

## Devops Project - 1

1. Install the necessary software on the machines using a configuration management tool.

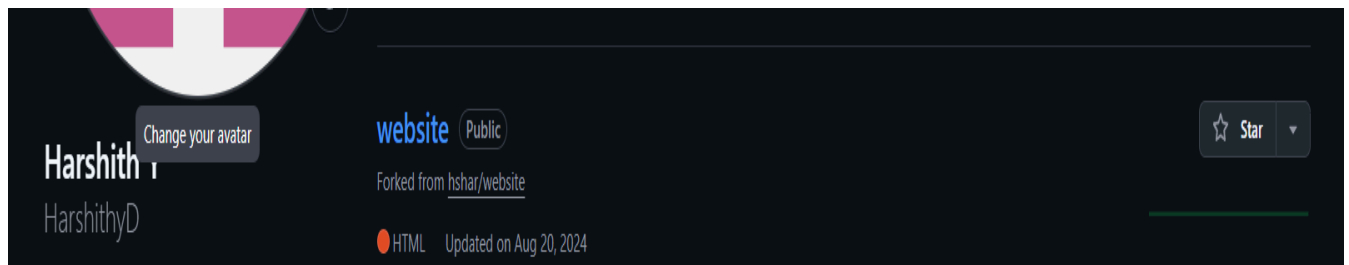
```
---
- name: task for master
  hosts: localhost
  become: true
  tasks:
    - name: executing script on master
      script: master.sh

- name: task for slave
  hosts: slave
  become: true
  tasks:
    - name: executing script on slave
      script: slave.sh
```

```
ubuntu@ip-172-31-15-45:~$ jenkins --version
2.498
ubuntu@ip-172-31-15-45:~$ java --version
openjdk 17.0.14 2025-01-21
OpenJDK Runtime Environment (build 17.0.14+7-Ubuntu-122.04.1)
OpenJDK 64-Bit Server VM (build 17.0.14+7-Ubuntu-122.04.1, mixed mode, sharing)
```

```
ubuntu@ip-172-31-0-151:~$ docker --version
Docker version 26.1.3, build 26.1.3-0ubuntu1~22.04.1
ubuntu@ip-172-31-0-151:~$ java --version
openjdk 11.0.26 2025-01-21
OpenJDK Runtime Environment (build 11.0.26+4-post-Ubuntu-1ubuntu122.04)
OpenJDK 64-Bit Server VM (build 11.0.26+4-post-Ubuntu-1ubuntu122.04, mixed mode, sharing)
```

2. Git Workflow has to be implemented



3.Code Build should automatically be triggered once commit is made to master branch or develop branch. If commit is made to master branch, test and push to prod If commit is made to develop branch, just test the product, do not push to prod

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

Built-In Node

0/2

slave1

0/1

slave2

0/1

All

+

S	W	Name	Last Success
✓	☀	Job1	4 min 53 sec #1
✓	☀	Job2	3 min 25 sec #1
✓	☀	Job3	2 min 26 sec #1

Icons: S M L

☐ Execute concurrent builds if necessary ?

☒ Restrict where this project can be run ?

Label Expression ?

slave2

Label slave2 matches 1 node. Permissions or other restrictions may apply

Advanced ?

Git ?

Repositories ?

Repository URL ?

https://github.com/HarshithyD/website.git

Credentials ?

ubuntu

+ Add

Advanced ?

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/develop

Add Branch

None

Git ?

Repositories ?

Repository URL ?

https://github.com/HarshithyD/website.git

Credentials ?

ubuntu

+ Add

Advanced ?

Add Repository

Branches to build ?

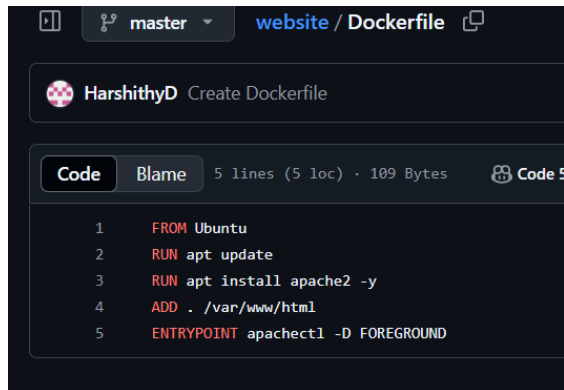
Branch Specifier (blank for 'any') ?

\*/master

4. The Code should be containerized with the help of a Dockerfile. The Dockerfile should be built every time there is a push to Git-Hub.

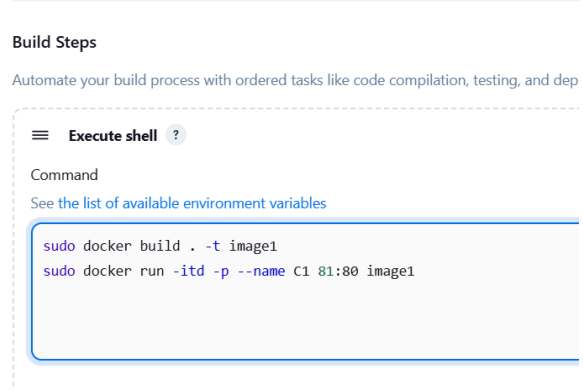
Use the following pre-built container for your application: hshar/webapp

The code should reside in '/var/www/html'



The screenshot shows a code editor with a dark theme. At the top, there's a header with 'master' and 'website / Dockerfile'. Below that, a user profile for 'HarshithyD' is visible. The main area shows a Dockerfile with 5 lines of code:

```
1 FROM Ubuntu
2 RUN apt update
3 RUN apt install apache2 -y
4 ADD . /var/www/html
5 ENTRYPOINT apache2l -D FOREGROUND
```



This section shows the 'Build Steps' for a Docker image. It includes a description: 'Automate your build process with ordered tasks like code compilation, testing, and dep'. Below this, there's a section for 'Execute shell' with a command box containing:

```
sudo docker build . -t image1
sudo docker run -itd -p 81:80 --name C1 image1
```



GitHub



Hello world!



Hello world!

