Experiment -2

(Creating a Jenkins Pipeline with a Jenkins File)

Objective: Create a Jenkins pipeline using a Jenkins file that builds a simple project, runs tests, and deploys the project to a designed environment.

1. Create a simple maven Project (the same one used in Experiment -1) and push the project to GitHub.

2. Create a Jenkins file and push it to GitHub repo (in the root dir) Note: the following Jenkins file includes stages associated with maven project

```
pipeline {
        agent any
        tools {
        maven 'MAVEN_HOME'
        }
        stages {
                stage('Stage1: Hello Clean Stage 1') {
                        steps {
                                bat 'mvn clean'
                        }
                }
                stage ('Stage 2: Test Stage') {
                        steps {
                                bat 'mvn test'
                        }
                }
                stage ('Stage 3: My Package'){
                        steps {
                                bat 'mvn package'
                        }
                }
                stage ('Stage 4: My Final Build Stage'){
                        steps {
                                bat 'mvn install'
                        }
                }
                stage ('Stage Final: Build Success'){
                        steps {
                                echo  'Build Success!'
                        }
                }
        }
}
```

3. Create a Jenkins Pipeline CONFIGURATION:

4. Select pipeline Script from SCM (git) and provide GitHub repo URL.

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/ghanshree2310/CICD-LAB-3-4

5. Provide the Jenkins file path (path in the repo) in the Script Path.

Script Path ?

Jenkinsfile

☑ Lightweight checkout ?

Pipeline Syntax

6. Now if we make any changes to the GitHub repo and push it, it will trigger a new pipeline build.

Declarative: Checkout SCM	Declarative: Tool Install	Stage 1 : Clean Stage	Stage 2 : test Stage	Stage 3 : Install stage	Stage Final : Build Sucess
2s	172ms	4s	4s	4s	255ms
2s	172ms	4s	4s	4s	255ms