

# **Build And Release Management Lab File**

## **Experiment-4**

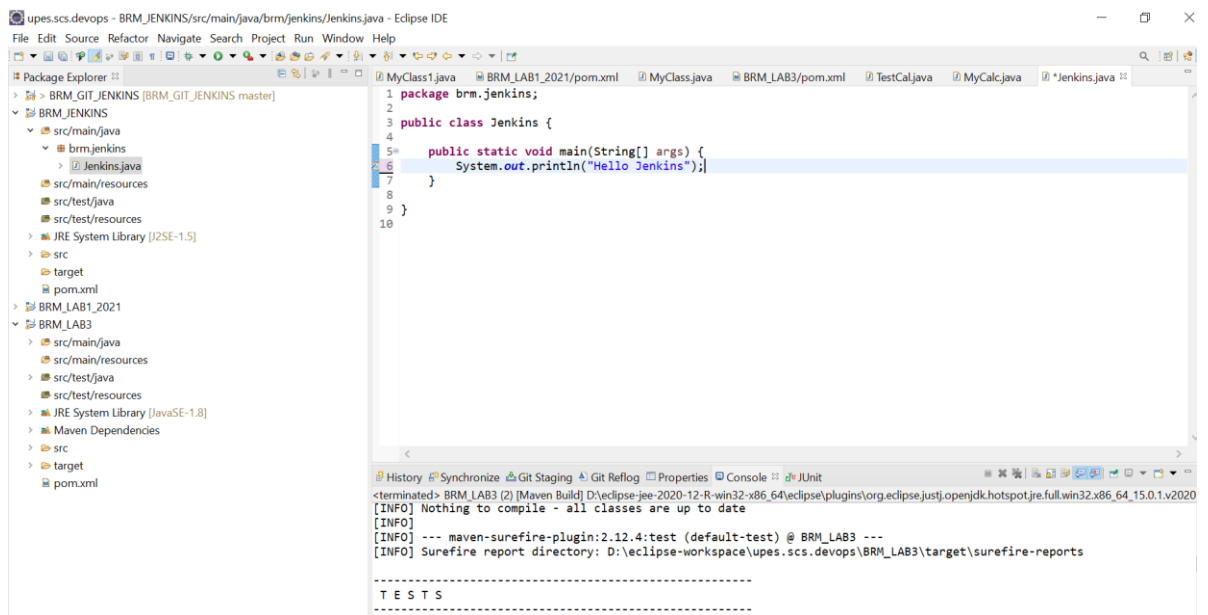
Name: Snigdha Markanday

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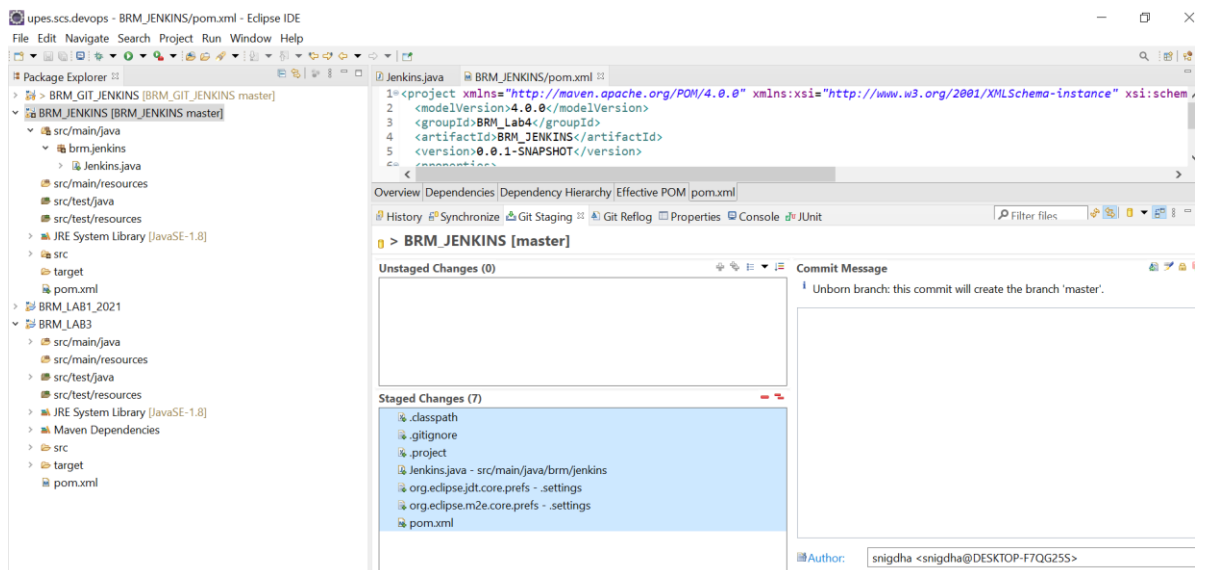
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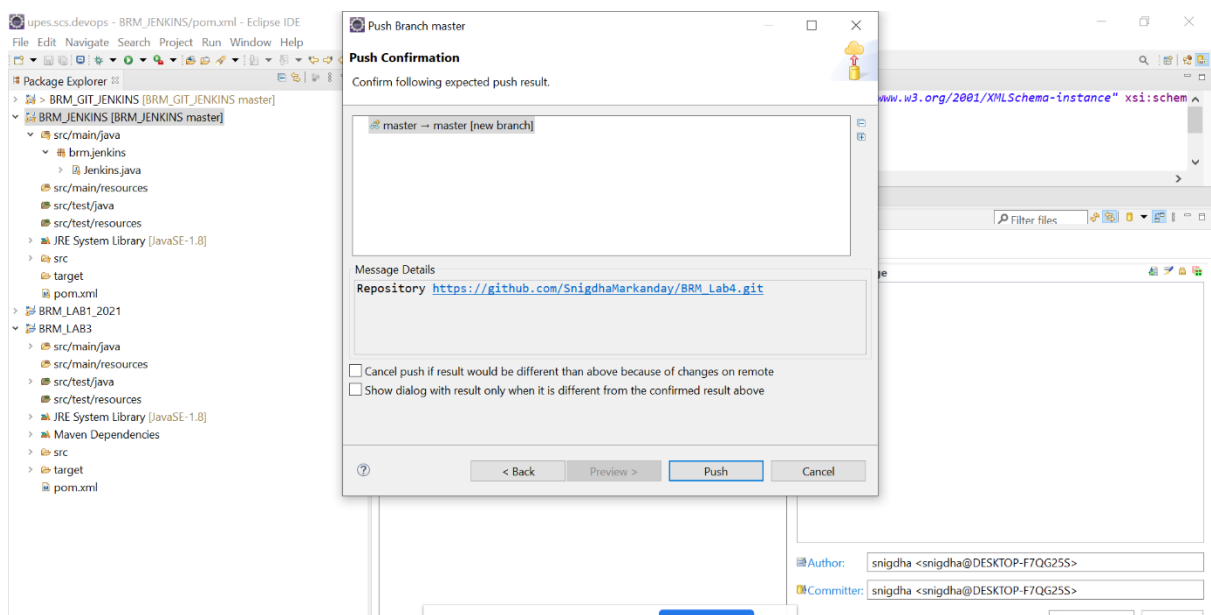
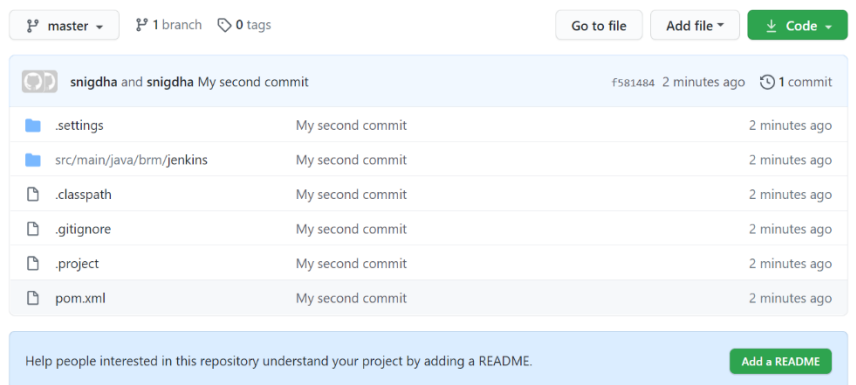
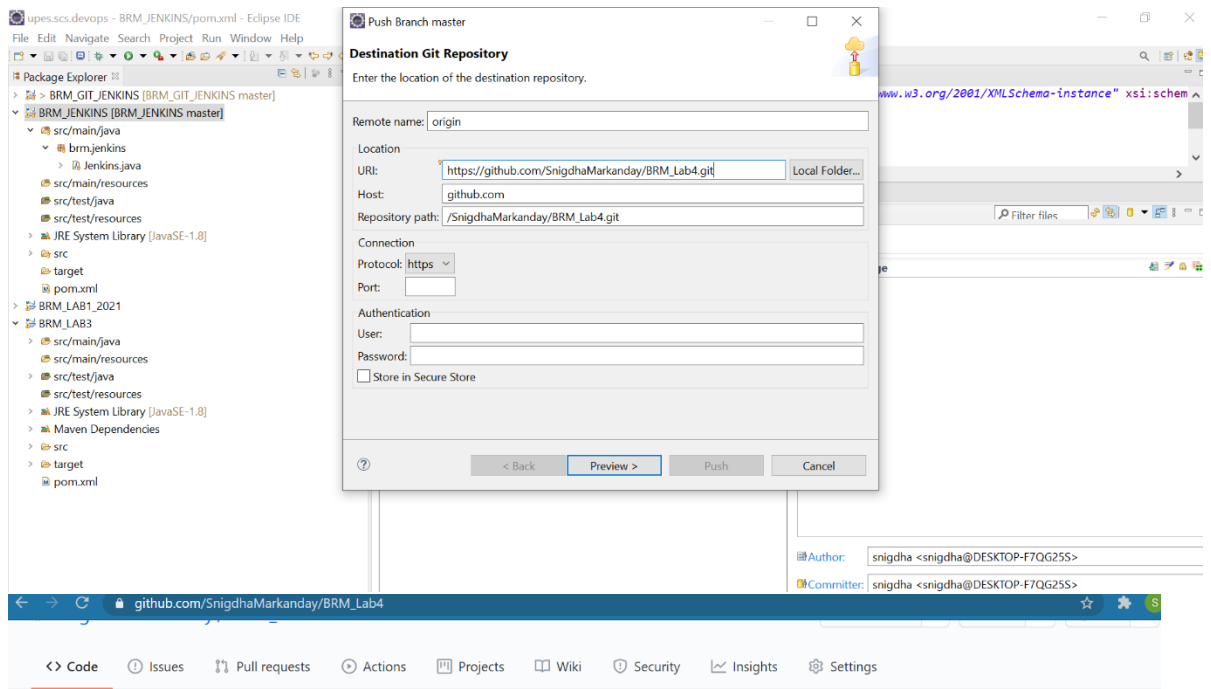
Roll No: R171219035

## • Creating a Maven Project

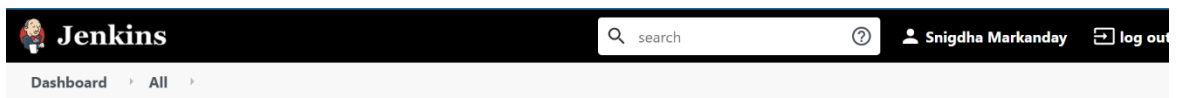


## • Initializing Git





- Open Jenkins to automate Maven Builds




Dashboard > All >


### Enter an item name

BRM\_Lab4


*» Required field*

**Freestyle project**


This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**

Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

**Pipeline**

Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**Configuration project**

For projects that need a large number of different configurations, such as testing on multiple environments, platform-specific

**OK**

Dashboard > BRM\_Lab4 >

General **Source Code Management** Build Triggers Build Environment Pre Steps Build Post Steps Build Settings

Post-build Actions

### Source Code Management

☐ None  
☒ Git

Repositories

Repository URL

Credentials  **Add**

**Advanced...**

**Add Repository**

Branches to build

Branch Specifier (blank for 'any')

**Save** **Apply** **Add Branch**

Dashboard > BRM\_Lab4 >

General Source Code Management Build Triggers **Build Environment** Pre Steps Build Post Steps Build Settings

Post-build Actions

☐ Abort the build if it's stuck  
☐ Add timestamps to the Console Output  
☐ Inspect build log for published Gradle build scans  
☐ With Ant

### Pre Steps

**Add pre-build step**

### Build

Root POM

Goals and options

**Save** **Apply** **Advanced...**

The image displays two screenshots of the Jenkins web interface. The top screenshot shows the 'Maven project BRM\_Lab4' dashboard. The left sidebar contains links: 'Back to Dashboard', 'Status', 'Changes', 'Workspace', 'Build Now', 'Configure', 'Delete Maven project', 'Modules', and 'Rename'. The main area shows 'Maven project BRM\_Lab4' with buttons for 'add description' and 'Disable Project'. Below this are 'Workspace' and 'Recent Changes' links, and a 'Permalinks' section. The bottom screenshot shows the 'Console Output' for the same project. The left sidebar includes 'Back to Project', 'Status', 'Changes', 'Console Output', 'View as plain text', 'Edit Build Information', 'Git Build Data', and 'Monitor Maven Process'. The main area displays the console output, which includes the following text:

```
Started by user Snigdha Markanday
Running as SYSTEM
Building in workspace C:\Users\snigdha\.jenkins\workspace\BRM_Lab4
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/SnigdhaMarkanday/BRM_Lab4.git
> D:\Git\bin\git.exe init C:\Users\snigdha\.jenkins\workspace\BRM_Lab4 # timeout=10
Fetching upstream changes from https://github.com/SnigdhaMarkanday/BRM_Lab4.git
> D:\Git\bin\git.exe fetch --version # timeout=10
> git --version # 'git version 2.30.1.windows.1'
> D:\Git\bin\git.exe fetch --tags --force --progress -- https://github.com/SnigdhaMarkanday/BRM_Lab4.git
+refs/heads/*:refs/remotes/origin/* # timeout=10
> D:\Git\bin\git.exe config remote.origin.url https://github.com/SnigdhaMarkanday/BRM_Lab4.git # timeout=10
> D:\Git\bin\git.exe config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> D:\Git\bin\git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision f581484de93156d0cef62fac0cca173cf6b94773 (refs/remotes/origin/master)
> D:\Git\bin\git.exe config core.sparsecheckout # timeout=10
> D:\Git\bin\git.exe checkout -f f581484de93156d0cef62fac0cca173cf6b94773 # timeout=10
Commit message: "My second commit"
First time build. Skipping changelog.
Parsing POMs
Discovered a new module BRM_Lab4:BRM_JENKINS BRM_JENKINS
```

The bottom screenshot shows the 'Console Output' for the same project, displaying the build process from cloning the repository to the final success message.

- Now, to automate this process we will perform the following in configure section of Build Job.

DashboardBRM\_Lab4

GeneralSource Code ManagementBuild TriggersBuild EnvironmentPre StepsBuildPost StepsBuild Settings

Post-build Actions

☐ Trigger builds remotely (e.g., from scripts)

☐ Build after other projects are built

☐ Build periodically

☐ GitHub hook trigger for GITScm polling

☒ Poll SCM

Schedule

\*\*\*\*\*

⚠ Do you really mean "every minute" when you say "\*\*\*\*\*"? Perhaps you meant "H\*\*\*\*\*" to poll once per hour

Would last have run at Monday, 15 February, 2021 10:41:25 AM IST; would next run at Monday, 15 February, 2021 10:41:26 AM IST.

☐ Ignore post-commit hooks

SaveApply

<> CodeIssuesPull requestsActionsProjectsWikiSecurityInsightsSettings

master1 branch0 tags

Go to fileAdd fileCode

About

snigdha and snigdha My third commitd24a9f2 1 minute ago2 commits

.settings	My second commit	12 minutes ago
src/main/java/brm/jenkins	My third commit	1 minute ago
.classpath	My second commit	12 minutes ago
.gitignore	My second commit	12 minutes ago
.project	My second commit	12 minutes ago
pom.xml	My second commit	12 minutes ago

Help people interested in this repository understand your project by adding a README.

Add a README

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

DashboardBRM\_Lab4#2

Back to Project

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#2'

Polling Log

Git Build Data

Redeploy Artifacts

See Fingerprints

Console Output

Started by an SCM change  
Running as SYSTEM  
Building in workspace C:\Users\snigdha\jenkins\workspace\BRM\_Lab4  
The recommended git tool is: NONE  
No credentials specified  
> D:\Git\bin\git.exe rev-parse --is-inside-work-tree # timeout=10  
Fetching changes from the remote Git repository  
> D:\Git\bin\git.exe config remote.origin.url https://github.com/SnigdhaMarkanday/BRM\_Lab4.git # timeout=10  
Fetching upstream changes from https://github.com/SnigdhaMarkanday/BRM\_Lab4.git  
> D:\Git\bin\git.exe fetch --tags --force --progress -- https://github.com/SnigdhaMarkanday/BRM\_Lab4.git +refs/heads/\*:refs/remotes/origin/\* # timeout=10  
> D:\Git\bin\git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10  
Checking out Revision d24a9f271edfc0b0d79a6683d4fab412ffc5d25b (refs/remotes/origin/master)  
> D:\Git\bin\git.exe config core.sparsecheckout # timeout=10  
> D:\Git\bin\git.exe checkout -f d24a9f271edfc0b0d79a6683d4fab412ffc5d25b # timeout=10  
Commit message: "My third commit"  
> D:\Git\bin\git.exe rev-list --no-walk f581484de93156d0cef62fac0cca173cf6b94773 # timeout=10  
Parsing POMs  
Established TCP socket on 54771  
{BRM\_Lab4} \$ "C:\Program Files\Java\jdk1.8.0\_271\bin\java" -cn C:\Users\snigdha\jenkins\plugins\maven-plugin\WEB-

Dashboard > BRM\_Lab4 > #2

```
[INFO] Scanning for projects...
[INFO]
[INFO] -----< BRM_Lab4:BRM_JENKINS >-----
[INFO] Building BRM_JENKINS 0.0.1-SNAPSHOT
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ BRM_JENKINS ---
[WARNING] Using platform encoding (Cp1252 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory C:\Users\snigdha\.jenkins\workspace\BRM_Lab4\src\main\resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ BRM_JENKINS ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding Cp1252, i.e. build is platform dependent!
[INFO] Compiling 1 source file to C:\Users\snigdha\.jenkins\workspace\BRM_Lab4\target\classes
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 5.358 s
[INFO] Finished at: 2021-02-15T10:44:29+05:30
[INFO] -----
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving C:\Users\snigdha\.jenkins\workspace\BRM_Lab4\pom.xml to BRM_Lab4\BRM_JENKINS\0.0.1-SNAPSHOT\BRM_JENKINS-0.0.1-SNAPSHOT.pom
channel stopped
Finished: SUCCESS
```