# React Front End App – Documentation
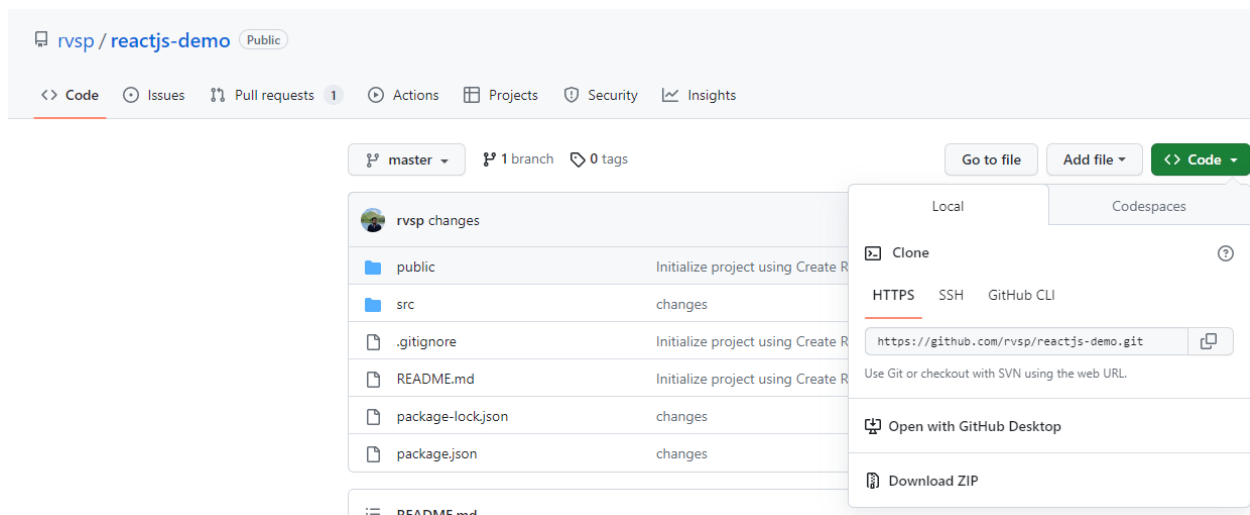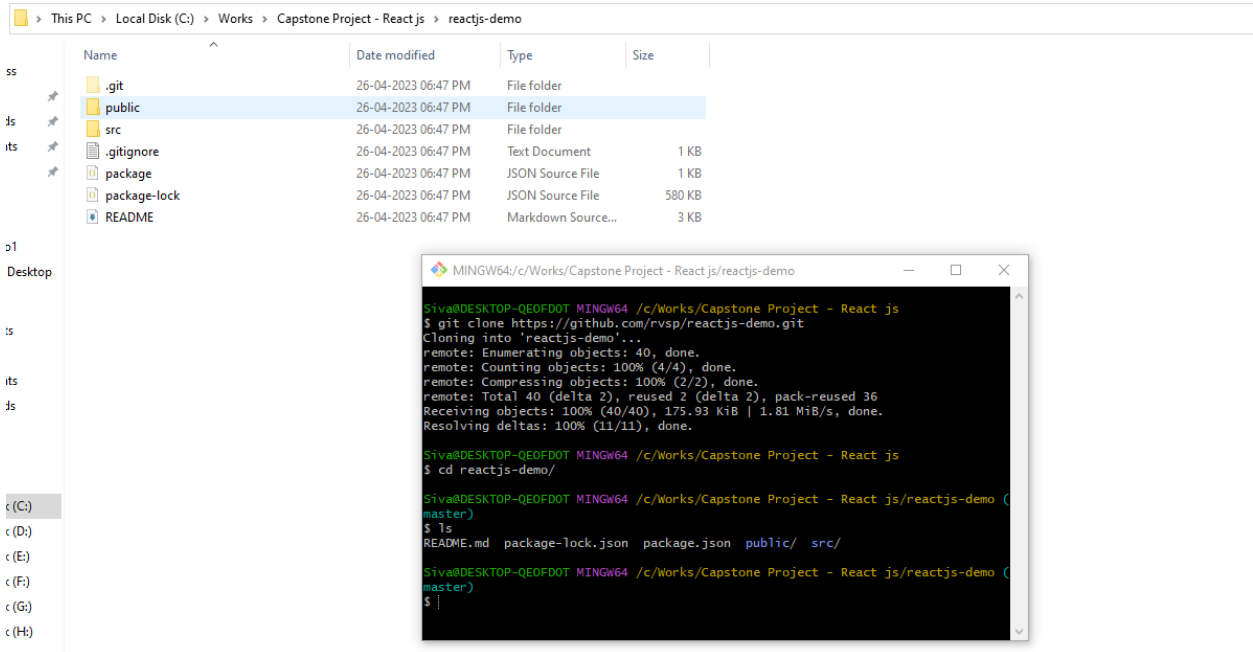
Git(code) pushed to ➔ Github – once code pushed from git auto trigger starts and Jenkins job runs automatically ➔ In Jenkins build steps – 1.Docker image build from Dockerfile, 2.If code pushed from dev branch docker image build and pushed to Dockerhub(dev-repo-react) repository, 3.If code pushed from master branch docker image build and pushed to Dockerhub(prod-repo-react) repository, 4.Docker container runs using docker-compose.yml, 5.Removed the builded images from local to free up the disk space ➔ In Jenkins Post build action using ssh connection build docker image and run a container another EC2 instance server ➔ Monitored the EC2 instance using cloudwatch and Prometheus and configured the email notification if system failure or CPU utilization.

Source Code cloned to Git ➔

```
$ git clone https://github.com/rvsp/reactjs-demo.git
$ git status
$ git add .
$ git commit -m "initial commit"
$ git remote add reactapp-gh-repo https://github.com/Sivaprakash-pk/React-
js_Project.git
$ git push -f reactapp-gh-repo master
```

| Name | Date modified | Type | Size |
|---|---|---|---|
| .git | 26-04-2023 06:47 PM | File folder | |
| public | 26-04-2023 06:47 PM | File folder | |
| src | 26-04-2023 06:47 PM | File folder | |
| .gitignore | 26-04-2023 06:47 PM | Text Document | 1 KB |
| package | 26-04-2023 06:47 PM | JSON Source File | 1 KB |
| package-lock | 26-04-2023 06:47 PM | JSON Source File | 580 KB |
| README | 26-04-2023 06:47 PM | Markdown Source... | 3 KB |

```
MINGW64:/c/Works/Capstone Project - React js/reactjs-demo

Siva@DESKTOP-QEOFDOT MINGW64 /c/Works/Capstone Project - React js
$ git clone https://github.com/rvsp/reactjs-demo.git
Cloning into 'reactjs-demo'...
remote: Enumerating objects: 40, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 40 (delta 2), reused 2 (delta 2), pack-reused 36
Receiving objects: 100% (40/40), 175.93 KiB | 1.81 MiB/s, done.
Resolving deltas: 100% (11/11), done.

Siva@DESKTOP-QEOFDOT MINGW64 /c/Works/Capstone Project - React js
$ cd reactjs-demo/

Siva@DESKTOP-QEOFDOT MINGW64 /c/Works/Capstone Project - React js/reactjs-demo (
master)
$ ls
README.md  package-lock.json  package.json  public/  src/

Siva@DESKTOP-QEOFDOT MINGW64 /c/Works/Capstone Project - React js/reactjs-demo (
master)
$
```

```
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   .gitignore

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        .dockerignore
        Dockerfile
        build.sh
        deploy.sh
        docker-compose.yml
        nginx.conf

no changes added to commit (use "git add" and/or "git commit -a")
```

```
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   .dockerignore
        modified:   .gitignore
        new file:   Dockerfile
        new file:   build.sh
        new file:   deploy.sh
        new file:   docker-compose.yml
        new file:   nginx.conf
```

```
$ git commit -m "initial commit"
[master 5e69a87] initial commit
 7 files changed, 154 insertions(+), 1 deletion(-)
 create mode 100644 .dockerignore
 create mode 100644 Dockerfile
 create mode 100644 build.sh
 create mode 100644 deploy.sh
 create mode 100644 docker-compose.yml
 create mode 100644 nginx.conf
```

Setup Jenkins Server ➜

Jenkins IP – 52.201.223.242

Install JAVA ➜

$ sudo apt update

$ sudo apt install openjdk-11-jre -y

$ java -version

openjdk version "11.0.12" 2021-07-20

OpenJDK Runtime Environment (build 11.0.12+7-post-Debian-2)

OpenJDK 64-Bit Server VM (build 11.0.12+7-post-Debian-2, mixed mode, sharing)

```
root@ip-10-10-2-190:/home/ubuntu# java -version
openjdk version "11.0.18" 2023-01-17
OpenJDK Runtime Environment (build 11.0.18+10-post-Ubuntu-0ubuntu122.04)
OpenJDK 64-Bit Server VM (build 11.0.18+10-post-Ubuntu-0ubuntu122.04, mixed mode, sharing)
```

Install Jenkins ➜

$curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee \

 /usr/share/keyrings/jenkins-keyring.asc > /dev/null

$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

$sudo apt-get install jenkins –y

```
ubuntu@ip-10-10-2-190:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
ff8d0219829940eb9266ff67dd206455
```

# 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.

# Create First Admin User

**Username**

siva

**Password**

••••••••

**Confirm password**

••••••••

**Full name**

Sivaprakash S

**E-mail address**

s.sivaprakashdgl@gmail.com

Skip and continue as admin     **Save and Continue**

# Instance Configuration

Jenkins URL:

http://3.85.9.236:8080/

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 2.387.2

Not now      **Save and Finish**

Install Needed plug-ins ➔

# Jenkins

Search (CTRL+K)

Sivaprakash S

log out

- Updates
- Available plugins
- Installed plugins
- Advanced settings
- Download progress

## Plugins

Search available plugins

| Install | Name ↓ | Released |
|---|---|---|
| ✓ | **Maven Integration** 3.21 <br> Build Tools <br> This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTs as well as the automated configuration of various Jenkins publishers such as Junit. | 1 mo 25 days ago |
| ✓ | **Publish Over SSH** 1.24 <br> Artifact Uploaders    Build Tools <br> Send build artifacts over SSH | 1 yr 2 mo ago |
| ✓ | **NodeJS** 1.6.0 <br> npm <br> NodeJS Plugin executes NodeJS script as a build step. | 2 mo 21 days ago |
| ✓ | **Build Pipeline** 1.5.8 <br> User Interface    Build Tools    Other Post-Build Actions <br> This plugin renders upstream and downstream connected jobs that typically form a build pipeline. In addition, it offers the ability to define manual triggers for jobs that require intervention prior to execution. e.g. an approval process outside of Jenkins. <br><br> Warning: This plugin version may not be safe to use. Please review the following security notices: <br> • Stored XSS vulnerability | 5 yr 4 mo ago |

**Install without restart**   **Download now and install after restart**   Update information obtained: 4 hr 14 min ago   Check now

Search available plugins

| | | |
|---|---|---|
| ✓ | **Delivery Pipeline** 1.4.2 <br> User Interface <br> This plugin visualize Delivery Pipelines (Jobs with upstream/downstream dependencies) | 3 yr 1 mo ago |
| ✓ | **Dashboard for Blue Ocean** 1.27.3 <br> External Site/Tool Integrations    User Interface <br> Blue Ocean Dashboard | 1 mo 9 days ago |
| ✓ | **Dashboard View** 2.472.v9ff2a_e6a_c529 <br> User Interface <br> Customizable dashboard that can present various views of job information. | 2 mo 26 days ago |
| ☐ | **Oracle Java SE Development Kit Installer** 66.vd8fa_64ee91b_d <br> Allows the Oracle Java SE Development Kit (JDK) to be installed via download from Oracle's website. | 5 days 17 hr ago |
| ☐ | **Command Agent Launcher** 90.v669d7ccb_7c31 <br> Agent Management <br> Allows agents to be launched using a specified command. | 7 mo 10 days ago |
| ☐ | **JSch dependency** 0.1.55.61.va_e9ee26616e7 <br> Library plugins (for use by other plugins)    Miscellaneous <br> Jenkins plugin that brings the JSch library as a plugin dependency, and provides an SSHAuthenticatorFactory for using JSch with the ssh-credentials plugin. | 8 mo 25 days ago |
| ☐ | **JavaScript GUI Lib: ACE Editor bundle** 1.1 <br> JavaScript GUI Lib: ACE Editor bundle plugin. <br><br> This plugin is deprecated. In general, this means that it is either obsolete, no longer being developed, or may no longer work. Learn more. | 7 yr 1 mo ago |

**Install without restart**   **Download now and install after restart**   Update information obtained: 4 hr 14 min ago   Check now

# Download progress

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

| | |
|---|---|
| Ionicons API | ✓ Success |
| Folders | ✓ Success |
| JavaBeans Activation Framework (JAF) API | ✓ Success |
| JavaMail API | ✓ Success |
| bouncycastle API | ✓ Success |
| Instance Identity | ✓ Success |
| Mina SSHD API :: Common | ✓ Success |
| Mina SSHD API :: Core | ✓ Success |
| SSH server | ✓ Success |
| OWASP Markup Formatter | ✓ Success |
| Structs | ✓ Success |
| Token Macro | ✓ Success |
| Build Timeout | ✓ Success |
| Pipeline: Step API | ✓ Success |
| Credentials | ✓ Success |
| Plain Credentials | ✓ Success |
| Trilead API | ✓ Success |
| SSH Credentials | ✓ Success |
| Credentials Binding | ✓ Success |
| SCM API | ✓ Success |
| Pipeline: API | ✓ Success |
| commons-lang3 v3.x Jenkins API | ✓ Success |

Configure Global configuration tools for Git ➔

## JDK

**JDK installations**

List of JDK installations on this system

Add JDK

## Git installations

≡ Git

Name

Git

Path to Git executable ?

/usr/bin/git

☐ Install automatically ?

Add Git ▾

## Gradle

Gradle installations

Save    Apply

Create GitHub Token ➔

Configure github server in congiure system(Jenkins) ➔

## GitHub

GitHub Servers ?

GitHub Server ?

Name ?

Github

API URL ?

https://api.github.com

Credentials ?

Github token to connect my account

Add ▾

Credentials verified for user Sivaprakash-pk, rate limit: 4999

Test connection

☐ Manage hooks

Advanced ▾

Add GitHub Server ▾

**Save**  Apply

Add Github token and credentials ➔

## Credentials

| T | P | Store ↓ | Domain | ID | Name |
|---|---|---------|--------|-----|------|
| 🔑 | 🧑 | System | (global) | Github_Token | Github token to connect my account |
| 📱 | 🧑 | System | (global) | Github_Cred | Sivaprakash-pk/****** (Github Cred) |

### Stores scoped to Jenkins

| P | Store ↓ | Domains |
|---|---------|---------|
| 🧑 | System | (global) |

Icon:  S   M   L

REST API    Jenkins 2.387.2

Get Webhook URL from Jenkins and configure to Github repository ➔

## Override Hook URL

☑ Specify another hook URL for GitHub configuration

http://54.166.6.219:8080/github-webhook/

## Shared secrets

Add shared secret

## Additional actions ?

Manage additional GitHub actions ▾

http://54.166.6.219:8080/github-webhook/



Add and configure ssh connection EC2 instance using Publish ssh plugin ➤



IP – 54.175.149.56

## CSRF Protection

Crumb Issuer

| Default Crumb Issuer | ⌄ |
|---|---|

☑ Enable proxy compatibility ?

### Publish over SSH

Jenkins SSH Key ?

Passphrase ?

Path to key ?

Key ?

```
SIjZaCerD3UA+cS1Zwbhdrqhothvmg20T0kWbE0EbI5QK+1GNYDNrWAbj1DtIOjhi
JKjYowlA2XvbfX1MfC36vnkp45YXx+os/ieFim6cWNbJpVYW56jJ/TOPjxAWWDNw
q4VabiUCgYBxxBLOgk5j4CxQJpjAxnpkLT3P2Ndju8kjhUaLk4dJLUNd963R/3gc
mtZRbzLw7z5IJt7O0Cb9Go29/Qv75jLLowUOhXH6+zfcsEvMUAQJAdiAK0Go0aEy
/yodasSQJlm2Sjf4ZPFbFyM3QMRocIkLyQA6Xu0OM9arVO8c8kmRzw==
-----END RSA PRIVATE KEY-----
```

☐ Disable exec ?

☐ Disable exec ?

### SSH Servers

SSH Server ✕

Name ?

| React-app server(Docker) |
|---|

Hostname ?

| 54.175.149.56 |
|---|

Username ?

| ubuntu |
|---|

Remote Directory ?

| /home/ubuntu |
|---|

Advanced ⌄

Success               Test Configuration

Add

Create Jenkins Job ➜

## Configure

**General**                                                Enabled

- ⚙ General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps

### General

Description

Git(code) pushed to  Github – once code pushed from git auto trigger starts and Jenkins job runs automatically  In Jenkins build steps – 1.Docker image build from Dockerfile, 2.If code pushed from dev branch docker image build and pushed to Dockerhub(dev-repo-react) repository, 3.If code pushed from master branch docker image build and pushed to Dockerhub(prod-repo-react) repository, 4.Docker container runs using docker-compose.yml, 5.Removed the builded images from local to free up the disk space  In Jenkins Post build action using ssh connection build docker image and run a container another EC2 instance server  Monitored the EC2 instance using cloudwatch and Prometheus and configured the email notification if system failure or CPU utilization

[Plain text] Preview

☐ Discard old builds ?

☑ This project is parameterized ?

---

☰ **Multi-line String Parameter**                                                ✕

Name ?

GIT_BRANCH

Default Value ?

master

Description ?

Github branch name

[Plain text] **Preview**

---

☰ **Multi-line String Parameter**                                                ✕

Name ?

IMAGE_NAME

Default Value ?

reactapp

Description ?

Image name that build on local

[Plain text] **Preview**

## ☰ Multi-line String Parameter ✕

**Name** ?

IMAGE_VERSION

**Default Value** ?

v1

**Description** ?

Image version that build on local

[Plain text] **Preview**

## ☰ Multi-line String Parameter ✕

**Name** ?

DOCKERHUB_USERNAME

**Default Value** ?

sivaprakash1998

**Description** ?

Username to login Dockerhub

[Plain text] **Preview**

## ☰ Password Parameter ? ✕

**Name** ?

DOCKERHUB_PASSWORD

**Default Value** ?

•••••••••••

**Description** ?

Password to login Dockerhub

[Plain text] **Preview**

## ≡ **Multi-line String Parameter**                    ⊗

**Name** ?

DOCKER_REPO

**Default Value** ?

sivaprakash1998/prod-repo-reactapp

**Description** ?

Docker hub Repository name to push the docker image

[Plain text] **Preview**

## ≡ **Multi-line String Parameter**                    ⊗

**Name** ?

DOCKER_TAG

**Default Value** ?

latest-img

**Description** ?

Docker hub Repository tag to push the docker image

[Plain text] **Preview**

## Source Code Management

○ None

● Git **?**

    **Repositories** **?**

    **Repository URL** **?**           ✕

    | https://github.com/Sivaprakash-pk/React-js_Project.git |

    **Credentials** **?**

    | Sivaprakash-pk/****** (Github Credential) ⌄ |

    [ Add ⌄ ]

    [ Advanced ⌄ ]

    [ Add Repository ]

**Branches to build** **?**

    **Branch Specifier (blank for 'any')** **?**      ✕

    | */$GIT_BRANCH |

[ Add Branch ]

**Repository browser** **?**

| (Auto) ⌄ |

**Additional Behaviours**

[ Add ⌄ ]

## Build Triggers

☐ Trigger builds remotely (e.g., from scripts)  ?
☐ Build after other projects are built  ?
☐ Build periodically  ?
☑ GitHub hook trigger for GITScm polling  ?
☐ Poll SCM  ?

## Build Environment

☑ Delete workspace before build starts

| Advanced ⌄ |

☐ Use secret text(s) or file(s)  ?
☐ Provide Configuration files  ?
☐ Send files or execute commands over SSH before the build starts  ?
☐ Send files or execute commands over SSH after the build runs  ?
☐ Add timestamps to the Console Output
☐ Create Delivery Pipeline version  ?
☐ Inspect build log for published build scans
☐ Provide Node & npm bin/ folder to PATH
☐ Terminate a build if it's stuck
☐ With Ant  ?

## Build Steps

☰ **Execute shell**  ?                                    ✕

Command

See the list of available environment variables

```
docker rmi $(docker images -q)
chmod 777 build.sh
chmod 777 deploy.sh
bash build.sh $IMAGE_NAME $IMAGE_VERSION
bash deploy.sh $DOCKERHUB_USERNAME $DOCKERHUB_PASSWORD $IMAGE_NAME $GIT_BRANCH $DOCKER_REPO $DOCKER_TAG
docker images
docker-compose up -d
docker rmi -f $IMAGE_NAME:$IMAGE_VERSION
docker rmi -f $DOCKER_REPO:$DOCKER_TAG
docker images
```

| Advanced ⌄ |

| Add build step ⌄ |

## Post-build Actions

☰ **Send build artifacts over SSH**  ?                    ✕

SSH Publishers

SSH Server
Name  ?

| React-app server                                              ⌄ |

| Advanced ⌄ |

Transfers

Transfer Set                                                                          ✕
Source files  ?

| . |

Remove prefix  ?

| |

Remote directory  ?

| |

Exec command  ?

```
docker rm -f reactwebapp
docker rmi -f reactapp:v1
git clone https://github.com/Sivaprakash-pk/React-js_Project.git
cd React-js_Project
docker build -t reactapp:v1 .
docker run -dit --name reactwebapp -p 81:80 reactapp:v1
```

All of the transfer fields (except for Exec timeout) support substitution of **Jenkins environment variables**

Advanced  ⌄

Code pushed from git to github ➔



Jenkins auto trigger run the job once git code pushed to github – Output ➔

**Output ➜**

```
Started by GitHub push by Sivaprakash-pk
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/React JS web-app project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
The recommended git tool is: NONE
using credential Github_Credential
Cloning the remote Git repository
Cloning repository https://github.com/Sivaprakash-pk/React-js_Project.git
 > /usr/bin/git init /var/lib/jenkins/workspace/React JS web-app project # timeout=10
Fetching upstream changes from https://github.com/Sivaprakash-pk/React-js_Project.git
 > /usr/bin/git --version # timeout=10
 > git --version # 'git version 2.34.1'
using GIT_ASKPASS to set credentials Github Credential
 > /usr/bin/git fetch --tags --force --progress -- https://github.com/Sivaprakash-pk/React-
js_Project.git +refs/heads/*:refs/remotes/origin/* # timeout=10
 > /usr/bin/git config remote.origin.url https://github.com/Sivaprakash-pk/React-js_Project.git #
timeout=10
```

```
 > /usr/bin/git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
 > /usr/bin/git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision 50d7330f9babfa8719512f8fe638e46520a6231a (refs/remotes/origin/master)
 > /usr/bin/git config core.sparsecheckout # timeout=10
 > /usr/bin/git checkout -f 50d7330f9babfa8719512f8fe638e46520a6231a # timeout=10
Commit message: "1st commit"
First time build. Skipping changelog.
[React JS web-app project] $ /bin/sh -xe /tmp/jenkins16608667109891542447.sh
+ docker images -q
+ docker rmi 07f4e626c252
Untagged: node:latest
Untagged: node@sha256:242d81ad2a91353ac3a5ed3598582acb4a9a7761b16c60524b949a1603707848
Deleted: sha256:07f4e626c252cc83cd9c82225058cb4226581b77e44d614d8f8585828c34f496
Deleted: sha256:6d7140527100b8a0b62be606f36279d068bc6a0fa52a415f02d8dd8930e4a226
Deleted: sha256:4017cd6327da64d694e907023bd3b27cf7073ced8456e88014989b41cdacba41
Deleted: sha256:37cd3570fe018fbedb5359582a8d749c9ba8a3806519649433cef62df9656b3a
Deleted: sha256:6c57c349090475e4c491e2c774e2cb25cd949db386d5bc0ac605908b65d10584
Deleted: sha256:230c3b2acf5c7ce5ccbc11c5292092a5af0ce5b1e366228eee031eb9c84ed0dc
Deleted: sha256:34349aaf2e7f75c266222ea09df6e2bef39fea73640d191dfc5d271d390103fc
Deleted: sha256:f51029f953be13d297d2bc2dd7c56c0a84c77cd7bd6672837a01c4571c7cf5fa
Deleted: sha256:2fab58d5cf486ed4ca265634fde3c8b4a046ade908d9b1d5405d8dfce6d12413
Deleted: sha256:ae56c0c5405b3d38a59b5ec5dfe5db36e8b6ff6ca8595851f903cde13e709282
+ chmod 777 build.sh
+ chmod 777 deploy.sh
+ bash build.sh reactapp v1
Get the Image name from Parameterized variable:
Get the Image version from Parameterized variable:
Sending build context to Docker daemon  1.342MB

Step 1/13 : FROM node:latest
latest: Pulling from library/node
b0248cf3e63c: Pulling fs layer
127e97b4daf7: Pulling fs layer
0336c50c9f69: Pulling fs layer
1b89f3c7f7da: Pulling fs layer
2d6277217976: Pulling fs layer
9b293df1e1ca: Pulling fs layer
8365abce50c7: Pulling fs layer
50dcc63adbff: Pulling fs layer
2f7b576afa06: Pulling fs layer
1b89f3c7f7da: Waiting
2d6277217976: Waiting
9b293df1e1ca: Waiting
8365abce50c7: Waiting
50dcc63adbff: Waiting
2f7b576afa06: Waiting
127e97b4daf7: Verifying Checksum
127e97b4daf7: Download complete
0336c50c9f69: Verifying Checksum
0336c50c9f69: Download complete
b0248cf3e63c: Verifying Checksum
b0248cf3e63c: Download complete
9b293df1e1ca: Verifying Checksum
9b293df1e1ca: Download complete
1b89f3c7f7da: Verifying Checksum
1b89f3c7f7da: Download complete
50dcc63adbff: Verifying Checksum
50dcc63adbff: Download complete
2f7b576afa06: Verifying Checksum
2f7b576afa06: Download complete
8365abce50c7: Verifying Checksum
8365abce50c7: Download complete
b0248cf3e63c: Pull complete
2d6277217976: Verifying Checksum
2d6277217976: Download complete
127e97b4daf7: Pull complete
0336c50c9f69: Pull complete
1b89f3c7f7da: Pull complete
2d6277217976: Pull complete
9b293df1e1ca: Pull complete
```

```
8365abce50c7: Pull complete
50dcc63adbff: Pull complete
2f7b576afa06: Pull complete
Digest: sha256:242d81ad2a91353ac3a5ed3598582acb4a9a7761b16c60524b949a1603707848
Status: Downloaded newer image for node:latest
 ---> 07f4e626c252
Step 2/13 : RUN apt-get update && apt-get install -y nginx
 ---> Running in 2f4c79e4d861
Get:1 http://deb.debian.org/debian bullseye InRelease [116 kB]
Get:2 http://deb.debian.org/debian-security bullseye-security InRelease [48.4 kB]
Get:3 http://deb.debian.org/debian bullseye-updates InRelease [44.1 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 Packages [8183 kB]
Get:5 http://deb.debian.org/debian-security bullseye-security/main amd64 Packages [237 kB]
Get:6 http://deb.debian.org/debian bullseye-updates/main amd64 Packages [14.6 kB]
Fetched 8643 kB in 1s (6155 kB/s)
Reading package lists...
Reading package lists...
Building dependency tree...
Reading state information...
The following additional packages will be installed:
  geoip-database iproute2 libatm1 libbpf0 libcap2 libcap2-bin libgd3 libgeoip1
  libmnl0 libnginx-mod-http-geoip libnginx-mod-http-image-filter
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream
  libnginx-mod-stream-geoip libpam-cap libxpm4 libxtables12 nginx-common
  nginx-core
Suggested packages:
  iproute2-doc libgd-tools geoip-bin fcgiwrap nginx-doc ssl-cert
The following NEW packages will be installed:
  geoip-database iproute2 libatm1 libbpf0 libcap2 libcap2-bin libgd3 libgeoip1
  libmnl0 libnginx-mod-http-geoip libnginx-mod-http-image-filter
  libnginx-mod-http-xslt-filter libnginx-mod-mail libnginx-mod-stream
  libnginx-mod-stream-geoip libpam-cap libxpm4 libxtables12 nginx nginx-common
  nginx-core
0 upgraded, 21 newly installed, 0 to remove and 2 not upgraded.
Need to get 5957 kB of archives.
After this operation, 17.7 MB of additional disk space will be used.
Get:1 http://deb.debian.org/debian bullseye/main amd64 libbpf0 amd64 1:0.3-2 [98.3 kB]
Get:2 http://deb.debian.org/debian bullseye/main amd64 libcap2 amd64 1:2.44-1 [23.6 kB]
Get:3 http://deb.debian.org/debian bullseye/main amd64 libmnl0 amd64 1.0.4-3 [12.5 kB]
Get:4 http://deb.debian.org/debian bullseye/main amd64 libxtables12 amd64 1.8.7-1 [45.1 kB]
Get:5 http://deb.debian.org/debian bullseye/main amd64 libcap2-bin amd64 1:2.44-1 [32.6 kB]
Get:6 http://deb.debian.org/debian bullseye/main amd64 iproute2 amd64 5.10.0-4 [930 kB]
Get:7 http://deb.debian.org/debian bullseye/main amd64 geoip-database all 20191224-3 [3032 kB]
Get:8 http://deb.debian.org/debian bullseye/main amd64 libatm1 amd64 1:2.5.1-4 [71.3 kB]
Get:9 http://deb.debian.org/debian bullseye/main amd64 libxpm4 amd64 1:3.5.12-1 [49.1 kB]
Get:10 http://deb.debian.org/debian bullseye/main amd64 libgd3 amd64 2.3.0-2 [137 kB]
Get:11 http://deb.debian.org/debian bullseye/main amd64 libgeoip1 amd64 1.6.12-7 [92.5 kB]
Get:12 http://deb.debian.org/debian bullseye/main amd64 nginx-common all 1.18.0-6.1+deb11u3 [126
kB]
Get:13 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-http-geoip amd64 1.18.0-
6.1+deb11u3 [98.4 kB]
Get:14 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-http-image-filter amd64
1.18.0-6.1+deb11u3 [102 kB]
Get:15 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-http-xslt-filter amd64
1.18.0-6.1+deb11u3 [100 kB]
Get:16 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-mail amd64 1.18.0-
6.1+deb11u3 [129 kB]
Get:17 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-stream amd64 1.18.0-
6.1+deb11u3 [154 kB]
Get:18 http://deb.debian.org/debian bullseye/main amd64 libnginx-mod-stream-geoip amd64 1.18.0-
6.1+deb11u3 [97.7 kB]
Get:19 http://deb.debian.org/debian bullseye/main amd64 libpam-cap amd64 1:2.44-1 [15.4 kB]
Get:20 http://deb.debian.org/debian bullseye/main amd64 nginx-core amd64 1.18.0-6.1+deb11u3 [515
kB]
Get:21 http://deb.debian.org/debian bullseye/main amd64 nginx all 1.18.0-6.1+deb11u3 [92.9 kB]
[91mdebconf: delaying package configuration, since apt-utils is not installed
[0mFetched 5957 kB in 0s (65.3 MB/s)
Selecting previously unselected package libbpf0:amd64.
(Reading database ...
(Reading database ... 5%
(Reading database ... 10%
```

```
(Reading database ... 15%
(Reading database ... 20%
(Reading database ... 25%
(Reading database ... 30%
(Reading database ... 35%
(Reading database ... 40%
(Reading database ... 45%
(Reading database ... 50%
(Reading database ... 55%
(Reading database ... 60%
(Reading database ... 65%
(Reading database ... 70%
(Reading database ... 75%
(Reading database ... 80%
(Reading database ... 85%
(Reading database ... 90%
(Reading database ... 95%
(Reading database ... 100%
(Reading database ... 22794 files and directories currently installed.)
Preparing to unpack .../00-libbpf0_1%3a0.3-2_amd64.deb ...
Unpacking libbpf0:amd64 (1:0.3-2) ...
Selecting previously unselected package libcap2:amd64.
Preparing to unpack .../01-libcap2_1%3a2.44-1_amd64.deb ...
Unpacking libcap2:amd64 (1:2.44-1) ...
Selecting previously unselected package libmnl0:amd64.
Preparing to unpack .../02-libmnl0_1.0.4-3_amd64.deb ...
Unpacking libmnl0:amd64 (1.0.4-3) ...
Selecting previously unselected package libxtables12:amd64.
Preparing to unpack .../03-libxtables12_1.8.7-1_amd64.deb ...
Unpacking libxtables12:amd64 (1.8.7-1) ...
Selecting previously unselected package libcap2-bin.
Preparing to unpack .../04-libcap2-bin_1%3a2.44-1_amd64.deb ...
Unpacking libcap2-bin (1:2.44-1) ...
Selecting previously unselected package iproute2.
Preparing to unpack .../05-iproute2_5.10.0-4_amd64.deb ...
Unpacking iproute2 (5.10.0-4) ...
Selecting previously unselected package geoip-database.
Preparing to unpack .../06-geoip-database_20191224-3_all.deb ...
Unpacking geoip-database (20191224-3) ...
Selecting previously unselected package libatm1:amd64.
Preparing to unpack .../07-libatm1_1%3a2.5.1-4_amd64.deb ...
Unpacking libatm1:amd64 (1:2.5.1-4) ...
Selecting previously unselected package libxpm4:amd64.
Preparing to unpack .../08-libxpm4_1%3a3.5.12-1_amd64.deb ...
Unpacking libxpm4:amd64 (1:3.5.12-1) ...
Selecting previously unselected package libgd3:amd64.
Preparing to unpack .../09-libgd3_2.3.0-2_amd64.deb ...
Unpacking libgd3:amd64 (2.3.0-2) ...
Selecting previously unselected package libgeoip1:amd64.
Preparing to unpack .../10-libgeoip1_1.6.12-7_amd64.deb ...
Unpacking libgeoip1:amd64 (1.6.12-7) ...
Selecting previously unselected package nginx-common.
Preparing to unpack .../11-nginx-common_1.18.0-6.1+deb11u3_all.deb ...
Unpacking nginx-common (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-http-geoip.
Preparing to unpack .../12-libnginx-mod-http-geoip_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking libnginx-mod-http-geoip (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-http-image-filter.
Preparing to unpack .../13-libnginx-mod-http-image-filter_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking libnginx-mod-http-image-filter (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-http-xslt-filter.
Preparing to unpack .../14-libnginx-mod-http-xslt-filter_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking libnginx-mod-http-xslt-filter (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-mail.
Preparing to unpack .../15-libnginx-mod-mail_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking libnginx-mod-mail (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-stream.
Preparing to unpack .../16-libnginx-mod-stream_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking libnginx-mod-stream (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libnginx-mod-stream-geoip.
Preparing to unpack .../17-libnginx-mod-stream-geoip_1.18.0-6.1+deb11u3_amd64.deb ...
```

```
Unpacking libnginx-mod-stream-geoip (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package libpam-cap:amd64.
Preparing to unpack .../18-libpam-cap_1%3a2.44-1_amd64.deb ...
Unpacking libpam-cap:amd64 (1:2.44-1) ...
Selecting previously unselected package nginx-core.
Preparing to unpack .../19-nginx-core_1.18.0-6.1+deb11u3_amd64.deb ...
Unpacking nginx-core (1.18.0-6.1+deb11u3) ...
Selecting previously unselected package nginx.
Preparing to unpack .../20-nginx_1.18.0-6.1+deb11u3_all.deb ...
Unpacking nginx (1.18.0-6.1+deb11u3) ...
Setting up libxpm4:amd64 (1:3.5.12-1) ...
Setting up nginx-common (1.18.0-6.1+deb11u3) ...
debconf: unable to initialize frontend: Dialog
debconf: (TERM is not set, so the dialog frontend is not usable.)
debconf: falling back to frontend: Readline
Setting up libatm1:amd64 (1:2.5.1-4) ...
Setting up libcap2:amd64 (1:2.44-1) ...
Setting up libcap2-bin (1:2.44-1) ...
Setting up libnginx-mod-http-xslt-filter (1.18.0-6.1+deb11u3) ...
Setting up libgd3:amd64 (2.3.0-2) ...
Setting up libmnl0:amd64 (1.0.4-3) ...
Setting up libxtables12:amd64 (1.8.7-1) ...
Setting up libgeoip1:amd64 (1.6.12-7) ...
Setting up geoip-database (20191224-3) ...
Setting up libbpf0:amd64 (1:0.3-2) ...
Setting up libpam-cap:amd64 (1:2.44-1) ...
debconf: unable to initialize frontend: Dialog
debconf: (TERM is not set, so the dialog frontend is not usable.)
debconf: falling back to frontend: Readline
Setting up libnginx-mod-mail (1.18.0-6.1+deb11u3) ...
Setting up iproute2 (5.10.0-4) ...
debconf: unable to initialize frontend: Dialog
debconf: (TERM is not set, so the dialog frontend is not usable.)
debconf: falling back to frontend: Readline
Setting up libnginx-mod-http-image-filter (1.18.0-6.1+deb11u3) ...
Setting up libnginx-mod-stream (1.18.0-6.1+deb11u3) ...
Setting up libnginx-mod-stream-geoip (1.18.0-6.1+deb11u3) ...
Setting up libnginx-mod-http-geoip (1.18.0-6.1+deb11u3) ...
Setting up nginx-core (1.18.0-6.1+deb11u3) ...
invoke-rc.d: could not determine current runlevel
invoke-rc.d: policy-rc.d denied execution of start.
Setting up nginx (1.18.0-6.1+deb11u3) ...
Processing triggers for libc-bin (2.31-13+deb11u5) ...
Removing intermediate container 2f4c79e4d861
 ---> 73e996e1d898
Step 3/13 : RUN rm /etc/nginx/sites-enabled/default
 ---> Running in c4ea75495165
Removing intermediate container c4ea75495165
 ---> f45b72d64b4e
Step 4/13 : COPY nginx.conf /etc/nginx/sites-enabled/
 ---> b22eb43f8485
Step 5/13 : WORKDIR /usr/src/app
 ---> Running in 40d79b702207
Removing intermediate container 40d79b702207
 ---> da69c81ca926
Step 6/13 : ENV NODE_OPTIONS="--openssl-legacy-provider"
 ---> Running in b5ad2db64ac5
Removing intermediate container b5ad2db64ac5
 ---> cc828eff0e74
Step 7/13 : COPY package*.json ./
 ---> 0a04940a3356
Step 8/13 : RUN npm install
 ---> Running in 5ae707c3634a
[91mnpm[0m[91m WARN old lockfile
npm WARN[0m[91m old lockfile The package-lock.json file was created with an old version of npm,
npm WARN old lockfile so supplemental metadata must be fetched from the registry.
npm WARN old lockfile
npm WARN old lockfile This is a one-time fix-up, please be patient...
npm WARN old lockfile
[0m[91mnpm[0m[91m [0m[91mWARN[0m[91m [0m[91mdeprecated[0m[91m w3c-hr-time@1.0.2: Use your
platform's native performance.now() and performance.timeOrigin.
```

```
npm WARN deprecated urix@0.1.0: Please see
https://github.com/lydell/urix#deprecated
npm WARN deprecated uuid@3.4.0: Please upgrade  to version 7 or higher.  Older versions
may use Math.random() in certain circumstances, which is known to be problematic.  See
https://v8.dev/blog/math-random for details.
npm WARN deprecated stable@0.1.8: Modern JS already guarantees Array#sort() is a stable
sort, so this library is deprecated. See the compatibility table on MDN:
https://developer.mozilla.org/en-
US/docs/Web/JavaScript/Reference/Global_Objects/Array/sort#browser_compatibility
npm WARN deprecated svgo@1.3.2: This SVGO version is no longer
supported. Upgrade to v2.x.x.
npm WARN deprecated source-map-url@0.4.0: See https://github.com/lydell/source-map-
url#deprecated
npm WARN deprecated source-map-resolve@0.5.3: See
https://github.com/lydell/source-map-resolve#deprecated
npm WARN deprecated sane@4.1.0: some dependency
vulnerabilities fixed, support for node < 10 dropped, and newer ECMAScript syntax/features added
npm WARN deprecated resolve-url@0.2.1: https://github.com/lydell/resolve-url#deprecated
npm WARN deprecated request-promise-native@1.0.8: request-promise-native has been
deprecated because it extends the now deprecated request package, see
https://github.com/request/request/issues/3142
npm WARN deprecated request@2.88.2: request has been deprecated, see
https://github.com/request/request/issues/3142
npm WARN deprecated querystring@0.2.0: The querystring
API is considered Legacy. new code should use the URLSearchParams API instead.
npm WARN deprecated left-pad@1.3.0: use String.prototype.padStart()
npm WARN deprecated ini@1.3.5: Please update to ini >=1.3.6 to avoid a prototype
pollution issue
npm WARN deprecated html-webpack-plugin@4.0.0-beta.11: please switch to a stable version
npm WARN deprecated har-validator@5.1.3: this library is no longer supported
npm WARN deprecated flatten@1.0.3: flatten is deprecated in favor of utility frameworks
such as lodash.
npm WARN deprecated eslint-loader@3.0.3: This loader has been deprecated. Please use
eslint-webpack-plugin
npm WARN deprecated debug@4.1.1: Debug versions >=3.2.0 <3.2.7 || >=4 <4.3.1 have a low-
severity ReDos regression when used in a Node.js environment. It is recommended you upgrade to
3.2.7 or 4.3.1. (https://github.com/visionmedia/debug/issues/797)
npm WARN deprecated babel-eslint@10.1.0: babel-eslint is now @babel/eslint-parser. This
package will no longer receive updates.
npm WARN deprecated core-js-pure@3.6.5: core-js-pure@<3.23.3 is no longer maintained and
not recommended for usage due to the number of issues. Because of the V8 engine whims, feature
detection in old core-js versions could cause a slowdown up to 100x even if nothing is
polyfilled. Some versions have web compatibility issues. Please, upgrade your dependencies to the
actual version of core-js-pure.
npm WARN deprecated core-js@3.6.5: core-js@<3.23.3 is no longer maintained and not
recommended for usage due to the number of issues. Because of the V8 engine whims, feature
detection in old core-js versions could cause a slowdown up to 100x even if nothing is
polyfilled. Some versions have web compatibility issues. Please, upgrade your dependencies to the
actual version of core-js.
npm WARN deprecated @hapi/topo@3.1.6: This version has been deprecated and is no longer
supported or maintained
npm WARN deprecated @hapi/joi@15.1.1: Switch to 'npm install joi'
npm WARN deprecated @hapi/hoek@8.5.1: This version has been deprecated and is no longer
supported or maintained
npm WARN deprecated @hapi/bourne@1.3.2: This version has been deprecated and is no longer
supported or maintained
npm WARN deprecated @hapi/address@2.1.4: Moved to 'npm install @sideway/address'
npm WARN deprecated chokidar@2.1.8: Chokidar 2 does not receive security updates since
2019. Upgrade to chokidar 3 with 15x fewer dependencies
npm WARN deprecated chokidar@2.1.8: Chokidar 2 does not receive security updates since
2019. Upgrade to chokidar 3 with 15x fewer dependencies
npm WARN deprecated debug@3.2.6: Debug versions >=3.2.0
<3.2.7 || >=4 <4.3.1 have a low-severity ReDos regression when used in a Node.js environment. It
is recommended you upgrade to 3.2.7 or 4.3.1. (https://github.com/visionmedia/debug/issues/797)
npm WARN deprecated debug@3.2.6: Debug versions >=3.2.0 <3.2.7 || >=4 <4.3.1 have a low-
severity ReDos regression when used in a Node.js environment. It is recommended you upgrade to
3.2.7 or 4.3.1. (https://github.com/visionmedia/debug/issues/797)
npm WARN deprecated core-js@2.6.11: core-js@<3.23.3 is no longer maintained and not
recommended for usage due to the number of issues. Because of the V8 engine whims, feature
detection in old core-js versions could cause a slowdown up to 100x even if nothing is
```

polyfilled. Some versions have web compatibility issues. Please, upgrade your dependencies to the
actual version of core-js.
[0m
added 1645 packages, and audited 1646 packages in 50s

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

78 vulnerabilities (1 low, 26 moderate, 38 high, 13 critical)

To address issues that do not require attention, run:
  npm audit fix

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.
[91mnpm[0m[91m [0m[91mnotice[0m[91m
[0m[91mnpm[0m[91m notice New patch version of npm available! 9.6.4 -> 9.6.5
npm [0m[91mnotice Changelog: <https://github.com/npm/cli/releases/tag/v9.6.5>
npm notice Run `npm install -g npm@9.6.5` to update!
[0m[91mnpm notice
[0mRemoving intermediate container 5ae707c3634a
 ---> 4679e4192de6
Step 9/13 : COPY . .
 ---> d3dded32e1f0
Step 10/13 : RUN npm run build
 ---> Running in 48d8bfe08222

> react-front-end@0.1.0 build
> react-scripts build

Creating an optimized production build...
[91mBrowserslist: caniuse-lite is outdated. Please run:
npx browserslist@latest --update-db
[0mCompiled successfully.

File sizes after gzip:

  40.46 KB  build/static/js/2.c71cdbdb.chunk.js
  22.47 KB  build/static/css/2.af3c1da9.chunk.css
  793 B     build/static/js/main.079458d2.chunk.js
  779 B     build/static/js/runtime-main.c2a4c5c8.js
  547 B     build/static/css/main.5f361e03.chunk.css

The project was built assuming it is hosted at /.
You can control this with the homepage field in your package.json.

The build folder is ready to be deployed.
You may serve it with a static server:

  npm install -g serve
  serve -s build

Find out more about deployment here:

  bit.ly/CRA-deploy

Removing intermediate container 48d8bfe08222
 ---> bd880e30399e
Step 11/13 : RUN echo "server {\n\tlisten 80;\n\troot /usr/src/app/build;\n\tindex
index.html;\n\tserver_name localhost;\n}" > /etc/nginx/sites-enabled/default
 ---> Running in 4aa39badc9b6
Removing intermediate container 4aa39badc9b6
 ---> 07738c149502
Step 12/13 : EXPOSE 80
 ---> Running in 2090846d438b
Removing intermediate container 2090846d438b
 ---> 10b1baa0c557
Step 13/13 : CMD ["nginx", "-g", "daemon off;"]
 ---> Running in f9e71cca6e83

```
Removing intermediate container f9e71cca6e83
 ---> 69f997d3ff5f
Successfully built 69f997d3ff5f
Successfully tagged reactapp:v1
Docker image build completed successfully.
REPOSITORY    TAG        IMAGE ID        CREATED                 SIZE
reactapp      v1         69f997d3ff5f    Less than a second ago  1.34GB
node          latest     07f4e626c252    6 days ago              1GB
+ bash deploy.sh sivaprakash1998 Login$1998pk reactapp master sivaprakash1998/prod-repo-reactapp
latest-img
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
The push refers to repository [docker.io/sivaprakash1998/prod-repo-reactapp]
09aa4cea9b3e: Preparing
9f123f976e70: Preparing
44ce62198b08: Preparing
ddd9ef4e5d00: Preparing
57ebbf0d54f7: Preparing
56e40881e20c: Preparing
684b3747c1b8: Preparing
9b1b06e19bf1: Preparing
c3992d02ff0f: Preparing
52a74f30f3d6: Preparing
257a23ea050f: Preparing
59ce4b011e6f: Preparing
e29838afe536: Preparing
cfd0811d364e: Preparing
b86f260e173a: Preparing
6a1ebb98b0dc: Preparing
24b48387f467: Preparing
ae56c0c5405b: Preparing
257a23ea050f: Waiting
59ce4b011e6f: Waiting
e29838afe536: Waiting
cfd0811d364e: Waiting
b86f260e173a: Waiting
6a1ebb98b0dc: Waiting
24b48387f467: Waiting
ae56c0c5405b: Waiting
56e40881e20c: Waiting
684b3747c1b8: Waiting
9b1b06e19bf1: Waiting
c3992d02ff0f: Waiting
52a74f30f3d6: Waiting
09aa4cea9b3e: Pushed
44ce62198b08: Pushed
57ebbf0d54f7: Pushed
9f123f976e70: Pushed
56e40881e20c: Pushed
684b3747c1b8: Pushed
9b1b06e19bf1: Pushed
257a23ea050f: Mounted from library/node
52a74f30f3d6: Mounted from library/node
59ce4b011e6f: Mounted from library/node
cfd0811d364e: Mounted from library/node
e29838afe536: Mounted from library/node
b86f260e173a: Mounted from library/node
6a1ebb98b0dc: Mounted from library/node
ae56c0c5405b: Mounted from library/node
24b48387f467: Mounted from library/node
c3992d02ff0f: Pushed
ddd9ef4e5d00: Pushed
latest-img: digest: sha256:c39bc25973480a9060e9b6f37db7a8dd804bc9b1c5bbf6fde0c121330d8042ff size:
4099
Removing login credentials for https://index.docker.io/v1/
+ docker images
REPOSITORY                         TAG        IMAGE ID        CREATED          SIZE
reactapp                           v1         69f997d3ff5f    20 seconds ago   1.34GB
```

```
sivaprakash1998/prod-repo-reactapp    latest-img    69f997d3ff5f    20 seconds ago    1.34GB
node                                  latest        07f4e626c252    6 days ago        1GB
+ docker-compose up -d
Creating network "reactjsweb-appproject_default" with the default driver
Creating reactapp ...
Creating reactapp ... done
+ docker rmi -f reactapp:v1
Untagged: reactapp:v1
+ docker rmi -f sivaprakash1998/prod-repo-reactapp:latest-img
Untagged: sivaprakash1998/prod-repo-reactapp:latest-img
Untagged: sivaprakash1998/prod-repo-
reactapp@sha256:c39bc25973480a9060e9b6f37db7a8dd804bc9b1c5bbf6fde0c121330d8042ff
+ docker images
REPOSITORY    TAG         IMAGE ID         CREATED           SIZE
node          latest      07f4e626c252     6 days ago        1GB
SSH: Connecting from host [ip-10-10-2-197]
SSH: Connecting with configuration [React-app server] ...
SSH: EXEC: completed after 601 ms
SSH: Disconnecting configuration [React-app server] ...
SSH: Transferred 0 file(s)
Finished: SUCCESS
```
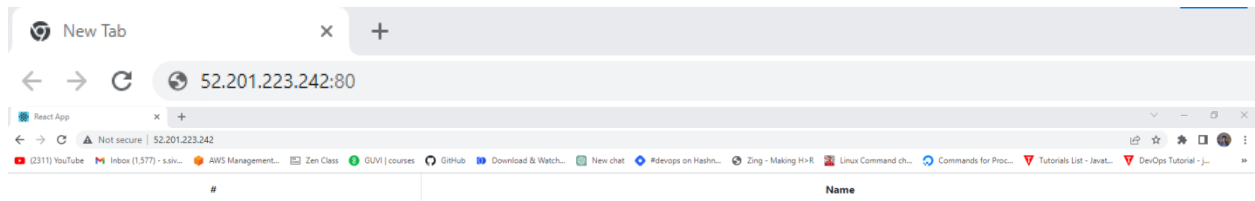


Webapp runs successfully on another EC2 server with jenkins job ➔
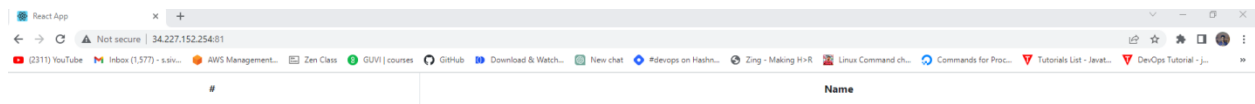
We can manually run the Jenkins job with parameters so the Image name & version and details are will not be hotcoded ➜

Dashboard > React JS web-app project >

**Status**

**Changes**

**Workspace**

**Build with Parameters**

**Configure**

**Delete Project**

**GitHub Hook Log**

**GitHub**

**Rename**

**Build History**                    trend ∨

Filter builds...                          /

⊘ #1
Apr 27, 2023, 2:40 PM

Atom feed for all   Atom feed for failures

**Project React JS web-app project**

This build requires parameters:

GIT_BRANCH

Github branch name

```
dev
```

IMAGE_NAME

Image name that build on local

```
reactapp
```

IMAGE_VERSION

Image version that build on local

```
v1
```

DOCKERHUB_USERNAME

Username to login Dockerhub

sivaprakash1998

DOCKERHUB_PASSWORD

Password to login Dockerhub

🔒 Concealed                                                    **Change Password**

DOCKER_REPO

Docker hub Repository name to push the docker image

sivaprakash1998/prod-repo-reactapp

DOCKER_TAG

Docker hub Repository tag to push the docker image

latest-img

**Build**

---

- 📄 Status
- </> Changes
- ▶ Console Output
  - 📄 View as plain text
- 📝 Edit Build Information
- 🗑 Delete build '#2'
- ⇄ Parameters
- 🔶 Git Build Data
- ← Previous Build

✅ **Console Output**

```
Started by user Sivaprakash S
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/React JS web-app project
[WS-CLEANUP] Deleting project workspace...
[WS-CLEANUP] Deferred wipeout is used...
[WS-CLEANUP] Done
The recommended git tool is: NONE
using credential Github_Credential
Cloning the remote Git repository
Cloning repository https://github.com/Sivaprakash-pk/React-js_Project.git
 > /usr/bin/git init /var/lib/jenkins/workspace/React JS web-app project # timeout=10
Fetching upstream changes from https://github.com/Sivaprakash-pk/React-js_Project.git
 > /usr/bin/git --version # timeout=10
 > git --version # 'git version 2.34.1'
using GIT_ASKPASS to set credentials Github Credential
 > /usr/bin/git fetch --tags --force --progress -- https://github.com/Sivaprakash-pk/React-js_Project.git +refs/heads/*:refs/remotes/origin/* # timeout=10
 > /usr/bin/git config remote.origin.url https://github.com/Sivaprakash-pk/React-js_Project.git # timeout=10
 > /usr/bin/git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
 > /usr/bin/git rev-parse refs/remotes/origin/dev^{commit} # timeout=10
Checking out Revision 50d7330f9babfa8719512f8fe638e46520a6231a (refs/remotes/origin/dev)
 > /usr/bin/git config core.sparsecheckout # timeout=10
 > /usr/bin/git checkout -f 50d7330f9babfa8719512f8fe638e46520a6231a # timeout=10
Commit message: "1st commit"
First time build. Skipping changelog.
[React JS web-app project] $ /bin/sh -xe /tmp/jenkins990569432259580875.sh
+ docker images -q
+ docker rmi 07f4e626c252
Untagged: node:latest
Untagged: node@sha256:242d81ad2a91353ac3a5ed3598582acb4a9a7761b16c60524b949a1603707848
Deleted: sha256:07f4e626c252cc83cd9c82225058cb4226581b77e44d614d8f8585828c34f496
Deleted: sha256:6d714052710b8a0b62be606f36279d068bc6a0fa52a415f02d8dd8930e4a226
```

```
59ce4b011e6f: Mounted from sivaprakash1998/prod-repo-reactapp
e29838afe536: Mounted from sivaprakash1998/prod-repo-reactapp
cfd0811d364e: Mounted from sivaprakash1998/prod-repo-reactapp
b86f260e173a: Mounted from sivaprakash1998/prod-repo-reactapp
6a1ebb98b0dc: Mounted from sivaprakash1998/prod-repo-reactapp
24b48387f467: Mounted from sivaprakash1998/prod-repo-reactapp
ae56c0c5405b: Mounted from sivaprakash1998/prod-repo-reactapp
791c3667c877: Pushed
22fd811feeb9: Pushed
latest-img: digest: sha256:fdb9d890a20012e02c30f42b5b88432ae0bf844602304aac392431d4fb1ef9dc size: 4099
Removing login credentials for https://index.docker.io/v1/
+ docker images
REPOSITORY                          TAG         IMAGE ID      CREATED        SIZE
reactapp                            v1          51494fa64f0f  20 seconds ago 1.34GB
sivaprakash1998/dev-repo-reactapp   latest-img  51494fa64f0f  20 seconds ago 1.34GB
node                                latest      07f4e626c252  6 days ago     1GB
+ docker-compose up -d
Creating reactapp ...
Creating reactapp ... done
+ docker rmi -f reactapp:v1
Untagged: reactapp:v1
+ docker rmi -f sivaprakash1998/dev-repo-reactapp:latest-img
Untagged: sivaprakash1998/dev-repo-reactapp:latest-img
Untagged: sivaprakash1998/dev-repo-reactapp@sha256:fdb9d890a20012e02c30f42b5b88432ae0bf844602304aac392431d4fb1ef9dc
+ docker images
REPOSITORY   TAG      IMAGE ID      CREATED       SIZE
<none>       <none>   51494fa64f0f  20 seconds ago 1.34GB
node         latest   07f4e626c252  6 days ago    1GB
SSH: Connecting from host [ip-10-10-2-197]
SSH: Connecting with configuration [React-app server] ...
SSH: EXEC: completed after 401 ms
SSH: Disconnecting configuration [React-app server] ...
SSH: Transferred 0 file(s)
Finished: SUCCESS
```

| # | Name |
|---|------|
|   |      |

Set Inbound rule in AWS security group for everyone can access react web-app using HTTP:80(port),
then only I can able to access the server with my public ip using SSH:22(port) ➔

Docker Hub with pushed images ➜

AWS Cloudwatch Monitoring alarm for CPU utilization and System health check status with SNS email notification ➜
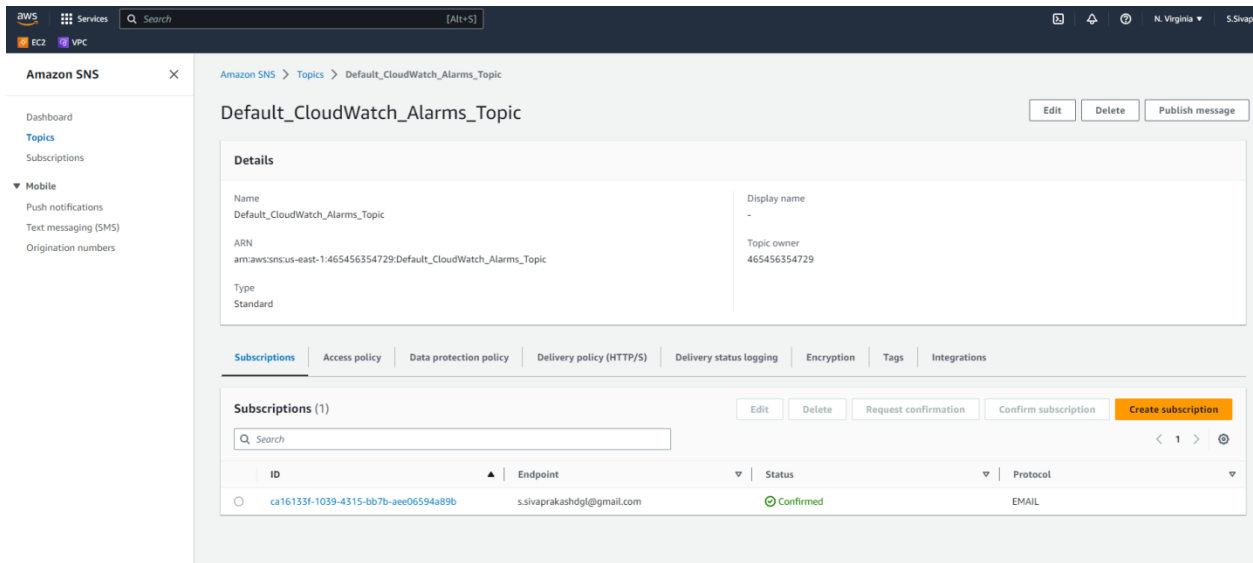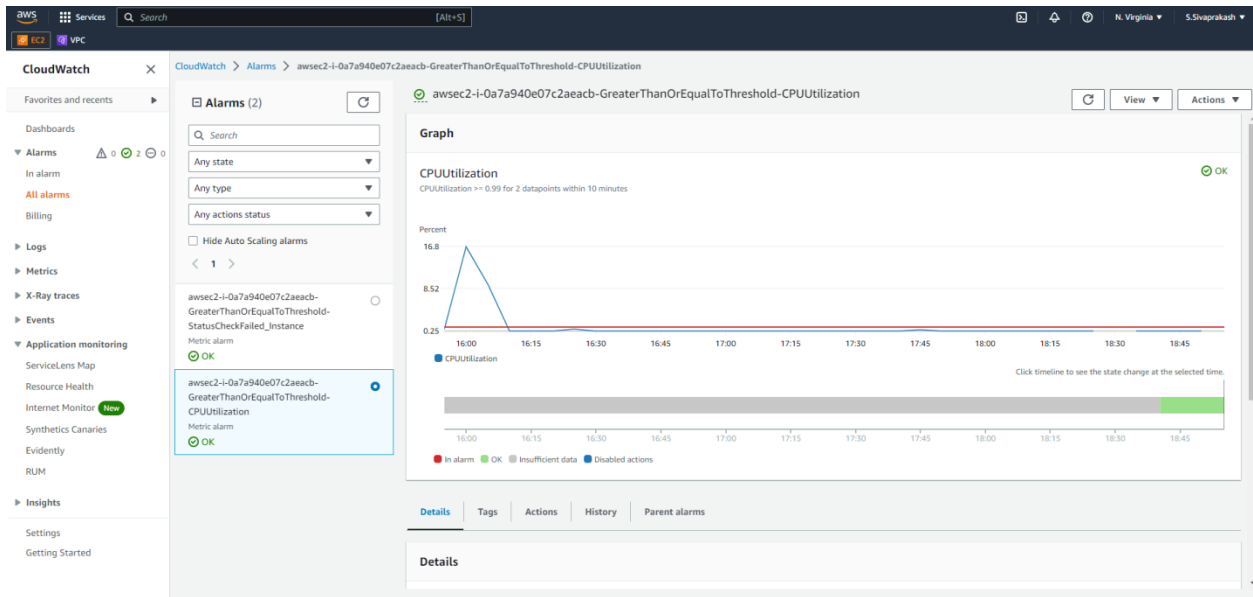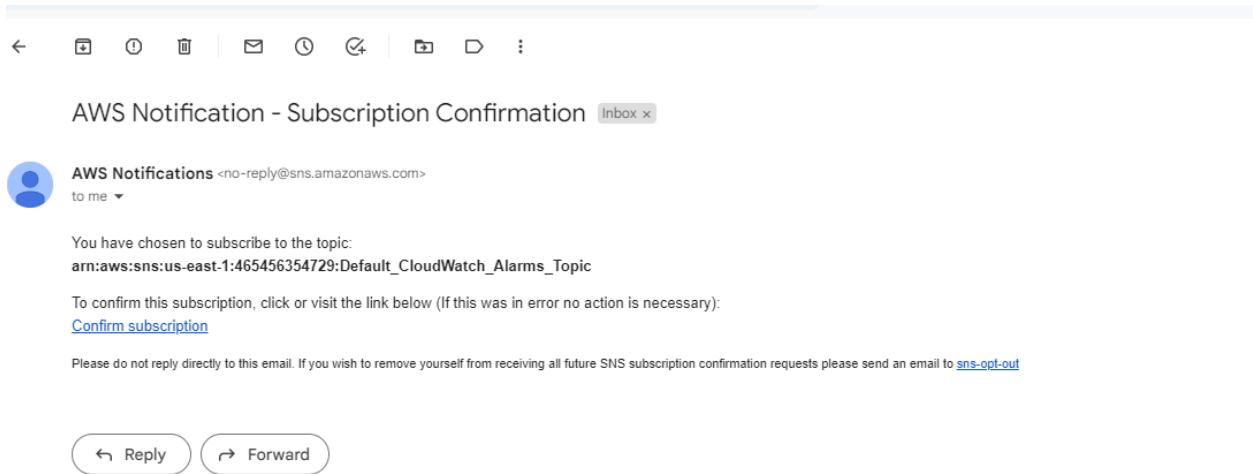
Jenkins Pipeline Script File ➜ using this pipeline script we can create pipeline project and get the same output

Jenkinsfile:

```
pipeline {
 agent any

 stages {
  stage('Checkout') {
   steps {
    git 'https://github.com/Sivaprakash-pk/sp1.git'
   }
  }
  stage('Build image') {
   steps {
    sh "docker rmi $(docker images -q)"
    sh "chmod 777 build.sh"
    sh "bash build.sh $IMAGE_NAME $IMAGE_VERSION"
    sh "docker images"
```

```
      }

    }

    stage('Deploy image') {

      steps {

        sh "chmod 777 deploy.sh"

        sh "bash deploy.sh $DOCKERHUB_USERNAME $DOCKERHUB_PASSWORD $IMAGE_NAME $GIT_BRANCH
$DOCKER_REPO $DOCKER_TAG"

        sh "docker images"

      }

    }

    stage('Deploy App via Docker') {

      steps {

        sh "docker-compose up -d"

        sh "docker ps"

      }

    }

    stage('Remove Docker images from local') {

      steps {

        sh "docker rmi -f $IMAGE_NAME:$IMAGE_VERSION"

        sh "docker rmi -f $DOCKER_REPO:$DOCKER_TAG"

        sh "docker images"

      }

    }

  }

}
```