Jenkins Pipeline

--> It is a way to define CI CD process as a code

--> CI CD workflow will be defined as a code in Jenkins pipeline and whenever we are dealing with complex CI/CD process it is highly recommended to go with Jenkins pipeline concept

Pipeline contains stages to perform CI CD

--> Clone Git Repo

--> Build that project with Maven

--> Review the code with tools (SonarQube)

--> Artifact upload using Nexus

--> Build Docker image

--> Add into the Docker hub

--> Push Docker image into registry

--> Deploy App in K8s

We are going to automate the entire CI/CD pipeline using two approaches:

1. Declarative pipeline

pipeline {

agents any ---> where we want to execute our job

tools {

maven “maven.3.9”

}

stages {

// 3 operations I am performing

// cloning the code

// building the project

// reviewing the code

// uploading using Nexus etc

stage (‘Git Clone’){

steps {

echo ‘cloning git repo…’

}

}

stage (‘Maven Build’){

steps {

echo ‘project build with Maven’

}

}

stage (‘Deploy’){

steps {

echo ‘deploying application with Tomcat’

}

}

}

}

1. Scripted pipeline (Groovy)

22.00

Start JenkinsServer and Slave

