

FINAL PROJECT - DEVOPS APPLICATION DEPLOYMENT

STEP 1: Running application in port 80

```
Compiled successfully!  
  
You can now view my-react-app in the browser.  
  
Local:      http://localhost:80  
On Your Network: http://192.168.198.115:80  
  
Note that the development build is not optimized.  
To create a production build, use npm run build.  
  
webpack compiled successfully
```



Edit `src/App.js` and save to reload.

[Learn React](#)

STEP 2 : DOCKER

(i) Dockerize the application by creating a dockerfile

Installed and Actively running Docker

```
● docker.service - Docker Application Container Engine
   Loaded: loaded (/usr/lib/systemd/system/docker.service; enabled; preset: disabled)
   Active: active (running) since Sat 2024-12-21 17:20:40 UTC; 33s ago
 TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
   Main PID: 29464 (dockerd)
     Tasks: 7
    Memory: 34.9M
      CPU: 274ms
   CGroup: /system.slice/docker.service
           └─29464 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/containerd.sock --default-ulimit nfile=32768:65536

Dec 21 17:20:39 ip-172-31-2-190.us-west-2.compute.internal systemd[1]: Starting docker.service - Docker Application Container Engine...
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.004985802Z" level=info msg="Starting
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.098228119Z" level=info msg="Loading >
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.546810216Z" level=info msg="Loading >
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.581459838Z" level=info msg="Docker de
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.581727821Z" level=info msg="Daemon h>
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal dockerd[29464]: time="2024-12-21T17:20:40.616247005Z" level=info msg="API list>
Dec 21 17:20:40 ip-172-31-2-190.us-west-2.compute.internal systemd[1]: Started docker.service - Docker Application Container Engine.
lines 1-20
```

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

DOCKERFILE

```
MINGW64/c/Users/ASUS/devops-build
GNU nano 8.2 Dockerfile
From nginx:alpine
copy build/ /usr/share/nginx/html
```

(ii) Create a docker-compose file to use the image

DOCKER-COMPOSE.YML

```
version: '3'
services:
  web:
    build:
      context: .
      dockerfile: dockerfile
    ports:
      - "80:80"
    restart: always
~
~
~
~
~
~
~
~
-- INSERT --
```

i-056dafa4108ffae87 (final-devops project)

STEP (iii) BASH SCRIPTING:

(i)build.sh- for application by creating a dockerfile

BUILD.SH

```
aws | [Search] [Alt+S]
#!/bin/bash
docker build -t dev-project .
~
~
~
~
~
~
~
~
-- INSERT --
```

Building images finished

```
ASUS@DESKTOP-BMULPAN MINGW64 ~/devops-build (main)
$ docker build -t dev-project .
[+] Building 11.7s (8/8) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 90B
=> [internal] load metadata for docker.io/library/nginx:alpine
=> [auth] library/nginx:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 3.38MB
=> CACHED [1/2] FROM docker.io/library/nginx:alpine@sha256:41523187cf7d7a2f2677a80609d9caa14388bf5c1fbc9c410ba3de602aaaab4
=> [2/2] COPY build/ /usr/share/nginx/html
=> exporting to image
=> => exporting layers
=> => writing image sha256:777ecde56e06c796452e8fc919ad7ff8ac796da780385c4d6d1d0adc13463fea
=> => naming to docker.io/library/dev-project

View build details: docker-desktop://dashboard/build/desktop-linux/desktop-linux/1eb5z21wgtlvvg75crtgdp8u1

1 warning found (use docker --debug to expand):
- ConsistentInstructionCasing: Command 'From' should match the case of the command majority (lowercase) (line 1)

What's next:
View a summary of image vulnerabilities and recommendations -> docker scout quickview
```

BUILT IMAGES

```
ASUS@DESKTOP-BMULPAN MINGW64 ~/devops-build (main)
$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
dev-project	latest	79fc453d3866	18 hours ago	55.1MB
<none>	<none>	18eec502a3e0	20 hours ago	55.1MB
my-react-app-app	latest	362ec6495f15	3 weeks ago	1.58GB
miridula02/dev	latest	362ec6495f15	3 weeks ago	1.58GB
miridula02/devmy-react-app-app	latest	362ec6495f15	3 weeks ago	1.58GB
devops-build	latest	d560f7b61aa0	3 weeks ago	1.58GB
miridula02/prod	latest	d560f7b61aa0	3 weeks ago	1.58GB
miridula02/proddevops-build	latest	d560f7b61aa0	3 weeks ago	1.58GB
docker/desktop-kubernetes	kubernetes-v1.30.5-cni-v1.4.0-critools-v1.29.0-cri-dockerd-v0.3.11-1-debian	a60dd8dae2ad	2 months ago	435MB
registry.k8s.io/kube-apiserver	v1.30.5	e9adc5c075a8	3 months ago	117MB
registry.k8s.io/kube-controller-manager	v1.30.5	38406042cf08	3 months ago	111MB
registry.k8s.io/kube-scheduler	v1.30.5	25903461e65c	3 months ago	62MB
registry.k8s.io/kube-proxy	v1.30.5	71161e05b9bb	3 months ago	84.7MB
registry.k8s.io/coredns/coredns	v1.11.3	c69fa2e9cbf5	4 months ago	61.8MB
docker/desktop-kubernetes	kubernetes-v1.30.2-cni-v1.4.0-critools-v1.29.0-cri-dockerd-v0.3.11-1-debian	8b7b9de36bd5	5 months ago	435MB
registry.k8s.io/kube-apiserver	v1.30.2	56ce0fd9fb53	6 months ago	117MB
registry.k8s.io/kube-controller-manager	v1.30.2	e874818b3caa	6 months ago	111MB
registry.k8s.io/kube-scheduler	v1.30.2	7820c83aa139	6 months ago	62MB
registry.k8s.io/kube-proxy	v1.30.2	53c535741fb4	6 months ago	84.7MB
registry.k8s.io/etcd	3.5.12-0	3861cfc7c04	10 months ago	149MB
registry.k8s.io/coredns/coredns	v1.11.1	ccb01a7bd410	16 months ago	59.8MB
docker/desktop-vpnkit-controller	dc331cb22850be0cdd97c84a9cfecaf44a1afb6e	556098075b3d	19 months ago	36.2MB
registry.k8s.io/pause	3.9	e6f181688397	2 years ago	744kB
docker/desktop-storage-provisioner	v2.0	99f89471f470	3 years ago	41.9MB

(ii) deploy.sh-for deploying the image to server

DEPLOY.SH

```
aws [Alt+S]

#!/bin/bash
if [[ $GIT_BRANCH == "origin/dev" ]]; then
    # Build your project
    sh 'chmod +x build.sh'
    sh './build.sh'
    docker login -u mirdula02 -p dckr_pat_Y2Cd1VatoDaWrcTiiRv_c3vQHLo
    docker tag dev-project mirdula02/dev
    docker push mirdula02/dev

elif [[ $GIT_BRANCH == "origin/main" ]]; then
    sh 'chmod +x build.sh'
    sh './build.sh'
    docker login -u mirdula02 -p dckr_pat_Y2Cd1VatoDaWrcTiiRv_c3vQHLo
    docker tag dev-project mirdula02/prod
    docker push mirdula02/prod
fi

-- INSERT --
```

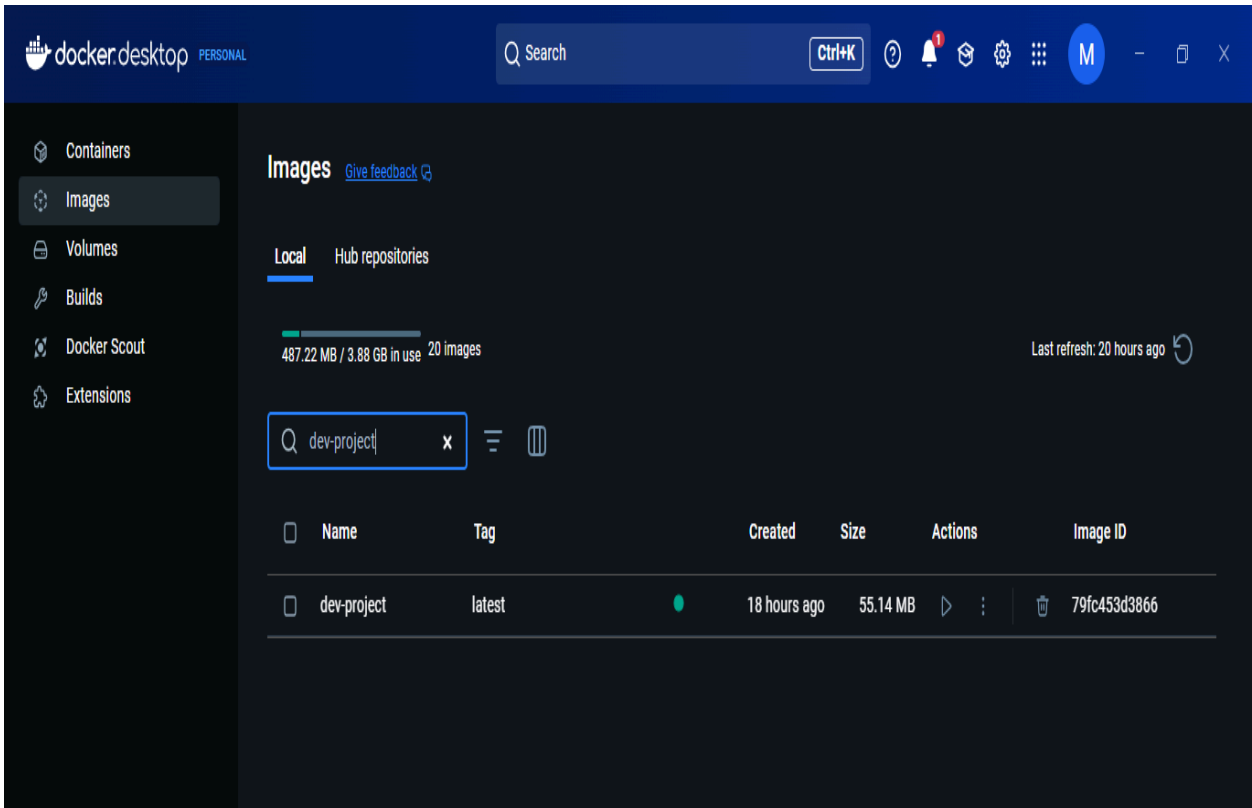
Completed deploying images

```
=> [web stage-1 1/2] FROM docker.io/library/nginx:alpine@sha256:41523187cf7d7a2f2677a80609d9caa14388bf5c1fbca9d
=> [web internal] load build context
=> => transferring context: 1.77kB
=> CACHED [web build 2/6] WORKDIR /app
=> CACHED [web build 3/6] COPY package*.json ./
=> CACHED [web build 4/6] RUN npm install
=> [web build 5/6] COPY . .
=> [web build 6/6] RUN npm run build
=> CACHED [web stage-1 2/2] COPY --from=build /app/build /usr/share/nginx/html
=> [web] exporting to image
=> => exporting layers
=> => writing image sha256:35f37d3bb56e8f14d197869dbe6062c9ecd059aa5b35c6b8bdad2e26e5822ba8
[+] Running 3/3o docker.io/library/final-project-web
✔ Service web Built
✔ Network final-project_default Created
✔ Container final-project-web-1 Started
[root@ip-172-31-2-190 final-project]# docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
create-react-app    latest      db9030eb3145      8 minutes ago   53.1MB
final-project-web    latest      35f37d3bb56e      8 minutes ago   53.1MB
[root@ip-172-31-2-190 final-project]#
```

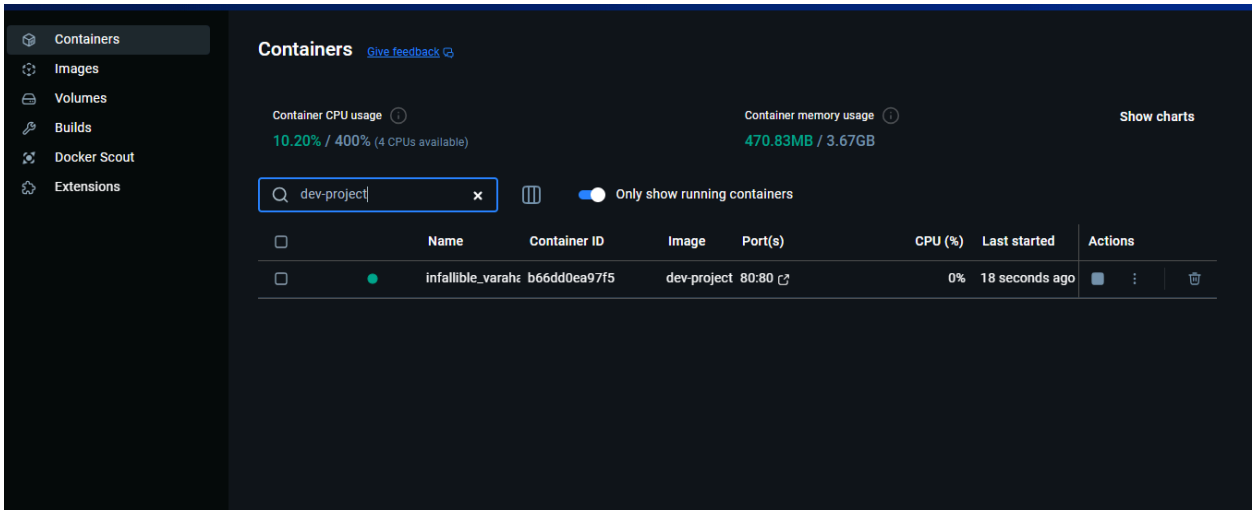
i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

Pushed docker images in the Docker application

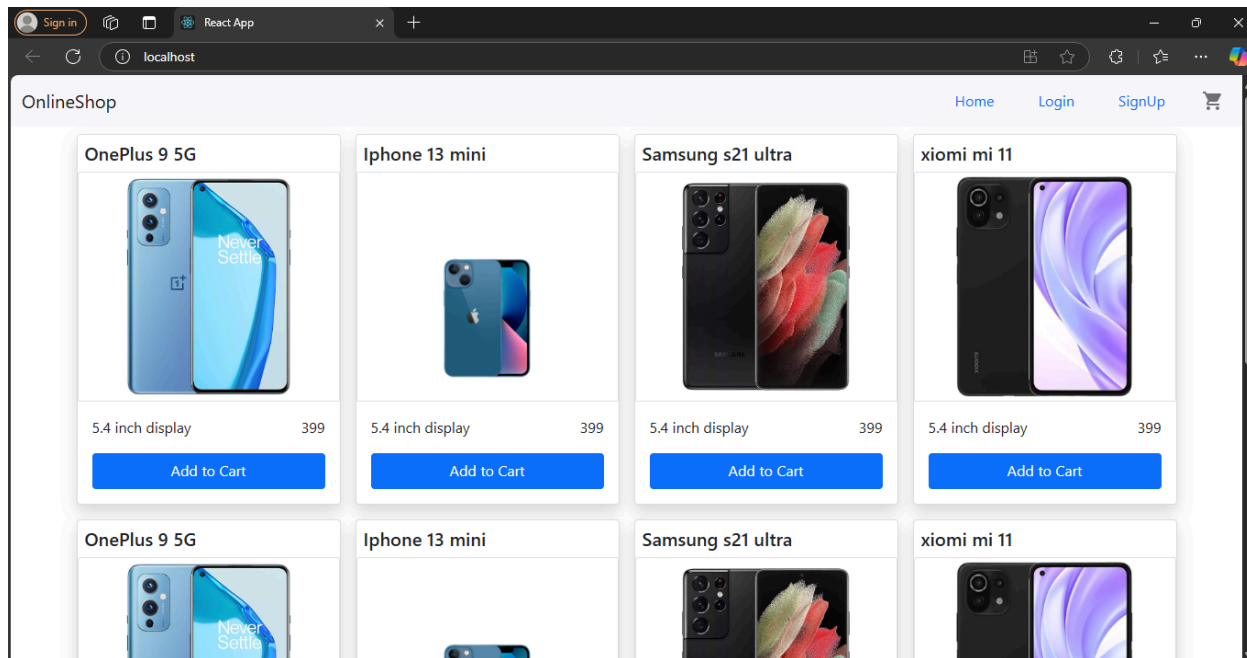


RUNNING CONTAINER



WEBSITE URL : <http://172.19.48.1:80>

RUNNING APPLICATION:

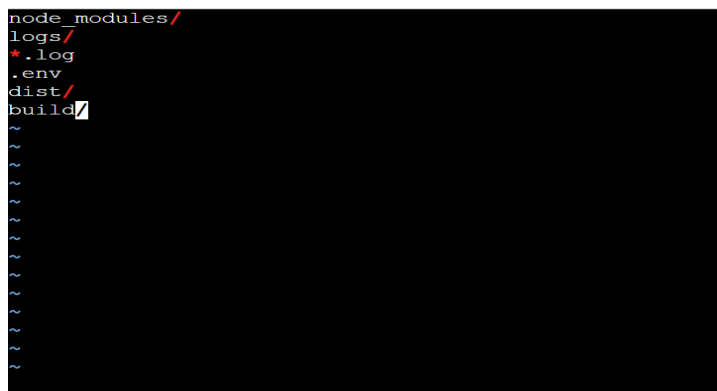


STEP 4 VERSION CONTROL:

(i) push the code to github to dev branch(use dockerignore and git ignore files)

NOTE: Using only CLI related commands

.gitignore files



i-056dafa4108ffae87 (final-devops project)

.dockerignore files

```
node_modules/  
.git  
.env  
logs/  
dist/  
build/█  
  
~  
~  
~  
~  
~  
~  
~  
~  
~  
~  
-- INSERT --
```

i-056dafa4108ffae87 (final-devops project)

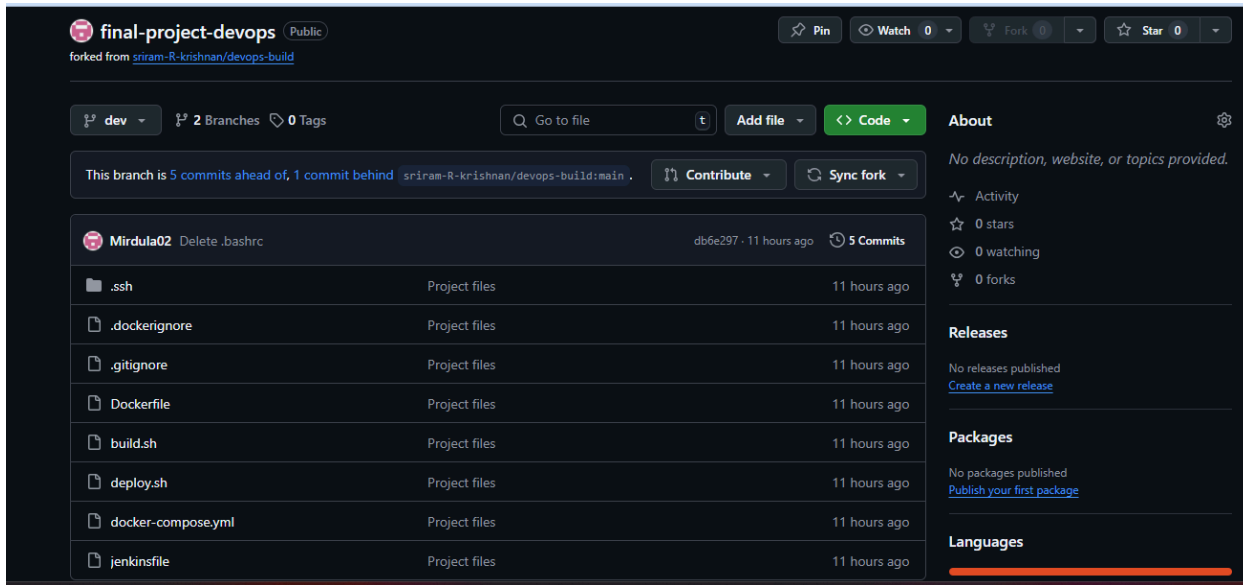
Pushed to git DEV Branch

```
git version 2.40.1
[ec2-user@ip-172-31-2-190 final-project]$ sudo chown -R ec2-user:ec2-user /home/ec2-user/final-project
[ec2-user@ip-172-31-2-190 final-project]$ chmod -R u+rwX /home/ec2-user/final-project
[ec2-user@ip-172-31-2-190 final-project]$ git init
Reinitialized existing Git repository in /home/ec2-user/final-project/.git/
[ec2-user@ip-172-31-2-190 final-project]$ git add .
[ec2-user@ip-172-31-2-190 final-project]$ git commit -m "project commit files"
On branch dev
nothing to commit, working tree clean
[ec2-user@ip-172-31-2-190 final-project]$ git remote set-url origin https://Mirdula02:ghp_UTmJhSpGJhrUyOzxqHNs8zsrP7ikMirdula02@github.com:Mirdula02/final-project.git
[ec2-user@ip-172-31-2-190 final-project]$ git branch
* dev
  main
[ec2-user@ip-172-31-2-190 final-project]$ git push -u origin dev
Enumerating objects: 43, done.
```

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

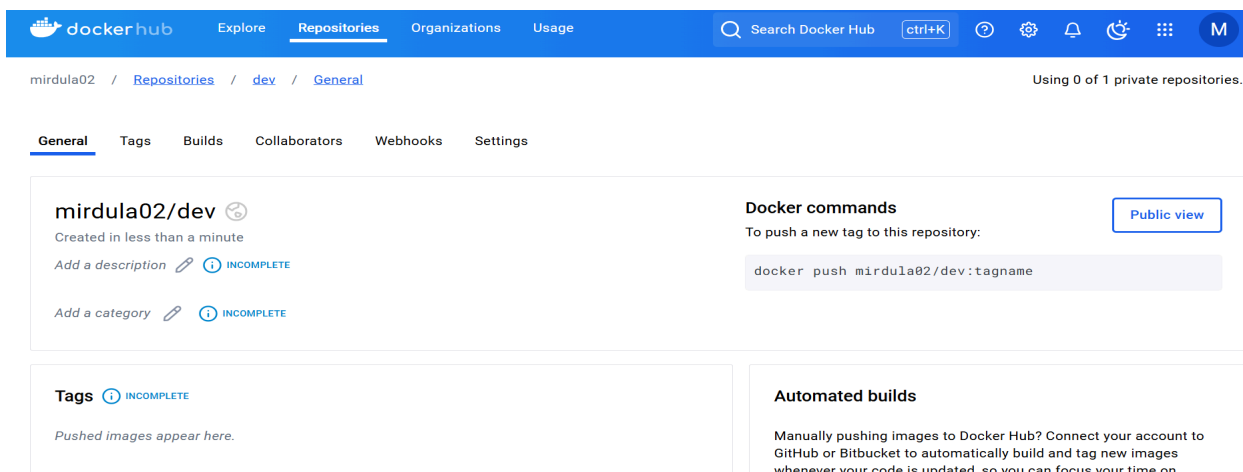
FILES PUSHED INSIDE REPO




STEP V DOCKER HUB :

(i) Create 2 repos “dev” and “prod” to push images. “Prod” repo must be “private” and the “dev ” repo is “public”.

CREATED DEV REPO(PUBLIC)



CREATED PROD REPO(PRIVATE)

 **dockerhub**


ExploreRepositoriesOrganizationsUsage

ctrl+K ? ⚙️ 🔔 🔄 ☰ M


mirdula02 / Repositories / prod / General


Using 1 of 1 private repositories.

GeneralTagsBuildsCollaboratorsWebhooksSettings

mirdula02/prod 

Created in less than a minute

Add a description 

Add a category 

Docker commands

To push a new tag to this repository:

```
docker push mirdula02/prod:tagname
```

PUSHED IMAGE ON DEV(PUBLIC)

```
Username: mirdula02
Password:
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
[root@ip-172-31-2-190 final-project]# docker push mirdula02/dev-create-react-app
Using default tag: latest
The push refers to repository [docker.io/mirdula02/dev-create-react-app]
973ae3643135: Pushed
2430c01bea64: Mounted from library/nginx
b11b58162504: Mounted from library/nginx
8b5ce426f73d: Mounted from library/nginx
884b72c14f15: Mounted from library/nginx
4a37d1b49911: Mounted from library/nginx
4e8a0009474a: Mounted from library/nginx
287563f25f8b: Mounted from library/nginx
75654b8eeebd: Mounted from library/nginx
latest: digest: sha256:1e728fb56f2f34893f7de2698ee11db653b5fc8dfc2b86320f1e05ca63e14eb3 size: 2199
[root@ip-172-31-2-190 final-project]#
```

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

IMAGE PUSHED ON PROD(PRIVATE)

```
The push refers to repository [docker.io/mirdula02/dev-create-react-app]
973ae3643135: Pushed
2430c01bea64: Mounted from library/nginx
b11b58162504: Mounted from library/nginx
8b5ce426f73d: Mounted from library/nginx
884b72c14f15: Mounted from library/nginx
4a37d1b49911: Mounted from library/nginx
4e8a0009474a: Mounted from library/nginx
287563f25f8b: Mounted from library/nginx
75654b8eeebd: Mounted from library/nginx
latest: digest: sha256:1e728fb56f2f34893f7de2698ee11db653b5fc8dfc2b86320f1e05ca63e14eb3 size: 2199
[root@ip-172-31-2-190 final-project]# docker push mirdula02/prod-final-project-web
Using default tag: latest
The push refers to repository [docker.io/mirdula02/prod-final-project-web]
973ae3643135: Mounted from mirdula02/dev-create-react-app
2430c01bea64: Mounted from mirdula02/dev-create-react-app
b11b58162504: Mounted from mirdula02/dev-create-react-app
8b5ce426f73d: Mounted from mirdula02/dev-create-react-app
884b72c14f15: Mounted from mirdula02/dev-create-react-app
4a37d1b49911: Mounted from mirdula02/dev-create-react-app
4e8a0009474a: Mounted from mirdula02/dev-create-react-app
```

i-056dafa4108ffae87 (final-devops project)

PUSHED IMAGE INTO DOCKER HUB (DEV REPO)

mirdula02/dev-create-react-app

Last pushed 3 minutes ago

Add a description

Add a category

INCOMPLETE

INCOMPLETE

Docker commands

To push a new tag to this repository:

docker push mirdula02/dev-create-react-app:tagname

Public view

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	3 minutes ago	3 minutes ago

See all

Automated builds

Manually pushing images to Docker Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds](#)

Upgrade

PUSHED IMAGE INTO DOCKER HUB (PROD REPO)

mirdula02/dev-create-react-app

Last pushed 3 minutes ago

Add a description

Add a category

INCOMPLETE

INCOMPLETE

Docker commands

To push a new tag to this repository:

docker push mirdula02/dev-create-react-app:tagname

Public view

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	3 minutes ago	3 minutes ago

See all

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Upgrade

DOCKER HUB REPOSITORY VIEW WITH THE IMAGES PUSHED

dockerhub

Explore

Repositories

Organizations

Usage

Search Docker Hub

ctrl+K

M

mirdula02

Search by repository name

All content

Create a repository

Name	Last Pushed	Contains	Visibility	Scout
mirdula02/prod-final-project-web	1 minute ago	IMAGE	Public	Inactive
mirdula02/dev-create-react-app	2 minutes ago	IMAGE	Public	Inactive
mirdula02/prod	22 minutes ago		Private	Inactive
mirdula02/dev	23 minutes ago		Public	Inactive

STEP 6 JENKINS :

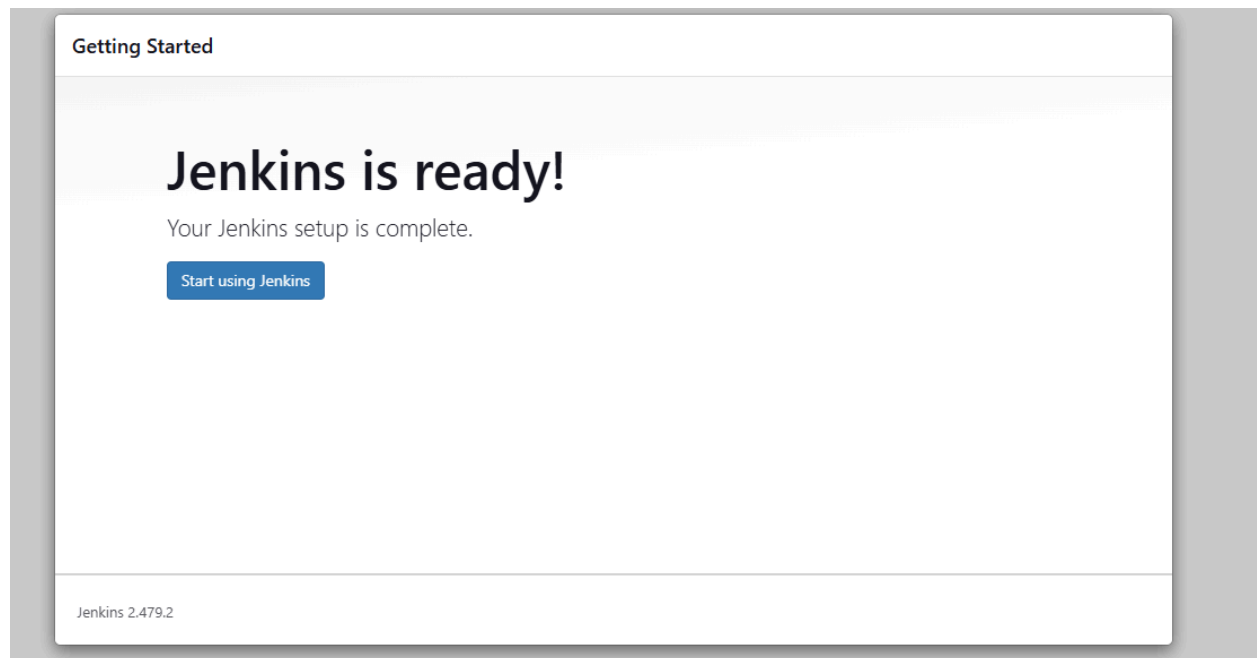
(i) INSTALLING AND CONFIGURING JENKINS

```
Complete!
[root@ip-172-31-29-226 dev-project]# yum install jenkins
Last metadata expiration check: 0:01:44 ago on Fri Dec 6 23:17:25 2024.
Dependencies resolved.
=====
Package               Architecture      Version           Repository        Size
-----
Installing:
jenkins               noarch            2.479.2-1.1      jenkins           91 M
=====
Transaction Summary
=====
Install 1 Package

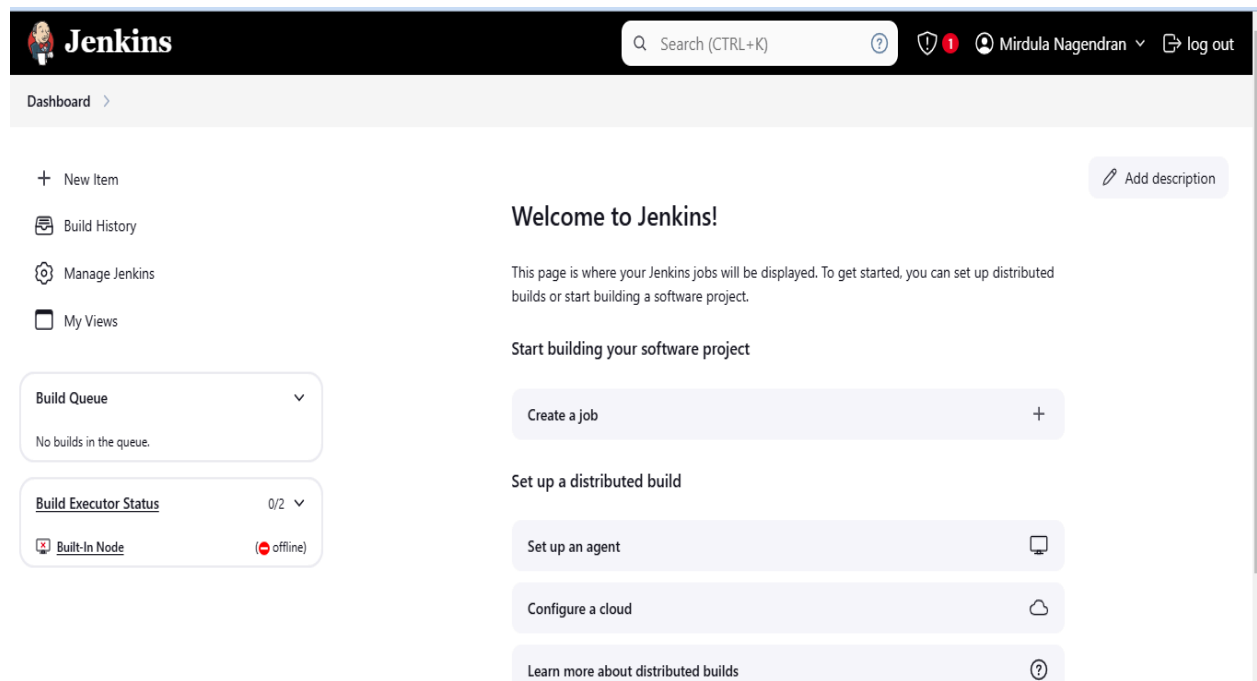
Total download size: 91 M
Installed size: 92 M
Is this ok [y/N]: y
Downloading Packages:
jenkins-2.479.2-1.1.noarch.rpm                                27 MB/s | 91 MB  00:03
-----
Total                                                    27 MB/s | 91 MB  00:03
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                :
  Running scriptlet: jenkins-2.479.2-1.1.noarch                1/1
  Installing              : jenkins-2.479.2-1.1.noarch                1/1
  Running scriptlet: jenkins-2.479.2-1.1.noarch                1/1
  Verifying                : jenkins-2.479.2-1.1.noarch                1/1

Installed:
jenkins-2.479.2-1.1.noarch

Complete!
[root@ip-172-31-29-226 dev-project]#
```



LOGGING INTO JENKINS



FIRST BUILD OF JENKINS

Dashboard > devops project > Configuration

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Build Steps

Execute shell ?

Command

[See the list of available environment variables](#)

```
docker build -t mindula02/devdev-project-app .
```

Advanced ▾

SECOND BUILD OF JENKINS

Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

Execute shell ?

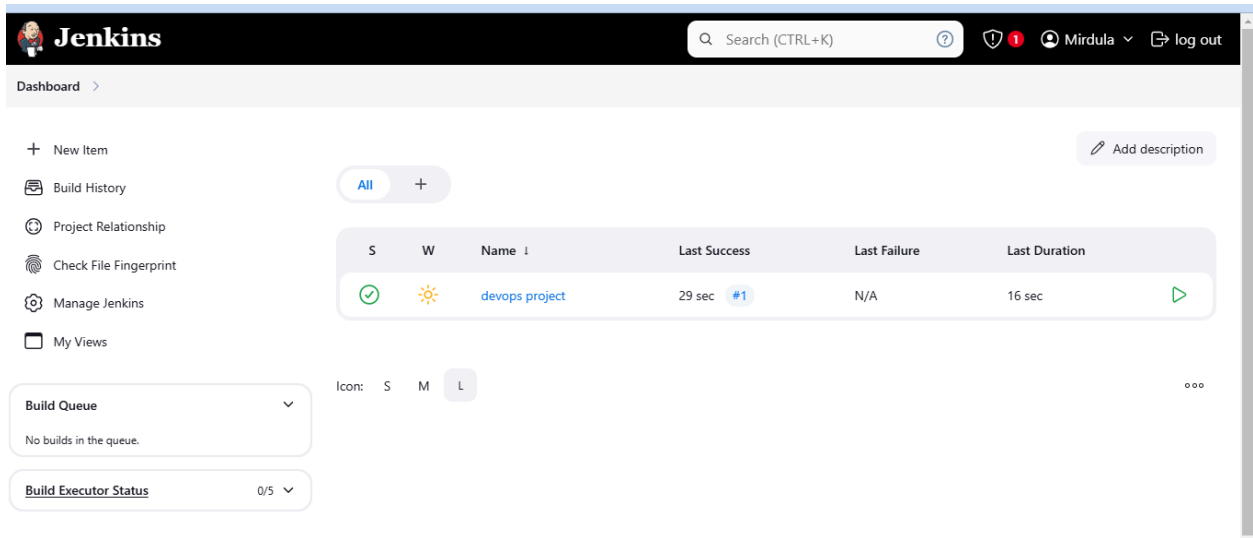
Command

[See the list of available environment variables](#)

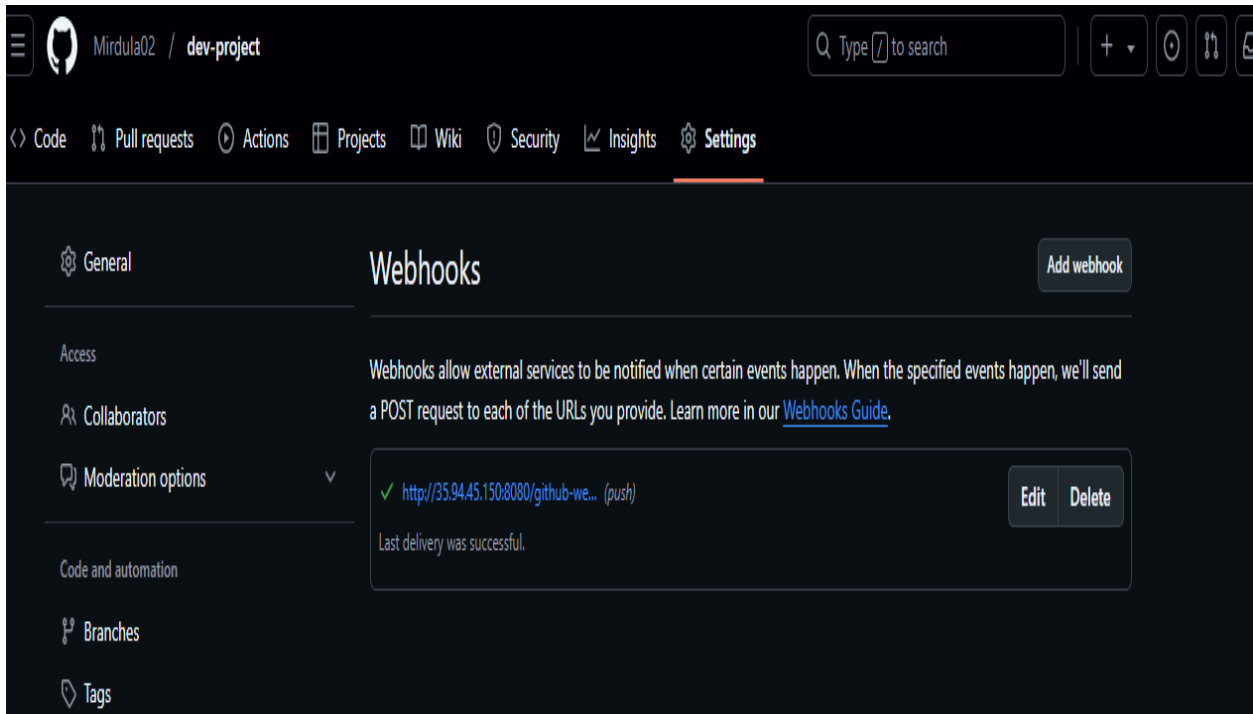
```
docker login -u mindula02 -p Mindula@31  
docker push mindula02/devdev-project-app
```

Advanced ▾

BUILT JENKINS JOB



WEBHOOK CREATED



CONSOLE OUTPUT

Status

Changes

Console Output

Edit Build Information

Delete build '#1'

Timings

Git Build Data

Console Output

Download

Copy

View as plain text

Started by user [Mirdula](#)
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/devops project
The recommended git tool is: NONE
using credential github-cred
Cloning the remote Git repository
Cloning repository <https://github.com/Mirdula02/dev-project.git>
> git init /var/lib/jenkins/workspace/devops project # timeout=10
Fetching upstream changes from <https://github.com/Mirdula02/dev-project.git>
> git --version # timeout=10
> git --version # 'git version 2.40.1'
using GIT_ASKPASS to set credentials
> git fetch --tags --force --progress -- <https://github.com/Mirdula02/dev-project.git> +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url <https://github.com/Mirdula02/dev-project.git> # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch

Dashboard > devops project > #1 > Console Output

fe0fb3ab4a0f: Waiting
f1186e5061f2: Waiting
b2dba7477754: Waiting
5f70bf18a086: Layer already exists
778ea5578ab4: Layer already exists
71304d53ec1c: Layer already exists
0d5f5a015e5d: Layer already exists
3c777d951de2: Layer already exists
e01a454893a9: Layer already exists
f8a91dd5fc84: Layer already exists
cb81227abde5: Layer already exists
8656469121f8: Mounted from mirdula02/devdev-project-app
fe0fb3ab4a0f: Layer already exists
f1186e5061f2: Layer already exists
c45660adde37: Layer already exists
b2dba7477754: Layer already exists
latest: digest: sha256:0980f78eb277f201b716a1908ef97fe402cd152856f3ea87b35cd7f7968d8fd6 size: 3042
Finished: SUCCESS

JENKINS BUILD DOCKER IMAGE(DEV)

mirdula02/dev-create-react-app

Last pushed 3 minutes ago

Add a description

INCOMPLETE

Add a category

INCOMPLETE

Docker commands

To push a new tag to this repository:

docker push mirdula02/dev-create-react-app:tagname

Public view

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	3 minutes ago	3 minutes ago

[See all](#)

Automated builds

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Upgrade

JENKINS BUILD DOCKER IMAGE(PROD)

mirdula02/prod-final-project-web

Last pushed 1 minute ago

Add a description

INCOMPLETE

Add a category

INCOMPLETE

Docker commands

To push a new tag to this repository:

docker push mirdula02/prod-final-project-web:tagname

Public view

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	a few seconds ago	a minute ago

[See all](#)

Automated builds

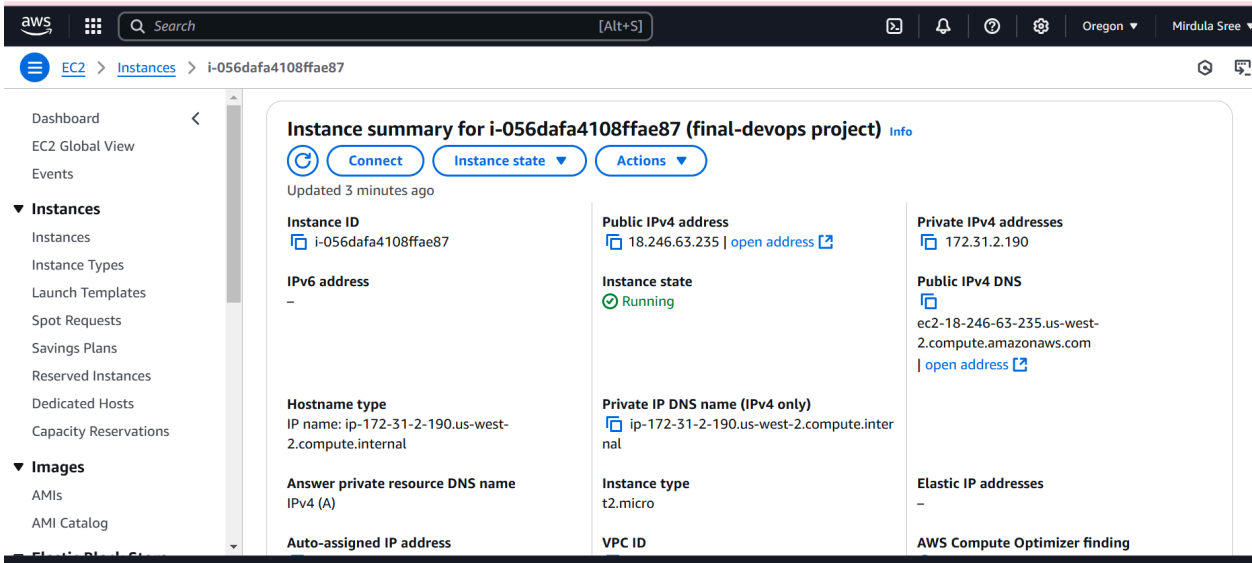
Manually pushing images to Docker Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds](#)

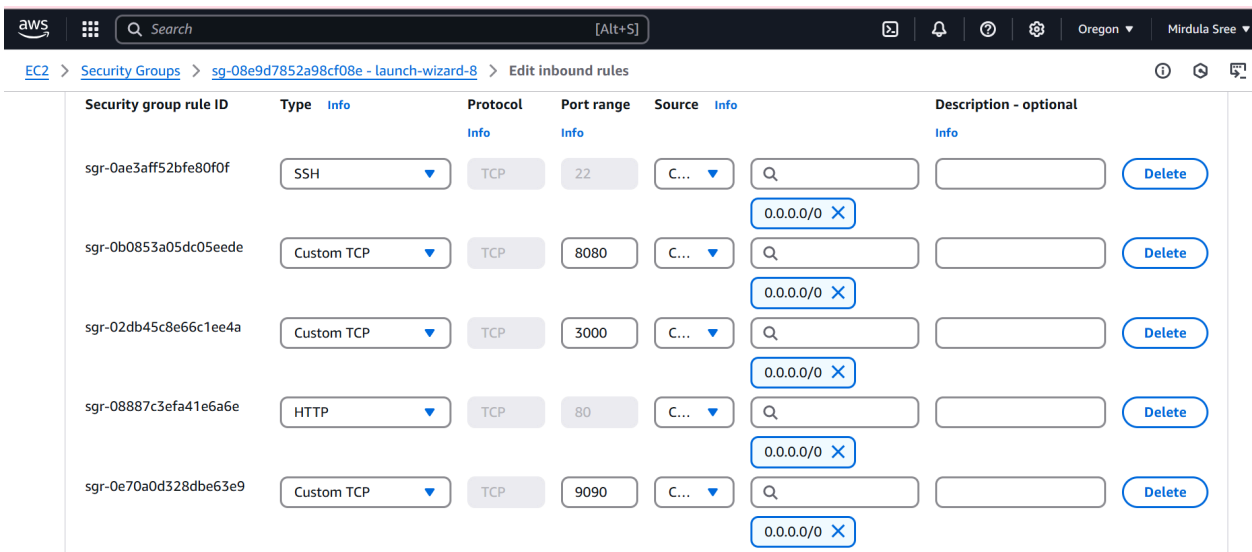
Upgrade

STEP 7 AWS:

LAUNCH t2.micro instance and deploy the create application
LAUNCHED INSTANCE:



SECURITY GROUPS



STEP 8 MONITORING:

INSTALLED PROMETHEUS

```
[root@ip-172-31-29-226 ~]# wget https://github.com/prometheus/prometheus/releases/download/v2.33.5/prometheus-2.33.5.linux-amd64.tar.gz
Last metadata expiration check: 4:58:26 ago on Fri Dec 6 23:17:25 2024.
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-29-226 ~]# wget https://github.com/prometheus/prometheus/releases/download/v2.33.5/prometheus-2.33.5.linux-amd64.tar.gz
--2024-12-07 04:16:27-- https://github.com/prometheus/prometheus/releases/download/v2.33.5/prometheus-2.33.5.linux-amd64.tar.gz
Resolving github.com (github.com)... 140.82.116.4
Connecting to github.com (github.com)[140.82.116.4]:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://objects.githubusercontent.com/github-production-release-asset-2665be/6838921/e711afc2-01e1-466d-8bdb-3705c22b78c2?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20241207%2Fus-east-1%2F%3Faws4_request&X-Amz-Date=20241207T041627Z&X-Amz-Expires=300&X-Amz-Signature=a869fda3a25d7f0439bde1a03e92001640dbc74a47d958721f37a33b20a8ae336X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dprometheus-2.33.5.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream [following]
--2024-12-07 04:16:27-- https://objects.githubusercontent.com/github-production-release-asset-2665be/6838921/e711afc2-01e1-466d-8bdb-3705c22b78c2?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=releaseassetproduction%2F20241207%2Fus-east-1%2F%3Faws4_request&X-Amz-Date=20241207T041627Z&X-Amz-Expires=300&X-Amz-Signature=a869fda3a25d7f0439bde1a03e92001640dbc74a47d958721f37a33b20a8ae336X-Amz-SignedHeaders=host&response-content-disposition=attachment%3B%20filename%3Dprometheus-2.33.5.linux-amd64.tar.gz&response-content-type=application%2Foctet-stream
Resolving objects.githubusercontent.com (objects.githubusercontent.com)... 185.199.111.133, 185.199.110.133, 185.199.108.133, ...
Connecting to objects.githubusercontent.com (objects.githubusercontent.com)[185.199.111.133]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 75869807 (72M) [application/octet-stream]
Saving to: 'prometheus-2.33.5.linux-amd64.tar.gz'

prometheus-2.33.5.linux-amd64.tar.gz          100%[=====] 72.35M  70.3MB/s   in 1.0s

2024-12-07 04:16:29 (70.3 MB/s) - 'prometheus-2.33.5.linux-amd64.tar.gz' saved [75869807/75869807]

[root@ip-172-31-29-226 ~]# tar xvfz prometheus-2.33.5.linux-amd64.tar.gz
prometheus-2.33.5.linux-amd64/
prometheus-2.33.5.linux-amd64/conssoles/
prometheus-2.33.5.linux-amd64/conssoles/index.html.example
prometheus-2.33.5.linux-amd64/conssoles/node-cpu.html
prometheus-2.33.5.linux-amd64/conssoles/node-disk.html
prometheus-2.33.5.linux-amd64/conssoles/node-overview.html
prometheus-2.33.5.linux-amd64/conssoles/node.html
prometheus-2.33.5.linux-amd64/conssoles/prometheus-overview.html
prometheus-2.33.5.linux-amd64/conssoles/prometheus.html
prometheus-2.33.5.linux-amd64/console_libraries/
prometheus-2.33.5.linux-amd64/console_libraries/menu.lib
prometheus-2.33.5.linux-amd64/console_libraries/prom.lib
prometheus-2.33.5.linux-amd64/prometheus.yml
prometheus-2.33.5.linux-amd64/LICENSE
prometheus-2.33.5.linux-amd64/NOTICE
prometheus-2.33.5.linux-amd64/prometheus
prometheus-2.33.5.linux-amd64/promtool
[root@ip-172-31-29-226 ~]# sudo mv prometheus-2.33.5.linux-amd64 /usr/local/bin/prometheus
[root@ip-172-31-29-226 ~]# sudo mv prometheus-2.33.5.linux-amd64 /usr/local/bin/prometheus
mv: cannot stat 'prometheus-2.33.5.linux-amd64': No such file or directory
[root@ip-172-31-29-226 ~]# sudo nano /etc/systemd/system/prometheus.service
[root@ip-172-31-29-226 ~]# sudo systemctl daemon-reload
```

PROMETHEUS.YML FILE

```
global:
  scrape_interval: 15s

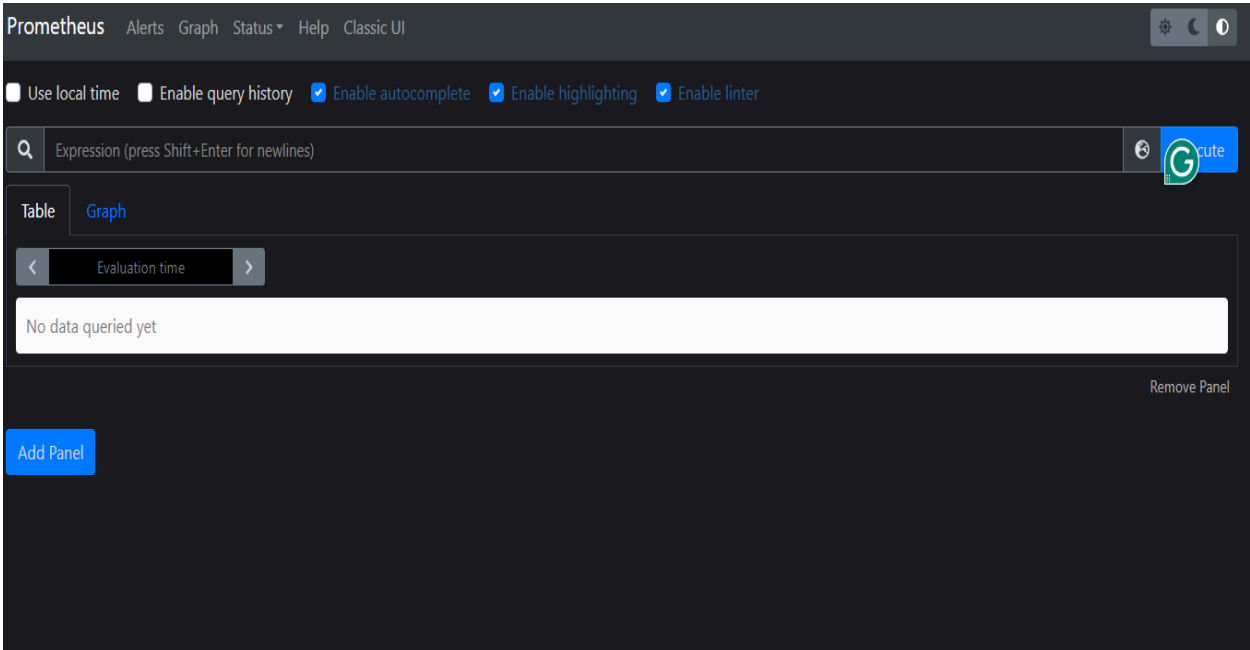
scrape_configs:
  - job_name: 'application'
    static_configs:
      - targets: ['<your-application-server-ip>:<metrics-port>']

-- INSERT --
```

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

PROMETHEUS DASHBOARD




HEALTH CHECK STATUS :HEALTHY

← → ↺

⚠ Not secure 18.246.63.235:9090/targets?search=

☆ ⬇ M ⋮

 Prometheus Alerts Graph Status ▾ Help

⚙ 🌙 0

Targets

All scrape pools ▾

All Unhealthy Collapse All

🔍

Filter by endpoint or labels

✓

Unknown

✓

Unhealthy

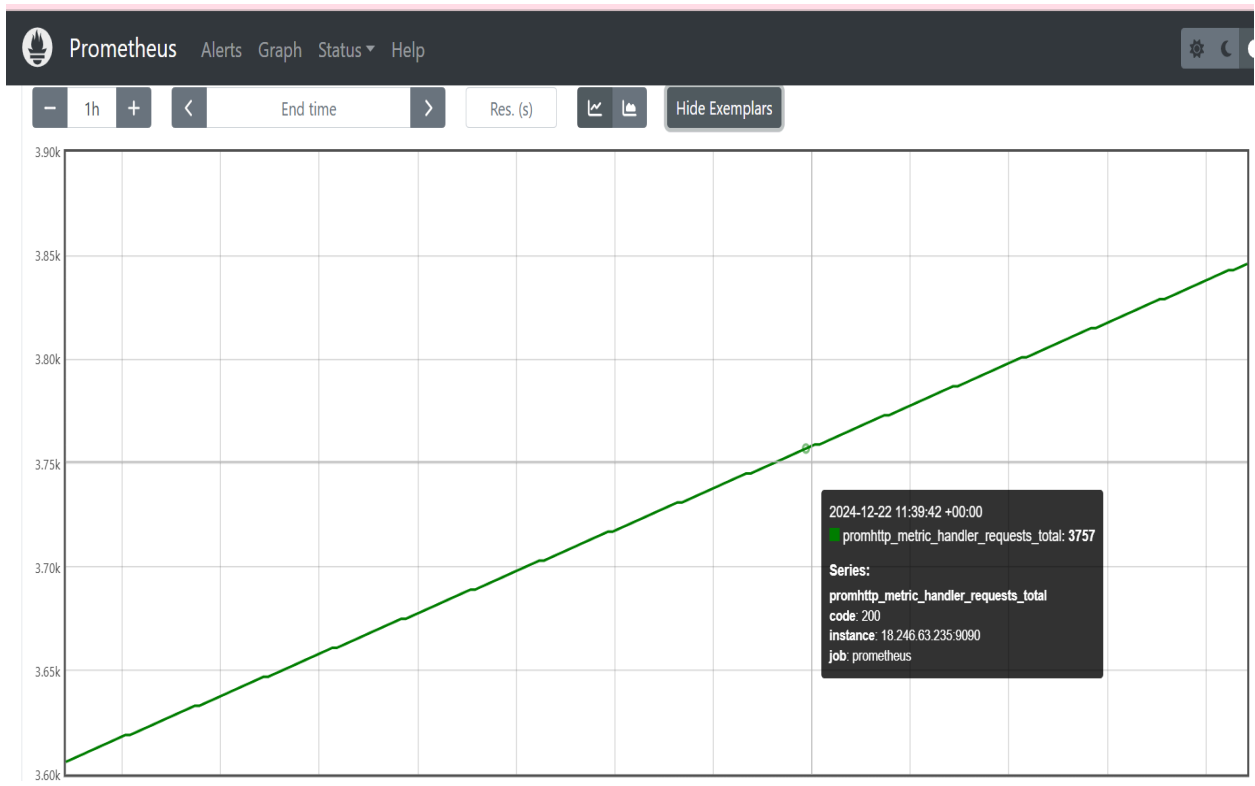
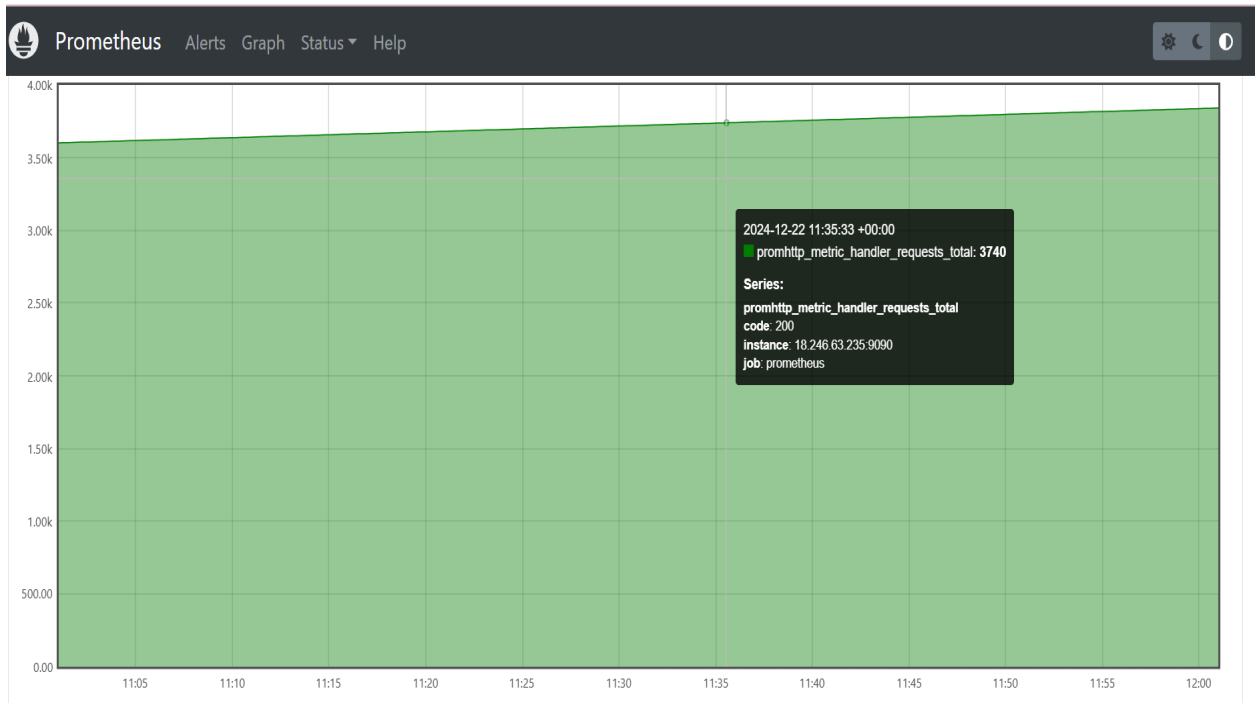
✓

Healthy

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

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://18.246.63.235:9090/metrics	UP	<div>instance="18.246.63.235:9090"</div> <div>job="prometheus"</div>	-7.783s ago	5.337ms	

PROMETHEUS MONITORING GRAPH



INSTALLED GRAFANA:

```

Installed:
cairo-1.18.0-4.amzn2023.0.1.x86_64
fonts-filesystem-1:2.0.5-12.amzn2023.0.2.noarch
google-noto-fonts-common-20201206-2.amzn2023.0.2.noarch
grafana-9.3.2-1.x86_64
harfbuzz-7.0.0-2.amzn2023.0.1.x86_64
libX11-1.8.10-2.amzn2023.0.1.x86_64
libXau-1.0.11-6.amzn2023.0.1.x86_64
libXrender-0.9.11-6.amzn2023.0.1.x86_64
libpng-2:1.6.37-10.amzn2023.0.6.x86_64
pixmap-0.43.4-1.amzn2023.0.4.x86_64
urw-base35-c059-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-gothic-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-nimbus-roman-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-p052-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-z003-fonts-20200910-6.amzn2023.0.2.noarch
fontconfig-2.13.94-2.amzn2023.0.2.x86_64
freetype-2.13.2-5.amzn2023.0.1.x86_64
google-noto-sans-vf-fonts-20201206-2.amzn2023.0.2.noarch
graphite2-1.3.14-7.amzn2023.0.2.x86_64
langpacks-core-font-en-3.0-21.amzn2023.0.4.noarch
libX11-common-1.8.10-2.amzn2023.0.1.noarch
libXext-1.3.6-1.amzn2023.0.1.x86_64
libbrotil-1.0.9-4.amzn2023.0.2.x86_64
libxcb-1.17.0-1.amzn2023.0.1.x86_64
urw-base35-bookman-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-d0500001-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-fonts-common-20200910-6.amzn2023.0.2.noarch
urw-base35-nimbus-mono-ps-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-nimbus-sans-fonts-20200910-6.amzn2023.0.2.noarch
urw-base35-standard-symbols-ps-fonts-20200910-6.amzn2023.0.2.noarch
xml-common-0.6.3-56.amzn2023.0.2.noarch

Complete!
[root@ip-172-31-2-190 prometheus-2.44.0.linux-amd64]# grafana --version

```

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

ACTIVELY RUNNING GRAFANA

```
aws [Alt+S] [X] [Bell] [Refresh] [Gear] Oregon Mirdula Sree
```

```
grafana-server.service - Grafana instance
Loaded: loaded (/usr/lib/systemd/system/grafana-server.service; enabled; preset: disabled)
Active: active (running) since Sat 2024-12-21 20:22:08 UTC; 1min 36s ago
Docs: http://docs.grafana.org
Main PID: 39403 (grafana-server)
Tasks: 7 (limit: 1111)
Memory: 118.4M
CPU: 1.090s
CGroup: /system.slice/grafana-server.service
└─39403 /usr/sbin/grafana-server --config=/etc/grafana/grafana.ini --pidfile=/var/run/grafana/grafana-server.pid --packaging>
```

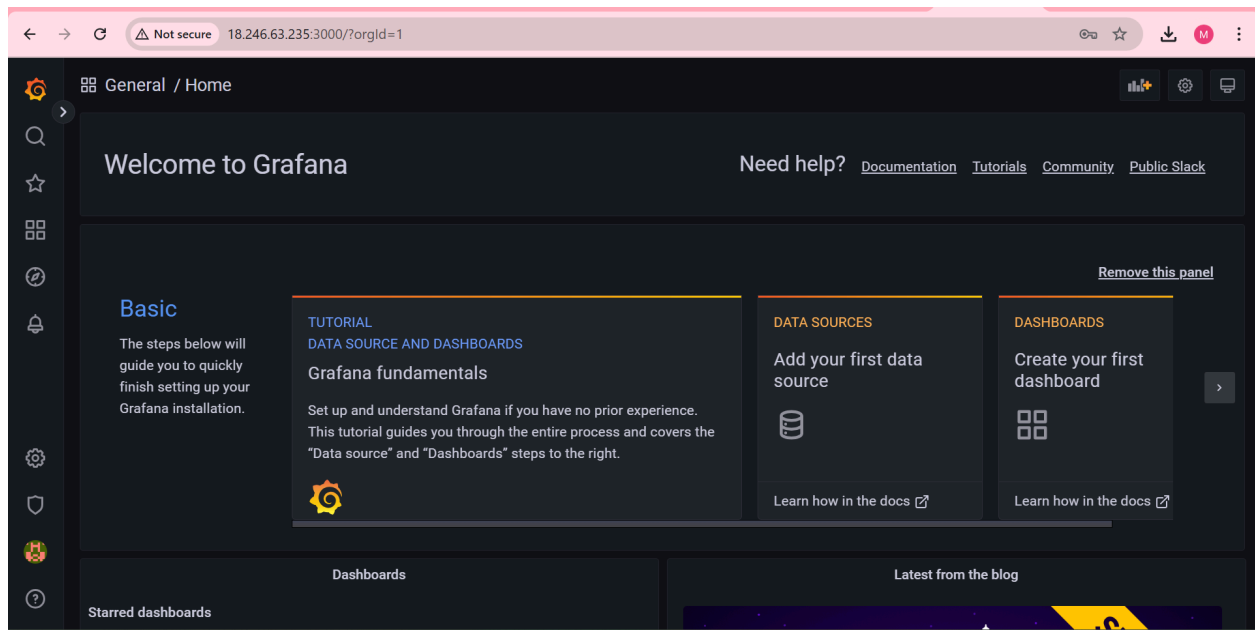
```
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=server t=2024-12-21T20:22:08.715931612Z level=info>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=provisioning.alerting t=2024-12-21T20:22:08.7193>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=provisioning.alerting t=2024-12-21T20:22:08.7195>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal systemd[1]: Started grafana-server.service - Grafana instance.
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=http.server t=2024-12-21T20:22:08.743758757Z lev>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=ngalert.state.manager t=2024-12-21T20:22:08.7459>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=ngalert.state.manager t=2024-12-21T20:22:08.7462>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=ticker t=2024-12-21T20:22:08.746308037Z level=info>
Dec 21 20:22:08 ip-172-31-2-190.us-west-2.compute.internal grafana-server[39403]: logger=grafanaStorageLogger t=2024-12-21T20:22:08.76605>
```

lines 1-20

i-056dafa4108ffae87 (final-devops project)

PublicIPs: 18.246.63.235 PrivateIPs: 172.31.2.190

GRAFANA DASHBOARD



ADDED PROMETHEUS INTO GRAFANA

