```
# Install Docker Compose
sudo apt install docker-compose -y

# Download the latest version of Docker Compose
sudo curl -L "https://github.com/docker/compose/releases/latest/download/docker-compose-$(uname -s)-$(uname -m)" -o /usr/local/bin/docker-compose

# Make Docker Compose executable
sudo chmod +x /usr/local/bin/docker-compose

# Check Docker Compose version
docker-compose --version

# Example docker-compose.yml file
version: '3'

services:
  web:
    image: nginx:latest
    ports:
      - 80:80

  db:
    image: mysql:latest
    environment:
      - MYSQL_ROOT_PASSWORD=secret

# Start services using Docker Compose
docker-compose up -d

# Execute a shell inside the database container
```

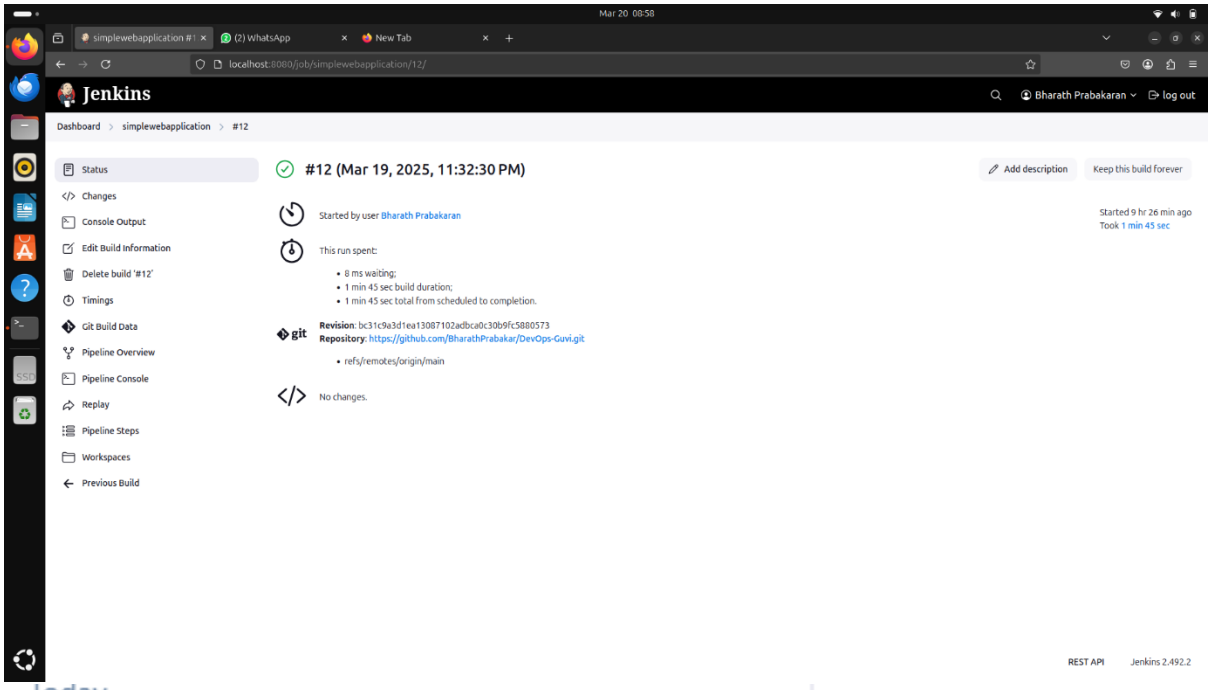
```
docker exec -it david-db-1 /bin/bash

# Access MySQL inside the container
mysql -u root -p
```

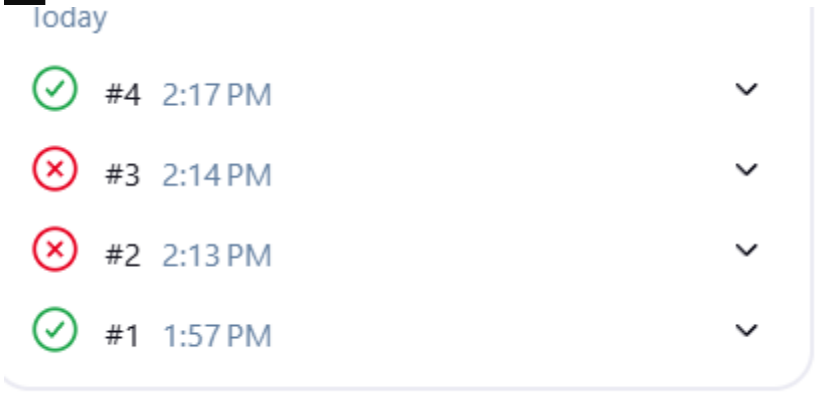
DOCKER:

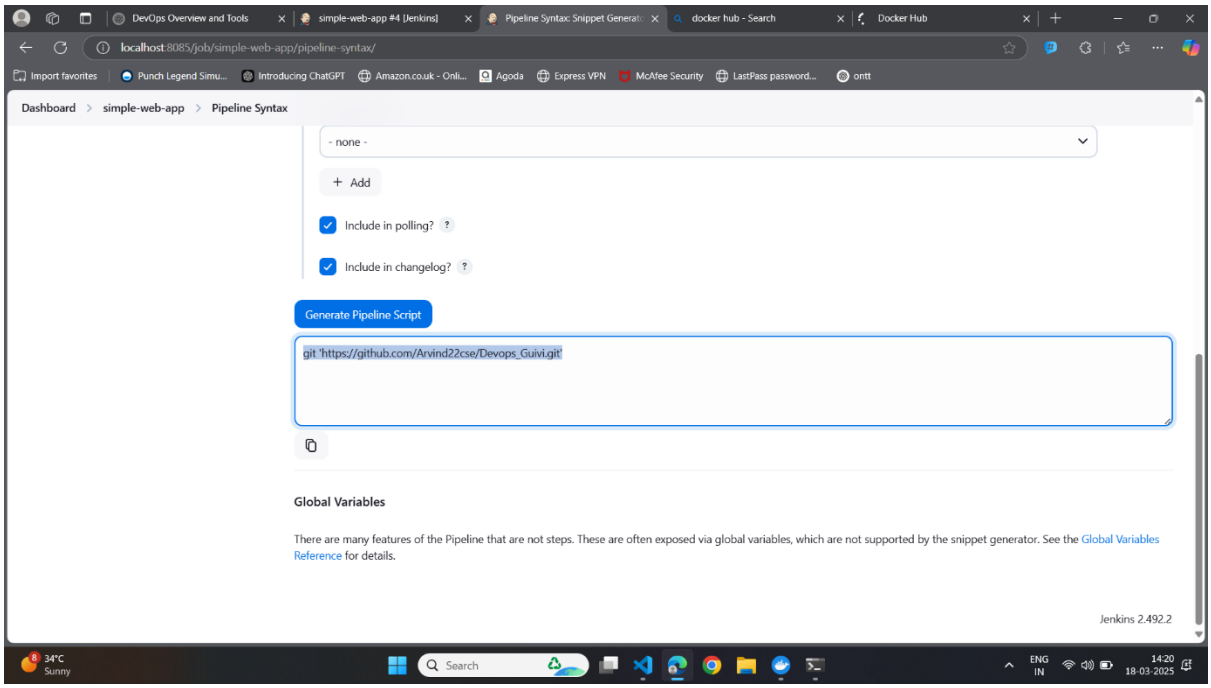
```
# Install Docker
sudo apt install docker.io -y

# Restart Docker service
sudo service docker restart

# Check Docker status
sudo service docker status

# Add current user to the Docker group
sudo usermod -aG docker $USER

# Verify Docker installation
docker images
docker ps

# Fix permission issues with Docker socket
sudo chmod 666 /var/run/docker.sock
```

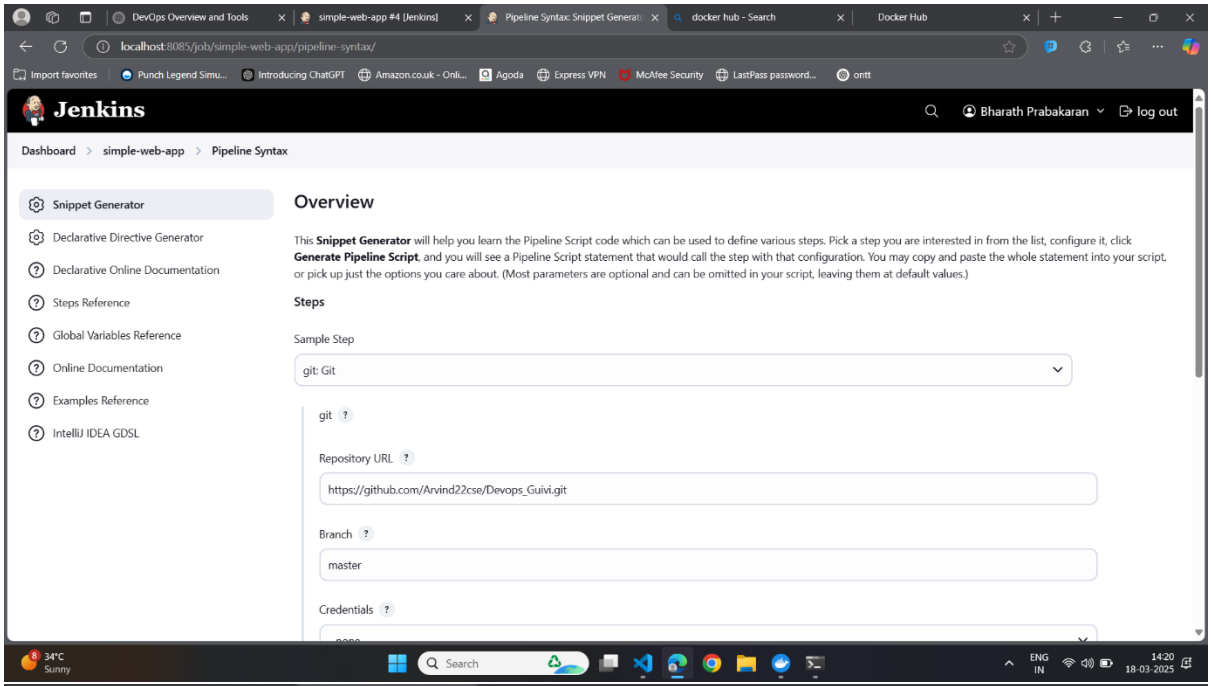
```
# Download kubectl
curl -LO https://dl.k8s.io/release/v1.32.0/bin/linux/amd64/kubectl

# Install kubectl with correct permissions
```

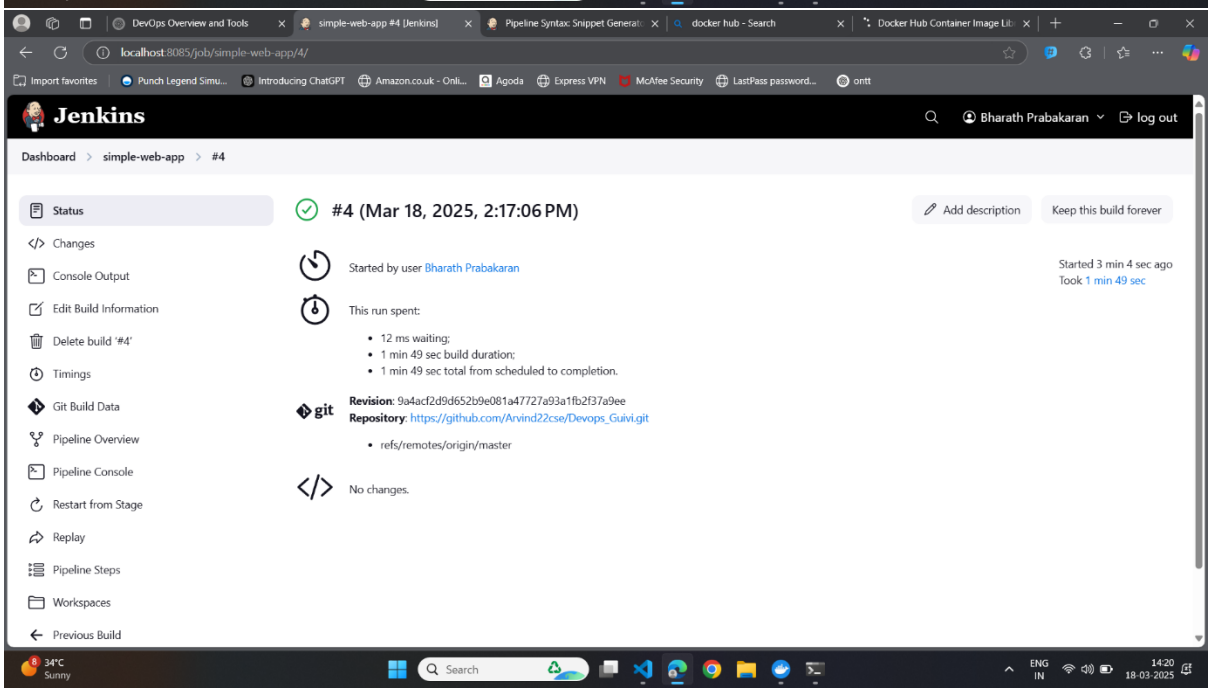
```
sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl


# Make kubectl executable
chmod +x kubectl


# Create a local bin directory if it doesn't exist
mkdir -p ~/.local/bin


# Move kubectl to the local bin directory
mv ./kubectl ~/.local/bin/kubectl


# Verify kubectl installation
kubectl version --client
```

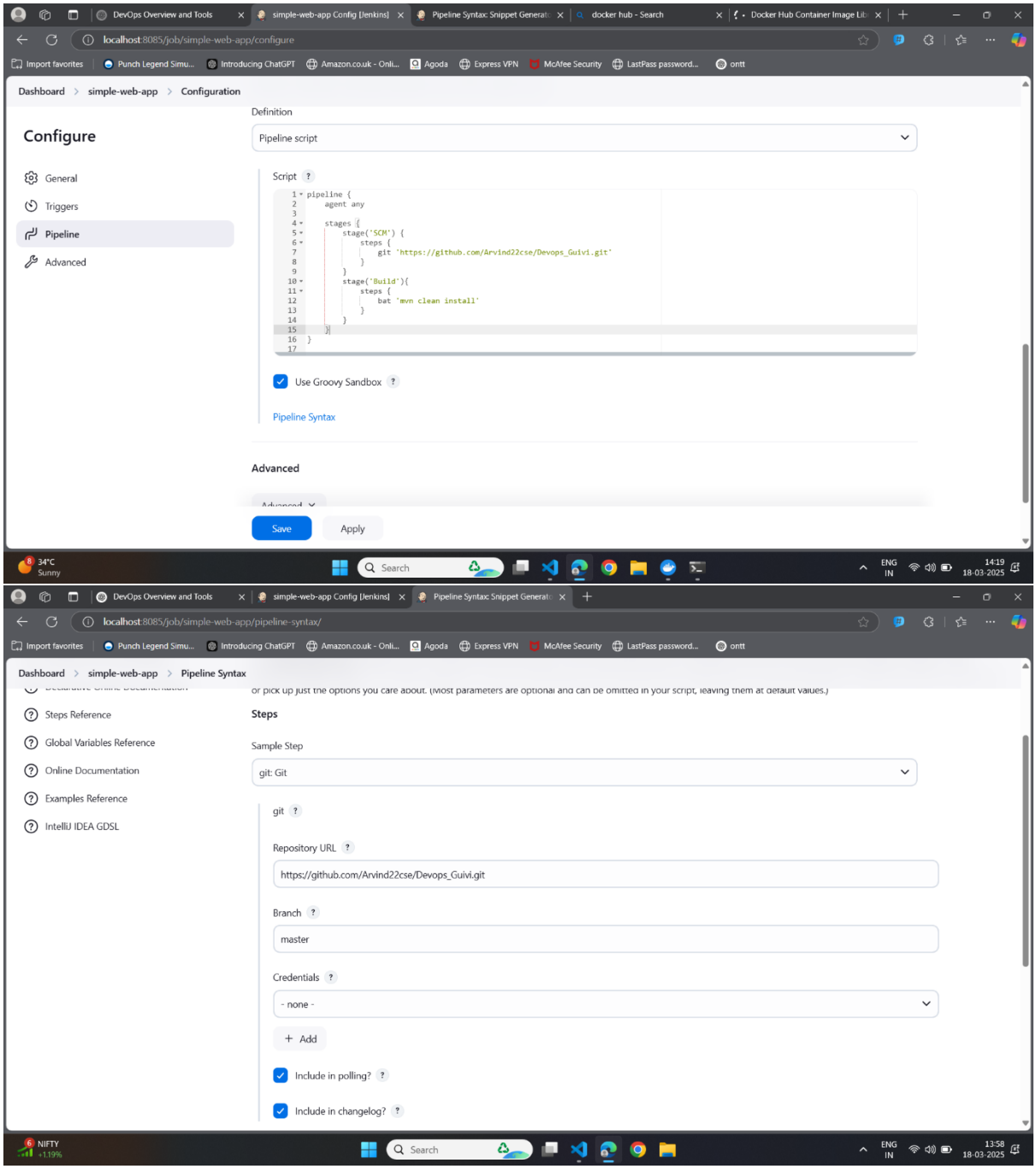

Jenkins
Bharath Prabakaran
log out
Dashboard
simplewebapplication
#12
Status
Changes
Console Output
Edit Build Information
Delete build '#12'
Timings
Git Build Data
Pipeline Overview
Pipeline Console
Replay
Pipeline Steps
Workspaces
Previous Build
#12 (Mar 19, 2025, 11:32:30 PM)
Add description
Keep this build forever
Started by user Bharath Prabakaran
Started 9 hr 26 min ago
Took 1 min 45 sec
This run spent:
8 ms waiting;
1 min 45 sec build duration;
1 min 45 sec total from scheduled to completion.
Revision: bc31c9a3d1ea13087102adbca0c30b9fc5880573
Repository: https://github.com/BharathPrabakar/DevOps-Guvi.git
refs/remotes/origin/main
No changes.
REST API
Jenkins 2.492.2


Today
#4 2:17 PM
#3 2:14 PM
#2 2:13 PM
#1 1:57 PM

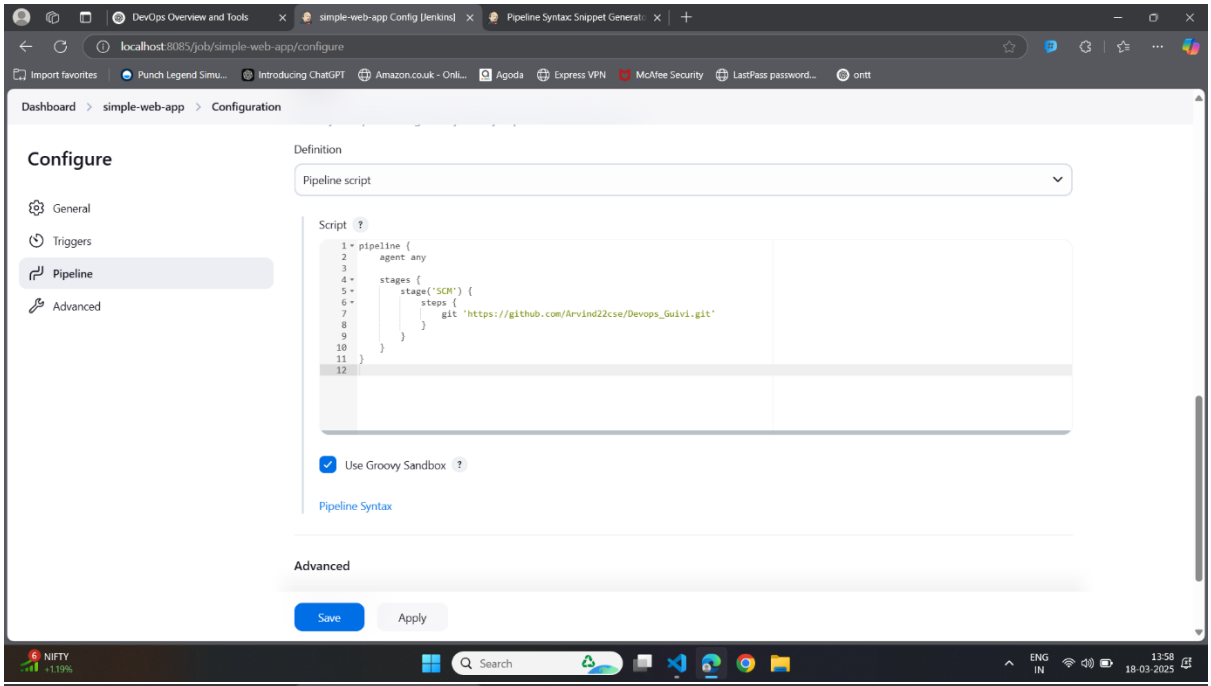

DevOps Overview and Tools
simple-web-app #4 [Jenkins]
Pipeline Syntax: Snippet Generator
docker hub - Search
Docker Hub
localhost:8085/job/simple-web-app/pipeline-syntax/
Dashboard
simple-web-app
Pipeline Syntax
- none -
Add
Include in polling?
Include in changelog?
Generate Pipeline Script
git 'https://github.com/Arvind22cse/Devops_Guivi.git'
Global Variables
There are many features of the Pipeline that are not steps. These are often exposed via global variables, which are not supported by the snippet generator. See the Global Variables Reference for details.
Jenkins 2.492.2
34°C
Sunny
Search
ENG
IN
14:20
18-03-2025

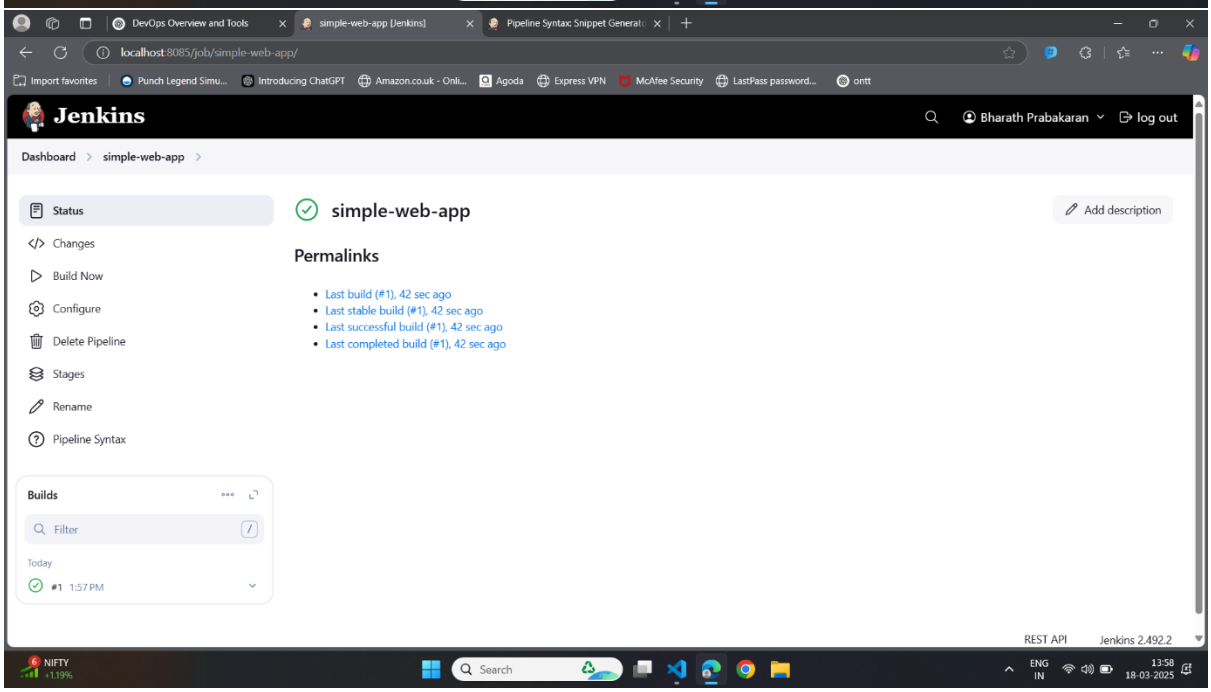

DevOps Overview and Tools
simple-web-app #4 [Jenkins]
Pipeline Syntax: Snippet Generator
docker hub - Search
Docker Hub
localhost:8085/job/simple-web-app/pipeline-syntax/
Jenkins
Bharath Prabakaran
log out
Dashboard > simple-web-app > Pipeline Syntax
Snippet Generator
Declarative Directive Generator
Declarative Online Documentation
Steps Reference
Global Variables Reference
Online Documentation
Examples Reference
IntelliJ IDEA GDSL
Overview
This Snippet Generator will help you learn the Pipeline Script code which can be used to define various steps. Pick a step you are interested in from the list, configure it, click Generate Pipeline Script, and you will see a Pipeline Script statement that would call the step with that configuration. You may copy and paste the whole statement into your script, or pick up just the options you care about. (Most parameters are optional and can be omitted in your script, leaving them at default values.)
Steps
Sample Step
git: Git
git
Repository URL
https://github.com/Arvind22cse/Devops_Guivi.git
Branch
master
Credentials

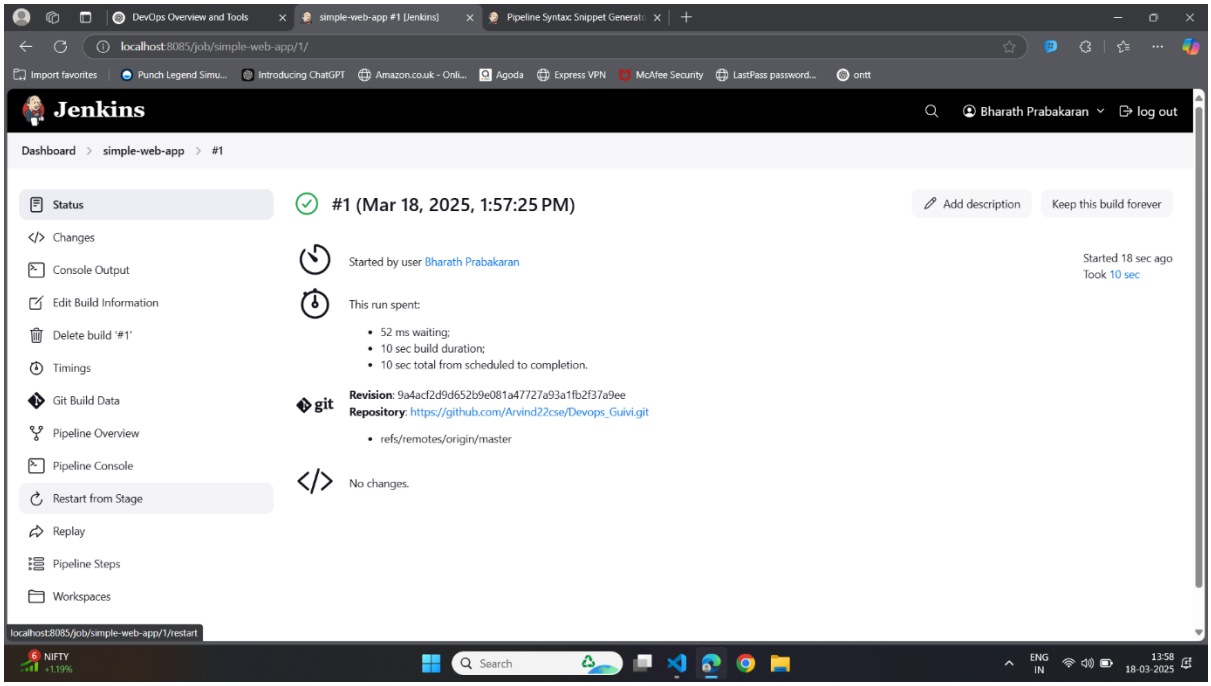

DevOps Overview and Tools
simple-web-app #4 [Jenkins]
Pipeline Syntax: Snippet Generator
docker hub - Search
Docker Hub Container Image Lib
localhost:8085/job/simple-web-app/4/
Jenkins
Bharath Prabakaran
log out
Dashboard > simple-web-app > #4
Status
Changes
Console Output
Edit Build Information
Delete build '#4'
Timings
Git Build Data
Pipeline Overview
Pipeline Console
Restart from Stage
Replay
Pipeline Steps
Workspaces
Previous Build
#4 (Mar 18, 2025, 2:17:06 PM)
Add description
Keep this build forever
Started by user Bharath Prabakaran
Started 3 min 4 sec ago
Took 1 min 49 sec
This run spent:
12 ms waiting;
1 min 49 sec build duration;
1 min 49 sec total from scheduled to completion.
Revision: 9a4acf2d9d652b9e081a47727a93a1fb2f37a9ee
Repository: https://github.com/Arvind22cse/Devops_Guivi.git
refs/remotes/origin/master
No changes.


DevOps Overview and Tools
simple-web-app Config [Jenkins]
Pipeline Syntax: Snippet Generator
docker hub - Search
Docker Hub Container Image Lib
localhost:8085/job/simple-web-app/configure
Dashboard > simple-web-app > Configuration
Configure
General
Triggers
Pipeline
Advanced
Definition
Pipeline script
Script
pipeline {
agent any
stages {
stage('SCM') {
steps {
git 'https://github.com/Arvind22cse/Devops_Guivi.git'
}
}
stage('Build'){
steps {
bat 'mvn clean install'
}
}
}
}
Use Groovy Sandbox
Pipeline Syntax
Advanced
Save
Apply
34°C
Sunny
Search
ENG
IN
14:19
18-03-2025

DevOps Overview and Tools
simple-web-app Config [Jenkins]
Pipeline Syntax: Snippet Generator
localhost:8085/job/simple-web-app/pipeline-syntax/
Dashboard > simple-web-app > Pipeline Syntax
Steps Reference
Global Variables Reference
Online Documentation
Examples Reference
IntelliJ IDEA GDSL
Steps
Sample Step
git: Git
git
Repository URL
https://github.com/Arvind22cse/Devops_Guivi.git
Branch
master
Credentials
- none -
Add
Include in polling?
Include in changelog?
NIFTY
+1.19%
Search
ENG
IN
13:58
18-03-2025


DevOps Overview and Tools
simple-web-app Config [Jenkins]
Pipeline Syntax Snippet Generat
localhost:8085/job/simple-web-app/configure
Dashboard > simple-web-app > Configuration
Configure
General
Triggers
Pipeline
Advanced
Definition
Pipeline script
Script
pipeline {
agent any
stages {
stage('SCM') {
steps {
git 'https://github.com/Arvind22cse/Devops_Guivi.git'
}
}
}
}
Use Groovy Sandbox
Pipeline Syntax
Advanced
Save
Apply


DevOps Overview and Tools
simple-web-app [Jenkins]
Pipeline Syntax Snippet Generat
localhost:8085/job/simple-web-app/
Jenkins
Bharath Prabakaran
log out
Dashboard > simple-web-app >
Status
Changes
Build Now
Configure
Delete Pipeline
Stages
Rename
Pipeline Syntax
Builds
Filter
Today
#1 1:57 PM
simple-web-app
Add description
Permalinks
Last build (#1), 42 sec ago
Last stable build (#1), 42 sec ago
Last successful build (#1), 42 sec ago
Last completed build (#1), 42 sec ago
REST API
Jenkins 2.492.2


DevOps Overview and Tools
simple-web-app #1 [Jenkins]
Pipeline Syntax Snippet Generat
localhost:8085/job/simple-web-app/1/
Import favorites
Punch Legend Simu...
Introducing ChatGPT
Amazon.co.uk - Onli...
Agoda
Express VPN
McAfee Security
LastPass password...
ontt
Jenkins
Bharath Prabakaran
log out
Dashboard
simple-web-app
#1
Status
Changes
Console Output
Edit Build Information
Delete build '#1'
Timings
Git Build Data
Pipeline Overview
Pipeline Console
Restart from Stage
Replay
Pipeline Steps
Workspaces
#1 (Mar 18, 2025, 1:57:25 PM)
Add description
Keep this build forever
Started by user Bharath Prabakaran
Started 18 sec ago
Took 10 sec
This run spent:
52 ms waiting;
10 sec build duration;
10 sec total from scheduled to completion.
Revision: 9a4acf2d9d652b9e081a47727a93a1fb2f37a9ee
Repository: https://github.com/Arvind22cse/Devops_Guivi.git
refs/remotes/origin/master
No changes.
localhost:8085/job/simple-web-app/1/restart
NIFTY
+1.19%
Search
ENG
IN
13:58
18-03-2025