Task 2 For DevOps:

1) **Installation of Docker:**

Code:

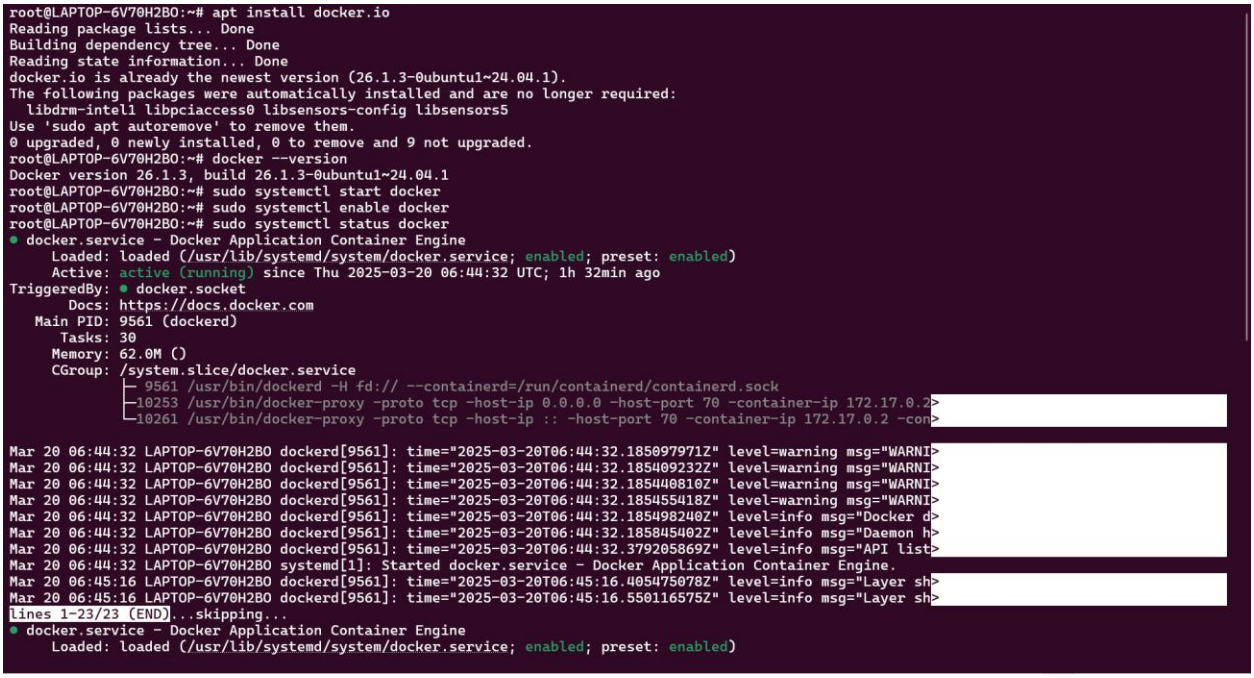
sudo apt install docker.io

docker –version

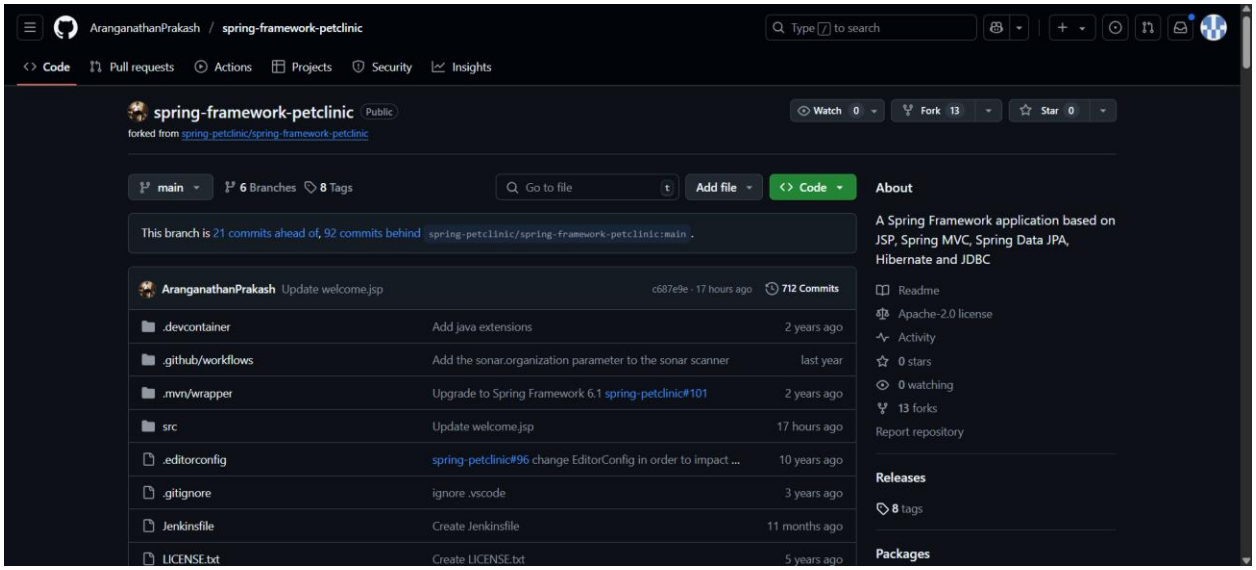
sudo systemctl start docker

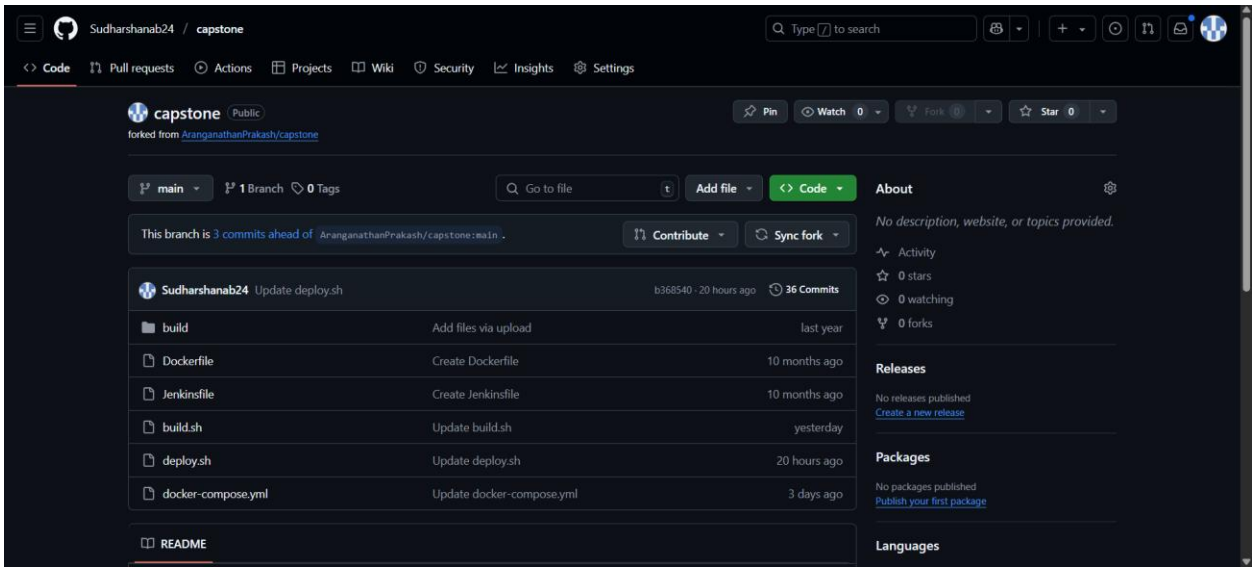
sudo systemctl status docker

sudo systemctl enable docker

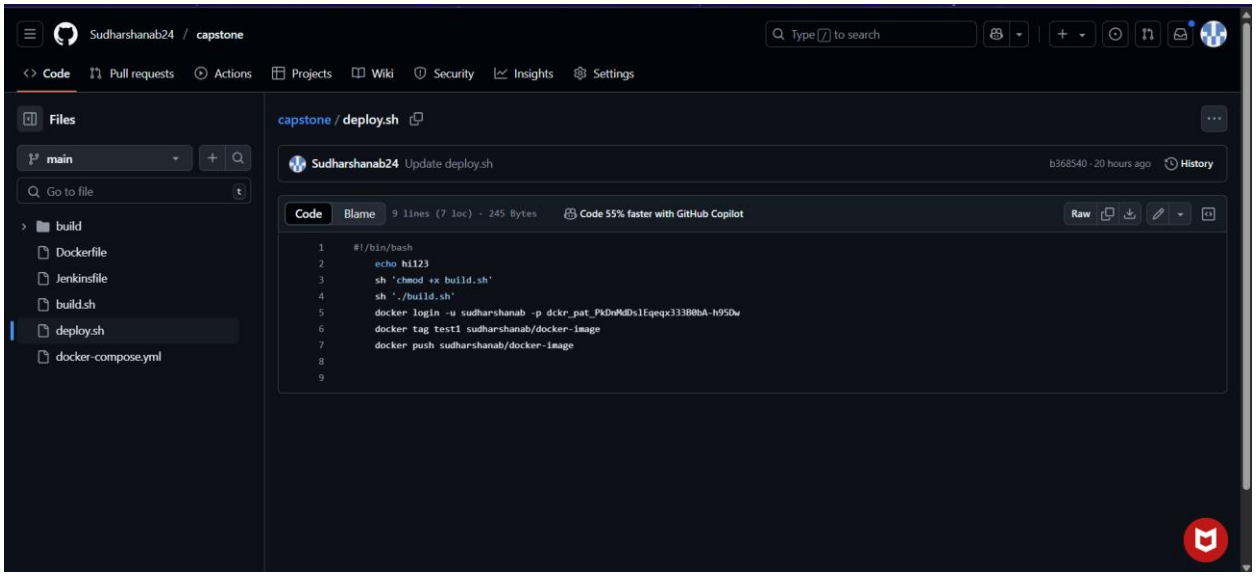


2) Fork a copy of a Github repo which contains the necessary files

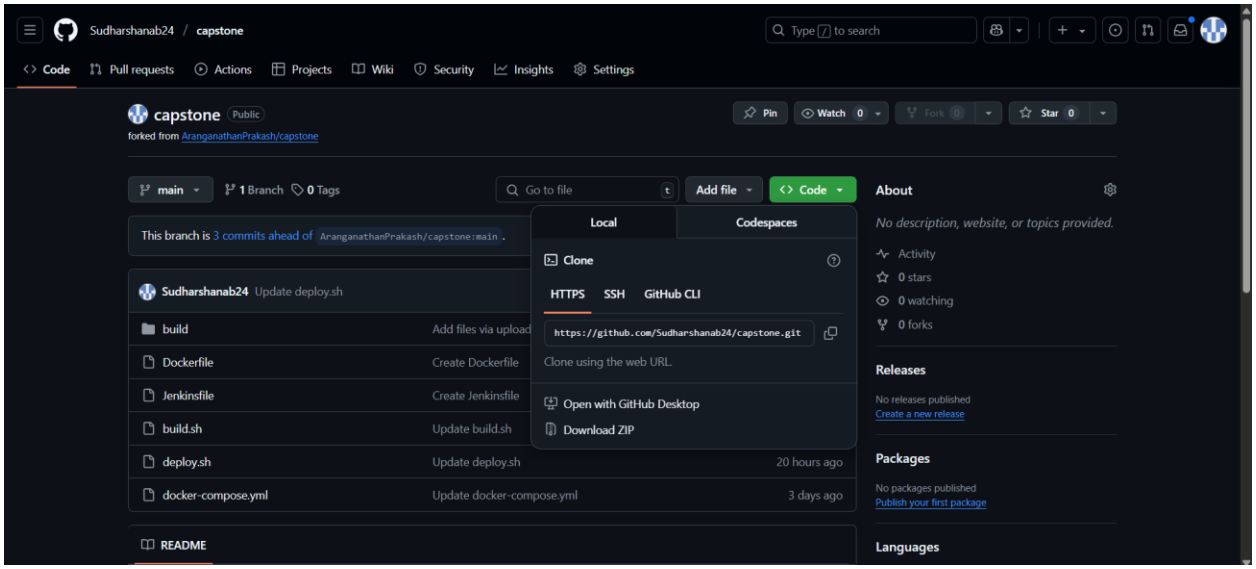




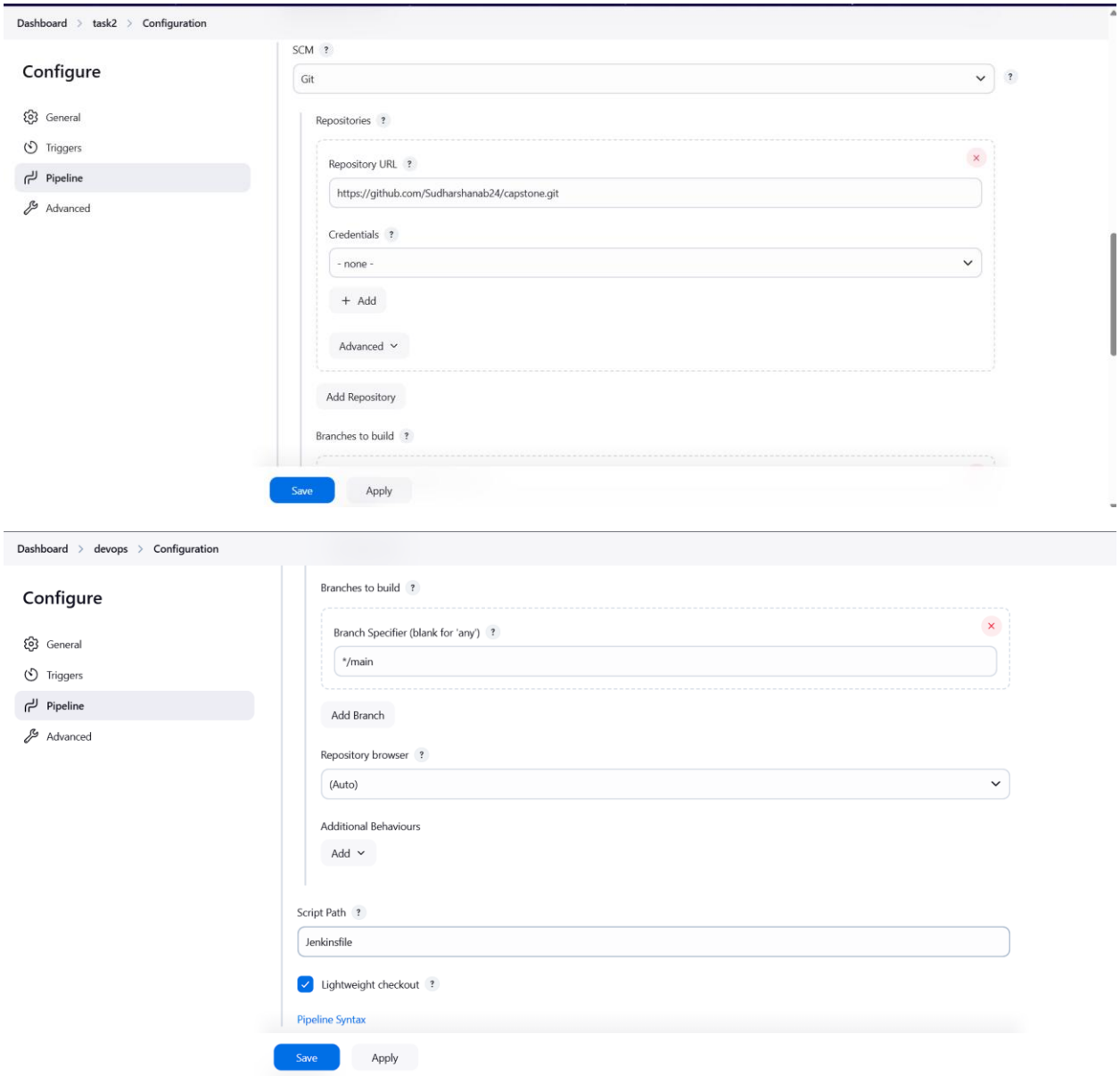
3) Then edit the deploy.sh file and enter the corresponding username and tokens



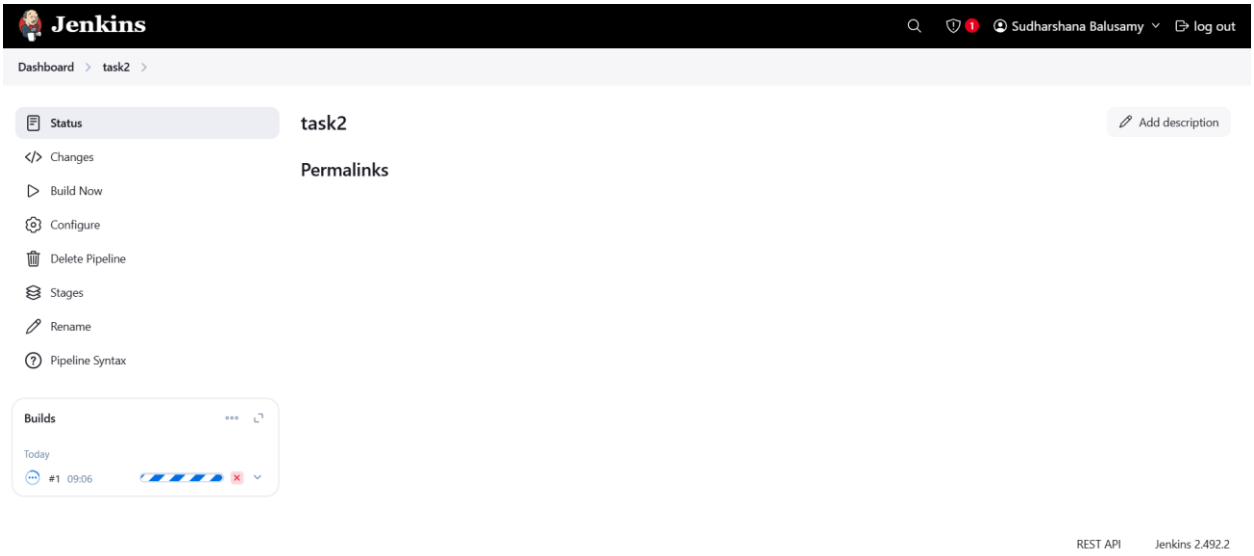
4) Copy the GitHub link of the repository and go to Jenkins to create a pipeline project



5) In Jenkins create a new item(Job) with a pipeline type and add the Git URL to the respective branch and Jenkinsfile



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



7) Now attach the desired port number to the build image

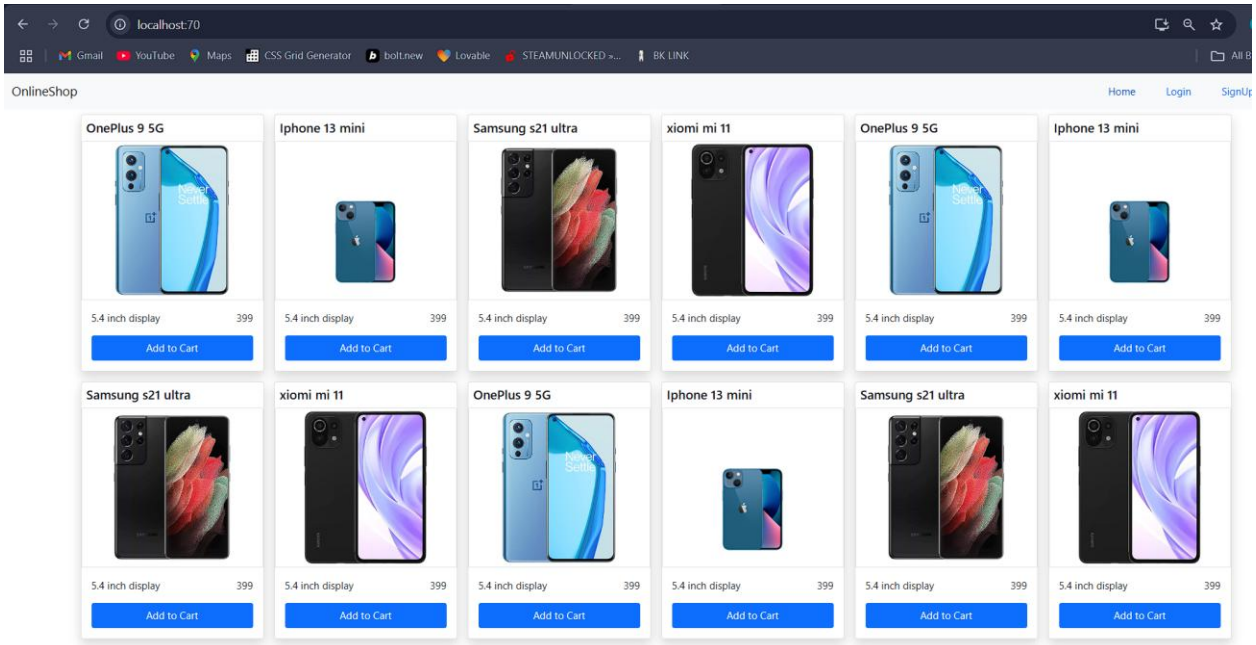
CODE:

docker images

docker build -itd -p 70:80 test1

ScreenShot:

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



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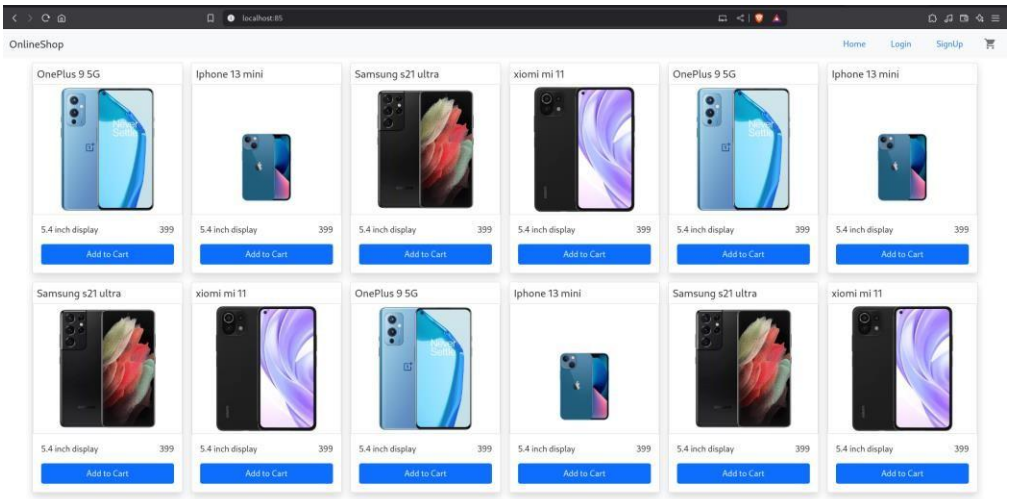
9) But, Instead of of running the image manually, we can also write the command for running in a file called docker-compose.yml

Code:

```
version: '3'

services:

  react-capstone:

    image: "test1"

    ports:

      - "85:80"
```

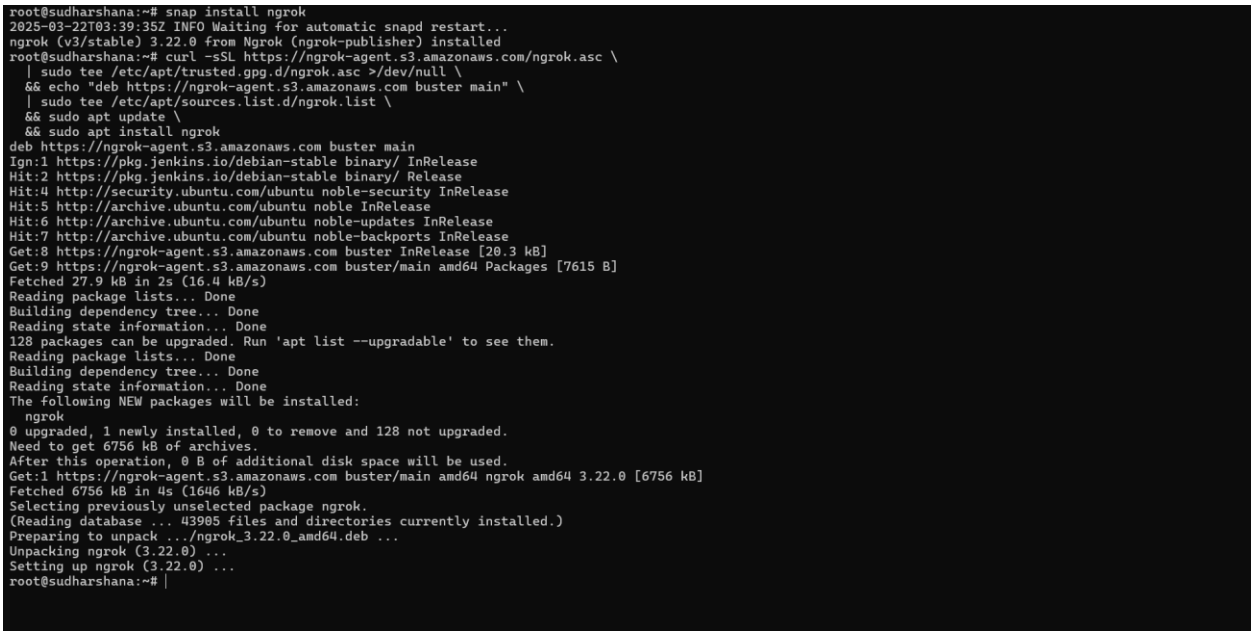
ScreenShot:



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

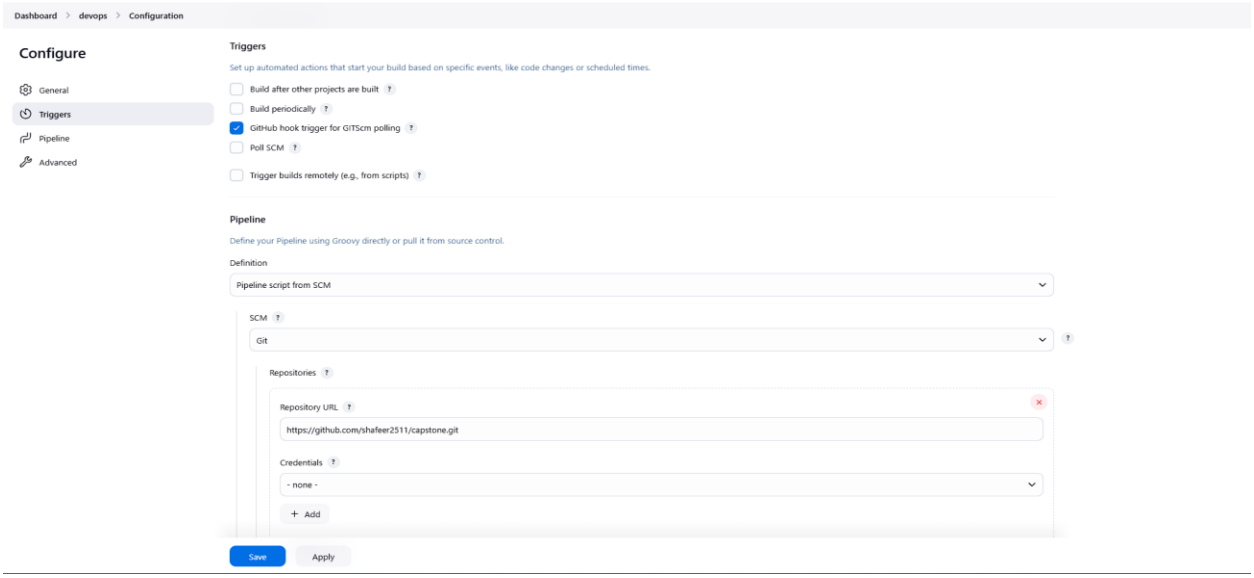
10) Adding Webhook to it which is available in GitHub for automatic build of the project.
Installing ngrok and with these command to get the Webhook Link.

ScreenShot:



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

SCREENSHOT:


Dashboard > devops > Configuration
Configure
General
Triggers
Pipeline
Advanced
Triggers
Set up automated actions that start your build based on specific events, like code changes or scheduled times.
Build after other projects are built
Build periodically
GitHub hook trigger for GITScm polling
Poll SCM
Trigger builds remotely (e.g., from scripts)
Pipeline
Define your Pipeline using Groovy directly or pull it from source control.
Definition
Pipeline script from SCM
SCM
Git
Repositories
Repository URL
https://github.com/shafeer2511/capstone.git
Credentials
- none -
Add
Save
Apply