DEVOPS – Task 2

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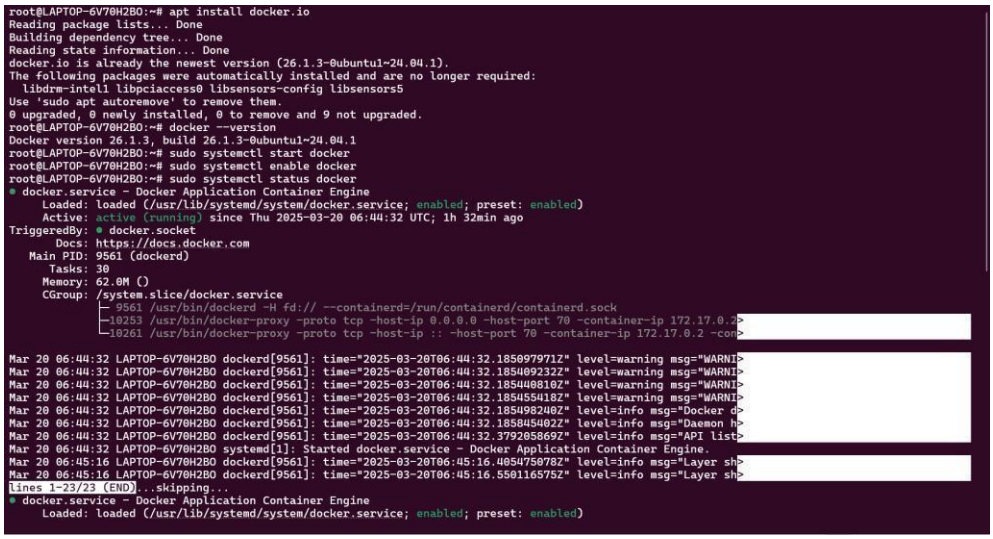
1)Installation of Docker:

Code:

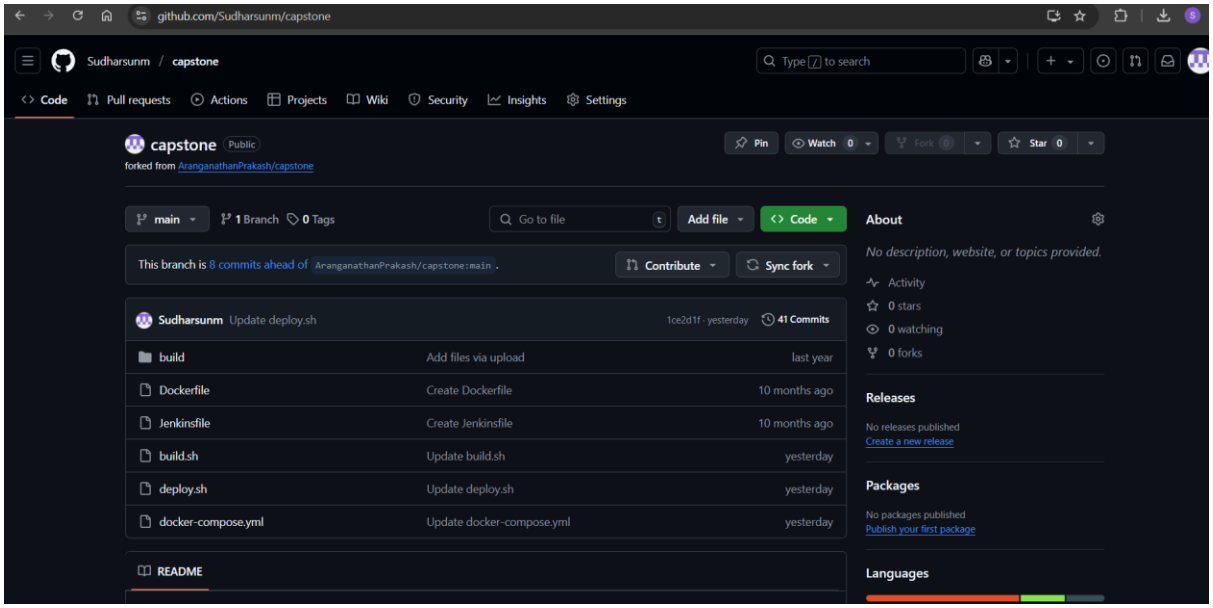
```
sudo apt install docker.io
docker –-version
sudo systemctl start docker
sudo systemctl enable docker
sudo systemctl status docker
```

Screenshot:



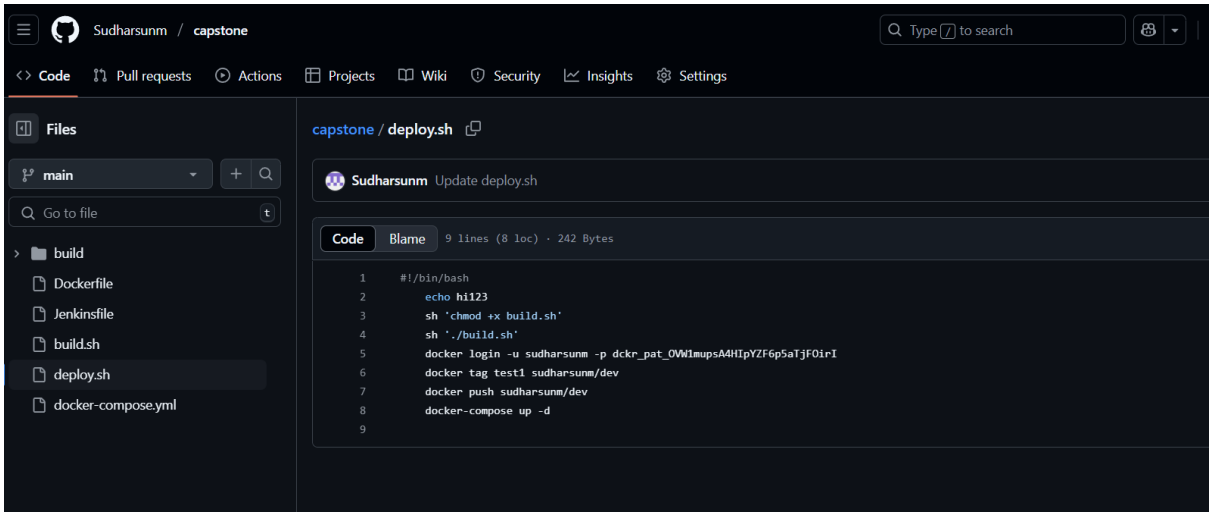
2)Fork a copy of a GitHub repo which contains the necessary files which will result in the clone of that repo in our own repository

Screenshot:



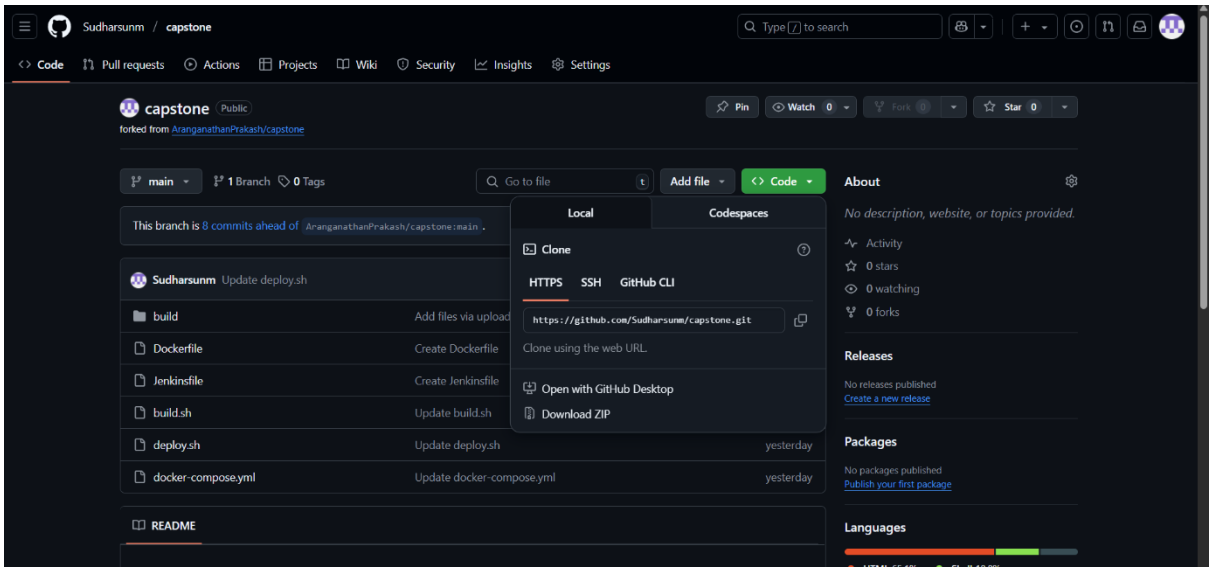
3)Then change the token and repo name of the docker Hub in the deploy.sh file which is in our repository.

Screenshot



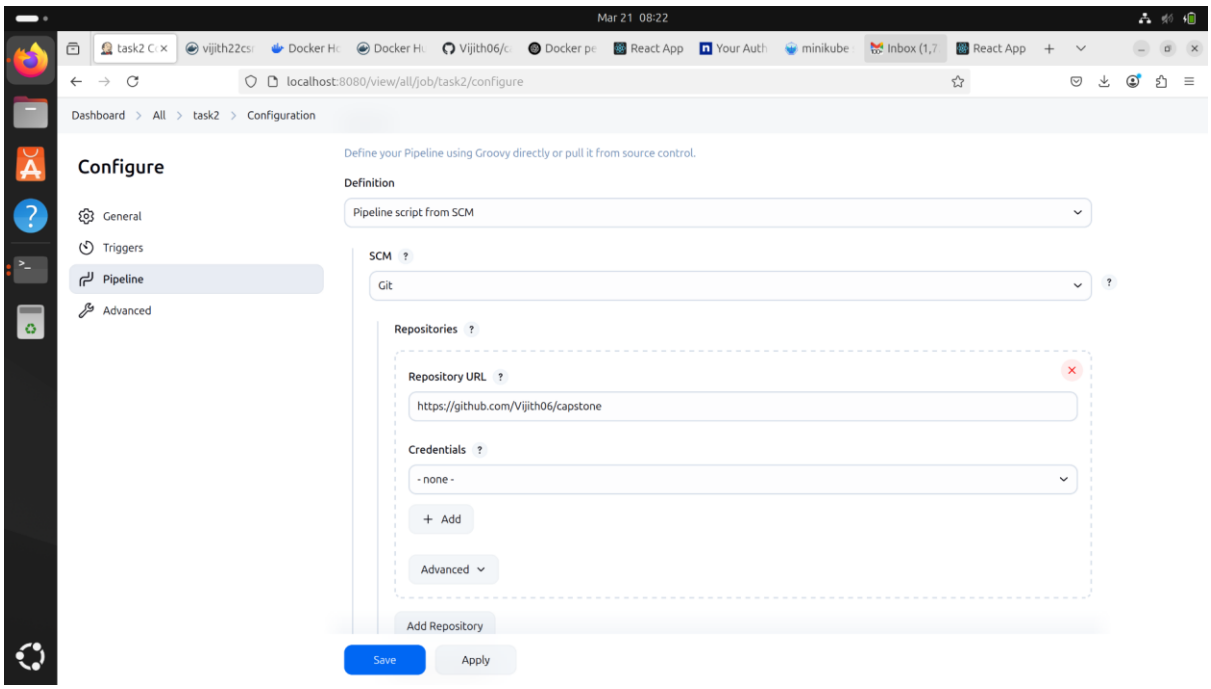
4)Then copy the GitHub link of the repository and go to Jenkins.

Screenshot:



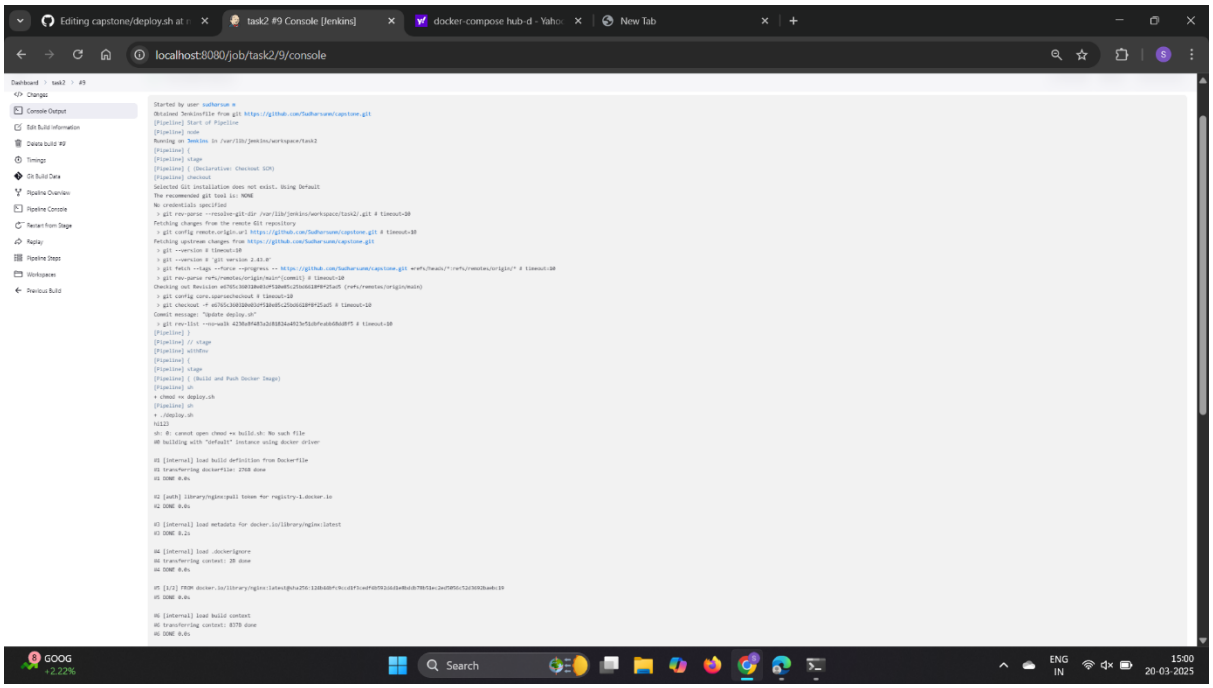
5)In Jenkins, create a new item (Job) with a type pipeline and add the copied GitHub url to it with the correct branch and Jenkinsfile.

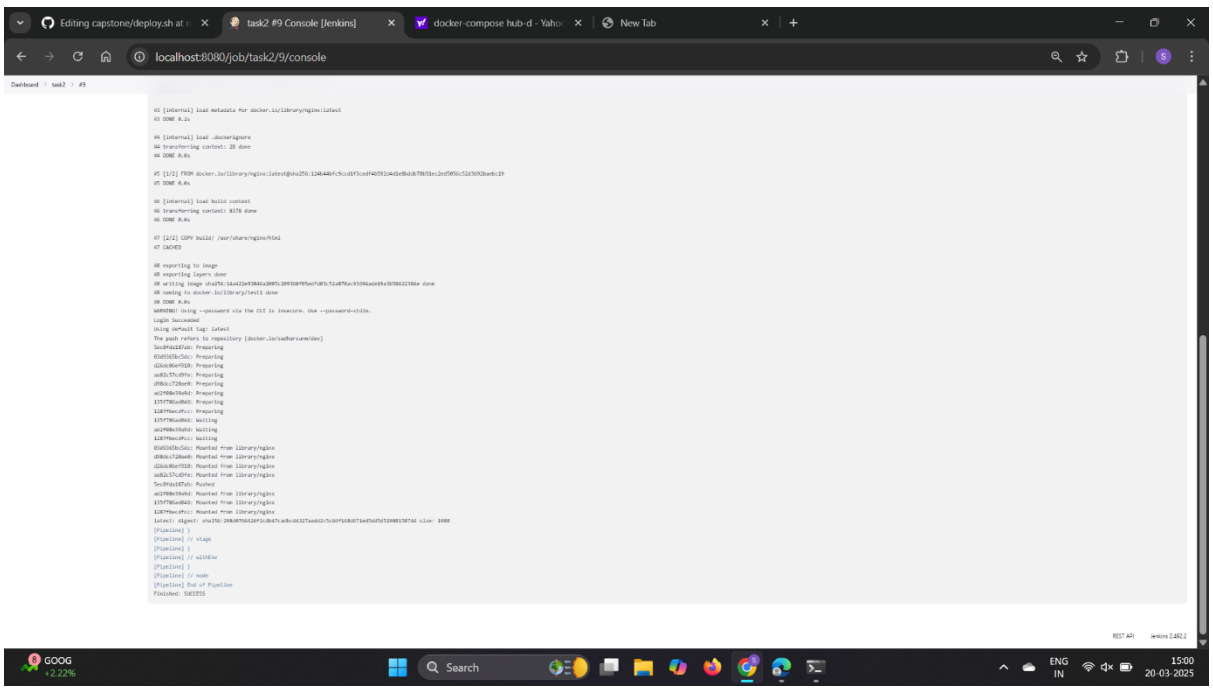
ScreenShot:



6)After Creating the job, build it and it will give the console output and the docker image will be created.

Screenshot:





7)Now Built this docker image in the terminal with desired port number to it.

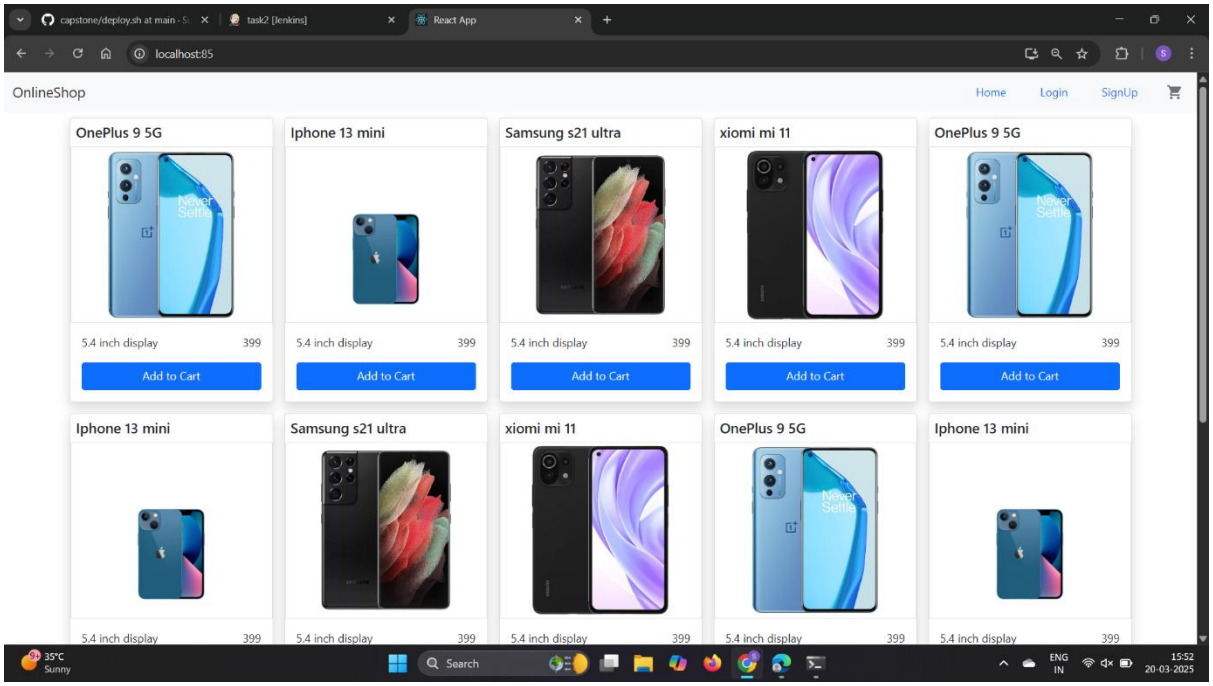
Code:

```
docker images

docker run -itd -p 70:80 test1
```

8)Go to the Browser and search for localhost:<PORT_NUMBER> and the respective application will be hosted.

Screenshot:

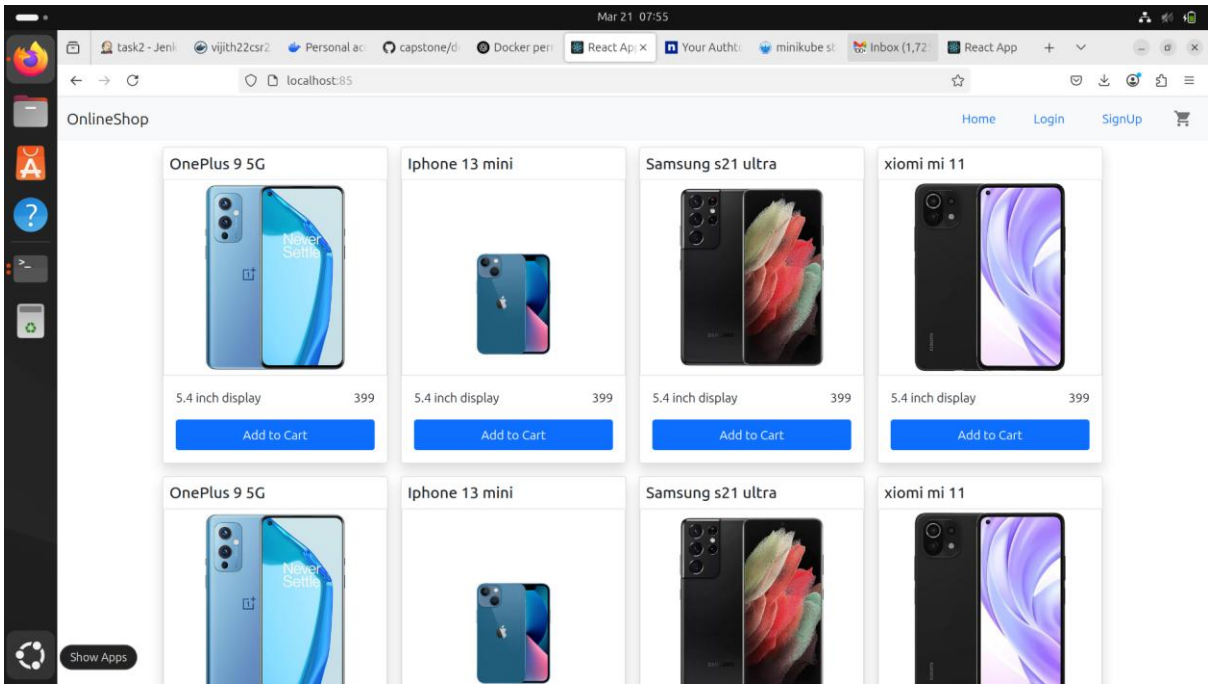


9)But, Instead of running the image by manually , we can also write the command for running in a file called docker-compose.yml

Code:

```
version: '3'
services:
react-
capstoneimage
:"test1"
 ports:
   - "85:80"
```

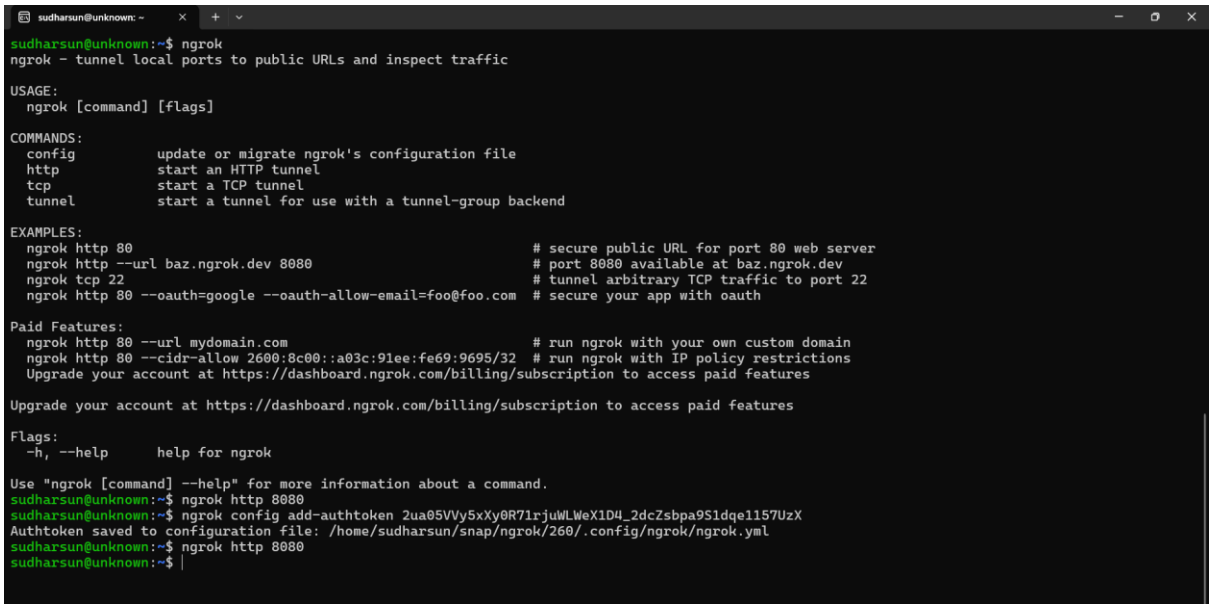
Screenshot:

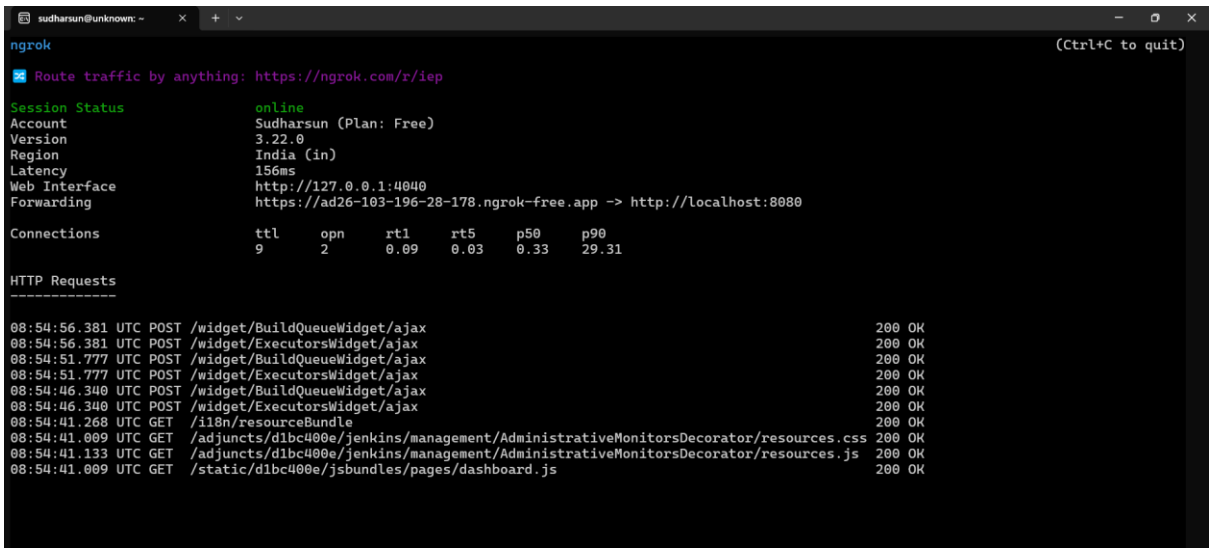


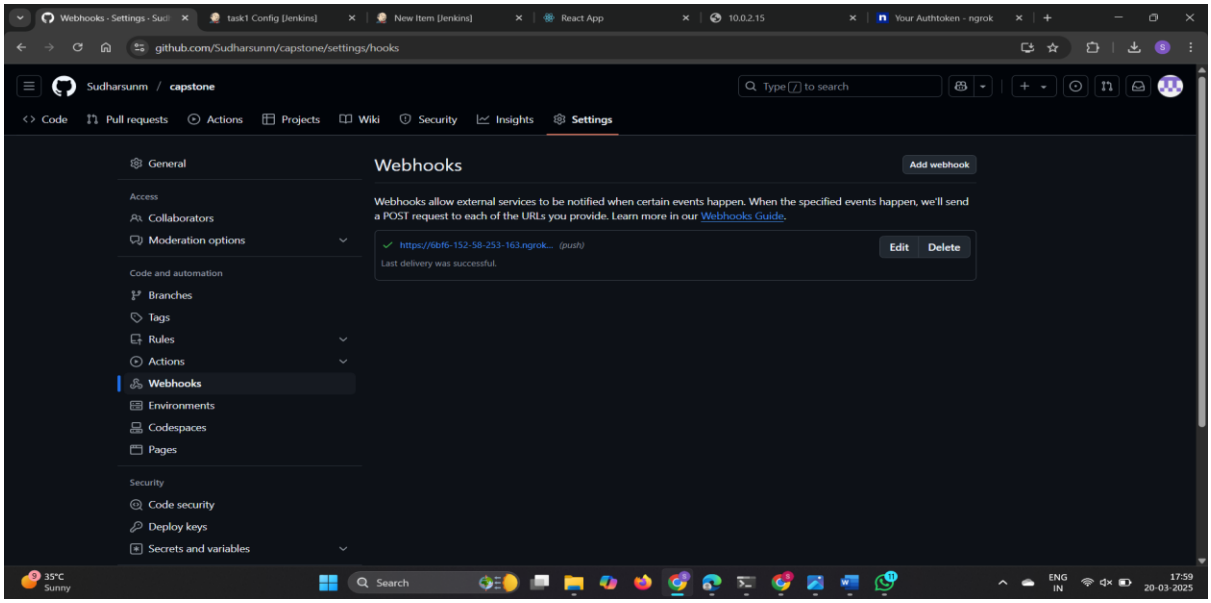
By Creating this, we no need to run the image by manually. (It will automatically run)

10) Adding Webhook to it which is available in GitHub for automatic build of the
project.
Installing ngrok and with these command to get the Webhook Link.

Screenshot:






Webhooks - Settings - Sudh
task1 Config [Jenkins]
New Item [Jenkins]
React App
10.0.2.15
Your Authtoken - ngrok
github.com/Sudharsunm/capstone/settings/hooks
Sudharsunm / capstone
Type / to search
Code
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
General
Access
Collaborators
Moderation options
Code and automation
Branches
Tags
Rules
Actions
Webhooks
Environments
Codespaces
Pages
Security
Code security
Deploy keys
Secrets and variables
Webhooks
Add webhook
Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our Webhooks Guide.
https://6bf6-152-58-253-163.ngrok... (push)
Last delivery was successful.
Edit
Delete
35°C
Sunny
Search
ENG
IN
17:59
20-03-2025

11) Tick the checkbox of GitHub hook trigger for GITScm polling in Jenkins.

Screenshot: