

Application Deployment

Application:

Cloned Repo URL : <https://github.com/sriram-R-krishnan/devops-build>

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~ (master)
$ git clone https://github.com/sriram-R-krishnan/devops-build.git
Cloning into 'devops-build'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 21 (delta 0), reused 0 (delta 0), pack-reused 20
Receiving objects: 100% (21/21), 720.09 KiB | 717.00 KiB/s, done.

Swetha@LAPTOP-UBF20HAV MINGW64 ~ (master)
$ cd devops-build

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ npm version
{
  npm: '10.2.4',
  node: '20.11.1',
  acorn: '8.11.2',
  ada: '2.7.4',
  ares: '1.20.1',
  base64: '0.5.1',
  brotli: '1.0.9',
  cjs_module_lexer: '1.2.2',
  cldr: '43.1',
  icu: '73.2',
  tlhttp: '8.1.1',
  modules: '115',
  napi: '9',
  nghttp2: '1.58.0',
  nghttp3: '0.7.0',
  ngtcp2: '0.8.1',
  openssl: '3.0.13+quic',
  simdutf: '4.0.4',
  tz: '2023c',
  undici: '5.28.3',
  unicode: '15.0',
  uv: '1.46.0',
  uwwasi: '0.0.19',
  v8: '11.3.244.8-node.17',
  zlib: '1.2.13.1-motley-5dafffc7'
}
```

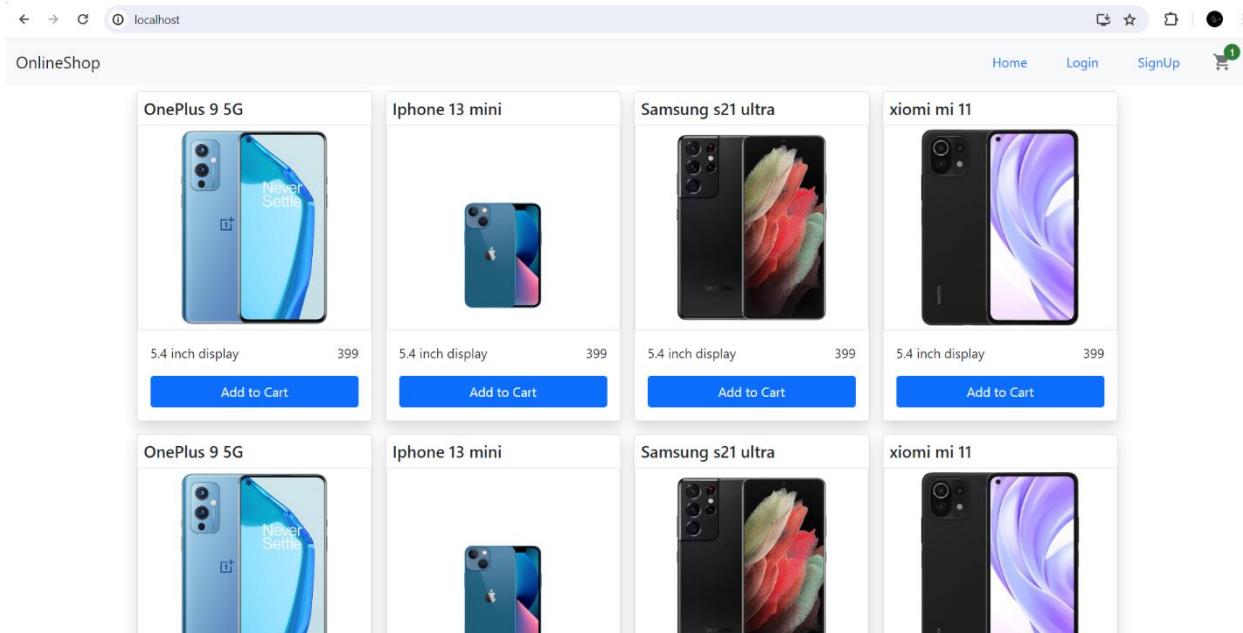
Installed npm and node and exposed the react application in port 80:

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ npm install -g serve

added 20 packages, removed 9 packages, and changed 69 packages in 8s

24 packages are looking for funding
  run `npm fund` for details

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ serve -s build -p 80
INFO  Accepting connections at http://localhost:80
HTTP 3/15/2024 11:54:10 AM ::1 GET /
HTTP 3/15/2024 11:54:10 AM ::1 Returned 200 in 39 ms
HTTP 3/15/2024 11:54:11 AM ::1 GET /static/css/main.cf5c13c5.css
HTTP 3/15/2024 11:54:11 AM ::1 GET /static/js/main.f1c48542.js
HTTP 3/15/2024 11:54:11 AM ::1 Returned 200 in 8 ms
HTTP 3/15/2024 11:54:11 AM ::1 Returned 200 in 15 ms
HTTP 3/15/2024 11:54:11 AM ::1 GET /manifest.json
HTTP 3/15/2024 11:54:11 AM ::1 GET /favicon.ico
HTTP 3/15/2024 11:54:11 AM ::1 Returned 304 in 4 ms
HTTP 3/15/2024 11:54:11 AM ::1 Returned 200 in 6 ms
HTTP 3/15/2024 11:54:11 AM ::1 GET /logo192.png
HTTP 3/15/2024 11:54:11 AM ::1 Returned 304 in 3 ms
```



localhost/login

OnlineShop

Home Login SignUp

Login Into your account

Email address

Password

Have an account? [Login In here](#)

The login form consists of the following elements:

- A header "Login Into your account".
- An input field labeled "Email address".
- An input field labeled "Password".
- A "Login" button.
- A link "Have an account? [Login In here](#)".

localhost/signup

OnlineShop

Home Login SignUp 

 login form

Sign Up your account

User Name

Email address

Password

Sign Up

Have an account? [Login In here](#)

localhost/cart

OnlineShop

Home Login SignUp 

Shopping Cart

#	Product	Price	Quantity	Total
1	 xiaomi mi 11 5.4 inch display Remove	\$399	- 1 +	\$399

[Clear Cart](#)

SubTotal: \$399

Taxes and Shipping Calculated

[Login to CheckOut](#)

[Continue Shopping](#)

Docker:

Install docker and created Dockerfile, docker-compose.yml, build.sh and deploy.sh files

Commands:

vi Dockerfile

Dockerfile

```
#!/bin/sh
# Use official Node.js image as the base image
FROM node:14

# Set the working directory in the container
WORKDIR /app

# Copy the dependencies file to the working directory
COPY package.json .

# Install dependencies
RUN npm install

# Copy the application code to the working directory
COPY .

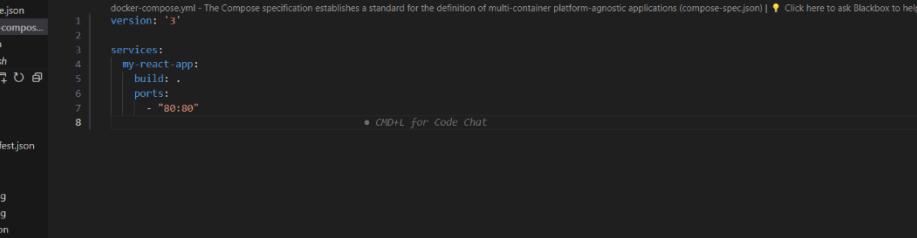
# Command to run the application
CMD ["sh", "-c", "serve -s build -p 80 -d 88 exec tail -f /dev/null"] * CRTL for Code Chat
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SEARCH ERROR COMMENTS

PS C:\Users\Swetha\devops-build\]

Ln 21, Col 1 Spaces: 4 UTF-8 LF Dockerfile Blackbox

Vi docker-compose.yml



```
PS C:\Users\swetha\devops-build> docker compose up
```

vi build.sh

The screenshot shows the VS Code interface with the following details:

- File Explorer:** Shows files like package.json, Dockerfile, docker-compose.yml, build.sh, static, _redirects, asset-manifest.json, favicon.ico, index.html, logo192.png, logo512.png, manifest.json, robots.txt, .dockerignore, .gitignore, deploy.sh, docker-compose.yml, Dockerfile, package-lock.json, and package.json.
- Editor:** The build.sh file is open in the editor tab, containing the following code:

```
# build.sh
#!/bin/bash
docker-compose build
```
- Terminal:** The terminal tab shows the command PS C:\Users\Swetha\devops-build>.
- Bottom Status Bar:** Displays weather (78°F, Mostly cloudy), system icons, and the date/time (3/19/2024, 4:45 AM).

vi deploy.sh

The screenshot shows the VS Code interface with the following details:

- File Explorer:** Shows files like package.json, docker-compose.yml, build.sh, deploy.sh, static, _redirects, asset-manifest.json, favicon.ico, index.html, logo192.png, logo512.png, manifest.json, robots.txt, .dockerignore, .gitignore, build.sh, docker-compose.yml, Dockerfile, package-lock.json, and package.json.
- Editor:** The deploy.sh file is open in the editor tab, containing the following code:

```
# deploy.sh
#!/bin/bash
docker-compose up -d
```
- Terminal:** The terminal tab shows the command PS C:\Users\Swetha\devops-build>.
- Bottom Status Bar:** Displays weather (78°F, Mostly cloudy), system icons, and the date/time (3/19/2024, 4:45 AM).

Image Build in Docker:

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ ./build.sh
[+] Building 5.3s (11/11) FINISHED
=> [my-react-app internal] load build definition from Dockerfile
=> => transferring dockerfile: 478B
=> [my-react-app internal] load .dockerignore
=> => transferring context: 53B
=> [my-react-app internal] load metadata for docker.io/library/node:14
=> [my-react-app 1/6] FROM docker.io/library/node:14@sha256:a158d3b9b4e3fa813fa6c8c590b8f0a860e015ad4e59bbce5744d2f6fd8461aa
=> [my-react-app internal] load build context
=> => transferring context: 15.70kB
=> CACHED [my-react-app 2/6] WORKDIR /app
=> CACHED [my-react-app 3/6] COPY package*.json .
=> CACHED [my-react-app 4/6] RUN npm install
=> CACHED [my-react-app 5/6] RUN npm install -g serve
=> [my-react-app 6/6] COPY .
=> [my-react-app] exporting to image
=> => exporting layers
=> => writing image sha256:8e7609765195f823e3c78c3efd4047d531e5ebd593c1ee033493f3838b096d63
=> => naming to docker.io/library/devops-build-my-react-app

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ ./deploy.sh
[+] Running 1/1
✓ Container devops-build-my-react-app-1 Started
1.0s
```

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ docker ps
CONTAINER ID   IMAGE          COMMAND       CREATED      STATUS        PORTS     NAMES
e00c147c11d8   devops-build-my-react-app   "docker-entrypoint.s..."  29 seconds ago   Up 21 seconds  0.0.0.0:80->80/tcp   devops-build-my-react-app-1
```

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ docker images
REPOSITORY          TAG      IMAGE ID      CREATED      SIZE
devops-build-my-react-app   latest   8e7609765195   3 minutes ago  1.26GB
```

Version Control:

Forked the repo and created a branch named 'dev'

The screenshot shows the GitHub repository page for 'devops-build'. The repository was forked from 'sriram-R-krishnan/devops-build'. The 'master' branch is selected, showing two commits: 'Update index.html' and 'First Commit', both made yesterday. A dropdown menu allows switching between branches and tags, with 'dev' currently listed. Other files visible include Dockerfile, build.sh, deploy.sh, and docker-compose.yml. The right sidebar displays repository statistics: 0 stars, 0 forks, and 17 commits.

Added the .dockerignore and .gitignore files and pushed to both ‘master’ and ‘dev’ repos

Commands:

git add .

git commit -m “Text”

git push origin <origin name>

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~ (master)
$ git clone https://github.com/SwethaShreeH/devops-build.git
Cloning into 'devops-build'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 21 (delta 0), reused 0 (delta 0), pack-reused 20
Receiving objects: 100% (21/21), 720.09 KiB | 1.29 MiB/s, done.

Swetha@LAPTOP-UBF20HAV MINGW64 ~ (master)
$ cd devops-build

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ ls
Dockerfile  build/  build.sh  deploy.sh  docker-compose.yml  package-lock.json  package.json

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ git init
Reinitialized existing Git repository in C:/Users/swetha/devops-build/.git/

Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ git add .
warning: in the working copy of 'Dockerfile', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'build.sh', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'deploy.sh', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'docker-compose.yml', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'package-lock.json', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'package.json', LF will be replaced by CRLF the next time Git touches it
```

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ git branch dev
```

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (main)
$ git checkout dev
Switched to branch 'dev'
A      Dockerfile
A      build.sh
A      deploy.sh
A      docker-compose.yml
A      package-lock.json
A      package.json
```

```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ git commit -m "Initial commit"
[dev 44b4ca3] Initial commit
6 files changed, 51 insertions(+)
create mode 100644 Dockerfile
create mode 100644 build.sh
create mode 100644 deploy.sh
create mode 100644 docker-compose.yml
create mode 100644 package-lock.json
create mode 100644 package.json
```

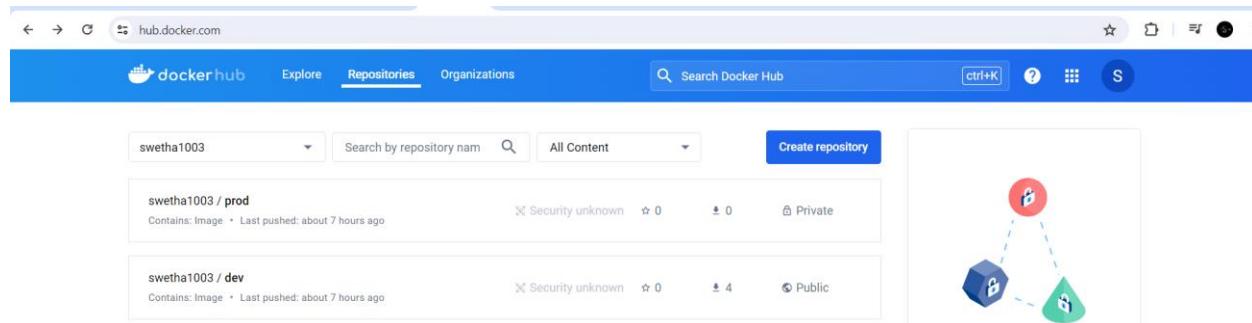
```
Swetha@LAPTOP-UBF20HAV MINGW64 ~/devops-build (dev)
$ git push origin dev
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (8/8), 992 bytes | 992.00 KiB/s, done.
Total 8 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
remote:
remote: Create a pull request for 'dev' on GitHub by visiting:
remote:     https://github.com/SwethaShreeH/devops-build/pull/new/dev
remote:
To https://github.com/SwethaShreeH/devops-build.git
 * [new branch]      dev -> dev
```

For master branch repeat the same command and before that give

git checkout <origin name>

Docker hub:

- Click **Create Repository** and name the repository
- Choose **public** for 'dev' repo and **private** for 'prod' repo.



hub.docker.com/repository/docker/swetha1003/prod/general

swetha1003 / Repositories / prod / General

General Tags Builds Collaborators Webhooks Settings

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

swetha1003/prod

Updated about 7 hours ago

This repository does not have a description

Docker commands
To push a new tag to this repository:

```
docker push swetha1003/prod:tagname
```

Tags
This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	---	7 hours ago

[See all](#)

Automated Builds
Manually pushing images to 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](#)

hub.docker.com/repository/docker/swetha1003/dev/general

swetha1003 / Repositories / dev / General

General Tags Builds Collaborators Webhooks Settings

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

Add a short description for this repository
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results. [Update](#)

swetha1003/dev

Updated about 7 hours ago

This repository does not have a description

Docker commands
To push a new tag to this repository:

```
docker push swetha1003/dev:tagname
```

Tags
This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	2 hours ago	7 hours ago

[See all](#)

Automated Builds
Manually pushing images to 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](#)

Jenkins:

Create Job Name as Jenkins and proceed with the below configuration

Pipeline Configuration:

The screenshot shows the Jenkins configuration interface for a job named 'Jenkins'. The 'General' section is selected. The 'GitHub project' checkbox is checked, and the 'Project url' field contains 'https://github.com/SwethaShreeH/devops-build.git'. The 'Enabled' switch is turned on. The left sidebar lists other configuration options: General, Advanced Project Options, Source Code Management, Build Triggers, Configuration Matrix, Build Environment, Build Steps, and Post-build Actions.

GitHub Credentials:

The screenshot shows the Jenkins configuration interface for the 'Source Code Management' section. The 'Git' option is selected. A repository is configured with the URL 'https://github.com/SwethaShreeH/devops-build.git' and a credential named 'SwethaShreeH'. The 'Save' button is visible at the bottom.

Configure

General

Advanced Project Options

Source Code Management

Build Triggers

Configuration Matrix

Build Environment

Build Steps

Post-build Actions

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

*/master

Branch Specifier (blank for 'any') ?

*/dev

Add Branch

Repository browser ?

(Auto)

Additional Behaviours

Add ▾

Save Apply

This screenshot shows the Jenkins configuration interface for a job. The 'Source Code Management' section is active. It defines two branches to build: '*/master' and '*/dev'. There are also sections for repository browser and additional behaviors.

Auto Trigger

Configure

General

Advanced Project Options

Build Triggers

Configuration Matrix

Build Environment

Build Steps

Post-build Actions

Build Triggers

Trigger builds remotely (e.g., from scripts) ?

Build after other projects are built ?

Build periodically ?

Build when a change is pushed to GitLab. GitLab webhook URL: http://44.220.152.81:8080/project/Jenkins ?

Generic Webhook Trigger ?

GitHub hook trigger for GITScm polling ?

Poll SCM ?

Configuration Matrix

Add axis ▾

Combination Filter ?

Run each configuration sequentially ?

Execute touchstone builds first ?

Save Apply

This screenshot shows the Jenkins configuration interface for build triggers. The 'GitHub hook trigger for GITScm polling' option is selected. Other trigger options like 'Trigger builds remotely' and 'Poll SCM' are available but not selected.

Build Step:

The screenshot shows the Jenkins configuration interface for a job named 'Jenkins'. The left sidebar lists various configuration sections: General, Advanced Project Options, Source Code Management, Build Triggers, Configuration Matrix, Build Environment, Build Steps (which is selected and highlighted in grey), and Post-build Actions. The main content area is titled 'Command' and contains a text editor with the following script:

```
#!/bin/bash

# Remove the existing directory
rm -rf /var/lib/jenkins/workspace/Devops/devops-build

# Clone the GitHub repository
git clone https://github.com/SwethaShreeH/devops-build.git

# Navigate to the repository directory
cd devops-build

# Build Docker image
docker-compose build

# Authenticate Docker with Docker Hub
# echo "$DOCKER_HUB_PASSWORD" | docker login -u "$DOCKER_HUB_USERNAME" --password-stdin

# Check if the branch is 'dev' or 'master' and push the Docker image accordingly
if [ "$BRANCH_NAME" == "dev" ]; then
    docker push swetha1003/dev:latest
elif [ "$BRANCH_NAME" == "master" ]; then
    docker push swetha1003/prod:latest
else
    echo "Unsupported branch. Skipping Docker image push."
fi
```

At the bottom of the command editor are two buttons: 'Save' and 'Apply'.

System Configuration for Docker Credentials:

Declarative Pipeline (Docker)

Docker Label ?

Docker registry URL ?

Registry credentials

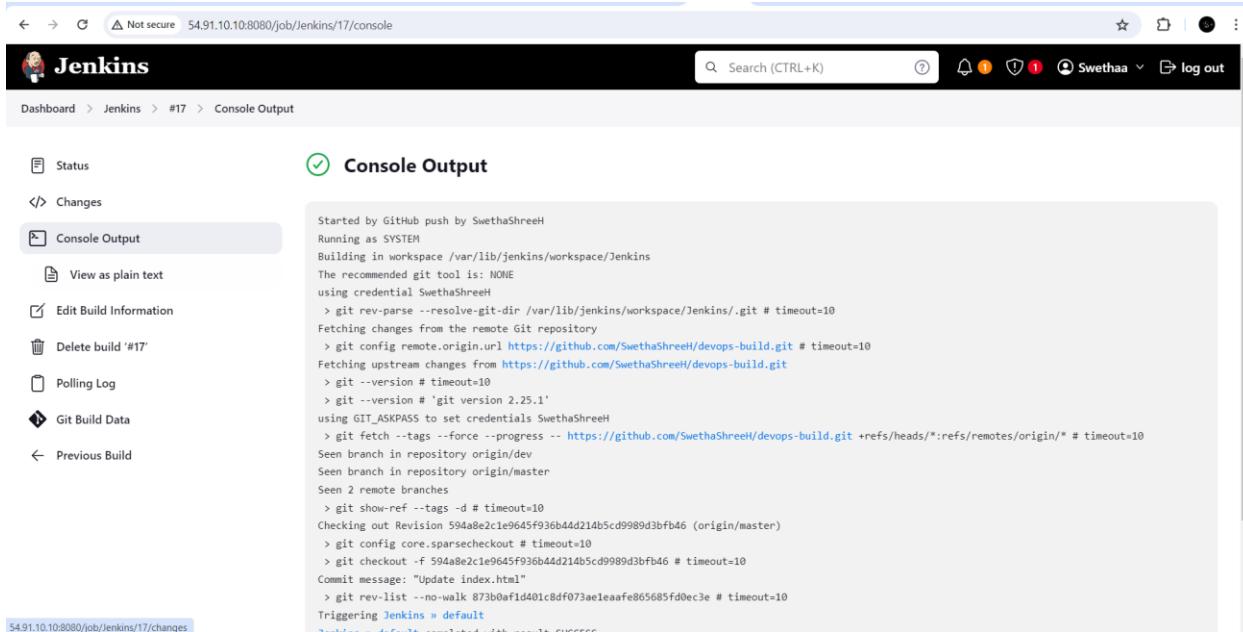
+ Add ▾

GitHub Webhook:

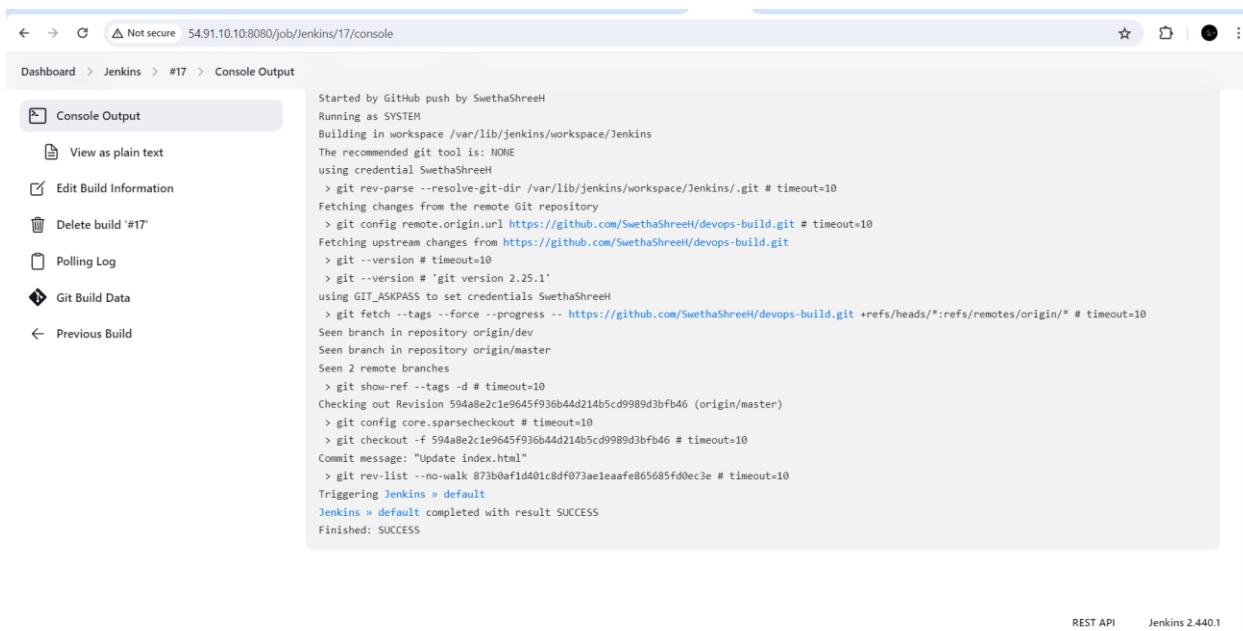
The screenshot shows the GitHub settings interface for a repository named "devops-build". The left sidebar has a "Webhooks" section selected under "Actions". A single webhook is listed with the URL "http://54.91.10.10:8080/github-webhook/" and the event type "push". There are "Edit" and "Delete" buttons next to the URL.

The screenshot shows the "Manage webhook" page for the same repository. It includes fields for "Payload URL" (set to "http://54.91.10.10:8080/github-webhook/"), "Content type" (set to "application/json"), and a "Secret" field. Below these, there's a section for selecting events to trigger the webhook, with the radio button "Just the push event." selected.

Output:



Started by GitHub push by SwethaShreeH
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Jenkins
The recommended git tool is: NONE
using credential SwethaShreeH
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Jenkins/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/SwethaShreeH/devops-build.git # timeout=10
Fetching upstream changes from https://github.com/SwethaShreeH/devops-build.git
> git --version # timeout=10
> git --version # 'git' version 2.25.1
using GIT_ASKPASS to set credentials SwethaShreeH
> git fetch --tags --force --progress -- https://github.com/SwethaShreeH/devops-build.git +refs/heads/*:refs/remotes/origin/* # timeout=10
Seen branch in repository origin/dev
Seen branch in repository origin/master
Seen 2 remote branches
> git show-ref --tags -d # timeout=10
Checking out Revision 594a8e2c1e9645f936b44d214b5cd9989d3fb46 (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 594a8e2c1e9645f936b44d214b5cd9989d3fb46 # timeout=10
Commit message: "Update index.html"
> git rev-list --no-walk 873b0af1d401c8df073ae1aafe865685fd0ec3e # timeout=10
Triggering Jenkins » default



Started by GitHub push by SwethaShreeH
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Jenkins
The recommended git tool is: NONE
using credential SwethaShreeH
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Jenkins/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/SwethaShreeH/devops-build.git # timeout=10
Fetching upstream changes from https://github.com/SwethaShreeH/devops-build.git
> git --version # timeout=10
> git --version # 'git' version 2.25.1
using GIT_ASKPASS to set credentials SwethaShreeH
> git fetch --tags --force --progress -- https://github.com/SwethaShreeH/devops-build.git +refs/heads/*:refs/remotes/origin/* # timeout=10
Seen branch in repository origin/dev
Seen branch in repository origin/master
Seen 2 remote branches
> git show-ref --tags -d # timeout=10
Checking out Revision 594a8e2c1e9645f936b44d214b5cd9989d3fb46 (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 594a8e2c1e9645f936b44d214b5cd9989d3fb46 # timeout=10
Commit message: "Update index.html"
> git rev-list --no-walk 873b0af1d401c8df073ae1aafe865685fd0ec3e # timeout=10
Triggering Jenkins » default
Jenkins » default completed with result SUCCESS
Finished: SUCCESS

← → ⚡ Not secure 54.91.10.10:8080/job/Jenkins/default/lastBuild/console

Jenkins

Dashboard > Jenkins > default > #17 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#17'

Git Build Data

← Previous Build

Console Output

```
Started by upstream project "Jenkins" build number 17
originally caused by:
Started by GitHub push by SwethaShreeH
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/Jenkins/default
The recommended git tool is: NONE
using credential SwethaShreeH
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Jenkins/default/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/SwethaShreeH/devops-build.git # timeout=10
Fetching upstream changes from https://github.com/SwethaShreeH/devops-build.git
> git --version # timeout=10
> git --version # 'git version 2.25.1'
using GIT_ASKPASS to set credentials SwethaShreeH
> git fetch -tags -force --progress -- https://github.com/SwethaShreeH/devops-build.git +refs/heads/*:refs/remotes/origin/* # timeout=10
Checking out Revision 594a8e2c1e9645f936b44d214b5cd9989d3bf46 (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 594a8e2c1e9645f936b44d214b5cd9989d3bf46 # timeout=10
Commit message: "Update index.html"
> git rev-list --no-walk 873b0af1d401c8df073ae1eaafe865685fd0ec3e # timeout=10
[default] $ /bin/bash /tmp/jenkins1466666212451397672.sh
fatal: destination path 'devops-build' already exists and is not an empty directory.
Building my-react-app
Step 1/7 : FROM node:14

```

← → ⚡ Not secure 54.91.10.10:8080/job/Jenkins/default/lastBuild/console

Dashboard > Jenkins > default > #17 > Console Output

```
[default] $ /bin/bash /tmp/jenkins1466666212451397672.sh
fatal: destination path 'devops-build' already exists and is not an empty directory.
Building my-react-app
Step 1/7 : FROM node:14
--> 1d12470f0a62
Step 2/7 : WORKDIR /app
--> Using cache
--> 81b7a61c8c38
Step 3/7 : RUN npm install
--> Using cache
--> 01dc6b8d7688
Step 4/7 : RUN npm install -g serve
--> Using cache
--> 907a6959d64f
Step 5/7 : COPY . .
--> Using cache
--> eb114d39bf0e
Step 6/7 : EXPOSE 80
--> Using cache
--> 871d260e4255
Step 7/7 : CMD ["sh", "-c", "serve -s build -p 80 -d && exec tail -f /dev/null"]
--> Using cache
--> 1c09d8259e0d
Successfully built 1c09d8259e0d
Successfully tagged devops-build_my-react-app:latest
Finished: SUCCESS
```

Not secure 54.91.10.10:8080/jenkins/

Jenkins

Dashboard > Jenkins >

Project Jenkins

Status Changes Workspace Build Now Configure Delete Multi-configuration project GitHub Hook Log GitHub Rename

Add description Disable Project

Configurations

default

Permalinks

- Last build (#17), 3 min 5 sec ago
- Last stable build (#17), 3 min 5 sec ago
- Last successful build (#17), 3 min 5 sec ago
- Last failed build (#13), 36 min ago
- Last unsuccessful build (#13), 36 min ago
- Last completed build (#17), 3 min 5 sec ago

Build History

trend Filter... /

- #17 Mar 18, 2024, 4:56 PM
- #16

Not secure 54.91.10.10:8080/jenkins/default/

Jenkins

Dashboard > Jenkins > default >

default

Status Changes Workspace Rename

Add description

Permalinks

- Last build (#17), 2 min 16 sec ago
- Last stable build (#17), 2 min 16 sec ago
- Last successful build (#17), 2 min 16 sec ago
- Last failed build (#13), 35 min ago
- Last unsuccessful build (#13), 35 min ago
- Last completed build (#17), 2 min 16 sec ago

Build History

trend Filter... /

- #17 Mar 18, 2024, 4:56 PM
- #16 Mar 18, 2024, 4:50 PM
- #15 Mar 18, 2024, 4:48 PM
- #14 Mar 18, 2024, 4:35 PM
- #13 Mar 18, 2024, 4:23 PM
- #12

Not secure 54.91.10.10:8080/job/jenkins/17/console

Jenkins

Dashboard > Jenkins > #17

#17 (Mar 18, 2024, 4:56:26 PM)

Status Changes Console Output Edit Build Information Delete build '#17' Polling Log Git Build Data Previous Build

Changes
1. Update index.html (commit: 594a8e2) (details / githubweb)

Started by GitHub push by SwethaShreeH

Revision: 594a8e2c1e9645f936b44d214b5cd9989d3bf46
Repository: <https://github.com/SwethaShreeH/devops-build.git>
• origin/master

Configurations

default

Keep this build forever Add description Started 3 min 35 sec ago Took 1.2 sec

REST API Jenkins 2.440.1

This screenshot shows a Jenkins job build page. The top navigation bar includes links for Status, Changes, Console Output, Edit Build Information, Delete build '#17', Polling Log, Git Build Data, and Previous Build. The main content area displays build #17, which was started by a GitHub push from the user 'SwethaShreeH'. It shows a commit log entry for 'Update index.html' with commit hash 594a8e2, a link to the commit details, and a link to the GitHub web interface. Below this, it shows the repository information: 'https://github.com/SwethaShreeH/devops-build.git' and the branch 'origin/master'. A 'Configurations' section is present, with 'default' selected. At the bottom right, there are links for 'Keep this build forever', 'Add description', and build statistics ('Started 3 min 35 sec ago Took 1.2 sec'). The footer indicates REST API access and Jenkins version 2.440.1.

Docker repos:

hub.docker.com/repositories/swetha1003

docker hub

Explore Repositories Organizations

Search Docker Hub ctrl+K

swetha1003 Create repository

swetha1003 / prod
Contains: Image • Last pushed: 5 minutes ago Security unknown ⚡ 0 ⚡ 0 Private

swetha1003 / dev
Contains: Image • Last pushed: 12 minutes ago Security unknown ⚡ 0 ⚡ 3 Public

swetha1003 / nginx-custom
Contains: Image • Last pushed: 3 months ago Security unknown ⚡ 0 ⚡ 3 Public

This screenshot shows the Docker Hub repository page for the user 'swetha1003'. The top navigation bar includes links for Explore, Repositories, and Organizations. The search bar is set to 'Search Docker Hub' with the keyboard shortcut 'ctrl+K'. The user's repositories are listed: 'prod' (private), 'dev' (public), and 'nginx-custom' (public). Each repository card shows the number of images ('Contains: Image') and the last push time ('Last pushed'). It also displays security status ('Security unknown'), star count ('star 0'), fork count ('fork 0'), and visibility ('Private' or 'Public').

AWS:

Created EC 2 with t2.micro:

The screenshot shows the AWS EC2 Instances details page for an instance named 'MyReactApplication'. Key details include:

- Public IP4 address:** 52.91.59.39
- Instance state:** Running
- Private IP DNS name (IPv4 only):** ip-172-31-29-88.ec2.internal
- Instance type:** t2.micro
- VPC ID:** vpc-0ce7ddc8e03075549
- Subnet ID:** subnet-0d244d8e360457826
- Platform:** Ubuntu (Inferred)
- AMI ID:** ami-0cd59ecaf388e5ccf
- AMI name:** ubuntu/images/hvm-ssd/ubuntu-focal-20.04-amd64-server-20240228
- Launch time:** Tue Mar 19 2024 05:12:21 GMT+0530 (India Standard Time) (27 minutes)
- Lifecycle:** normal
- Monitoring:** disabled
- Termination protection:** Disabled
- AMI location:** amazon/ubuntu/images/hvm-ssd/ubuntu-focal-20.04-amd64-server-20240228
- Stop-hibernate behavior:** Disabled
- State transition reason:** Key pair assigned at launch

Created two SG's:

The screenshot shows the 'Edit inbound rules' page for a security group 'sg-03a1c14b6a2810f4e'. It lists two rules:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-00b800ebe86ff50cc	HTTP	TCP	80	Custom (0.0.0.0/0)	
sgr-00b356fffc1ed98757	SSH	TCP	22	Custom (183.82.177.49/32)	

A warning message at the bottom states: "⚠ Rules with source of 0.0.0.0/0 or ::/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only." Buttons for 'Cancel', 'Preview changes', and 'Save rules' are visible.

Open via SSH and pull the image from the docker repo and run the image:

```
ubuntu@ip-172-31-29-88:~ % + - x

System information as of Tue Mar 19 00:07:07 UTC 2024

System load:          0.0
Usage of /:           39.7% of 7.57GB
Memory usage:         24%
Swap usage:           0%
Processes:            99
Users logged in:      0
IPv4 address for br-256895373a2f: 172.18.0.1
IPv4 address for docker0: 172.17.0.1
IPv4 address for eth0:  172.31.29.88

Expanded Security Maintenance for Applications is not enabled.

16 updates can be applied immediately.
9 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Mar 18 15:00:13 2024 from 183.82.177.49
ubuntu@ip-172-31-29-88:~$ docker images
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
devops-build_my-react-app latest   c465d30916b2  9 hours ago  925MB
node                14      1d12470fa662  11 months ago 912MB
ubuntu@ip-172-31-29-88:~$ docker ps
CONTAINER ID        IMAGE      COMMAND     CREATED      STATUS      PORTS      NAMES
ubuntu@ip-172-31-29-88:~$ docker run -d -p 80:80 devops-build_my-react-app:latest
21a21b8a78a1fc8464fa7072c3921143b67276b3edc442419cf35631aab62099
ubuntu@ip-172-31-29-88:~$ docker ps
CONTAINER ID        IMAGE      COMMAND     CREATED      STATUS      PORTS      NAMES
21a21b8a78a1        devops-build_my-react-app:latest    "docker-entrypoint.s..."  4 seconds ago  Up 3 seconds  0.0.0.0:80->80/tcp, :::80->80/tcp  pensive_varaha
mihir@             mihi...
ubuntu@ip-172-31-29-88:~$ |
```

```
ubuntu@ip-172-31-29-88:~ % + - x

ubuntu@unix@LAPTOP-UBF20HAV:~$ ssh -i "Devops.pem" ubuntu@ec2-52-91-59-39.compute-1.amazonaws.com
The authenticity of host 'ec2-52-91-59-39.compute-1.amazonaws.com (52.91.59.39)' can't be established.
ED25519 key fingerprint is SHA256:9395d605z7IMleIeffZ0ffff#ljE6lc4Pisw6KpzsyQ.
This host key is known by the following other names/addresses:
~/.ssh/known_hosts:19: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-52-91-59-39.compute-1.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.15.0-1055-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

 System information as of Tue Mar 19 00:07:07 UTC 2024

System load:          0.0
Usage of /:           39.7% of 7.57GB
Memory usage:         24%
Swap usage:           0%
Processes:            99
Users logged in:      0
IPv4 address for br-256895373a2f: 172.18.0.1
IPv4 address for docker0: 172.17.0.1
IPv4 address for eth0:  172.31.29.88

Expanded Security Maintenance for Applications is not enabled.

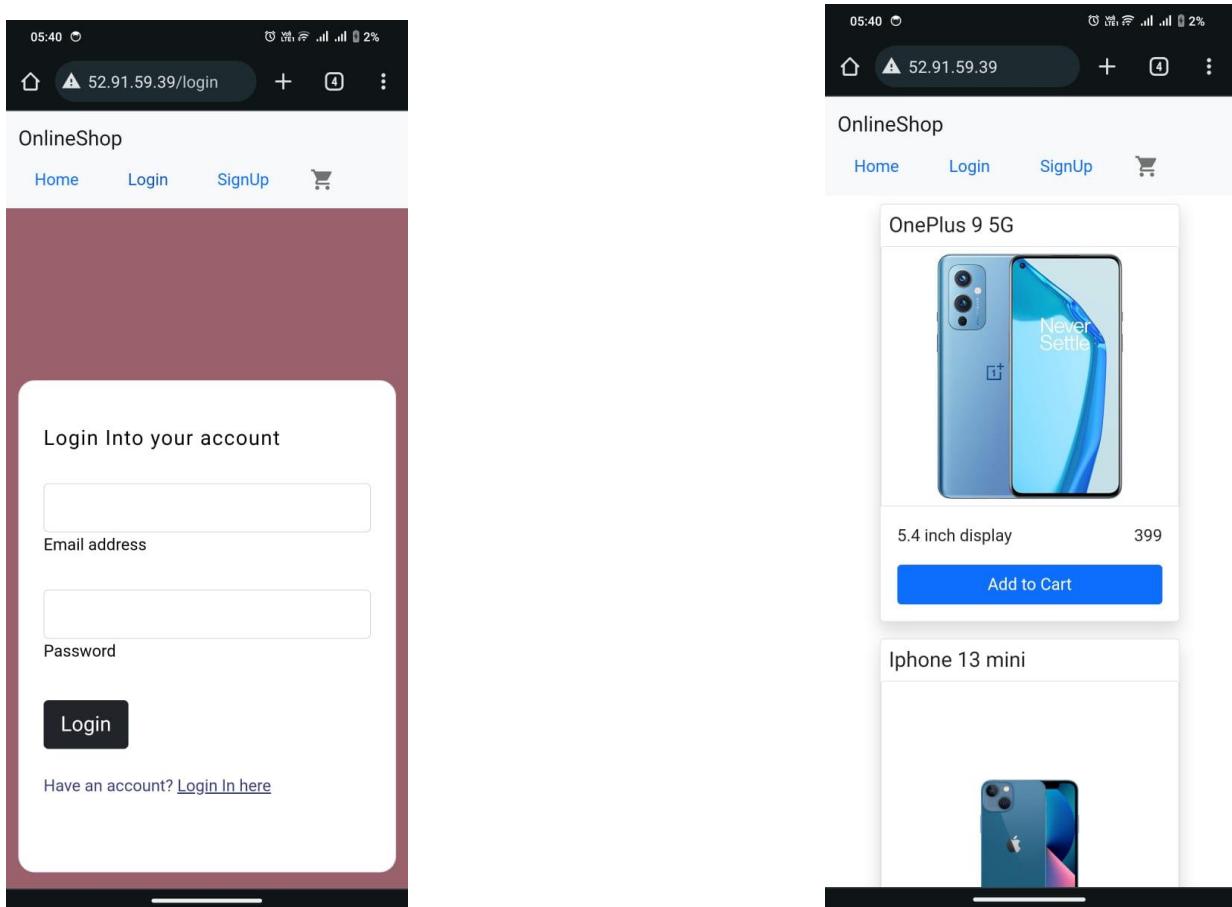
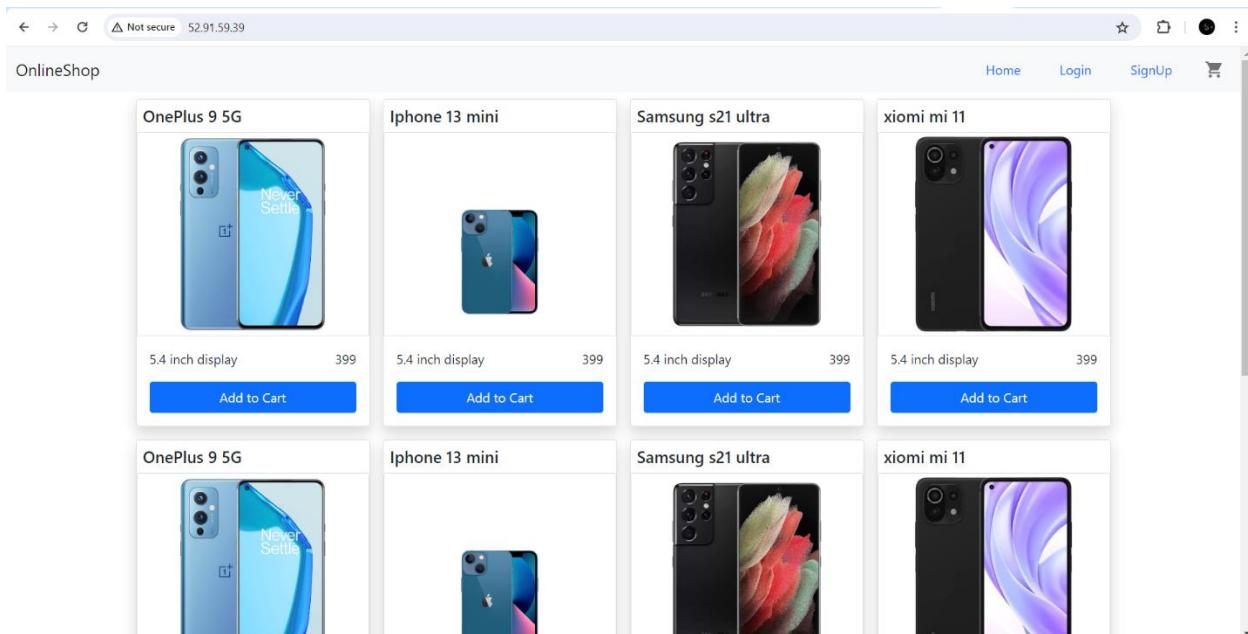
16 updates can be applied immediately.
9 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

New release '22.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Mar 18 15:00:13 2024 from 183.82.177.49
ubuntu@ip-172-31-29-88:~|
```

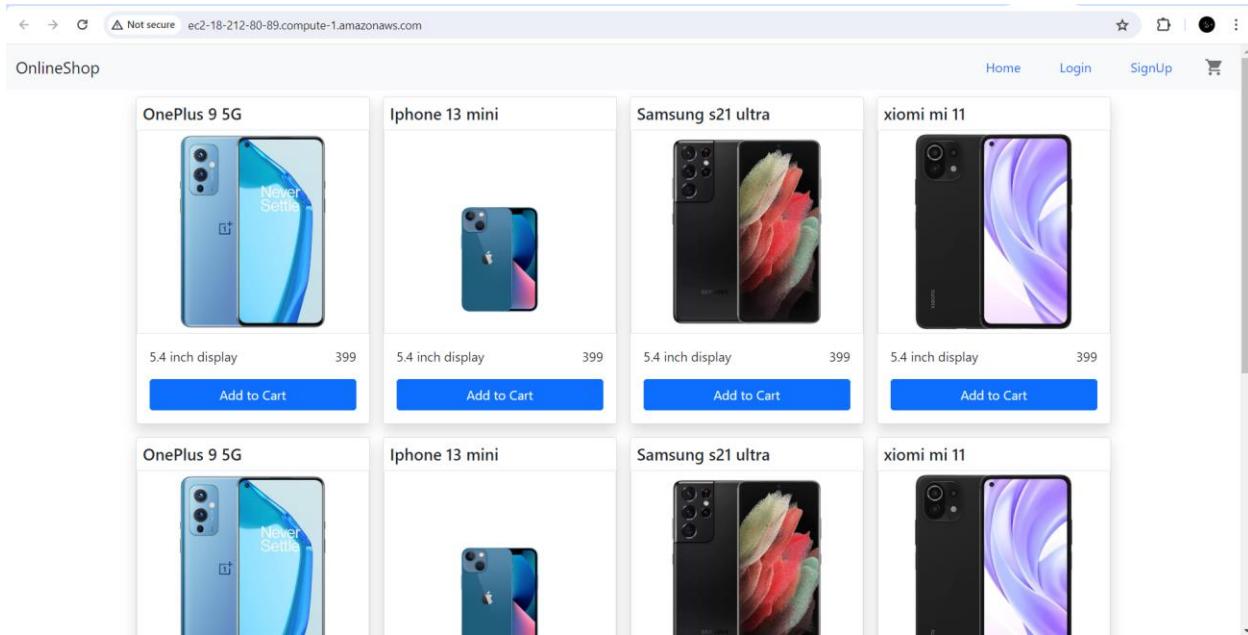
Output:



Created S3:

The screenshot shows the AWS S3 console interface. At the top, the URL is s3.console.aws.amazon.com/s3/buckets?region=us-east-1&bucketType=general®ion=us-east-1. The navigation bar includes the AWS logo, Services, Search, and Global dropdown. Below the navigation is an Account snapshot section with a link to 'View Storage Lens dashboard'. The main area shows 'General purpose buckets' (1) with a table. The table has columns: Name, AWS Region, Access, and Creation date. One row is shown: myawsbucketreactapp, US East (N. Virginia) us-east-1, Public, March 19, 2024, 14:13:13 (UTC+05:30). Action buttons include Create bucket, Copy ARN, Empty, and Delete.

The screenshot shows the AWS S3 console interface for editing static website hosting. The URL is s3.console.aws.amazon.com/s3/bucket/myawsbucketreactapp/property/website/edit?region=us-east-1&bucketType=general. The navigation path is Amazon S3 > Buckets > myawsbucketreactapp > Edit static website hosting. The page title is 'Edit static website hosting' with an Info link. The configuration section is titled 'Static website hosting' with a note: 'Use this bucket to host a website or redirect requests.' A 'Learn more' link is provided. Under 'Static website hosting', the 'Enable' option is selected. Under 'Hosting type', the 'Redirect requests for an object' option is selected. Under 'Host name', the value is 'ec2-18-212-80-89.compute-1.amazonaws.com'. Under 'Protocol - Optional', the 'http' option is selected. Other sections include 'Target bucket website address or personal domain' and 'Protocol - Optional'.

Output:**Public Url:**

<http://myawsbucketreactapp.s3-website-us-east-1.amazonaws.com>

Monitoring:

Created EC2 instance and installed Prometheus and Grafana

The screenshot shows the AWS EC2 Instances details page for an instance named "i-0f256c4f3bf0224ac (Prometheus and Grafana)". The instance is currently running. Key details include its Public IPv4 address (18.208.224.14), Private IP4 name (ip-172-31-27-57.ec2.internal), and VPC ID (vpc-0ce7ddc8e03075549). The instance type is t2.micro, and it is associated with a subnet (subnet-0d244d8e36b457826) and a specific AWS Compute Optimizer finding.

Detail	Value
Instance ID	i-0f256c4f3bf0224ac (Prometheus and Grafana)
IPv6 address	-
Hostname type	IP name: ip-172-31-27-57.ec2.internal
Answer private resource DNS name	IPv4 (A)
Auto-assigned IP address	18.208.224.14 [Public IP]
IAM Role	-
IMDSv2	Required
AMI ID	ami-080e1f13689e07408
AMI name	ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20240501
Platform details	Ubuntu (Inferred)
Platform	Linux/UNIX
Stop protection	Disabled
Launch time	Tue Mar 19 2024 00:28:24 GMT+0530 (India Standard Time) (about 15 hours)
Instance auto-recovery	-
Lifecycle	-
Monitoring	disabled
Termination protection	Disabled
AMI location	amazon/ubuntu/images/hvm-ssd/ubuntu-jammy-22.04-amd64-server-20240501
Stop-hibernate behavior	-

The screenshot shows the "Edit inbound rules" page for a security group named "sg-072b65739d3cf7799". The page lists five existing rules:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
sgr-03f05bd0b47de6ab9	HTTP	TCP	80	Custom	0.0.0.0/0
sgr-078717277e9b8a875	Custom TCP	TCP	3000	Custom	0.0.0.0/0
sgr-054716892dfb15611	Custom TCP	TCP	9323	Custom	0.0.0.0/0
sgr-0902ff79c4123e24	Custom TCP	TCP	9090	Custom	0.0.0.0/0
sgr-012b7c7bd65b2e289	SSH	TCP	22	Custom	0.0.0.0/0

An "Add rule" button is located at the bottom left of the table.

```

ubuntu@ip-172-31-27-57:~$ sudo docker build -t my-prometheus .
[+] Building 0.1s (7/7) FINISHED
=> [internal] load build definition from Dockerfile
=> transferring dockerfile: 94B
=> [internal] load metadata for docker.io/prom/prometheus:latest
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 36B
=> [1/2] FROM docker.io/prom/prometheus:latest
=> CACHED [2/2] ADD prometheus.yml /etc/prometheus/
=> exporting to image
=> => exporting layers
=> => writing image sha256:75b2aefec0b7cc21ab0aad409cc1b94ea98fb185fe2bc2b5110409ee31cac778
=> => naming to docker.io/library/my-prometheus
ubuntu@ip-172-31-27-57:~$ sudo docker run -d -p 9090:9090 -v /etc/prometheus prom/prometheus
b1b5ad444d0725875c23ffe2ae722721ce4f2a2589ee98b049c416252c44b52b

```

Build the images and its running:

```

ubuntu@ip-172-31-27-57:~$ sudo docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
b1b5ad444d07      prom/prometheus   "/bin/prometheus --c..."   15 seconds ago    Up 14 seconds     0.0.0.0:9090->9090/tcp, :::9090->9090/tcp   charming_swirls
eb1e62043c59      grafana/grafana   "/run.sh"          14 hours ago     Up 51 minutes    0.0.0.0:3000->3000/tcp, :::3000->3000/tcp   grafana

```

Note:

I am facing issue in Prometheus and Grafana

- In Prometheus, after updating the prometheus.yml file, the container needs to be restarted. When I try to restart or stop and start, the container gets exited.**

```

ubuntu@ip-172-31-27-57:~$ sudo docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
bbac832a8216      prom/prometheus   "/bin/prometheus --c..."   16 minutes ago    Up 8 minutes     0.0.0.0:9091->9090/tcp, :::9091->9090/tcp   laughing_blackwell
eb1e62043c59      grafana/grafana   "/run.sh"          14 hours ago     Up 42 minutes    0.0.0.0:3000->3000/tcp, :::3000->3000/tcp   grafana
ubuntu@ip-172-31-27-57:~$ sudo docker exec -it bba /bin/sh
/bb
ubuntu@ip-172-31-27-57:~$ /etc/prometheus
/etc/prometheus $ vi prometheus.yml
/etc/prometheus $ exit
ubuntu@ip-172-31-27-57:~$ sudo docker stop 9091
Error response from daemon: No such container: 9091
ubuntu@ip-172-31-27-57:~$ sudo docker stop bba
bba
ubuntu@ip-172-31-27-57:~$ sudo docker start bba
bba
ubuntu@ip-172-31-27-57:~$ sudo docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED            STATUS              PORTS               NAMES
eb1e62043c59      grafana/grafana   "/run.sh"          14 hours ago     Up 50 minutes    0.0.0.0:3000->3000/tcp, :::3000->3000/tcp   grafana

```

- In Grafana, there is an error in Prometheus plugin so could not able to create monitoring setup.**

