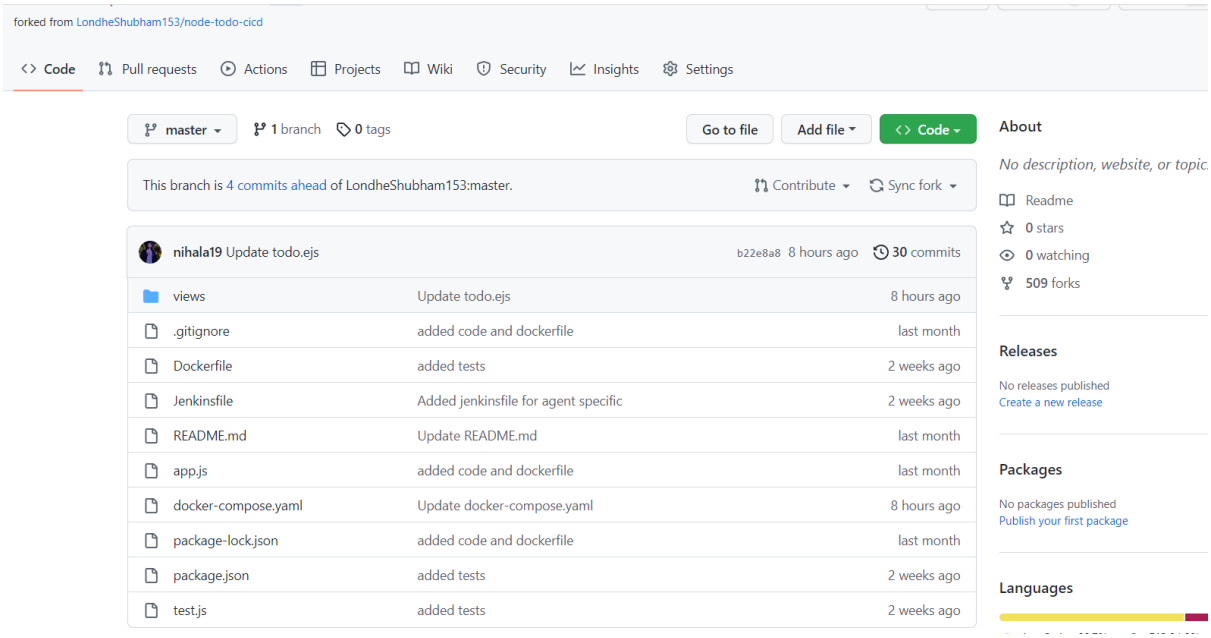
Day 24 Task: Complete Jenkins CI/CD Project:

Let's make a beautiful CI/CD Pipeline for your Node JS Application 😍

Task-01:

Fork this repository:

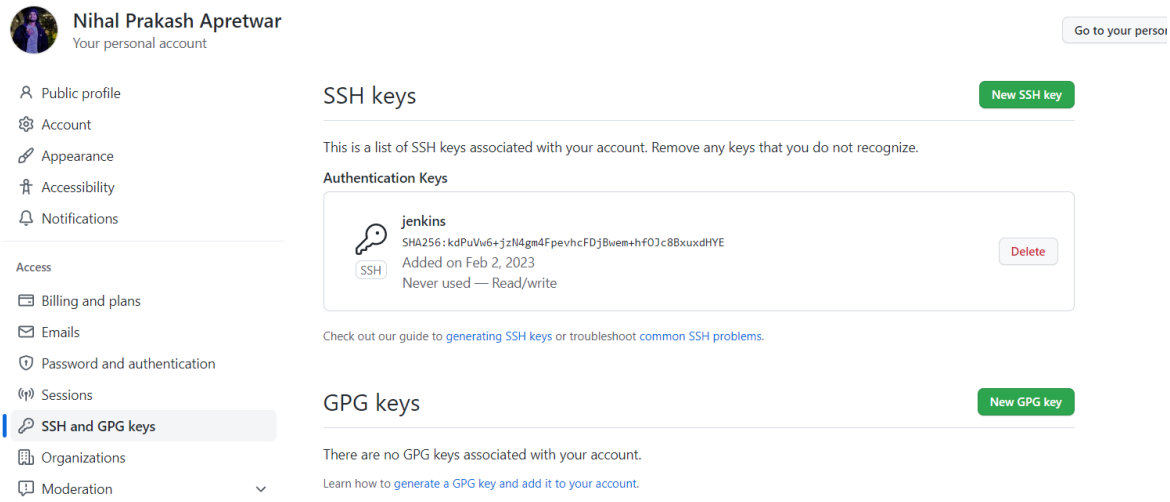


Create a connection to your Jenkins job and your GitHub Repository via GitHub Integration.

- Generate the SSH keys for integrating your Jenkins project with your git repository. Use ssh-keygen command to create public and private key.

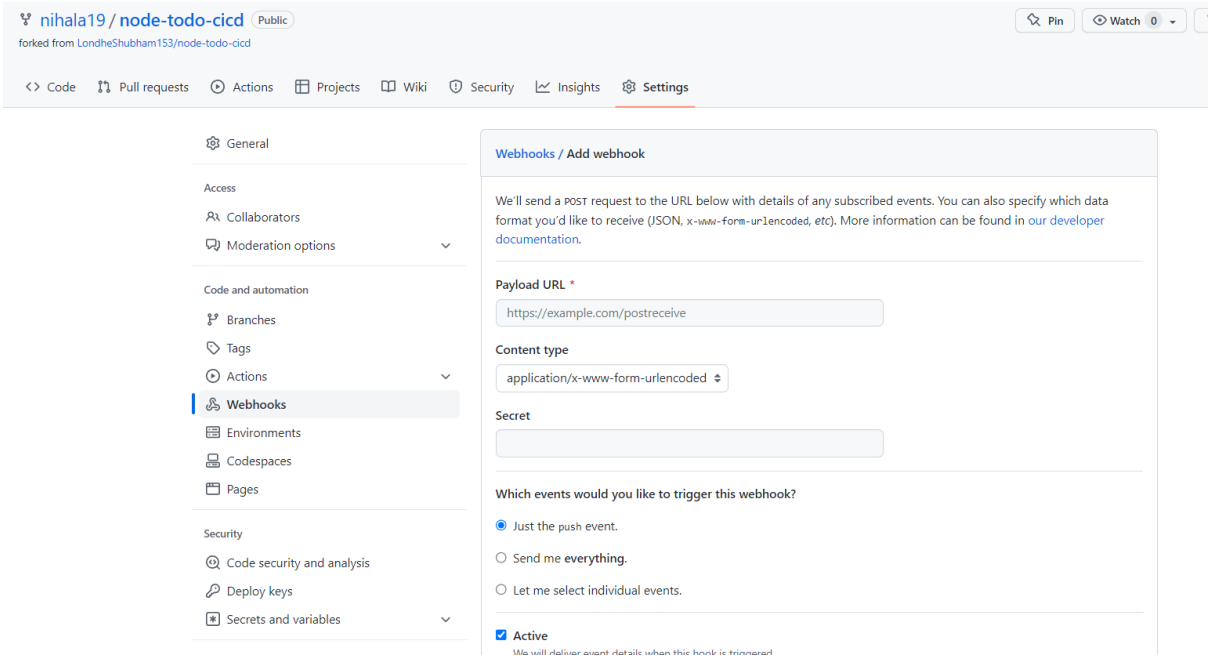
```
ubuntu@ip-172-31-55-25:~$
ubuntu@ip-172-31-55-25:~$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/home/ubuntu/.ssh/id_rsa):
/home/ubuntu/.ssh/id_rsa already exists.
Overwrite (y/n)? y
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/ubuntu/.ssh/id_rsa
Your public key has been saved in /home/ubuntu/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:shhDbylcAUPGgV7i6xdxAu98l5bDDFgD3GGBeTzyX8k ubuntu@ip-172-31-55-25
The key's randomart image is:
+---[RSA 3072]----+
|   =BO=o         |
|  +.BoB.         |
| o =.*.o . .     |
|  oo=o+.  E      |
|   +=+==S+       |
|  . +*.oX        |
| .  .o.o .       |
|  . .            |
|   .             |
+----[SHA256]-----+
ubuntu@ip-172-31-55-25:~$
ubuntu@ip-172-31-55-25:~$ cd .ssh/
ubuntu@ip-172-31-55-25:~/.ssh$ ls
authorized_keys  id_rsa  id_rsa.pub
ubuntu@ip-172-31-55-25:~/.ssh$
```

- Now, go to your GitHub account settings.
- Go to **SSH and GPG keys**, Add public key that we created using ssh-keygen and select key-type Authentication key.

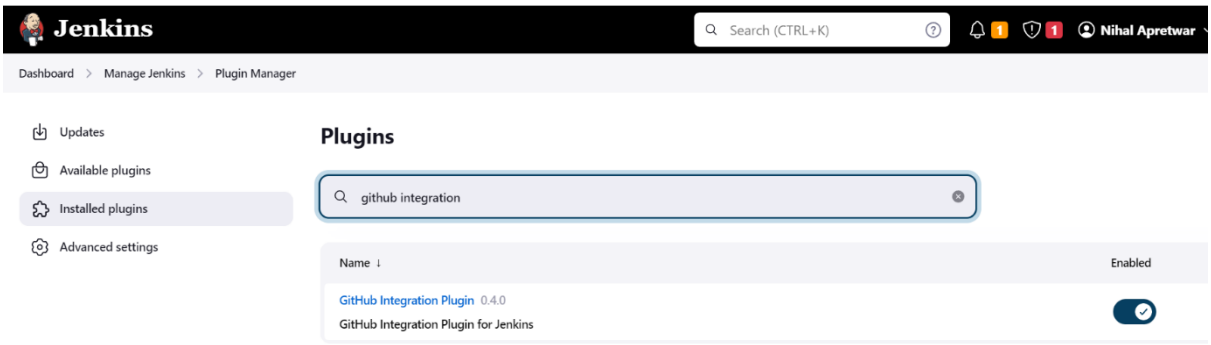


For GitHub-Webhook:

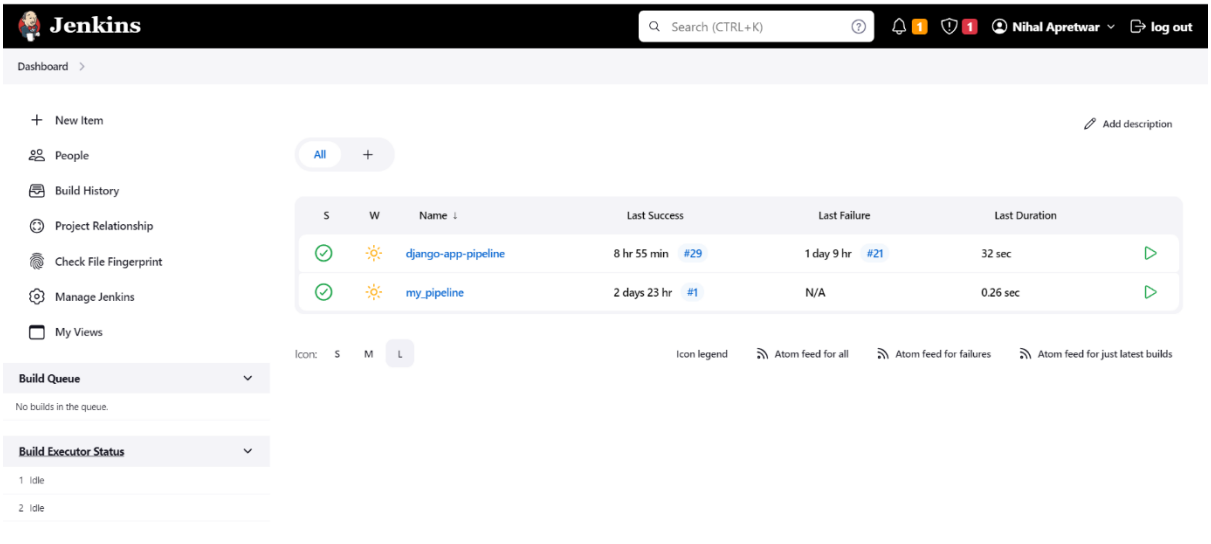
- Go to your GitHub repository and click on **Settings**.
- Click on **Webhooks** and then click on **Add webhook**.
- In the ‘Payload URL’ field, paste your Jenkins environment URL. At the end of this URL add /github-webhook/. In the ‘Content type’ select: ‘application/json’ and leave the ‘Secret’ field empty.



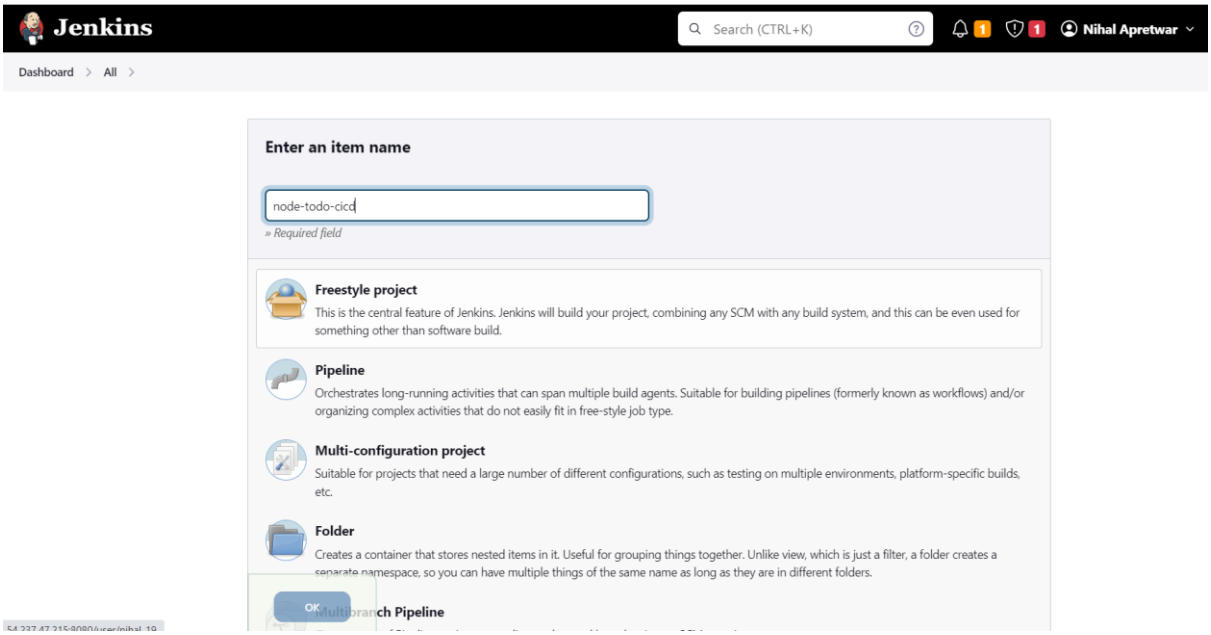
- Now for Installing GitHub Integration plugin in Jenkins
- Open your jenkins dashboard.
- Click on the Manage Jenkins button on your Jenkins dashboard
- Click on Manage Plugins
- Install GitHub Integration plugin



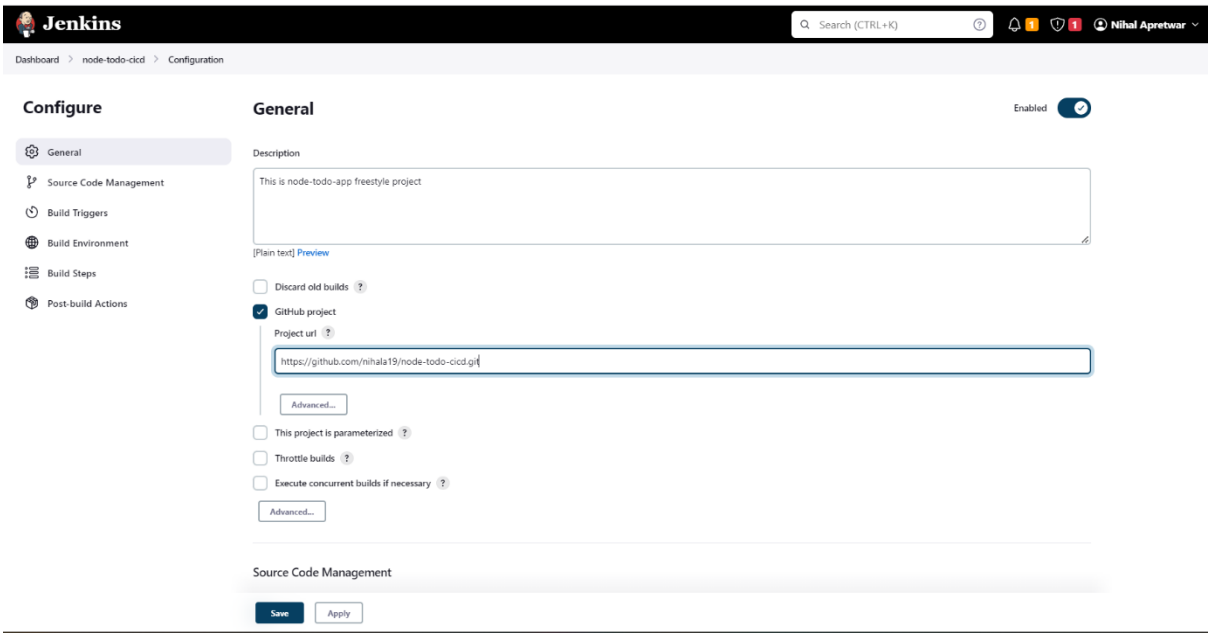
- Configuring Jenkins:
- Create a jenkins job



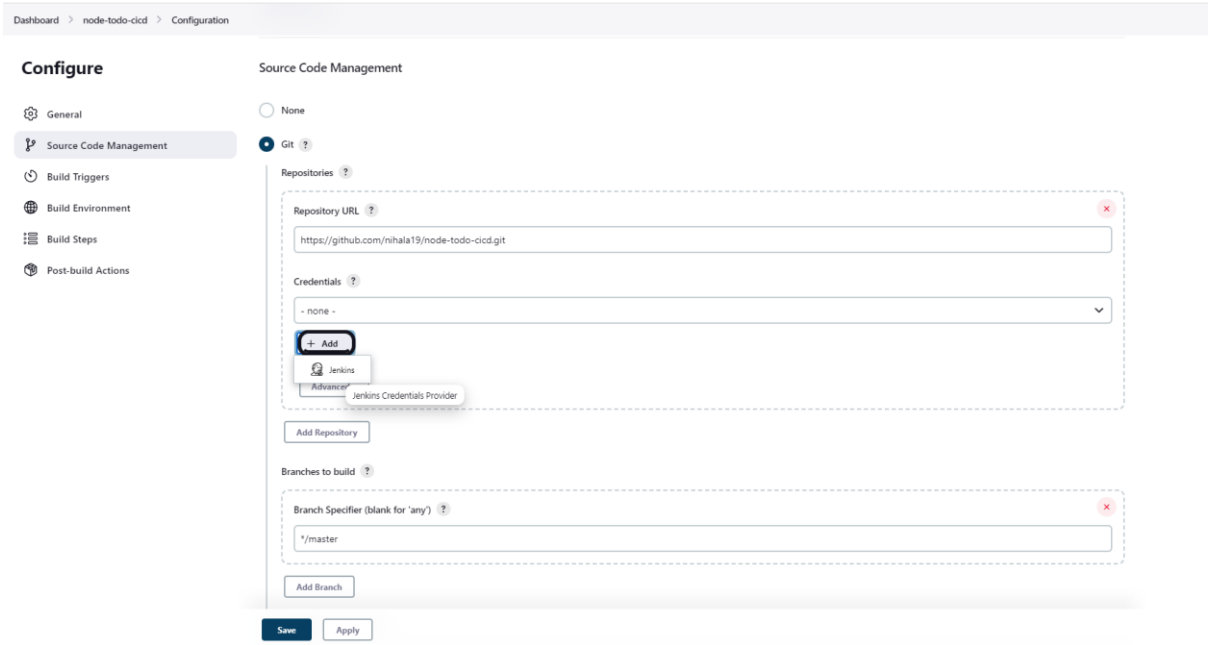
- Create node-todo-app freestyle project



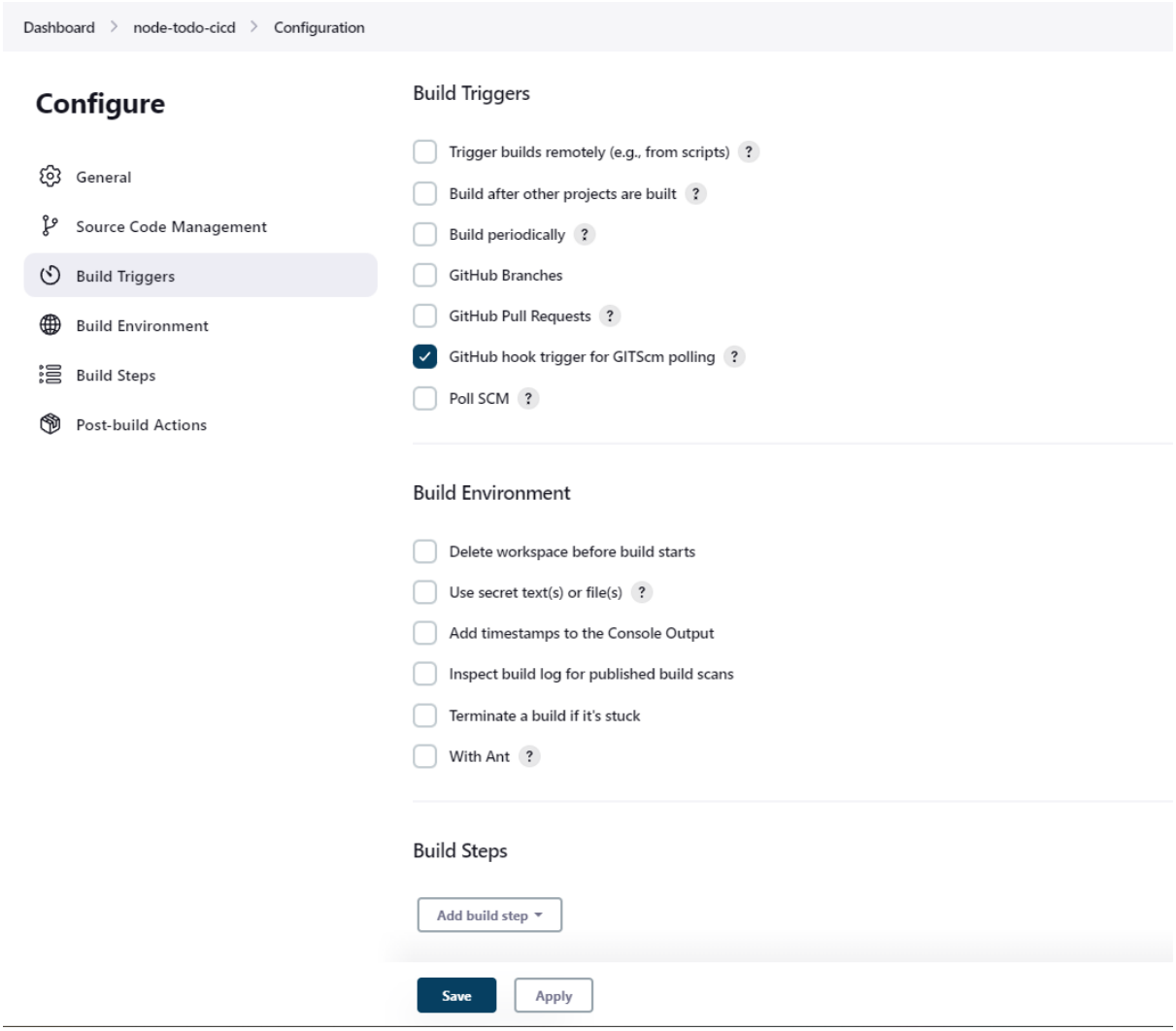
- In Configure, GitHub project URL write your project GitHub URL



- In Git, add credentials for Jenkins

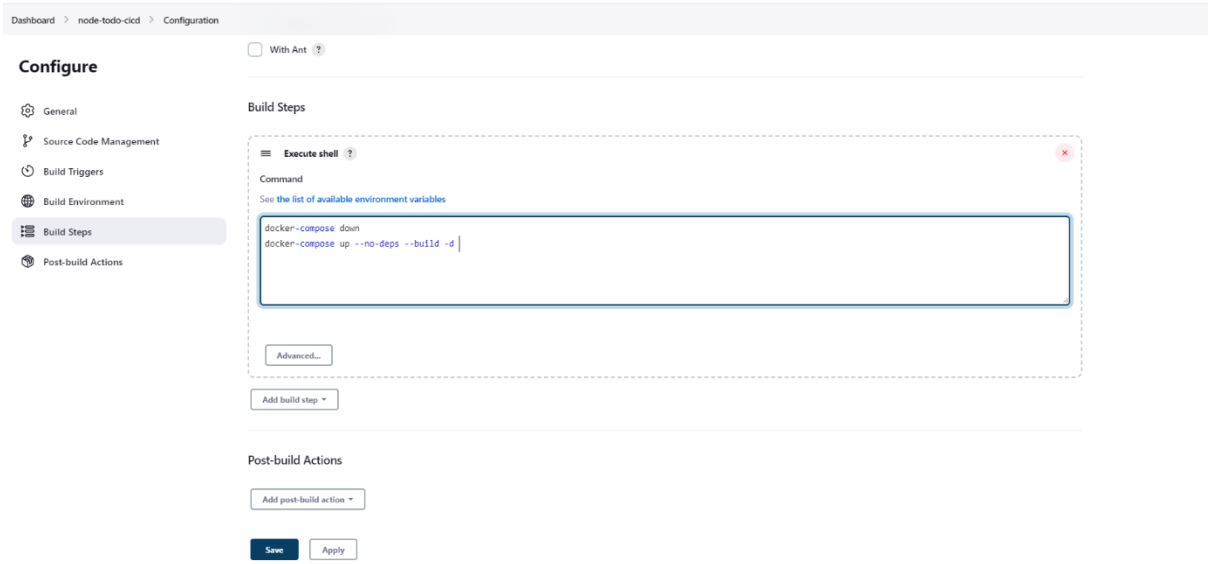


- Click on the ‘Build Triggers’ tab and then on the ‘GitHub hook trigger for GITScm polling’.

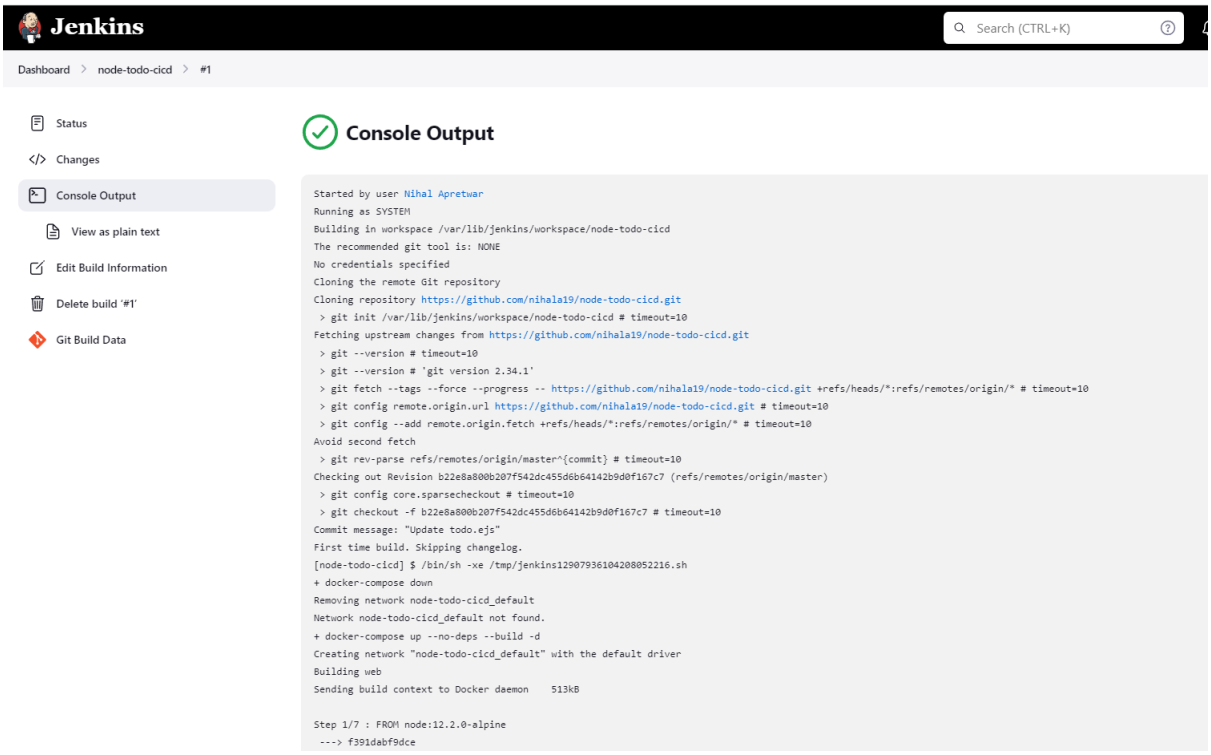


Task 2:

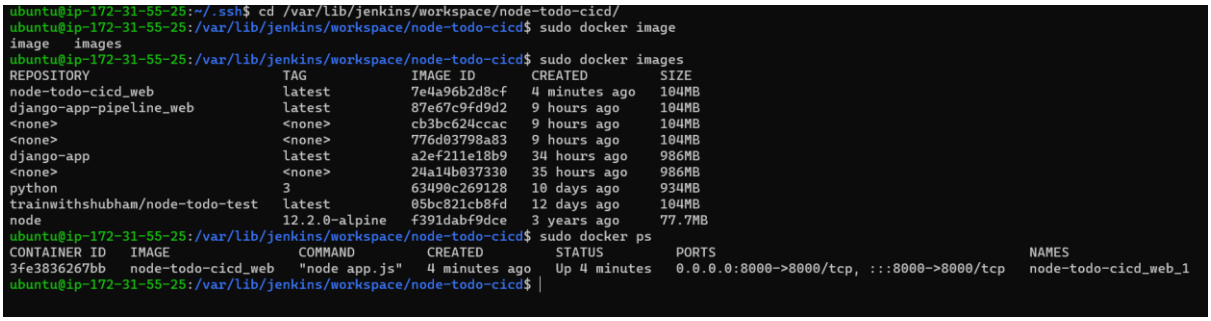
In the Execute shell run the application using Docker compose



- You will have to make a Docker Compose file for this Project
- After build you can check console output.



- Using docker ps command, you can see container is created.



- Browse public IP address with port no.8000

Thank you for reading!

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