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Employee ID: API2309
Batch: Greenfiled Training Batch 31

Title: 1. Maven Project to Connect with database.

Source Code:

pom.xml

```
<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 https://maven.apache.org/xsd/maven-4.0.0.xsd">
  <modelVersion>4.0.0</modelVersion>
  <groupId>com.apisero.greenfield</groupId>
  <artifactId>JDBCConnection</artifactId>
  <version>0.0.1-SNAPSHOT</version>
    <dependencies>
  <!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java -->
<dependency>
    <groupId>mysql</groupId>
    <artifactId>mysql-connector-java</artifactId>
    <version>8.0.26</version>
</dependency>
  </dependencies>
        </project>
```

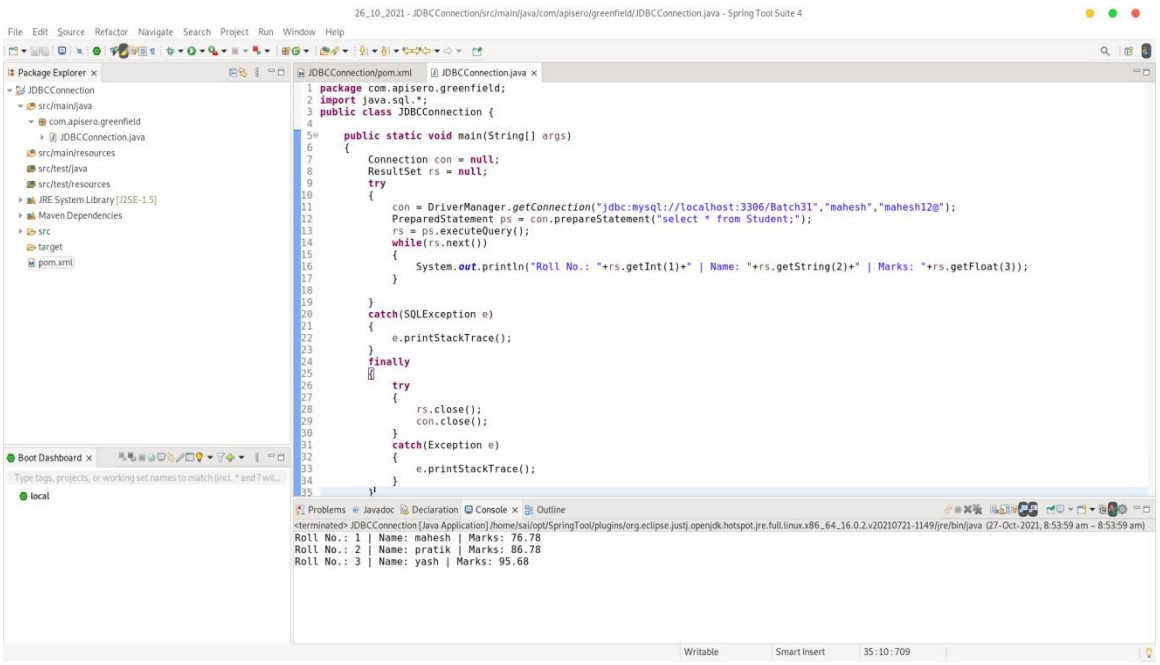
JDBCConnection.java

```
package com.apisero.greenfield;
import java.sql.*;
public class JDBCConnection {
    public static void main(String[] args) {
        Connection con = null;
        ResultSet rs = null;
        try {
            con = DriverManager.getConnection("jdbc:mysql://localhost:3306/Batch31", "mahesh", "mahesh12@");
            PreparedStatement ps = con.prepareStatement("select * from Student;");
            rs = ps.executeQuery();
            while (rs.next()) {
                System.out.println(
                        "Roll No.: " + rs.getInt(1) + " | Name: " + rs.getString(2) + " | Marks: " + rs.getFloat(3));
            }

        } catch (SQLException e) {
            e.printStackTrace();
        } finally {
            try {
                rs.close();
                con.close();
            } catch (Exception e) {
                e.printStackTrace();
            }
        }
    }

}
```

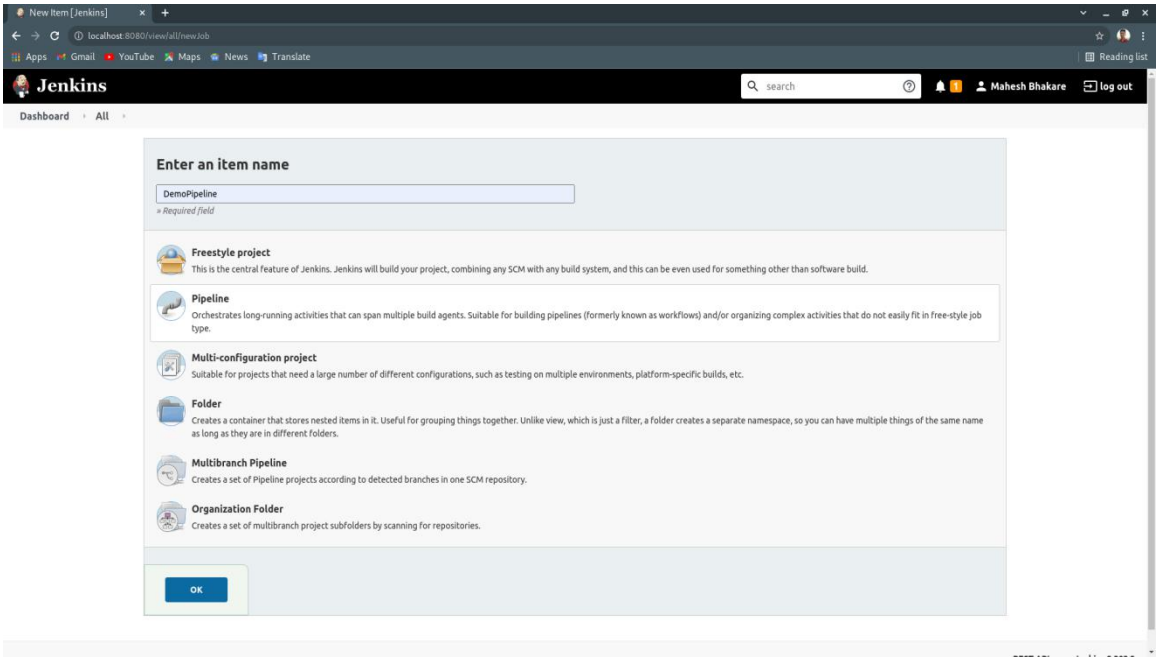
Output:



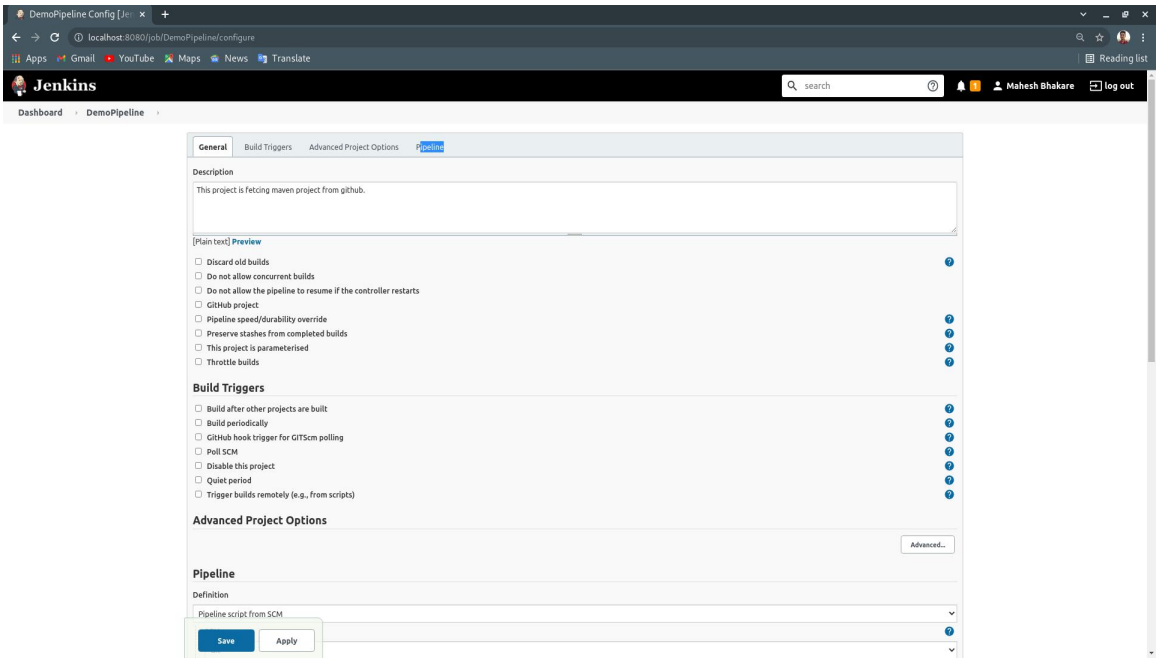
Title: 2. Use jenkins tool to compile and run java application from Git Repo (Use Job and Pipeline).

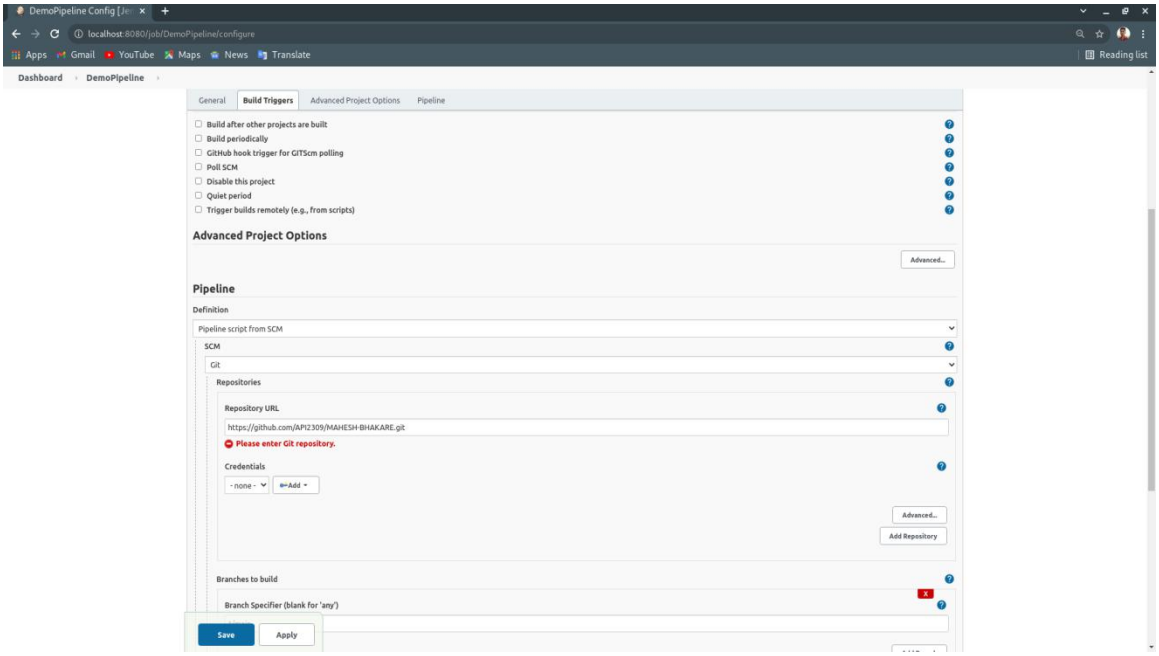
Steps:

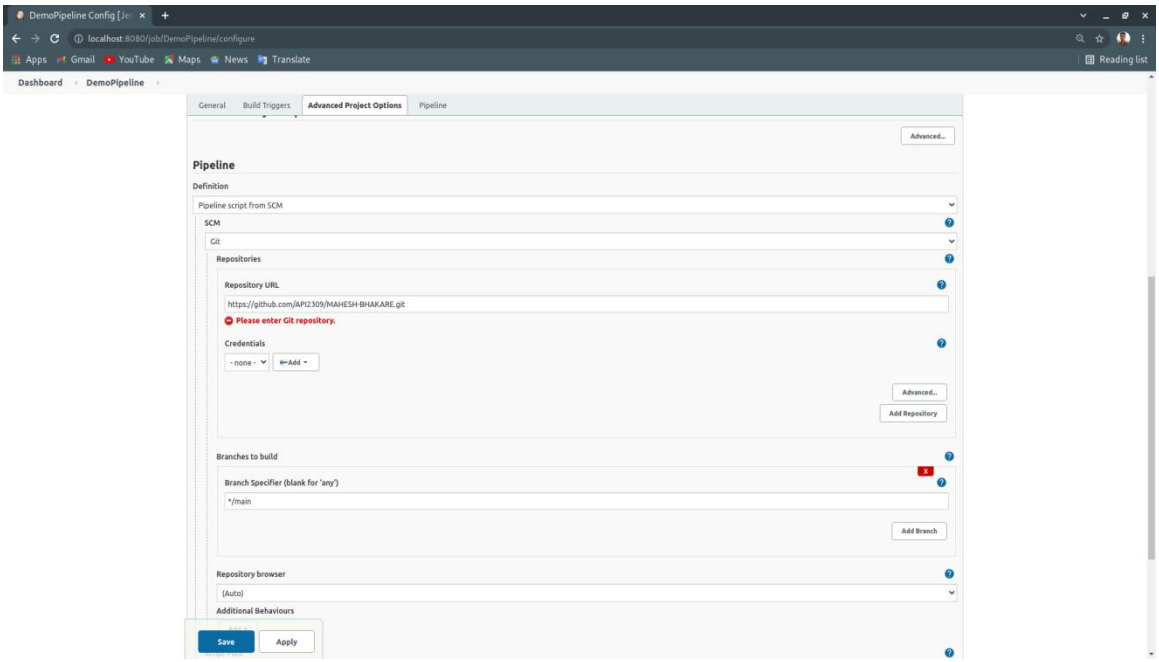
1. **Create new Job using pipeline**

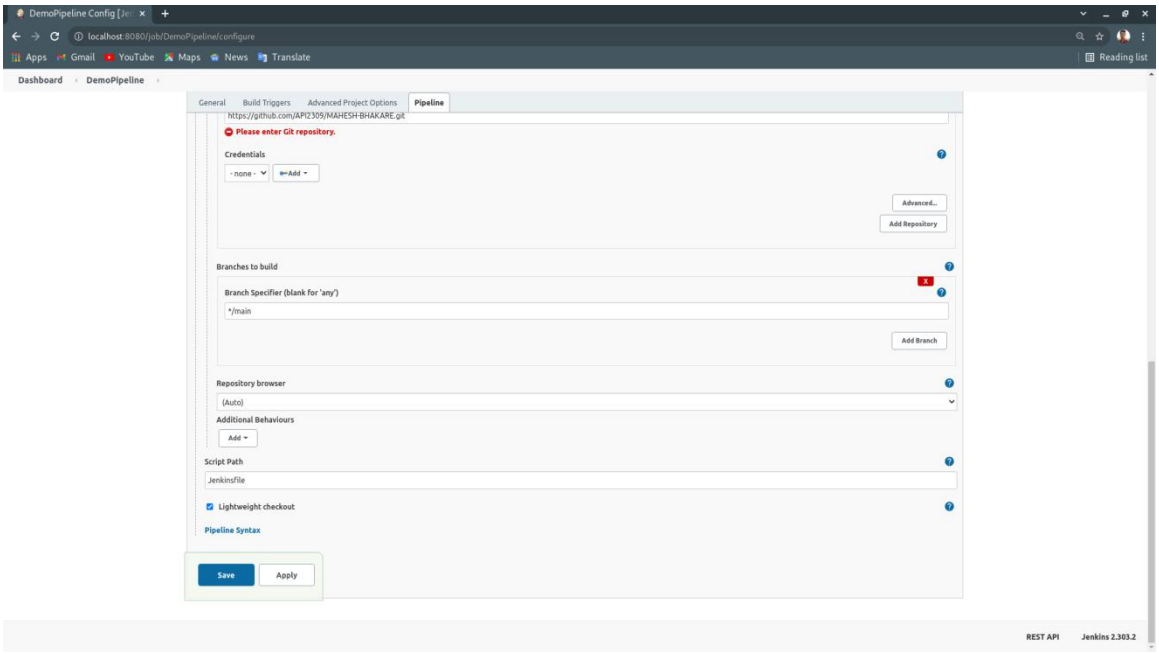


2. **Configuring the Job.**

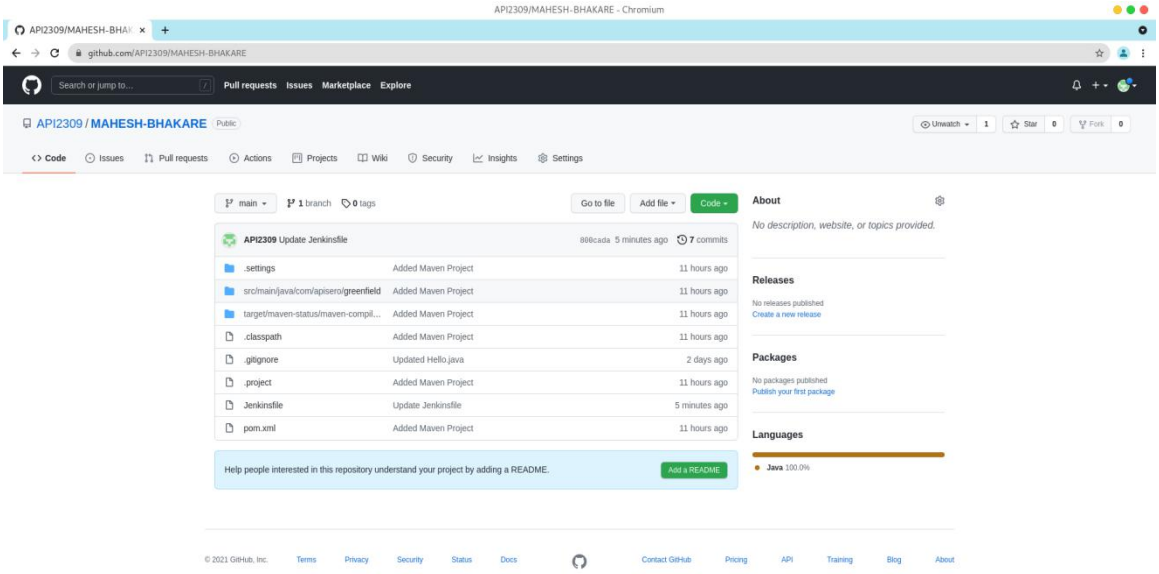

DemoPipeline Config [Jen
localhost:8080/job/DemoPipeline/configure
Apps Gmail YouTube Maps News Translate
Reading list
Jenkins
search
Mahesh Bhakare
log out
Dashboard
DemoPipeline
General
Build Triggers
Advanced Project Options
Pipeline
Description
This project is fetcing maven project from github.
[Plain text] Preview
Discard old builds
Do not allow concurrent builds
Do not allow the pipeline to resume if the controller restarts
GitHub project
Pipeline speed/durability override
Preserve stashes from completed builds
This project is parameterised
Throttle builds
Build Triggers
Build after other projects are built
Build periodically
GitHub hook trigger for GITScm polling
Poll SCM
Disable this project
Quiet period
Trigger builds remotely (e.g., from scripts)
Advanced Project Options
Advanced...
Pipeline
Definition
Pipeline script from SCM
Save
Apply


DemoPipeline Config [Jen
localhost:8080/job/DemoPipeline/configure
Apps Gmail YouTube Maps News Translate
Reading list
Dashboard
DemoPipeline
General
Build Triggers
Advanced Project Options
Pipeline
Build after other projects are built
Build periodically
GitHub hook trigger for GITScm polling
Poll SCM
Disable this project
Quiet period
Trigger builds remotely (e.g., from scripts)
Advanced Project Options
Advanced...
Pipeline
Definition
Pipeline script from SCM
SCM
Git
Repositories
Repository URL
https://github.com/API2309/MAHESH-BHAKARE.git
Please enter Git repository.
Credentials
- none -
Add
Advanced...
Add Repository
Branches to build
Branch Specifier (blank for 'any')
Save
Apply

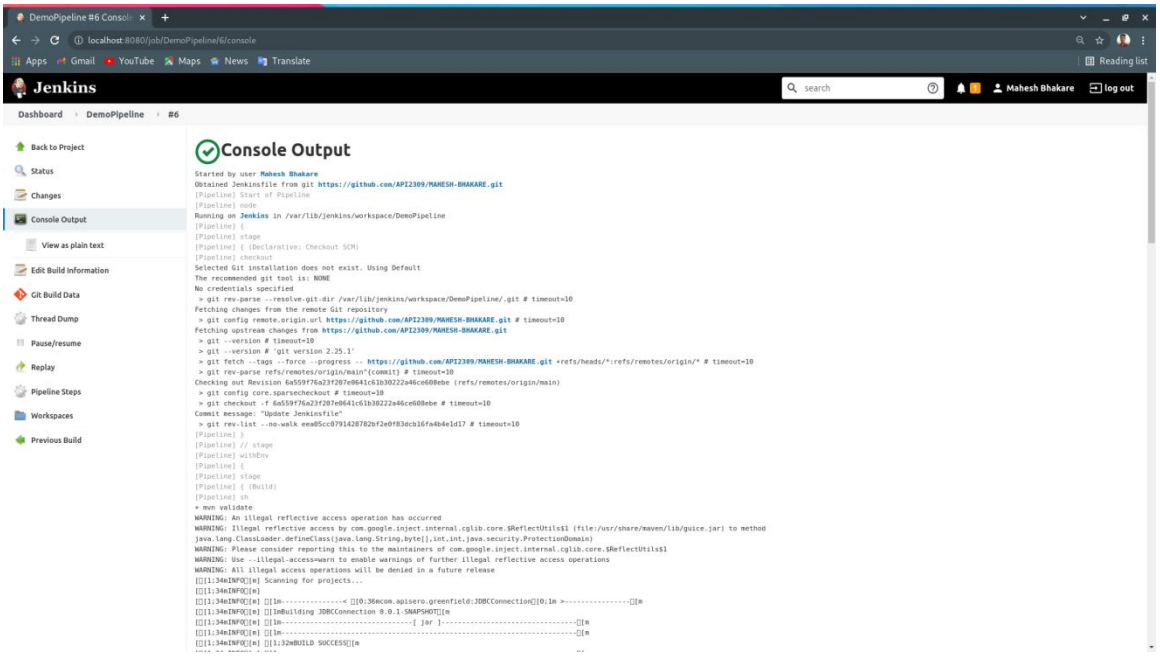

DemoPipeline Config [Jen
localhost:8080/job/DemoPipeline/configure
Apps Gmail YouTube Maps News Translate
Reading list
Dashboard
DemoPipeline
General
Build Triggers
Advanced Project Options
Pipeline
Advanced...
Pipeline
Definition
Pipeline script from SCM
SCM
Git
Repositories
Repository URL
https://github.com/API2309/MAHESH-BHAKARE.git
Please enter Git repository.
Credentials
- none -
Add
Advanced...
Add Repository
Branches to build
Branch Specifier (blank for 'any')
*/main
Add Branch
Repository browser
(Auto)
Additional Behaviours
Save
Apply



3. Git repository where maven project present.



4. Output after Build the project.


DemoPipeline #6 Consol
localhost:8080/job/DemoPipeline/6/console
Apps Gmail YouTube Maps News Translate
Reading list
Jenkins
search
Mahesh Bhakare
log out
Dashboard › DemoPipeline › #6
Back to Project
Status
Changes
Console Output
View as plain text
Edit Build Information
Git Build Data
Thread Dump
Pause/resume
Replay
Pipeline Steps
Workspaces
Previous Build
Console Output
Started by user Mahesh Bhakare
Obtained Jenkinsfile from git https://github.com/API2309/MAHESH-BHAKARE.git
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/DemoPipeline
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Declarative: Checkout SCM)
[Pipeline] checkout
Selected Git installation does not exist. Using Default
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/DemoPipeline/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/API2309/MAHESH-BHAKARE.git # timeout=10
Fetching upstream changes from https://github.com/API2309/MAHESH-BHAKARE.git
> git --version # timeout=10
> git --version # 'git version 2.25.1'
> git fetch --tags --force --progress -- https://github.com/API2309/MAHESH-BHAKARE.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse refs/remotes/origin/main^{commit} # timeout=10
Checking out Revision 6a559f76a23f207e0641c61b30222a46ce608ebe (refs/remotes/origin/main)
> git config core.sparsecheckout # timeout=10
> git checkout -f 6a559f76a23f207e0641c61b30222a46ce608ebe # timeout=10
Commit message: "Update Jenkinsfile"
> git rev-list --no-walk eea05cc0791428782bf2e0f83dcb16fa4b4e1d17 # timeout=10
[Pipeline] }
[Pipeline] // stage
[Pipeline] withEnv
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] sh
+ mvn validate
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by com.google.inject.internal.cglib.core.$ReflectUtils$1 (file:/usr/share/maven/lib/guice.jar) to method
java.lang.ClassLoader.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain)
WARNING: Please consider reporting this to the maintainers of com.google.inject.internal.cglib.core.$ReflectUtils$1
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
[INFO] Scanning for projects...
[INFO]
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT
[INFO] --------------------------------[jar]---------------------------------
[INFO]
[INFO] BUILD SUCCESS
[INFO] Total time: 0.207 s
[INFO] Finished at: 2021-10-28T10:19:47+05:30
[Pipeline] sh
+ mvn clean compile
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by com.google.inject.internal.cglib.core.$ReflectUtils$1 (file:/usr/share/maven/lib/guice.jar) to method
java.lang.ClassLoader.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain)
WARNING: Please consider reporting this to the maintainers of com.google.inject.internal.cglib.core.$ReflectUtils$1
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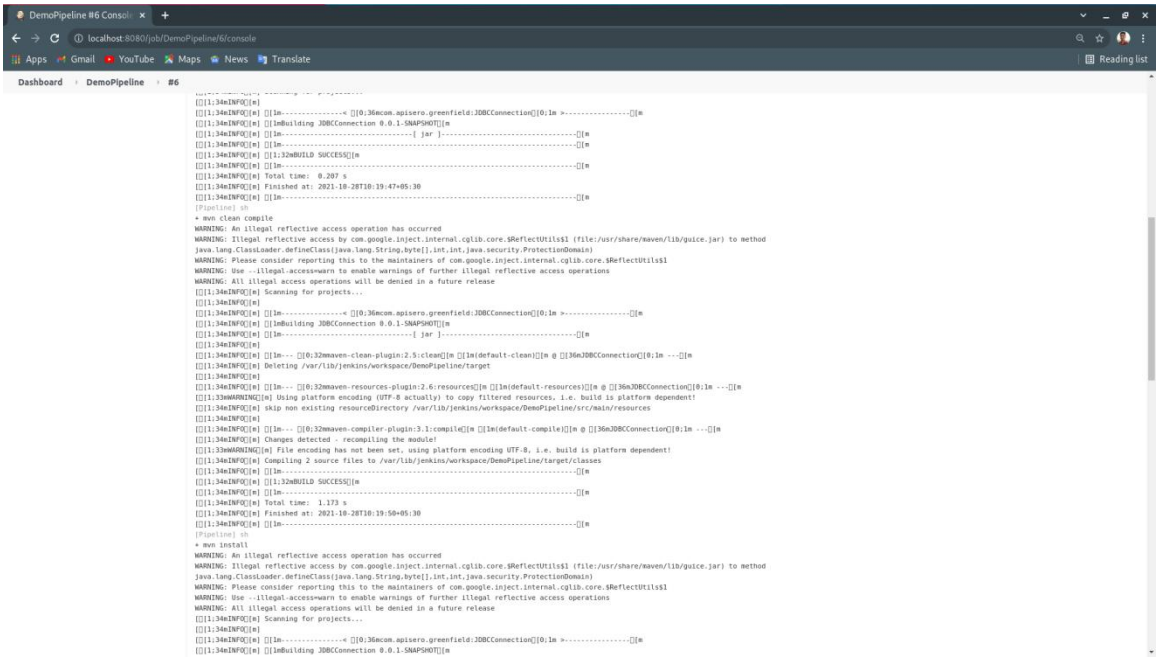
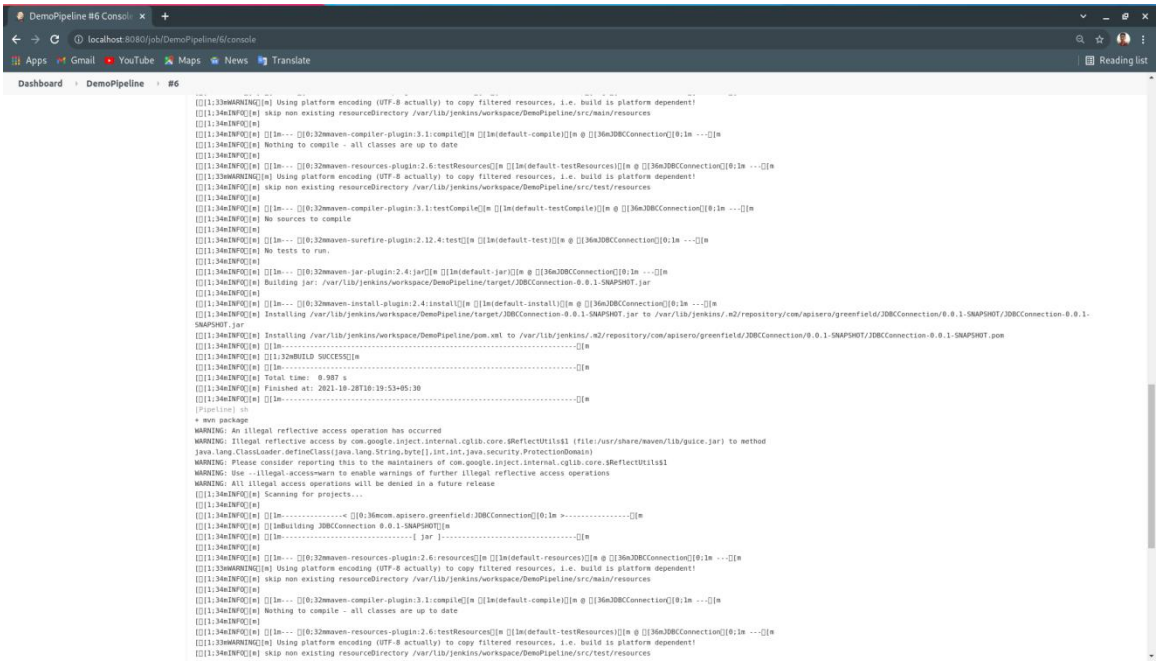
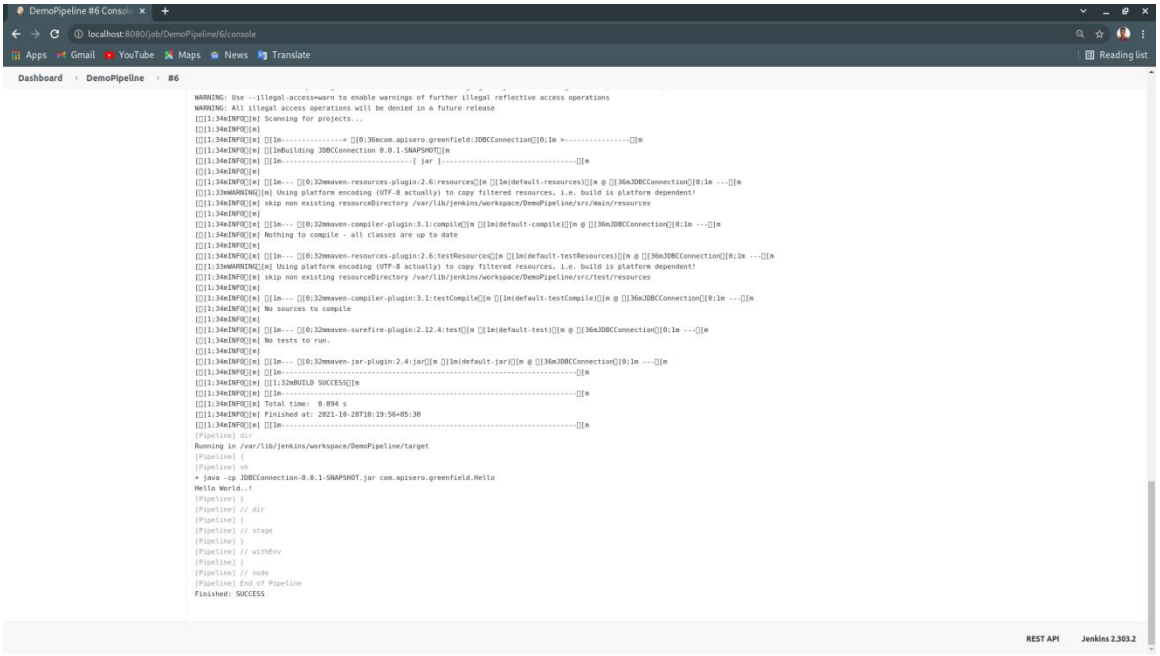
[INFO] Scanning for projects...
[INFO]
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT
[INFO] --------------------------------[jar]---------------------------------
[INFO]
[INFO] --- [0;32mmaven-clean-plugin:2.5:clean[m @ JDBCConnection ---
[INFO] Deleting /var/lib/jenkins/workspace/DemoPipeline/target
[INFO]
[INFO] --- [0;32mmaven-resources-plugin:2.6:resources[m @ JDBCConnection ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/main/resources
[INFO]
[INFO] --- [0;32mmaven-compiler-plugin:3.1:compile[m @ JDBCConnection ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
[INFO] Compiling 2 source files to /var/lib/jenkins/workspace/DemoPipeline/target/classes
[INFO] --
[INFO] BUILD SUCCESS
[INFO] --
[INFO] Total time: 1.173 s
[INFO] Finished at: 2021-10-28T10:19:50+05:30
[INFO] --
[Pipeline] sh
+ mvn install
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by com.google.inject.internal.cglib.core.$ReflectUtils$1 (file:/usr/share/maven/lib/guice.jar) to method
java.lang.ClassLoader.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain)
WARNING: Please consider reporting this to the maintainers of com.google.inject.internal.cglib.core.$ReflectUtils$1
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
[INFO] Scanning for projects...
[INFO]
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT


DemoPipeline #6 Consol
localhost:8080/job/DemoPipeline/6/console
Apps Gmail YouTube Maps News Translate
Reading list
Dashboard › DemoPipeline › #6
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT
[INFO] --------------------------------[jar]---------------------------------
[INFO] BUILD SUCCESS
[INFO] Total time: 0.207 s
[INFO] Finished at: 2021-10-28T10:19:47+05:30
[Pipeline] sh
+ mvn clean compile
[INFO] Deleting /var/lib/jenkins/workspace/DemoPipeline/target
[INFO] --- [0;32mmaven-resources-plugin:2.6:resources[m @ JDBCConnection ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/main/resources
[INFO] --- [0;32mmaven-compiler-plugin:3.1:compile[m @ JDBCConnection ---
[INFO] Changes detected - recompiling the module!
[WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
[INFO] Compiling 2 source files to /var/lib/jenkins/workspace/DemoPipeline/target/classes
[INFO] BUILD SUCCESS
[INFO] Total time: 1.173 s
[INFO] Finished at: 2021-10-28T10:19:50+05:30
[Pipeline] sh
+ mvn install
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT


DemoPipeline #6 Consol
localhost:8080/job/DemoPipeline/6/console
Apps Gmail YouTube Maps News Translate
Reading list
Dashboard › DemoPipeline › #6
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/main/resources
[INFO] --- [0;32mmaven-compiler-plugin:3.1:compile[m @ JDBCConnection ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- [0;32mmaven-resources-plugin:2.6:testResources[m @ JDBCConnection ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/test/resources
[INFO] --- [0;32mmaven-compiler-plugin:3.1:testCompile[m @ JDBCConnection ---
[INFO] No sources to compile
[INFO] --- [0;32mmaven-surefire-plugin:2.12.4:test[m @ JDBCConnection ---
[INFO] No tests to run.
[INFO] --- [0;32mmaven-jar-plugin:2.4:jar[m @ JDBCConnection ---
[INFO] Building jar: /var/lib/jenkins/workspace/DemoPipeline/target/JDBCConnection-0.0.1-SNAPSHOT.jar
[INFO] --- [0;32mmaven-install-plugin:2.4:install[m @ JDBCConnection ---
[INFO] Installing /var/lib/jenkins/workspace/DemoPipeline/target/JDBCConnection-0.0.1-SNAPSHOT.jar to /var/lib/jenkins/.m2/repository/com/apisero/greenfield/JDBCConnection/0.0.1-SNAPSHOT/JDBCConnection-0.0.1-SNAPSHOT.jar
[INFO] Installing /var/lib/jenkins/workspace/DemoPipeline/pom.xml to /var/lib/jenkins/.m2/repository/com/apisero/greenfield/JDBCConnection/0.0.1-SNAPSHOT/JDBCConnection-0.0.1-SNAPSHOT.pom
[INFO] BUILD SUCCESS
[INFO] Total time: 0.987 s
[INFO] Finished at: 2021-10-28T10:19:53+05:30
[Pipeline] sh
+ mvn package
[INFO] ------------< [0;36mcom.apisero.greenfield:JDBCConnection[0;1m >-------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT
[INFO] --- [0;32mmaven-resources-plugin:2.6:resources[m @ JDBCConnection ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/main/resources
[INFO] --- [0;32mmaven-compiler-plugin:3.1:compile[m @ JDBCConnection ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- [0;32mmaven-resources-plugin:2.6:testResources[m @ JDBCConnection ---
[WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/test/resources


DemoPipeline #6 Console
localhost:8080/job/DemoPipeline/6/console
Apps
Gmail
YouTube
Maps
News
Translate
Reading list
Dashboard
DemoPipeline
#6
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
WARNING: All illegal access operations will be denied in a future release
[INFO] Scanning for projects...
[INFO] ------------< com.apisero.greenfield:JDBCConnection >---------------
[INFO] Building JDBCConnection 0.0.1-SNAPSHOT
[INFO] --------------------------------[jar]---------------------------------
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ JDBCConnection ---
WARNING: Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/main/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:compile (default-compile) @ JDBCConnection ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ JDBCConnection ---
WARNING: Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
[INFO] skip non existing resourceDirectory /var/lib/jenkins/workspace/DemoPipeline/src/test/resources
[INFO]
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ JDBCConnection ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ JDBCConnection ---
[INFO] No tests to run.
[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ JDBCConnection ---
[INFO] --
[INFO] BUILD SUCCESS
[INFO] --
[INFO] Total time: 0.894 s
[INFO] Finished at: 2021-10-28T10:19:56+05:30
[INFO] --
[Pipeline] dir
Running in /var/lib/jenkins/workspace/DemoPipeline/target
[Pipeline] {
[Pipeline] sh
+ java -cp JDBCConnection-0.0.1-SNAPSHOT.jar com.apisero.greenfield.Hello
Hello World..!
[Pipeline] }
[Pipeline] // dir
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
REST API
Jenkins 2.303.2