capstone

capstone project

Permalinks

- Last build (#45), 2 days 0 hr ago
- Last stable build (#45), 2 days 0 hr ago
- Last successful build (#45), 2 days 0 hr ago
- Last failed build (#42), 2 days 2 hr ago
- Last unsuccessful build (#42), 2 days 2 hr ago
- Last completed build (#45), 2 days 0 hr ago

Build History

trend

Filter... /

#45 | Aug 17, 2024, 8:55 AM

Create 2 repo in docker:

1. Dev repo -public
2. Prod- private

Dev repo-public:

The screenshot shows the Docker Hub interface for creating a new repository. At the top, there are tabs for 'Explore', 'Repositories' (which is selected), and 'Organizations'. A search bar is on the right. Below the tabs, it says 'Repositories / Create'. The main form has a 'Namespace' dropdown set to 'sharmi2504' and a 'Repository Name *' field containing 'dev'. There is a 'Short description' input field with placeholder text: 'A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.' Below this, under 'Visibility', there are two options: 'Public' (selected) with the note 'Appears in Docker Hub search results' and 'Private' (unselected) with the note 'Only visible to you'. At the bottom right are 'Cancel' and 'Create' buttons. The URL at the bottom of the browser window is 'sharmi2504 / Repositories / dev / General'. The 'General' tab is selected, showing basic repository details like the name 'sharmi2504/dev', a creation timestamp, and status indicators for description and category being incomplete.

sharmi2504 / [Repositories](#) / [dev](#) / [General](#)

General Tags Builds Collaborators Webhooks Settings

sharmi2504/dev

Created less than a minute ago

This repository does not have a description INCOMPLETE

This repository does not have a category INCOMPLETE

Tags INCOMPLETE

This repository is empty. Push some images to it to see them appear here.

Prod repo – private:

[Repositories](#) / [Create](#)

Create repository

Namespace
sharmi2504

Repository Name *
prod

Short description

A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.

Visibility

Using 0 of 1 private repositories. [Get more](#)

Public 
Appears in Docker Hub search results

Private 
Only visible to you

[Cancel](#)

[Create](#)

sharmi2504 / [Repositories](#) / [prod](#) / [General](#)

[General](#) [Tags](#) [Builds](#) [Collaborators](#) [Webhooks](#) [Settings](#)

sharmi2504/prod 

Created less than a minute ago

This repository does not have a description 

This repository does not have a category 

Tags

This repository is empty. Push some images to it to see them appear here.

sharmi2504	Search by repository name 	All Content 	Create repository
sharmi2504 / dev	Contains: Image • Last pushed: 8 minutes ago	 0  0  Public 	
sharmi2504 / prod	Contains: No content • Created: about 2 hours ago	 0  0  Private 	

Multibranch pipeline:

The screenshot shows the Jenkins interface for creating a new item. At the top, there are navigation links: Dashboard > All > New Item. Below this, the title "New Item" is displayed. A search bar contains the text "multibranch".

Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Folder
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

Multibranch Pipeline
Creates a set of Pipeline projects according to detected branches in one SCM repository.

Organization Folder
Creates a set of multibranch project subfolders by scanning for repositories.

If you want to create a new item from other existing, you can use this option:

OK

Configuration:

The screenshot shows the Jenkins Configuration screen for a Multibranch Pipeline named "multibranch". The left sidebar lists configuration tabs: General, Branch Sources (selected), Build Configuration, Scan Multibranch Pipeline Triggers, Orphaned Item Strategy, Appearance, Health metrics, and Properties. The right panel displays the "General" configuration with a "Display Name" field containing "multibranch". The "Branch Sources" section shows a GitHub credential entry with the username "sharmi2504/" and a red "X" button to delete it.

Branch Sources

GitHub
Credentials ?

sharmi2504/********
- none -
sharmi2504/********
sharmi2504/******** (dockercredentials)

Repository HTTPS URL

Repository HTTPS URL ?
https://github.com/sharmi2504/capstone-project.git

Validate

GitHub
Credentials ?

sharmi2504/********
+ Add ▾

Repository HTTPS URL

Repository HTTPS URL ?
https://github.com/sharmi2504/capstone-project.git

Credentials ok. Connected to https://github.com/sharmi2504/capstone-project.

Validate

Repository Scan - Deprecated Visualization

Jenkins

Dashboard > project >

Status project

Folder name: multistagepipeline

Configure Scan Repository Now Scan Repository Log Multibranh Pipeline Events Delete Multibranh Pipeline Build History Project Relationship Check File Fingerprint

Disable Multibranh Pipeline

Branches (2) Pull Requests (0)

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☀	dev	10 min #10	2 days 3 hr #3	13 sec ➔
✓	☀	master	28 min #1	N/A	15 sec ➔

sharmi2504 / capstone-project

Type ⌘ to search

Code Issues Pull requests Actions Projects Security Insights Settings

capstone-project Public

Pin Unwatch 1

dev Branches Tags

Switch branches/tags

Find or create a branch...

Branches Tags

✓ dev default

master

View all branches

dockerfile

Go to file Add file Code

68b2afc · 6 hours ago 72 Commits

add all files 5 days ago

Merge branch 'dev' into master 7 hours ago

Update build.sh 6 hours ago

Update deploy.sh 10 hours ago

Update docker-compose.yaml 2 days ago

add all files 5 days ago

sharmi2504 / capstone-project

Type ⌘ to search

Code Issues Pull requests Actions Projects Security Insights Settings

Files

dev

build Jenkinsfile build.sh deploy.sh docker-compose.yaml dockerfile

capstone-project / build.s

Edit Preview

Commit changes

Commit message Update build.sh

Extended description Add an optional extended description..

Commit directly to the dev branch

Create a new branch for this commit and start a pull request [Learn more about pull requests](#)

Cancel Commit changes

project

Folder name: multistagepipeline

Disable Multibranch Pipeline

Branches (2) Pull Requests (0)

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀️	dev	18 min #9	2 days 3 hr #3	16 sec
✓	☀️	master	18 min #1	N/A	15 sec

Icon: S M L

ooo

Image pushed to prod repo:

Multipipeline – changes in dev automatically image pushed to dev repo

Dashboard > project > dev >

Status  **dev**

</> Changes Full project name: multistagepipeline/dev

▷ Build Now

 View Configuration

 Stages

 GitHub

 Pipeline Syntax

Permalinks

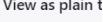
- [Last build \(#10\), 1 min 16 sec ago](#)
- [Last stable build \(#10\), 1 min 16 sec ago](#)
- [Last successful build \(#10\), 1 min 16 sec ago](#)
- [Last failed build \(#3\), 2 days 3 hr ago](#)
- [Last unsuccessful build \(#3\), 2 days 3 hr ago](#)
- [Last completed build \(#10\), 1 min 16 sec ago](#)

Build History  [trend](#) 

 #10

| Aug 19, 2024, 9:41 AM

Console output:

 **Console Output**  Download  Copy  View as plain text

```
Started by user sharmila
Obtained Jenkinsfile from git https://github.com/sharmi2504/capstone-project.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/capstone
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
Warning: CredentialId "dockerhub" could not be found.
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/capstone/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/sharmi2504/capstone-project.git # timeout=10
Fetching upstream changes from https://github.com/sharmi2504/capstone-project.git
> git --version # timeout=10
> git --version # 'git version 2.34.1'
> git fetch --tags --force --progress -- https://github.com/sharmi2504/capstone-project.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/dev^{commit} # timeout=10
Checking out Revision 8b788231599f42f91752c9ae71e28d58f7128dc0 (refs/remotes/origin/dev)
> git config core.sparsecheckout # timeout=10
```

```
Checking out Revision 8b788231599f42f91752c9ae71e28d58f7128dc0 (refs/remotes/origin/dev)
> git config core.sparsecheckout # timeout=10
> git checkout -f 8b788231599f42f91752c9ae71e28d58f7128dc0 # timeout=10
Commit message: "Update deploy.sh"
> git rev-list --no-walk cb37f1a1b45669c3b1e5eb825fb5efb4bf6375 # timeout=10
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (changing the file permission)
[Pipeline] sh
+ chmod +x build.sh
[Pipeline] sh
+ chmod +x deploy.sh
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ ./build.sh
DEPRECATION: The legacy builder is deprecated and will be removed in a future release.
      Install the buildx component to build images with BuildKit:
      https://docs.docker.com/go/buildx/
```

```
Sending build context to Docker daemon 3.858MB
```

```
Step 1/5 : FROM nginx:latest
--> a72860cb95fd
Step 2/5 : WORKDIR /usr/share/nginx/html
--> Using cache
--> 834607514a93
Step 3/5 : COPY build/ .
--> Using cache
--> 3e67ce2f96b2
Step 4/5 : EXPOSE 80
--> Using cache
--> ae8d137bf4fa
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
--> Using cache
--> cd0340c4bf09
Successfully built cd0340c4bf09
Successfully tagged projectimage:latest
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Login)
[Pipeline] withCredentials
Masking supported pattern matches of $DOCKER_PASSWORD
[Pipeline] {
[Pipeline] sh
+ docker login -u sharmi2504 --password-stdin
```

```
[Pipeline] sh
+ docker login -u sharmi2504 --password-stdin
+ echo ****
WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[Pipeline] }
[Pipeline] // withCredentials
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Deploy)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ ./deploy.sh
sh: 0: cannot open chmod +x build.sh: No such file
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
    Install the buildx component to build images with BuildKit:
    https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 3.858MB

Step 1/5 : FROM nginx:latest
--> a72860cb95fd
Step 2/5 : WORKDIR /usr/share/nginx/html
--> Using cache
```

```
--> 3e67ce2f96b2
Step 4/5 : EXPOSE 80
--> Using cache
--> ae8d137bf4fa
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
--> Using cache
--> cd0340c4bf09
Successfully built cd0340c4bf09
Successfully tagged projectimage:latest
Using default tag: latest
The push refers to repository [docker.io/sharmi2504/dev]
a6883682415c: Preparing
60e72fbb314e: Preparing
599e8de62018: Preparing
09581b9299a2: Preparing
a39383416a22: Preparing
a6355e7844d5: Preparing
fcfa12460e7d: Preparing
e0781bc8667f: Preparing
a6355e7844d5: Waiting
fcfa12460e7d: Waiting
e0781bc8667f: Waiting
599e8de62018: Mounted from sharmi2504/nginx
09581b9299a2: Mounted from sharmi2504/nginx
a39383416a22: Mounted from sharmi2504/nginx
60e72fbb314e: Mounted from sharmi2504/nginx
a6883682415c: Mounted from sharmi2504/nginx
a6355e7844d5: Mounted from sharmi2504/nginx
e0781bc8667f: Mounted from sharmi2504/nginx
```

```

599e8de62018: Mounted from sharmi2504/nginx
09581b9299a2: Mounted from sharmi2504/nginx
a39383416a22: Mounted from sharmi2504/nginx
60e72fbb314e: Mounted from sharmi2504/nginx
a6883682415c: Mounted from sharmi2504/nginx
a6355e7844d5: Mounted from sharmi2504/nginx
e0781bc8667f: Mounted from sharmi2504/nginx
fcfa12460e7d: Mounted from sharmi2504/nginx
latest: digest: sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b size: 1988
[Pipeline]
[Pipeline] // script
[Pipeline]
[Pipeline] // stage
[Pipeline]
[Pipeline] // withEnv
[Pipeline]
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

```

Branches to build ?

Branch Specifier (blank for 'any') ?

`*/master`

Branches to build ?

Branch Specifier (blank for 'any') ?

`*/dev`

Add Branch

Image pushed to dev repo:

Docker Hub

sharmi2504 / [Repositories](#) / [dev](#) / [Tags](#)

Using 1 of 1 private repositories.

General Tags Builds Collaborators Webhooks Settings

Sort by Newest Filter Tags Delete

TAG	Digest	OS/ARCH	Last pull	Compressed Size
● latest	9bd5620d5392	linux/amd64	---	68.38 MB

Docker Hub interface showing the 'sharmi2504' organization page.

Header navigation: Explore, **Repositories**, Organizations. Search bar: Search Docker Hub. Shortcuts: ctrl+K, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘.

Repository list:

- sharmi2504 / dev**
Contains: Image • Last pushed: 3 minutes ago
Star 0, Fork 0, Public, Scout inactive
- sharmi2504 / prod**
Contains: Image • Last pushed: 21 minutes ago
Star 0, Fork 0, Private, Scout inactive

Navigation tabs: General, Tags, Builds, Collaborators, Webhooks, Settings. The General tab is selected.

sharmi2504/dev (eye icon)

Updated 11 minutes ago

This repository does not have a description (edit icon) INCOMPLETE

This repository does not have a category (edit icon) INCOMPLETE

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest	🐧	Image	---	11 minutes ago

[See all](#)

Docker Hub interface showing the 'sharmi2504/dev/latest' tag page.

Header navigation: Explore, **Repositories**, Organizations. Search bar: Search Docker Hub. Shortcuts: ctrl+K, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘, ⌘.

Path: sharmi2504 / [Repositories](#) / [dev](#) / latest

sharmi2504/dev:latest

MANIFEST DIGEST: sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b (copy)

OS/ARCH: linux/amd64 | COMPRESSED SIZE: 68.38 MB | LAST PUSHED: 12 minutes ago by [sharmi2504](#) | TYPE: Image | MANIFEST DIGEST: sha256:9bd5620d... (copy)

Image Layers (Vulnerabilities)

Image Layers	Command
1 ADD file ... in /	27.78 MB ADD file:6c4730e7b12278bc7eb83b3b9d659437c92c42fc7ee70922ae8c4bebfb56a602 in /
2 CMD ["bash"]	0 B

[Delete Tag](#)

sharmi2504 / [Repositories](#) / dev / latest

sharmi2504/dev:latest

MANIFEST DIGEST sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b

OS/ARCH COMPRESSED SIZE LAST PUSHED TYPE MANIFEST DIGEST

linux/amd64 68.38 MB 3 minutes ago by sharmi2504 Image sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b

Image Layers Vulnerabilities

Image Layers Command

1 ADD file ... in / ADD file:6c4739e7b12278bc7eb83b3b9d659437c92c42fc7ee70922ae8c4bebf56a602 in /

2 CMD [\"bash\"] 0 B

Delete Tag

sharmi2504 / [Repositories](#) / prod / Tags

Using 1 of 1 private repositories.

General Tags Builds Collaborators Webhooks Settings

Sort by Newest Filter Tags Delete

TAG latest Last pushed a few seconds ago by sharmi2504

Digest 9bd5620d5392 OS/ARCH linux/amd64 Last pull --- Compressed Size 68.38 MB

docker pull sharmi2504/prod:latest Copy

When changes in prod branch ,Image pushed to prod repo:

sharmi2504 / capstone-project

Code Issues Pull requests Actions Projects Security Insights Settings

Files master Go to file

build Jenkinsfile build.sh deploy.sh docker-compose.yaml dockerfile

capstone-project / deploy

Commit changes

Commit message Update deploy.sh

Extended description Add an optional extended description..

Commit directly to the master branch
 Create a new branch for this commit and start a pull request [Learn more about pull requests](#)

Cancel Commit changes

 Jenkins

Dashboard > project > dev > #7

Status Changes Console Output Edit Build Information Delete build #7 Timings Git Build Data Pipeline Overview Pipeline Console Restart from Stage Replay Pipeline Steps Workspaces Previous Build

Console Output

Search (CTRL+K) Help Notifications Jenkinsfile sharmila log out

Push event to branch dev
05:54:46 Connecting to <https://api.github.com> using sharmi2504/*****
Obtained Jenkinsfile from 8455ec8c16b7be01a626dba0eae7f9f965e4f1f0
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/multistagepipeline_dev
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
using credential 543081f2-5174-4955-af39-7cafe6d92fec
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/multistagepipeline_dev/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url <https://github.com/sharmi2504/capstone-project.git> # timeout=10
Fetching without tags
Fetching upstream changes from <https://github.com/sharmi2504/capstone-project.git>
> git --version # timeout=10
> git --version # 'git version 2.34.1'
using GIT_ASKPASS to set credentials
> git fetch --no-tags --force --progress -- <https://github.com/sharmi2504/capstone-project.git> +refs/heads/dev:refs/remotes/origin/dev # timeout=10

using GIT_ASKPASS to set credentials
> git fetch --no-tags --force --progress -- <https://github.com/sharmi2504/capstone-project.git> +refs/heads/dev:refs/remotes/origin/dev # timeout=10
Checking out Revision 8455ec8c16b7be01a626dba0eae7f9f965e4f1f0 (dev)
> git config core.sparsecheckout # timeout=10
> git checkout -f 8455ec8c16b7be01a626dba0eae7f9f965e4f1f0 # timeout=10
Commit message: "Update deploy.sh"
> git rev-list --no-walk 6eeb011db9252b76f61f7ce33365e8ed5197d03e # timeout=10
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (changing the file permission)
[Pipeline] sh
+ chmod +x build.sh
[Pipeline] sh
+ chmod +x deploy.sh
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] script
[Pipeline] {
[Pipeline] sh
+ ./build.sh
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
<https://docs.docker.com/go/buildx/>

```
[Pipeline] sh
+ ./build.sh
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
    Install the buildx component to build images with BuildKit:
        https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 3.516MB

Step 1/5 : FROM nginx:latest
--> a72860cb95fd
Step 2/5 : WORKDIR /usr/share/nginx/html
--> Using cache
--> 834607514a93
Step 3/5 : COPY build/
--> Using cache
--> ae8d137bf4fa
--> 3e67ce2f96b2
Step 4/5 : EXPOSE 80
--> Using cache
--> cd0340c4bf09
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
--> Using cache
--> cd0340c4bf09
Successfully built cd0340c4bf09
Successfully tagged projectimage:latest
[Pipeline] sh
+ ./deploy.sh
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.
Configure a credential helper to remove this warning. See
```

WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.

Configure a credential helper to remove this warning. See

<https://docs.docker.com/engine/reference/commandline/login/#credentials-store>

Login Succeeded

```
sh: 0: cannot open chmod +x build.sh: No such file
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
    Install the buildx component to build images with BuildKit:
        https://docs.docker.com/go/buildx/
```

Sending build context to Docker daemon 3.516MB

```
Step 1/5 : FROM nginx:latest
--> a72860cb95fd
Step 2/5 : WORKDIR /usr/share/nginx/html
--> Using cache
--> 834607514a93
Step 3/5 : COPY build/
--> Using cache
--> 3e67ce2f96b2
Step 4/5 : EXPOSE 80
--> Using cache
--> ae8d137bf4fa
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
--> Using cache
--> cd0340c4bf09
Successfully built cd0340c4bf09
Successfully tagged projectimage:latest
Using default tag: latest
```

```
Successfully tagged projectimage:latest
Using default tag: latest
The push refers to repository [docker.io/sharmi2504/dev]
a6883682415c: Preparing
60e72fbb314e: Preparing
599e8de62018: Preparing
09581b9299a2: Preparing
a39383416a22: Preparing
a6355e7844d5: Preparing
fcfa12460e7d: Preparing
e0781bc8667f: Preparing
e0781bc8667f: Waiting
a6355e7844d5: Waiting
fcfa12460e7d: Waiting
a39383416a22: Layer already exists
599e8de62018: Layer already exists
60e72fbb314e: Layer already exists
09581b9299a2: Layer already exists
a6883682415c: Layer already exists
e0781bc8667f: Layer already exists
a6355e7844d5: Layer already exists
fcfa12460e7d: Layer already exists
latest: digest: sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b size: 1988
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Login)

-----
fcfa12460e7d: Waiting
60e72fbb314e: Layer already exists
a39383416a22: Layer already exists
599e8de62018: Layer already exists
09581b9299a2: Layer already exists
a6883682415c: Layer already exists
fcfa12460e7d: Layer already exists
e0781bc8667f: Layer already exists
a6355e7844d5: Layer already exists
latest: digest: sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b size: 1988
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline

GitHub has been notified of this commit's build result

Finished: SUCCESS
```

General	Tags	Builds	Collaborators	Webhooks	Settings
sharmi2504/dev 					
Updated 7 minutes ago					
This repository does not have a description	  INCOMPLETE				
This repository does not have a category	  INCOMPLETE				

sharmi2504 / [Repositories](#) / [dev](#) / [latest](#)

sharmi2504/dev:latest

MANIFEST DIGEST: sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b [Copy](#)

OS/ARCH: linux/amd64 | COMPRESSED SIZE: 68.38 MB | LAST PUSHED: 42 minutes ago by [sharmi2504](#) | TYPE: Image | MANIFEST DIGEST: sha256:9bd5620d... [Copy](#)

[Delete Tag](#)

Image Layers [Vulnerabilities](#)

Image Layers	Command
1 ADD file ... in /	ADD file:6c4730e7b12278bc7eb83b3b9d659437c92c42fc7ee70922ae8c4bebf56a602 in /
2 CMD ["bash"]	0 B
3 LABEL maintainer=NGINX Docker Maintainers <docker-maint@nginx.com>	0 B
4 ENV NGINX_VERSION=1.27.0	0 B
5 ENV NJS_VERSION=0.8.4	0 B

General Tags Builds Collaborators Webhooks Settings

sharmi2504/prod

Updated 12 minutes ago

This repository does not have a description 

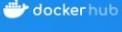
This repository does not have a category 

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
 latest		Image	---	12 minutes ago

[See all](#)

 dockerhub Explore Repositories Organizations ctrl+K     

sharmi2504 / [Repositories](#) / prod / latest

 sharmi2504/prod:latest Delete Tag

MANIFEST DIGEST sha256:9bd5620d53927747ea0a6e2c080e1532fe3d3fc5c209b4d980247c0c4677367b 

OS/ARCH	COMPRESSED SIZE	LAST PUSHED	TYPE	MANIFEST DIGEST
linux/amd64	68.38 MB	10 minutes ago by sharmi2504	Image	sha256:9bd5620d...

[Image Layers](#) [Vulnerabilities](#)

Image Layers 

1 ADD file ... in /	27.78 MB	Command
2 CMD ["bash"]	0 B	ADD file:6c4730e7b12278bc7eb83b3b9d659437c92c42fc7ee70922ae8c4bebfb56a602 in /

Monitoring:

Prometheus:

```
ubuntu@ip-172-31-46-99:~/capstone-project$ systemctl status prometheus
● prometheus.service - Prometheus
   Loaded: loaded (/etc/systemd/system/prometheus.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-08-19 04:34:14 UTC; 1min 14s ago
     Main PID: 2182 (prometheus)
        Tasks: 6 (limit: 1120)
       Memory: 44.3M
          CPU: 157ms
         CGroup: /system.slice/prometheus.service
             └─2182 /usr/local/bin/prometheus --config.file /etc/prometheus/prometheus.yml --storage.tsdb.path /var/lib/prometheus/ --web.console.templates=/etc/prometheus/consoles
```

Node exporter:

```
ubuntu@ip-172-31-46-99:~/capstone-project$ sudo systemctl status node_exporter
● node_exporter.service - Node Exporter
   Loaded: loaded (/etc/systemd/system/node_exporter.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-08-19 04:40:08 UTC; 59s ago
     Main PID: 2483 (node_exporter)
        Tasks: 3 (limit: 1120)
       Memory: 2.0M
          CPU: 8ms
         CGroup: /system.slice/node_exporter.service
             └─2483 /usr/local/bin/node_exporter
```

Grafana:

```
ubuntu@ip-172-31-46-99:~/capstone-project$ vi install-grafana.sh
ubuntu@ip-172-31-46-99:~/capstone-project$ chmod 777 install-grafana.sh
ubuntu@ip-172-31-46-99:~/capstone-project$ sudo ./install-grafana.sh
```

```
ubuntu@ip-172-31-46-99:~/capstone-project$ sudo systemctl status grafana-server
● grafana-server.service - Grafana instance
   Loaded: loaded (/lib/systemd/system/grafana-server.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2024-08-19 04:44:10 UTC; 1min 3s ago
     Docs: http://docs.grafana.org
   Main PID: 3396 (grafana)
      Tasks: 9 (limit: 1120)
     Memory: 150.9M
        CPU: 2.884s
       CGroup: /system.slice/grafana-server.service
             └─3396 /usr/share/grafana/bin/grafana server --config=/etc/grafana/grafana.ini --pidfile=/run/grafana/grafana.pid
```

Open all ports:

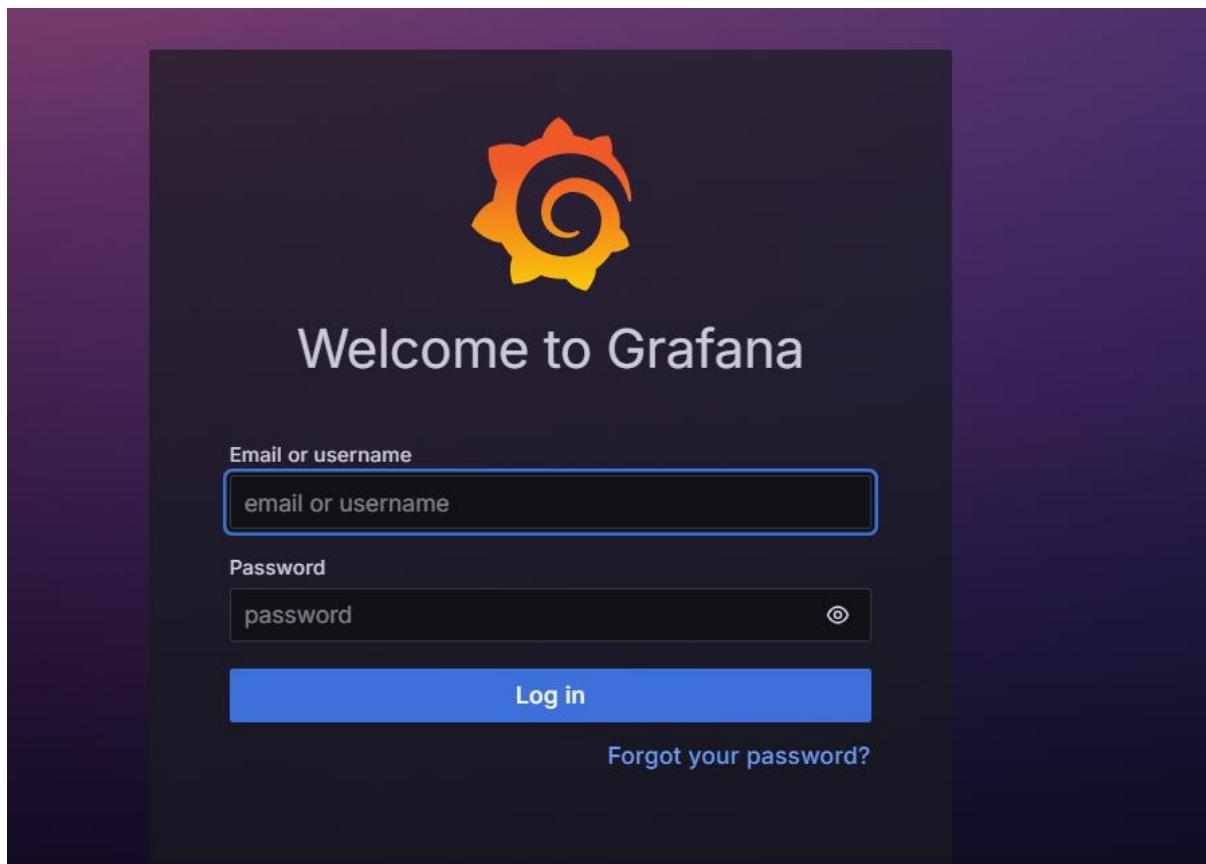
Inbound rules (7)						
	Name	Security group rule...	IP version	Type	Protocol	Port range
<input type="checkbox"/>	-	sgr-0efb4cd406c9f01f8	IPv4	Custom TCP	TCP	8000
<input type="checkbox"/>	-	sgr-04d3797ecafabce0a	IPv4	Custom TCP	TCP	8080
<input type="checkbox"/>	-	sgr-04d7a00c6fb578c4	IPv4	SSH	TCP	22
<input type="checkbox"/>	-	sgr-06bcfd96d037ac2bd	IPv4	Custom TCP	TCP	9090
<input type="checkbox"/>	-	sgr-08a8d280ff8d5b4b0	IPv4	Custom TCP	TCP	9100
<input type="checkbox"/>	-	sgr-0d46262f30ca2f723	IPv4	HTTP	TCP	80
<input type="checkbox"/>	-	sgr-09f390f40f03250f6	IPv4	Custom TCP	TCP	3000

The screenshot shows the Prometheus web interface. At the top, there is a dark header bar with the Prometheus logo and the word "Prometheus". Below the header are several configuration options: "Use local time" (unchecked), "Enable query history" (unchecked), "Enable autocomplete" (checked), "Enable highlighting" (checked), and "Enable linter" (checked). A search bar contains the placeholder text "Expression (press Shift+Enter for newlines)". Below the search bar are two tabs: "Table" (disabled) and "Graph" (selected). Underneath the tabs is a button labeled "Evaluation time" with arrows for navigation. A message "No data queried yet" is displayed. In the bottom left corner of the main area, there is a blue "Add Panel" button. The main content area has a large orange background with the white text "Node Exporter".

Prometheus Node Exporter

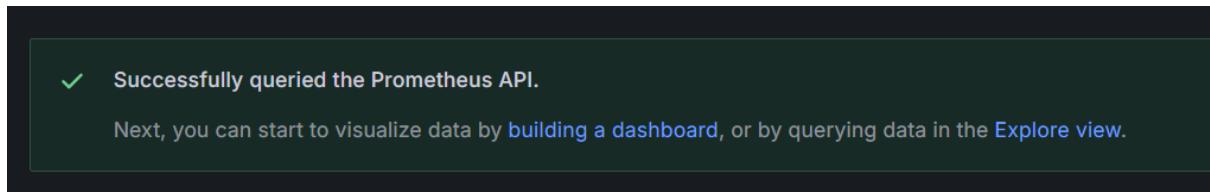
Version: (version=1.8.1, branch=HEAD, revision=400c3979931613db930ea035f39ce7b377cdbb5b)

- [Metrics](#)



This screenshot shows the "Connections > Data sources" section of Grafana. On the left is a sidebar with links like Home, Starred, Dashboards, Explore, Alerting, Connections, and Administration. The "Data sources" link is highlighted with an orange bar. In the main area, there is a card for a "prometheus" data source. The card includes the name "prometheus", its type ("Prometheus"), and status ("Supported"). It has tabs for "Settings" (which is active) and "Dashboards". A modal window titled "Configure your Prometheus data source below" is open, with instructions to skip configuration if using Prometheus or Loki. The "Name" field is set to "prometheus" with a "Default" toggle switch turned on. Below the modal, a note says "Before you can use the Prometheus data source, you must configure it below or in the config file. For detailed instructions, view the documentation." and "Fields marked with * are required".

This screenshot shows the same "Connections > Data sources" section as the previous one, but the "prometheus" data source card is collapsed. The main area now displays a "Connection" section. It features a text input field for "Prometheus server URL *" with the value "http://35.154.54.3:9090/" highlighted with a blue border. Above this input field is a note: "Before you can use the Prometheus data source, you must configure it below or in the config file. For detailed instructions, view the documentation." and "Fields marked with * are required".



```
scrape_configs:  
  # The job name is added as a label `job=<job_name>` to any timeseries scraped from this config.  
  - job_name: "prometheus"  
  
    # metrics_path defaults to '/metrics'  
    # scheme defaults to 'http'.  
  
    static_configs:  
      - targets: ["localhost:9100"]
```

Prometheus Alerts Graph Status ▾ Help

Targets

All scrape pools ▾ All Unhealthy Collapse All Unknown Unhealthy Healthy

prometheus (1/1 up) [show less](#)

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9100/metrics	UP	instance="localhost:9100" job="prometheus"	4.19s ago	17.269ms	

Home > Dashboards

Dashboards

Create and manage dashboards to visualize your data

Starred

You haven't created any dashboards yet

[+ Create dashboard](#)

The screenshot shows the Grafana interface with a dark theme. On the left, there is a sidebar with navigation links: Home, Starred, Dashboards (which is selected and highlighted in orange), Explore, Alerting, Connections (with 'Add new connection' and 'Data sources' sub-links), and Administration.

The main content area has a title "Importing dashboard from Grafana.com". It displays information about the dashboard being imported:

- Published by: rfmoz
- Updated on: 2024-05-22 21:37:35

Below this is a section titled "Options" with the following fields:

- Name: Node Exporter Full
- Folder: Dashboards
- Unique identifier (UID): rYdddIPWk (with a "Change uid" button)
- Prometheus: prometheus (with a dropdown arrow)

At the bottom are two buttons: "Import" (blue) and "Cancel".

