

# **Build and Release Management LAB File**

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LAB-4

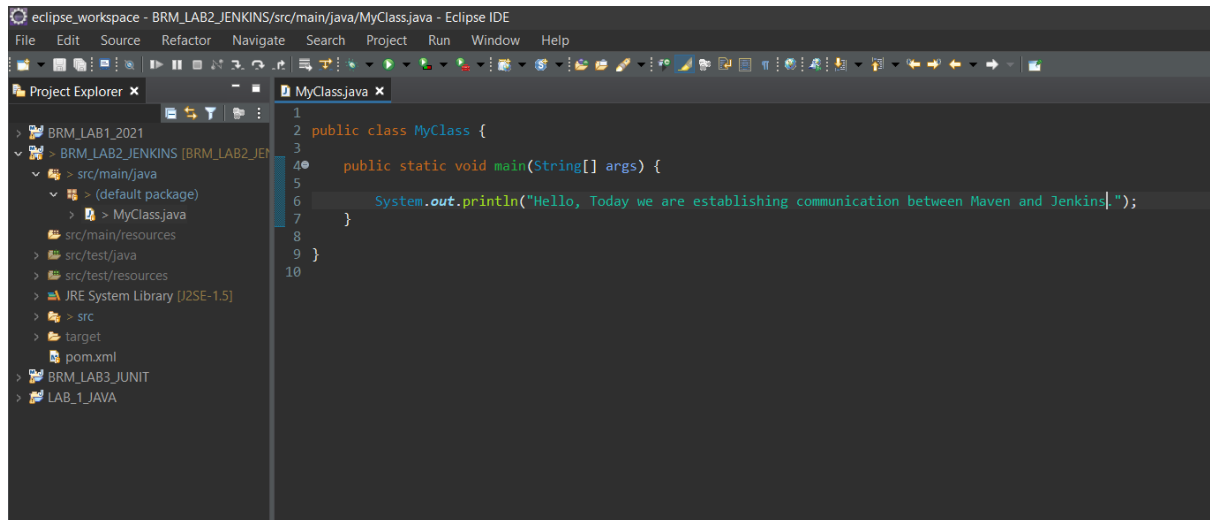
DATE : 11<sup>th</sup> FEB 2021

## LAB 4:

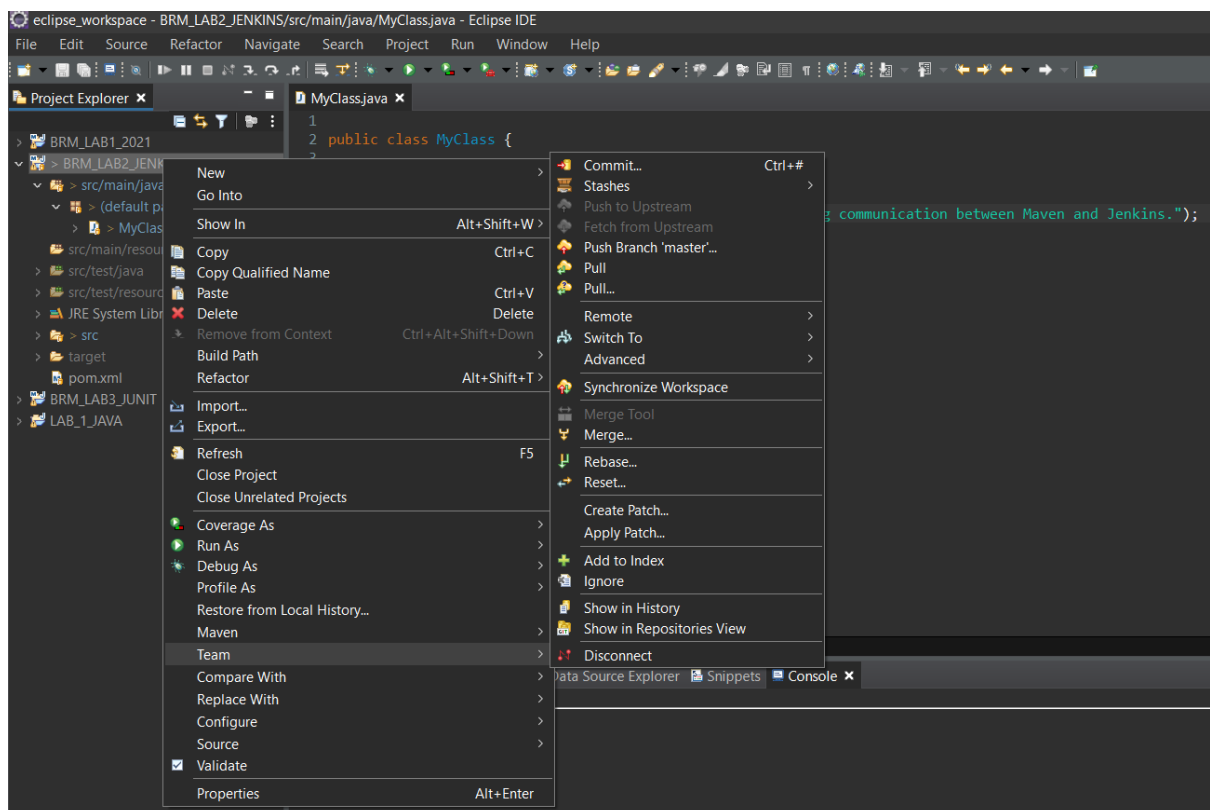
**Aim:** Automating builds of maven project using Jenkins

**Procedure:**

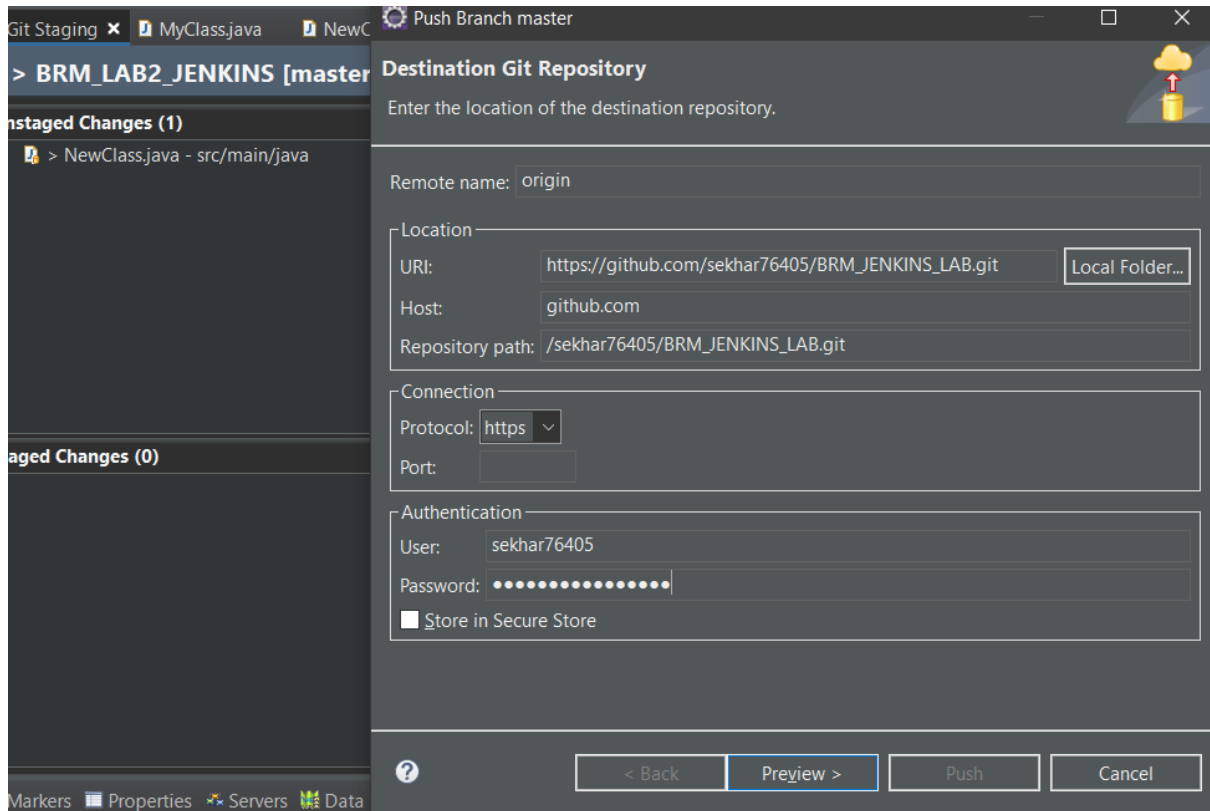
### 1. Create a simple maven project.



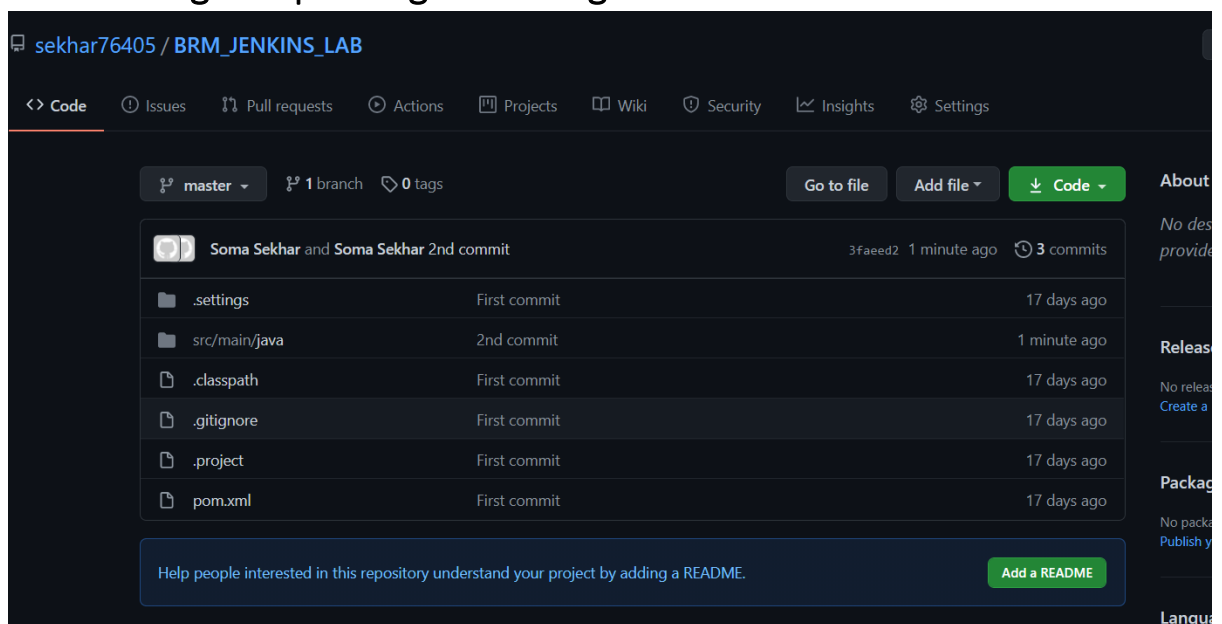
### 2. Initialize the project folder with. Git



### 3. Configuring with GitHub credentials and Staging the changes, through eclipse




### 4. Committing and pushing the changes.




## 5. Choose a new Item → Maven Project → Name of the project


**Enter an item name**  
  
» This field cannot be empty, please enter a valid name



**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.

## 6. Now give the Repository link and schedule the automatic build with POLL SCM


**Source Code Management**  

☐ None  
☒ Git

**Repositories**  

Repository URL

Credentials  

- none - 


Save

Apply

**Build Triggers**  

☒ Build whenever a SNAPSHOT dependency is built  
☐ Schedule build when some upstream has no successful builds  
☐ 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:**  
Would last have run at Sunday, 14 February, 2021 at 11:15:57 PM India Standard Time.

This field follows the syntax of cron (with minor differences). Specifically, e

MINUTE	MINUTE	HOUR	DOM	MONTH	DOW
MINUTE	Minutes within the hour (0–59)				
HOUR	The hour of the day (0–23)				
DOM	The day of the month (1–31)				

## 7. Start the Build Now

**Jenkins** search M Somasekhar log out

Dashboard > BRM\_LAB\_4

Back to Dashboard

Status

Changes

Workspace

**Build Now**

Configure

Delete Maven project

Modules

Git Polling Log

Rename

Build History trend

find

Feb 14, 2021, 11:20 PM

Atom feed for all Atom feed for failures

**Maven project BRM\_LAB\_4**

add description

Disable Project

Workspace

Recent Changes

Permalinks

Dashboard > BRM\_LAB\_4 > #1

```

kB/s)
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ lab2 ---
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (1.5 kB at 4.2 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom (9.0 kB at 26 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom (15 kB at 41 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom (3.4 kB at 10 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom (4.1 kB at 12 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom (8.4 kB at 24 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/sonatype/forge/forge-parent/5/forge-parent-5.pom
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/sonatype/forge/forge-parent/5/forge-parent-5.pom (8.4 kB at 25 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.jar
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.jar (13 kB at 38 kB/s)
[INFO] Downloading from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.jar
[INFO] Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.jar (226 kB at 224 kB/s)
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 7.690 s
[INFO] Finished at: 2021-02-14T23:21:21+05:30
[INFO] -----
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving C:\WINDOWS\system32\config\systemprofile\AppData\Local\Jenkins\.jenkins\workspace\BRM_LAB_4\pom.xml to lab2/lab2/0.0.1-SNAPSHOT/lab2-0.0.1-SNAPSHOT.pom
channel stopped
Finished: SUCCESS

```

8. Now we can test by committing a new change into the repository and Jenkins will automatically build it.

Dashboard > BRM LAB 4 >

Status

Changes

Workspace

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Git Polling Log

Rename

Workspace

Recent Changes

**Permalinks**

- Last build (#2), 2.7 sec ago
- Last stable build (#1), 8 min 16 sec ago
- Last successful build (#1), 8 min 16 sec ago
- Last completed build (#1), 8 min 16 sec ago

**Build History** trend ^

find X

#2	Feb 14, 2021, 11:29 PM
#1	Feb 14, 2021, 11:20 PM

Atom feed for all Atom feed for failures

## RESULT:

Thus, successfully, established a connection between Jenkins and maven project, automating the Build of every commit happening in the repository in github.