

Continuous Integration and Continuous Deployment

Assignment 2

Name : Harivansh Mathur

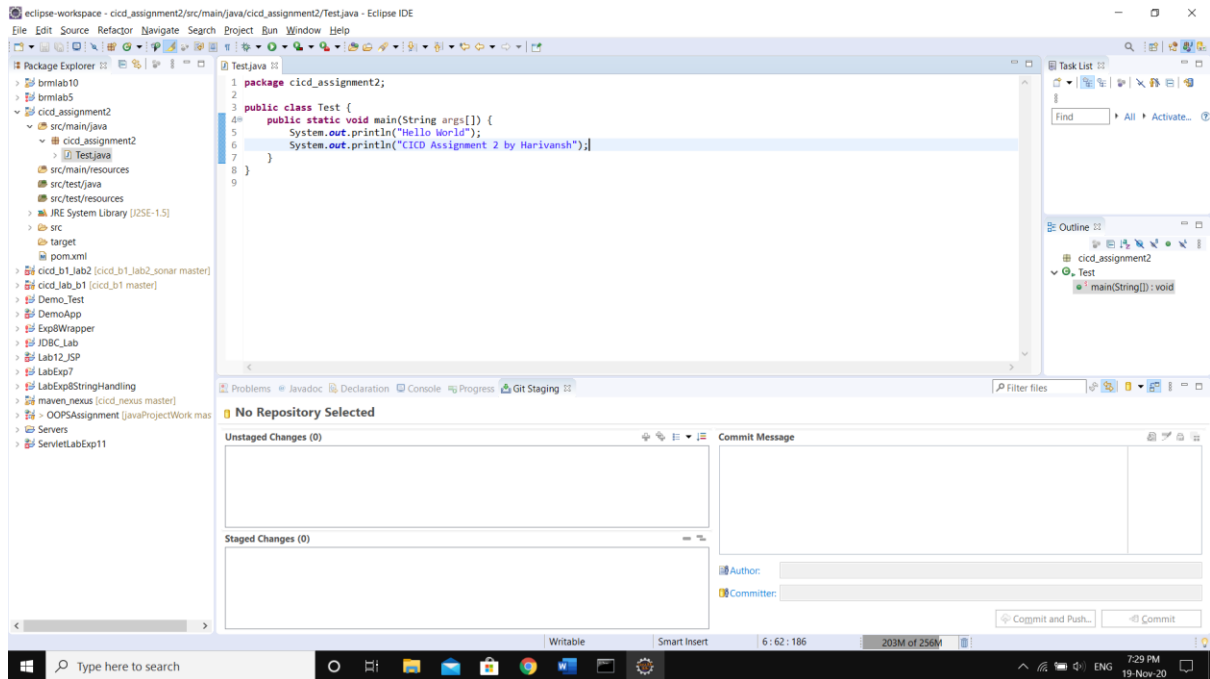
Roll No : R171218043

```
Command Prompt - java -jar jenkins.war
G:\Jenkins>java -jar jenkins.war
Running from: G:\Jenkins\jenkins.war
webroot: $user.home/.jenkins
2020-11-19 13:36:44.316+0000 [id=1] INFO org.eclipse.jetty.util.log: Logging initialized @6815ms to org.eclipse.jetty.util.log.JavaUtilLog
2020-11-19 13:36:45.567+0000 [id=1] INFO winstone.Logger@logInternal: Beginning extraction from war file
2020-11-19 13:36:45.868+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler$SetContextPath: Empty contextPath
2020-11-19 13:36:46.037+0000 [id=1] INFO org.eclipse.jetty.server.Server$doStart: jetty-9.4.30.v20200611; built: 2020-06-11T12:34:51.929Z; git: 271836e4c1f4612f2b7bb13ef5a92a27634b0d; jvm 1.8.0_261-b12
2020-11-19 13:37:01.868+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor$visitServlet: NO JSP Support for /, did not find org.eclipse.jetty.jsp.JettyJspServlet
2020-11-19 13:37:02.195+0000 [id=1] INFO o.e.j.s.s.DefaultSessionManager$doStart: DefaultSessionManager workerName=node0
2020-11-19 13:37:02.195+0000 [id=1] INFO o.e.j.s.s.DefaultSessionManager$doStart: No SessionScavenger set, using defaults
2020-11-19 13:37:02.246+0000 [id=1] INFO o.e.j.server.session.HouseKeeper$startScavenging: node0 Scavenging every 600000ms
2020-11-19 13:37:03.674+0000 [id=1] INFO hudson.WebAppMain$contextInitialized: Jenkins home directory: C:\Users\hp\.jenkins found at: $user.home/.jenkins
2020-11-19 13:37:04.459+0000 [id=1] INFO o.e.j.s.handler.ContextHandler$doStart: Started w.2c78324b(Jenkins v2.252.2, file:///C:/Users/hp/.jenkins/war/AVAILABLE)[C:\Users\hp\.jenkins\war]
2020-11-19 13:37:04.811+0000 [id=1] INFO o.e.j.server.AbstractConnector$doStart: Started ServerConnector@61dc3ce(HTTP/1.1, (http/1.1)){0.0.0.0:8080}
2020-11-19 13:37:04.811+0000 [id=1] INFO org.eclipse.jetty.server.Server$doStart: Started @27317ms
2020-11-19 13:37:04.811+0000 [id=23] INFO winstone.Logger@logInternal: Winstone Servlet Engine running: controlPort=disabled
2020-11-19 13:37:06.693+0000 [id=29] INFO jenkins.InitReactorRunner$1onAttained: Started initialization
2020-11-19 13:37:07.508+0000 [id=27] INFO jenkins.InitReactorRunner$1onAttained: Listed all plugins
2020-11-19 13:37:25.267+0000 [id=40] INFO jenkins.InitReactorRunner$1onAttained: Prepared all plugins
2020-11-19 13:37:25.318+0000 [id=34] INFO jenkins.InitReactorRunner$1onAttained: Started all plugins
2020-11-19 13:37:25.350+0000 [id=37] INFO jenkins.InitReactorRunner$1onAttained: Augmented all extensions
2020-11-19 13:37:32.991+0000 [id=37] INFO jenkins.InitReactorRunner$1onAttained: System config loaded
2020-11-19 13:37:32.992+0000 [id=37] INFO jenkins.InitReactorRunner$1onAttained: System config adapted
2020-11-19 13:37:35.362+0000 [id=36] INFO jenkins.InitReactorRunner$1onAttained: Loaded all jobs
2020-11-19 13:37:35.383+0000 [id=30] INFO jenkins.InitReactorRunner$1onAttained: Configuration for all jobs updated
2020-11-19 13:37:35.745+0000 [id=58] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$0: Started Download metadata
2020-11-19 13:37:36.070+0000 [id=58] INFO hudson.util.Retrier$doStart: Attempt #1 to do the action check updates server
2020-11-19 13:37:37.075+0000 [id=30] INFO o.s.c.s.AbstractApplicationContext$prepareRefresh: Refreshing org.springframework.web.context.support.StaticWebApplicationContext@6b8dbb5: display name [Root WebApplicationContext]; startup date [Thu Nov 19 08:37 IST 2020]; root of context hierarchy
2020-11-19 13:37:37.075+0000 [id=30] INFO o.s.c.s.AbstractApplicationContext$prepareRefresh: Bean factory for application context [org.springframework.web.context.support.StaticWebApplicationContext@6b8dbb5]: org.springframework.beans.factory.support.DefaultListableBeanFactory@7709cac2: defining beans [authenticationManager]; root of factory hierarchy
2020-11-19 13:37:37.693+0000 [id=30] INFO o.s.c.s.AbstractApplicationContext$prepareRefresh: Refreshing org.springframework.web.context.support.StaticWebApplicationContext@58a16c38: display name [Root WebApplicationContext]; startup date [Thu Nov 19 08:37 IST 2020]; root of context hierarchy
2020-11-19 13:37:37.693+0000 [id=30] INFO o.s.c.s.AbstractApplicationContext$prepareRefresh: Bean factory for application context [org.springframework.web.context.support.StaticWebApplicationContext@58a16c38]: org.springframework.beans.factory.support.DefaultListableBeanFactory@64817b1c: defining beans [filter,legacy]; root of factory hierarchy
2020-11-19 13:37:37.694+0000 [id=30] INFO o.s.b.f.s.DefaultListableBeanFactory$preInstantiateSingletons: Pre-instantiating singletons in org.springframework.beans.factory.support.DefaultListableBeanFactory@64817b1c: defining beans [filter,legacy]; root of factory hierarchy
2020-11-19 13:37:38.081+0000 [id=30] INFO jenkins.InitReactorRunner$1onAttained: Completed initialization
2020-11-19 13:37:38.866+0000 [id=22] INFO hudson.webapp.Main$run: Jenkins is fully up and running
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.tasks.Ant.AntInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.plugins.gradle.GradleInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.plugins.sonar.MsBuildSonarQubeRunnerInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.plugins.sonar.SonarRunnerInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO h.m.DownloadService$Downloadable$load: Obtained the updated data file for hudson.tools.JDKInstaller
2020-11-19 13:37:38.866+0000 [id=22] INFO hudson.util.Retrier$doStart: Performed the action check updates server successfully at the attempt #1
2020-11-19 13:37:38.866+0000 [id=22] INFO hudson.model.AsyncPeriodicWork$lambda$doRun$0: Finished Download metadata. 24,450 ms
```

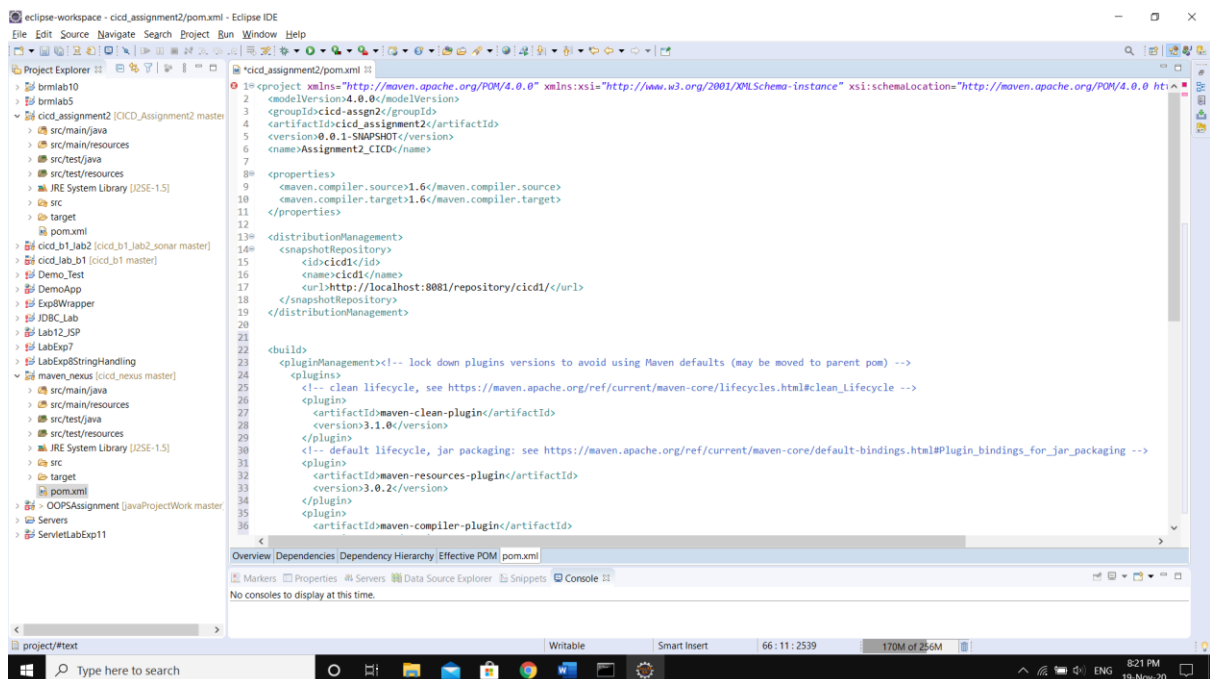
Starting Jenkins from the command prompt

```
Command Prompt - nexus.exe /run
2020-11-19 19:13:53.795+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-repository-pypi
2020-11-19 19:13:53.795+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-repository-maven
2020-11-19 19:13:53.795+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-onboarding-plugin
2020-11-19 19:13:53.795+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-repository-nuget
2020-11-19 19:13:53.795+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-repository-rubygems
2020-11-19 19:13:53.811+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.rapture.internal.RaptureWebResourceBundle - nexus-repository-docker
2020-11-19 19:13:53.811+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.internal.webresources.WebResourceServlet - Max-age: 30 days (2592000 seconds)
2020-11-19 19:13:53.895+0530 INFO [quartz-3-thread-1] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Task log cleanup' [tasklog.cleanup] state change WAITING -> RUNNING
2020-11-19 19:13:53.927+0530 INFO [quartz-3-thread-2] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Storage facet cleanup' [repository.storage-facet-cleanup] state change WAITING -> RUNNING
2020-11-19 19:13:53.927+0530 INFO [jetty-main-1] *SYSTEM com.softwarementors.extjs.djn.servlet.DirectJEngineServlet - Servlet GLOBAL configuration: debug=false, providersUrl=service/extdirect, minify=false, batchRequestsMaxInThreadsPoolSize=16, batchRequestsMaxInThreadsPoolSize=80, batchRequestsMaxThreadsPerRequest=8, batchRequestsMaxThreadKeepAliveSeconds=60, gsonBuilderConfigurator=Class=org.sonatype.nexus.extdirect.internal.ExtDirectGsonBuilderConfigurator, dispatcherClass=com.softwarementors.extjs.djn.servlet.ssm.SsmDispatcher, jsonRequestProcessorThreadClass=org.sonatype.nexus.extdirect.internal.ExtDirectJsonRequestProcessorThread, contextPath=not specified: calculated via JavaScript, createSourceFiles=true
2020-11-19 19:13:53.927+0530 INFO [jetty-main-1] *SYSTEM com.softwarementors.extjs.djn.servlet.DirectJEngineServlet - Servlet GLOBAL configuration: registryConfigurator=Class=org.sonatype.nexus.extdirect.internal.ExtDirectGsonBuilderConfigurator, dispatcherClass=com.softwarementors.extjs.djn.servlet.ssm.SsmDispatcher, jsonRequestProcessorThreadClass=org.sonatype.nexus.extdirect.internal.ExtDirectJsonRequestProcessorThread, contextPath=not specified: calculated via JavaScript, createSourceFiles=true
2020-11-19 19:13:53.927+0530 INFO [quartz-3-thread-3] *SYSTEM org.sonatype.nexus.tasklog.TaskLogCleanup - Task 'Cleanup service' [repository.cleanup] state change WAITING -> RUNNING
2020-11-19 19:13:53.974+0530 INFO [quartz-3-thread-1] *SYSTEM org.sonatype.nexus.tasklog.TaskLogCleanup - Cleaning up log files in F:\Nexus and Sonatype\sonatype-work\nexus3\log\tasks older than 30 days
2020-11-19 19:13:53.989+0530 INFO [quartz-3-thread-3] *SYSTEM org.sonatype.nexus.tasklog.TaskLogCleanup - Task 'Cleanup service' [repository.cleanup] state change RUNNING -> WAITING (OK)
2020-11-19 19:13:54.011+0530 INFO [quartz-3-thread-1] *SYSTEM org.sonatype.nexus.tasklog.TaskLogCleanup - Removed task log file F:\Nexus and Sonatype\sonatype-work\nexus3\log\tasks\repository.cleanup-2020092609200318.log
2020-11-19 19:13:54.011+0530 INFO [quartz-3-thread-1] *SYSTEM org.sonatype.nexus.tasklog.TaskLogCleanup - Removed task log file F:\Nexus and Sonatype\sonatype-work\nexus3\log\tasks\repository.cleanup-20201016082004077.log
2020-11-19 19:13:54.027+0530 INFO [quartz-3-thread-1] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Task log cleanup' [tasklog.cleanup] state change RUNNING -> WAITING (OK)
2020-11-19 19:13:54.074+0530 INFO [quartz-3-thread-2] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Storage facet cleanup' [repository.storage-facet-cleanup] state change RUNNING -> WAITING (OK)
2020-11-19 19:13:54.112+0530 INFO [jetty-main-1] *SYSTEM com.softwarementors.extjs.djn.jscodegen.CodeFileGenerator - Creating source files for APIs...
2020-11-19 19:13:56.150+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.siesta.SiestaServlet - JAX-RS RuntimeDelegate: org.sonatype.nexus.siesta.internal.resteasy.SisuResteasyProviderFactory@3a4886
2020-11-19 19:13:56.420+0530 INFO [jetty-main-1] *SYSTEM org.jboss.resteasy.plugins.validation.impl.ResteasyValidationFactory - Unable to find CDI supporting ValidatorFactory. Using default ValidatorFactory
2020-11-19 19:13:57.130+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.siesta.SiestaServlet - Initialized
2020-11-19 19:13:57.146+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.repository.httpbridge.internal.ViewServlet - Initialized
2020-11-19 19:13:57.199+0530 INFO [jetty-main-1] *SYSTEM org.eclipse.jetty.server.handler.ContextHandler - Started o.e.j.w.WebAppContext@221403db(Sonatype Nexus/,file:///F:/Nexus%20and%20Sonatype/nexus-3.18.1-01/public/AVAILABLE)
2020-11-19 19:13:57.436+0530 INFO [jetty-main-1] *SYSTEM org.eclipse.jetty.server.AbstractConnector - Started ServerConnector@4497540c(HTTP/1.1,[http/1.1]){0.0.0.0:8081}
2020-11-19 19:13:57.436+0530 INFO [jetty-main-1] *SYSTEM org.eclipse.jetty.server.Server - Started @184300ms
2020-11-19 19:13:57.436+0530 INFO [jetty-main-1] *SYSTEM org.sonatype.nexus.bootstrap.jetty.JettyServer -
Started Sonatype Nexus OSS 3.18.1-01
2020-11-19 19:14:59.642+0530 INFO [qtp1686238399-70] *UNKNOWN org.apache.shiro.session.mgt.AbstractValidatingSessionManager - Enabling session validation scheduler...
2020-11-19 19:14:59.722+0530 INFO [qtp1686238399-70] *UNKNOWN org.sonatype.nexus.internal.security.anonymous.AnonymousManagerImpl - Loaded configuration: AnonymousConfiguration(enabled=false, userId='anonymous', realmName='NexusAuthorizingRealm')
2020-11-19 19:20:00.039+0530 INFO [quartz-3-thread-4] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Storage facet cleanup' [repository.storage-facet-cleanup] state change WAITING -> RUNNING
2020-11-19 19:20:00.055+0530 INFO [quartz-3-thread-4] *SYSTEM org.sonatype.nexus.quartz.internal.task.QuartzTaskInfo - Task 'Storage facet cleanup' [repository.storage-facet-cleanup] state change RUNNING -> WAITING (OK)
```

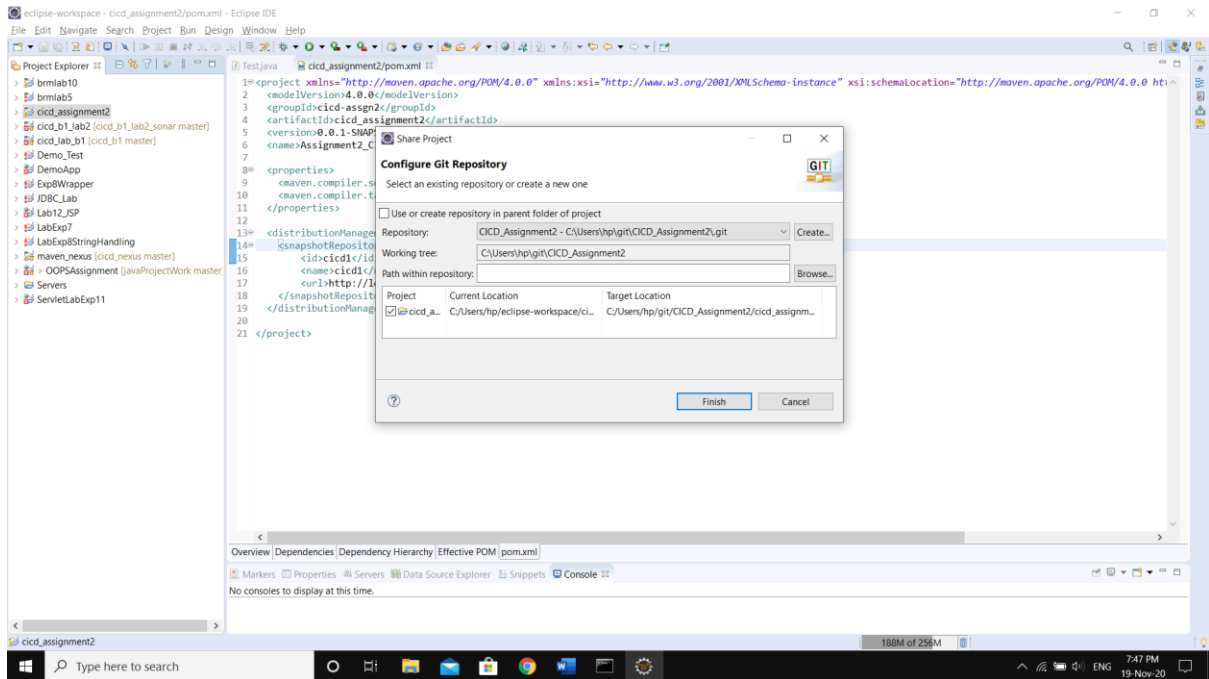
Starting Nexus Server from the command prompt



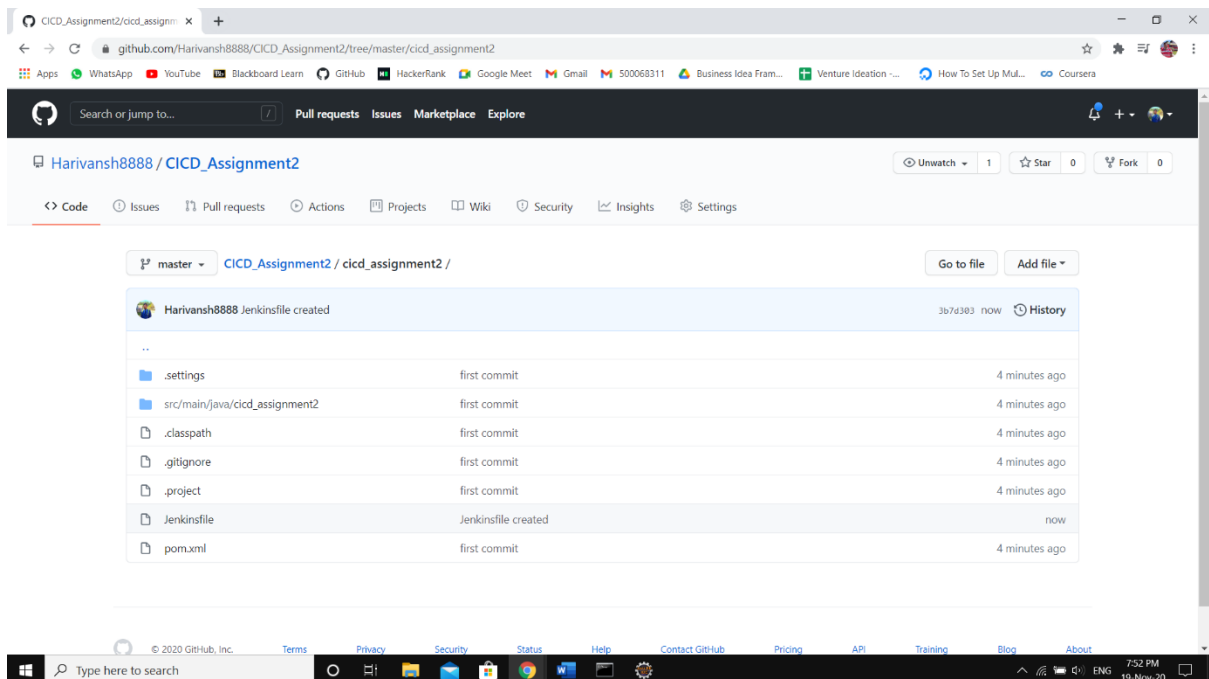
Creating a simple maven project



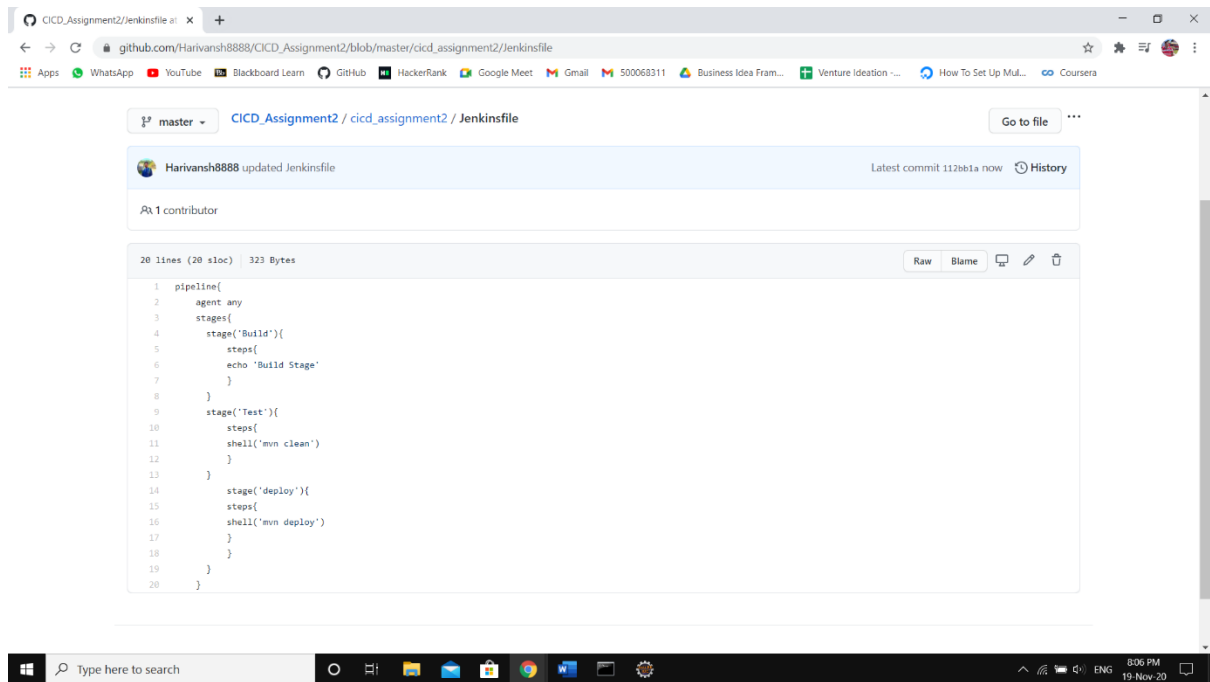
Pom.xml of that maven project



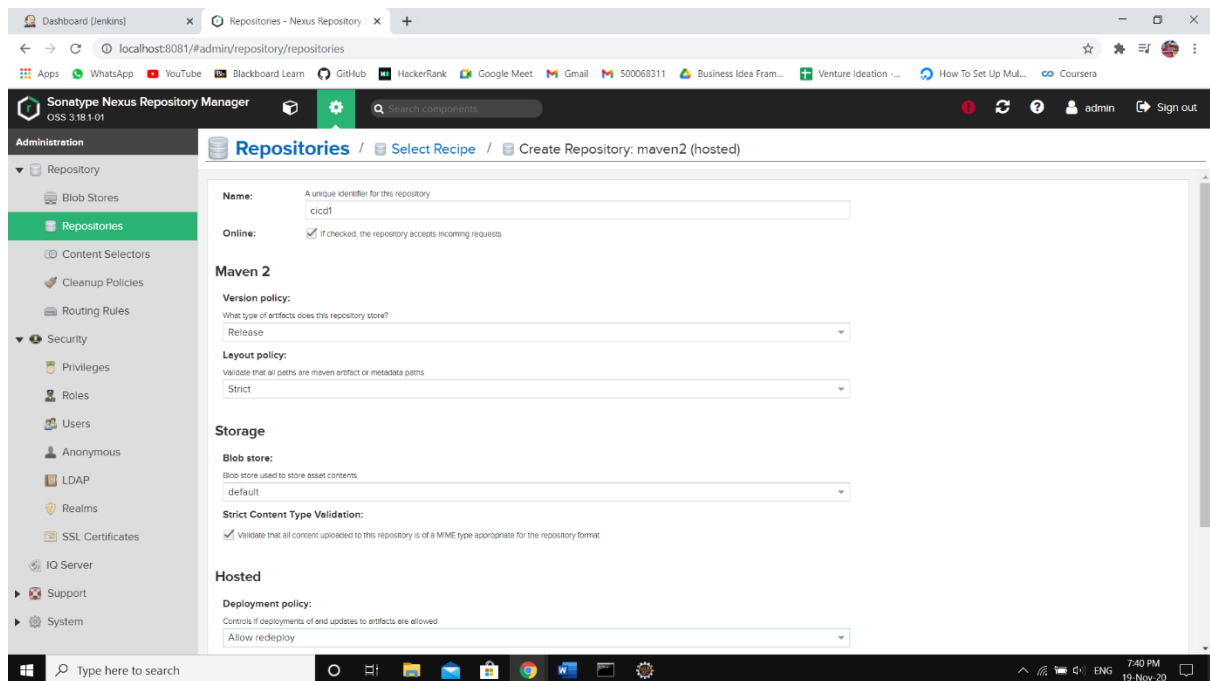
Pushing that maven project to GitHub using Eclipse IDE



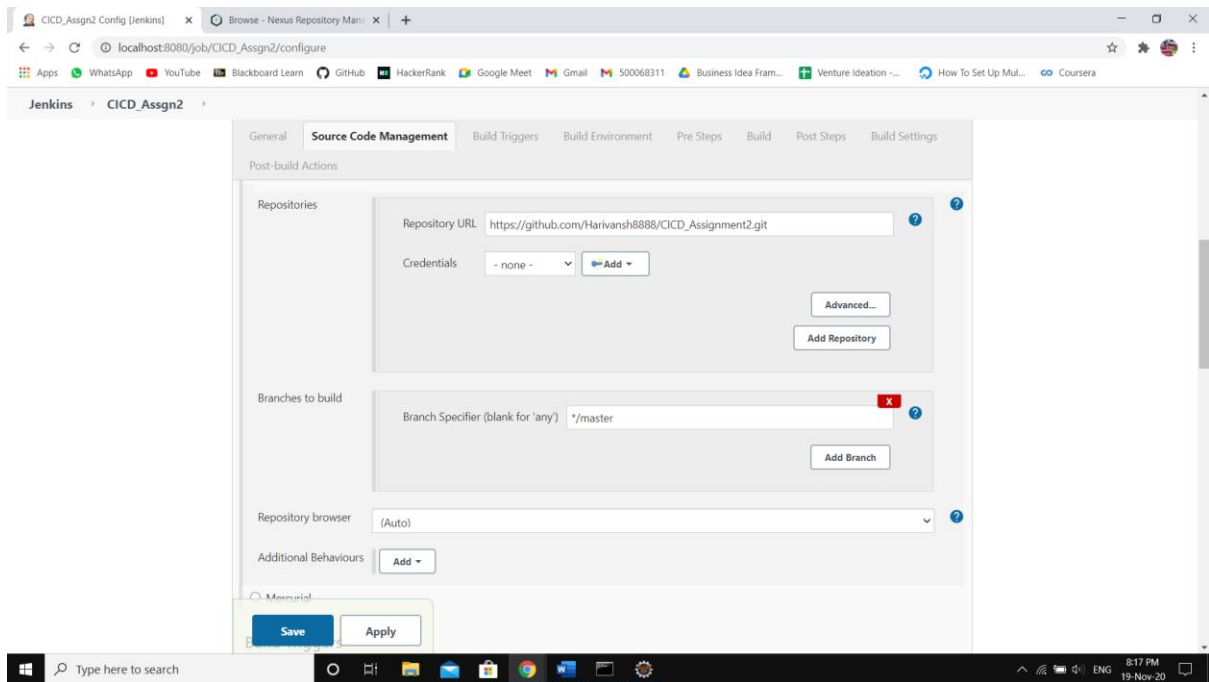
The project uploaded on GitHub and a Jenkinsfile added there manually



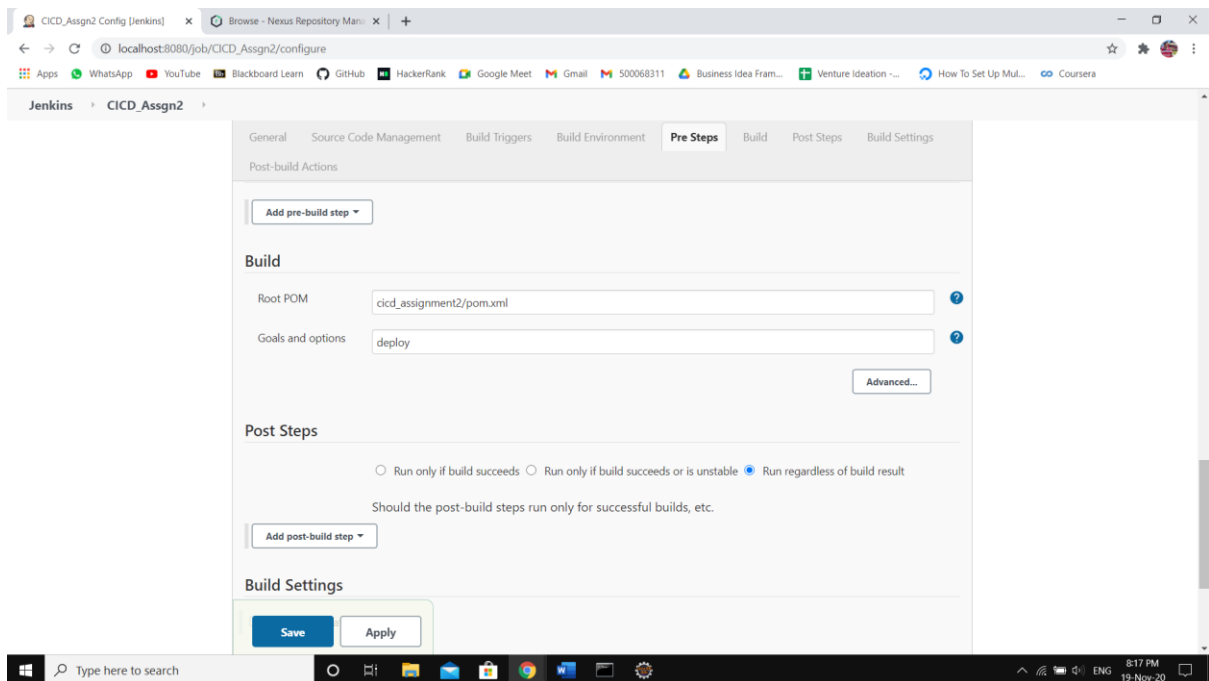
The Jenkinsfile which contains a pipeline



Making a repository on the Nexus Server



Making a Maven Project on Jenkins and configuring it by adding GitHub link



Providing correct POM.xml path and specifying the goal

```
[INFO] Installing C:\Users\hpl\.jenkins\workspace\CICD_Assgn2\CICD_Assgn2\target\CICD_Assgn2-0.0.1-SNAPSHOT.jar to C:\Users\hpl\.m2\repository\CICD_Assgn2\cicd_assignment2\0.0.1-SNAPSHOT\cicd_assignment2-0.0.1-SNAPSHOT.jar
[INFO] Installing C:\Users\hpl\.jenkins\workspace\CICD_Assgn2\cicd_assignment2\pom.xml to C:\Users\hpl\.m2\repository\CICD_Assgn2\cicd_assignment2\0.0.1-SNAPSHOT\cicd_assignment2-0.0.1-SNAPSHOT.pom
[INFO] --- maven-deploy-plugin:2.8.2:deploy (default-deploy) @ cicd_assignment2 ---
[INFO] Downloading from cicd1: http://localhost:8081/repository/cicd1/cicd-assign2/cicd_assignment2/0.0.1-SNAPSHOT/maven-metadata.xml
[WARNING] Could not transfer metadata cicd-assign2:cicd_assignment2:0.0.1-SNAPSHOT/maven-metadata.xml from/to cicd1 (http://localhost:8081/repository/cicd1/): Authentication failed for http://localhost:8081/repository/cicd1/cicd-assign2/cicd_assignment2/0.0.1-SNAPSHOT/maven-metadata.xml 401 Unauthorized
[INFO] -----
[INFO] BUILD FAILURE
[INFO] -----
[INFO] Total time: 18.124 s
[INFO] Finished at: 2020-11-19T20:24:36+05:30
[INFO] -----
Waiting for Jenkins to finish collecting data
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-deploy-plugin:2.8.2:deploy (default-deploy) on project cicd_assignment2: Failed to retrieve remote metadata cicd-assign2:cicd_assignment2:0.0.1-SNAPSHOT/maven-metadata.xml: Could not transfer metadata cicd-assign2:cicd_assignment2:0.0.1-SNAPSHOT/maven-metadata.xml from/to cicd1 (http://localhost:8081/repository/cicd1/): Authentication failed for http://localhost:8081/repository/cicd1/cicd-assign2/cicd_assignment2/0.0.1-SNAPSHOT/maven-metadata.xml 401 Unauthorized -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://wiki.apache.org/confluence/display/MAVEN/MojoExecutionException
[JENKINS] Archiving C:\Users\hpl\.jenkins\workspace\CICD_Assgn2\cicd_assignment2\pom.xml to cicd-assign2/cicd_assignment2/0.0.1-SNAPSHOT/cicd_assignment2-0.0.1-SNAPSHOT.pom
[JENKINS] Archiving C:\Users\hpl\.jenkins\workspace\CICD_Assgn2\cicd_assignment2\target\cicd_assignment2-0.0.1-SNAPSHOT.jar to cicd-assign2/cicd_assignment2/0.0.1-SNAPSHOT/cicd_assignment2-0.0.1-SNAPSHOT.jar
channel stopped
Finished: FAILURE
```

Console Output of the Build