

Deploy the given react application to a production ready

state

The below Techstacks are used :

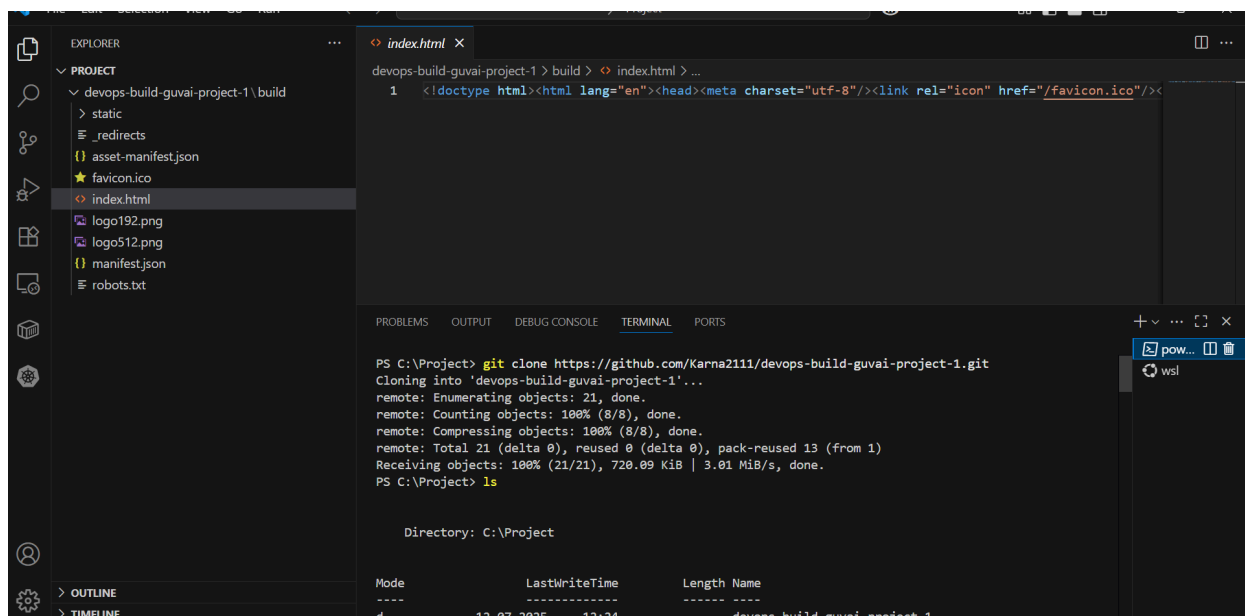
DOCKER:

BASH SCRIPTING:

VERSION CONTROL:

DOCKER HUB:

Clone the React app Repo locally



The screenshot shows a Visual Studio Code editor with a terminal window open at the bottom. The Explorer panel on the left shows a project structure with files like `static`, `_redirects`, `asset-manifest.json`, `favicon.ico`, `index.html`, `logo192.png`, `logo512.png`, `manifest.json`, and `robots.txt`. The terminal window shows the following commands and output:

```
PS C:\Project> git clone https://github.com/Karna2111/devops-build-guvai-project-1.git
Cloning into 'devops-build-guvai-project-1'...
remote: Enumerating objects: 21, done.
remote: Counting objects: 100% (8/8), done.
remote: Compressing objects: 100% (8/8), done.
remote: Total 21 (delta 0), reused 0 (delta 0), pack-reused 13 (from 1)
Receiving objects: 100% (21/21), 720.09 KiB | 3.01 MiB/s, done.
PS C:\Project> ls

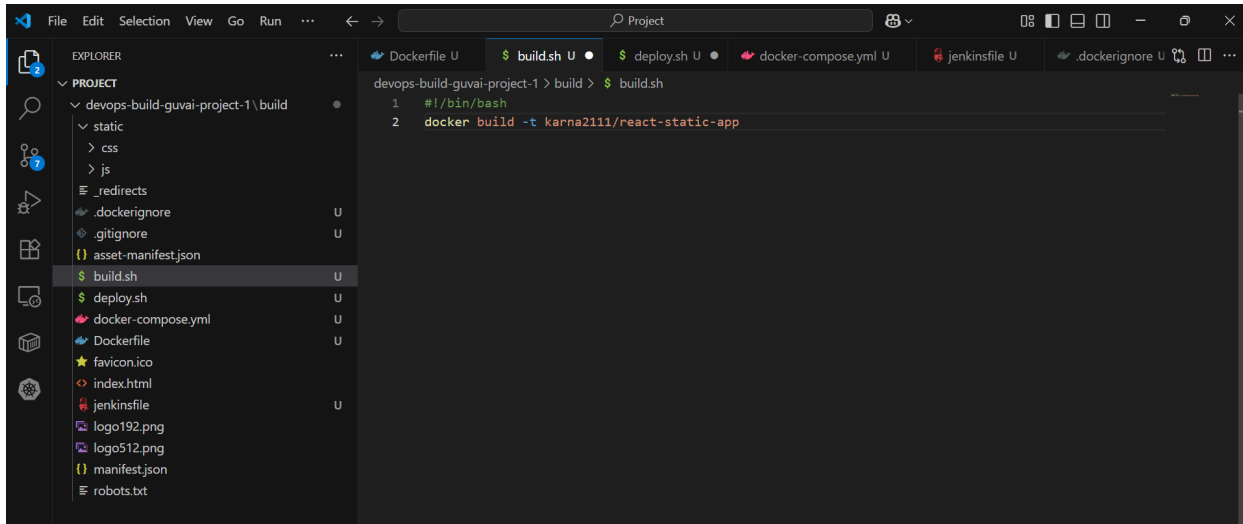
Directory: C:\Project

Mode                LastWriteTime         Length Name
----                -
d-----          12-07-2025         12:24         devops-build-guvai-project-1
```

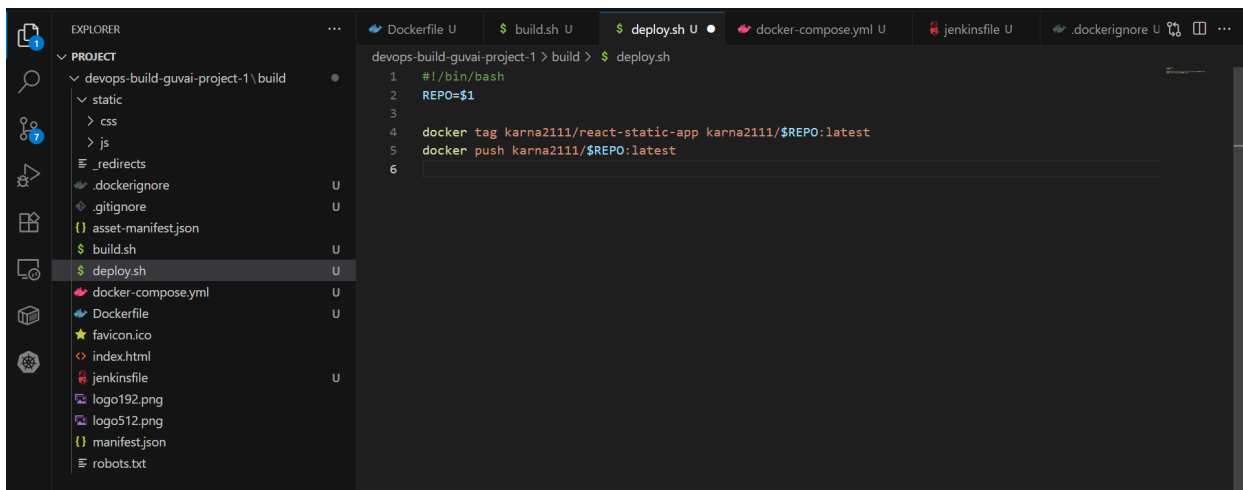
BASH SCRIPTING :

Write 2 script

build.sh - for building the docker image



deploy.sh - for deploying the image to server



VERSION CONTROL:

push the code to GitHub to dev branch (use dockerignore & gitignor file)

Note: Use Only CLI for relate git commands

Creating a branch dev and adding the .dockerignore and .gitignore

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ git branch
* main
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ git checkout -b dev
Switched to a new branch 'dev'
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ git branch
* dev
  main
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ ls
_redirects      favicon.ico  logo192.png  manifest.json  static
asset-manifest.json  index.html  logo512.png  robots.txt
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ touch .dockerignore
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ touch .git
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ rm rf .git
rm: cannot remove 'rf': No such file or directory
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ touch .gitignore
karna@Happy:/mnt/c/Project/devops-build-guvai-project-1/build$ ls -la
```

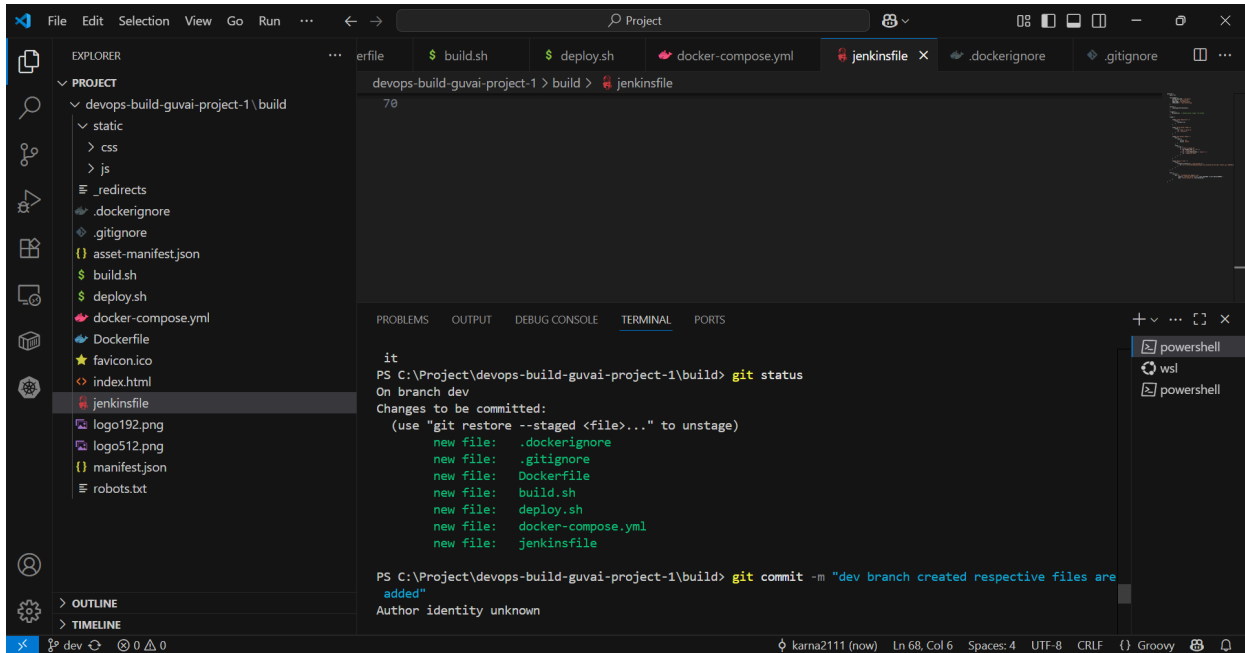
```
File  Edit  Selection  View  Go  Run  ...  Project
EXPLORER
PROJECT
  devops-build-guvai-project-1\build
    static
      css
      js
    _redirects
    .dockerignore
    .gitignore
    asset-manifest.json
    build.sh
    deploy.sh
    docker-compose.yml
    Dockerfile
    favicon.ico
    index.html
    jenkinsfile
    logo192.png
    logo512.png
    manifest.json
    robots.txt

devops-build-guvai-project-1 > build > jenkinsfile
70

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Project\devops-build-guvai-project-1\build>
PS C:\Project\devops-build-guvai-project-1\build>
PS C:\Project\devops-build-guvai-project-1\build> git status
On branch dev
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .dockerignore
    .gitignore
    Dockerfile
    build.sh
    deploy.sh
    docker-compose.yml
    jenkinsfile

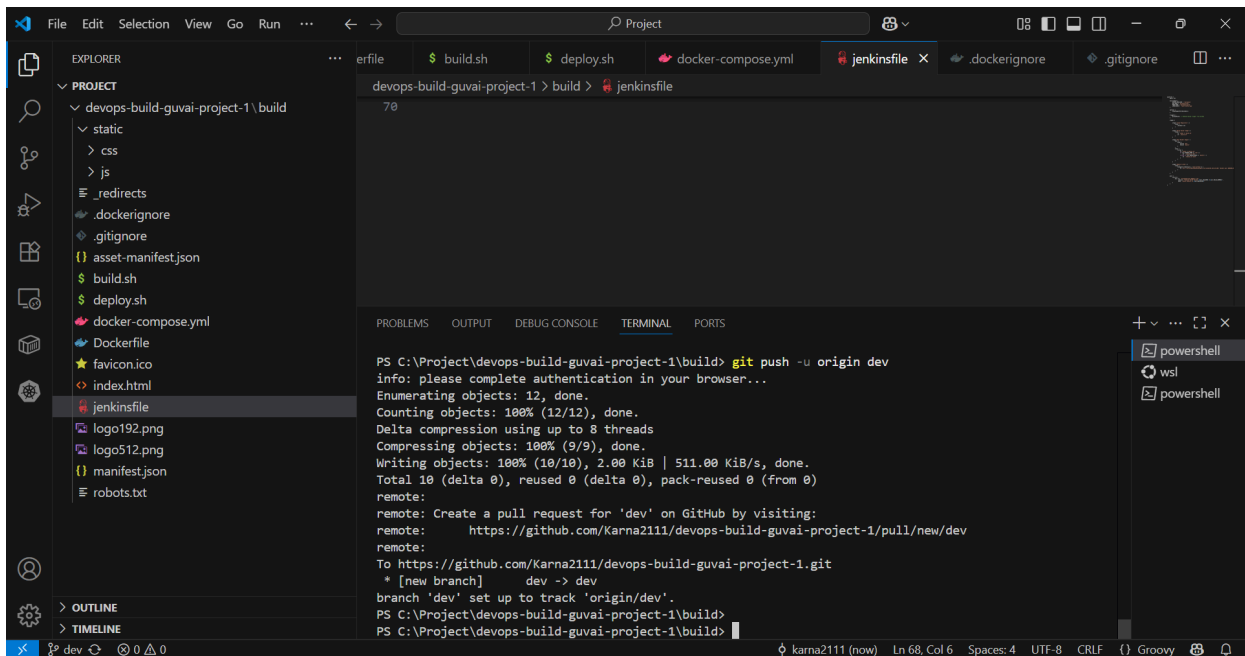
nothing added to commit but untracked files present (use "git add" to track)
PS C:\Project\devops-build-guvai-project-1\build> git add .
warning: in the working copy of 'build/build.sh', LF will be replaced by CRLF the next time Git touches
```



```
devops-build-guvai-project-1 > build > jenkinsfile
70

PS C:\Project\devops-build-guvai-project-1\build> git status
On branch dev
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   .dockerignore
        new file:   .gitignore
        new file:   Dockerfile
        new file:   build.sh
        new file:   deploy.sh
        new file:   docker-compose.yml
        new file:   jenkinsfile

PS C:\Project\devops-build-guvai-project-1\build> git commit -m "dev branch created respective files are added"
Author identity unknown
```

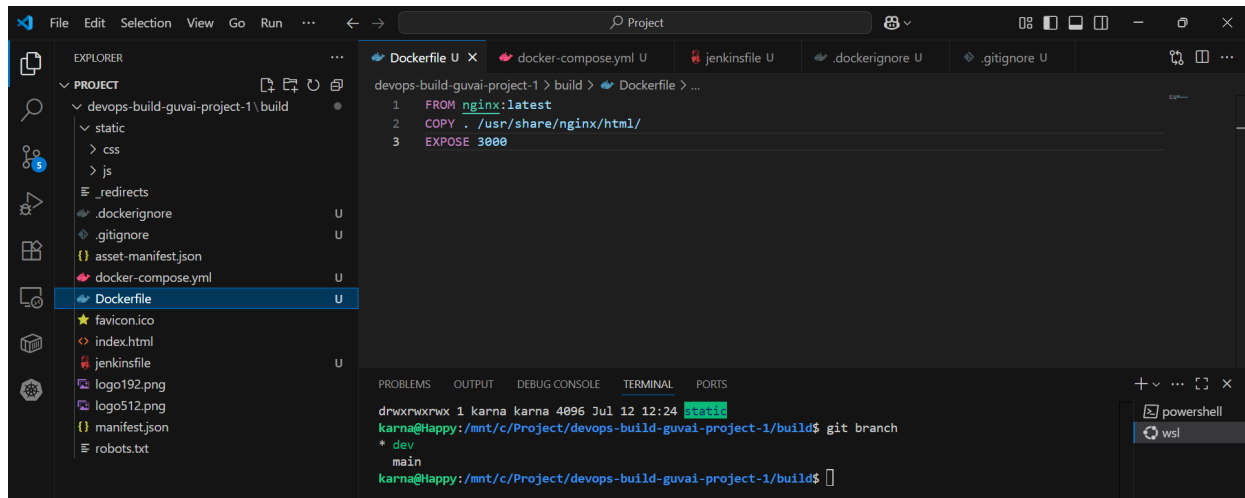


```
devops-build-guvai-project-1 > build > jenkinsfile
70

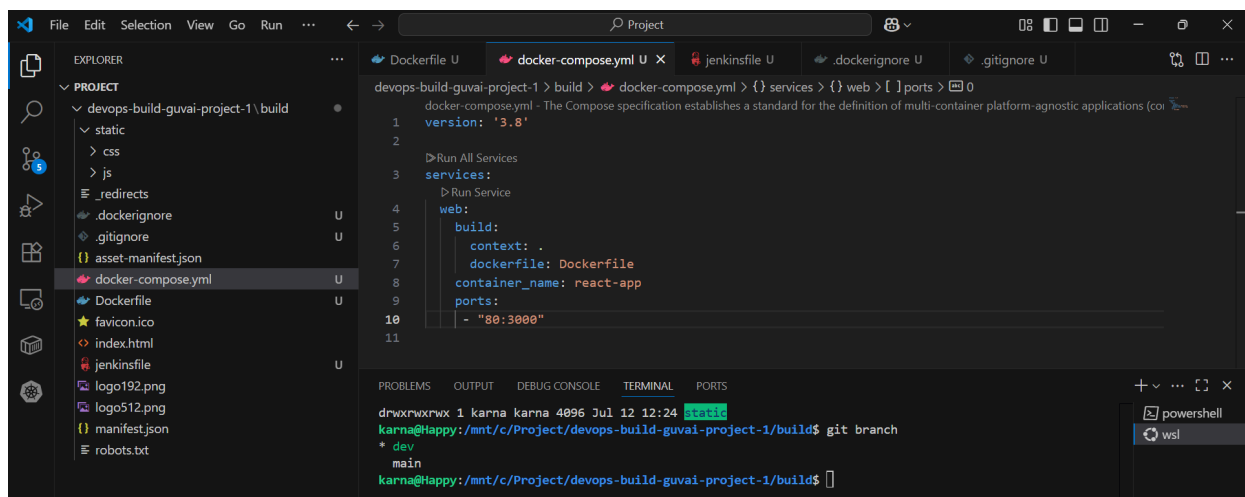
PS C:\Project\devops-build-guvai-project-1\build> git push -u origin dev
info: please complete authentication in your browser...
Enumerating objects: 12, done.
Counting objects: 100% (12/12), done.
Delta compression using up to 8 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (10/10), 2.00 KiB | 511.00 KiB/s, done.
Total 10 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Create a pull request for 'dev' on GitHub by visiting:
remote:   https://github.com/Karna2111/devops-build-guvai-project-1/pull/new/dev
remote: https://github.com/Karna2111/devops-build-guvai-project-1.git
To https://github.com/Karna2111/devops-build-guvai-project-1.git
 * [new branch] dev -> dev
branch 'dev' set up to track 'origin/dev'.
PS C:\Project\devops-build-guvai-project-1\build>
```

DOCKER:

Dockerize the application by creating a dockerfile



Create a docker-compose file to use the above image



DOCKER HUB:

Create 2 repo "dev" and "prod" to push image

"Prod" repo must be private

karna2111
Docker Personal

Repositories

Collaborations

Settings

Default privacy

Notifications

Billing

Usage

Pulls

Storage

Repositories / Create

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

Create repository

Repository Name *

prod

Short description

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

Visibility

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

Public

☐ Appears in Docker Hub search results

Private

☒ Only visible to you

Cancel

Create

Pushing images

You can push a new image to this repository using the CLI:

```
docker tag local-image:tagname new-repo
docker push new-repo:tagname
```

Make sure to replace `tagname` with your desired image repository tag.

"dev" repo be public

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Create repository

Repository Name *

dev



Short description

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

Visibility

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

Public

☒ Appears in Docker Hub search results

Private

☐ Only visible to you

Cancel

Create

Pushing images

You can push a new image to this repository using the CLI:

```
docker tag local-image:tagname new-repo
docker push new-repo:tagname
```

Make sure to replace `tagname` with your desired image repository tag.

docker push karna2111/prod:latest

docker push karna2111/dev:latest

dockerhub

Explore

My Hub

Search Docker Hub

CtrlK

K

karna2111

Docker Personal

Repositories

Collaborations

Settings

Default privacy

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Billing

Usage

Pulls

Repositories

All repositories within the karna2111 namespace.

Q

Search by repository name

All content

Create a repository

Name	Last Pushed	Contains	Visibility	Scout
karna2111/dev	21 minutes ago	IMAGE	Public	Inactive
karna2111/prod	32 minutes ago	IMAGE	Private	Inactive
karna2111/noinx-custom	6 days ago	IMAGE	Public	Inactive