# **Name: Abdurrahman Qureshi**

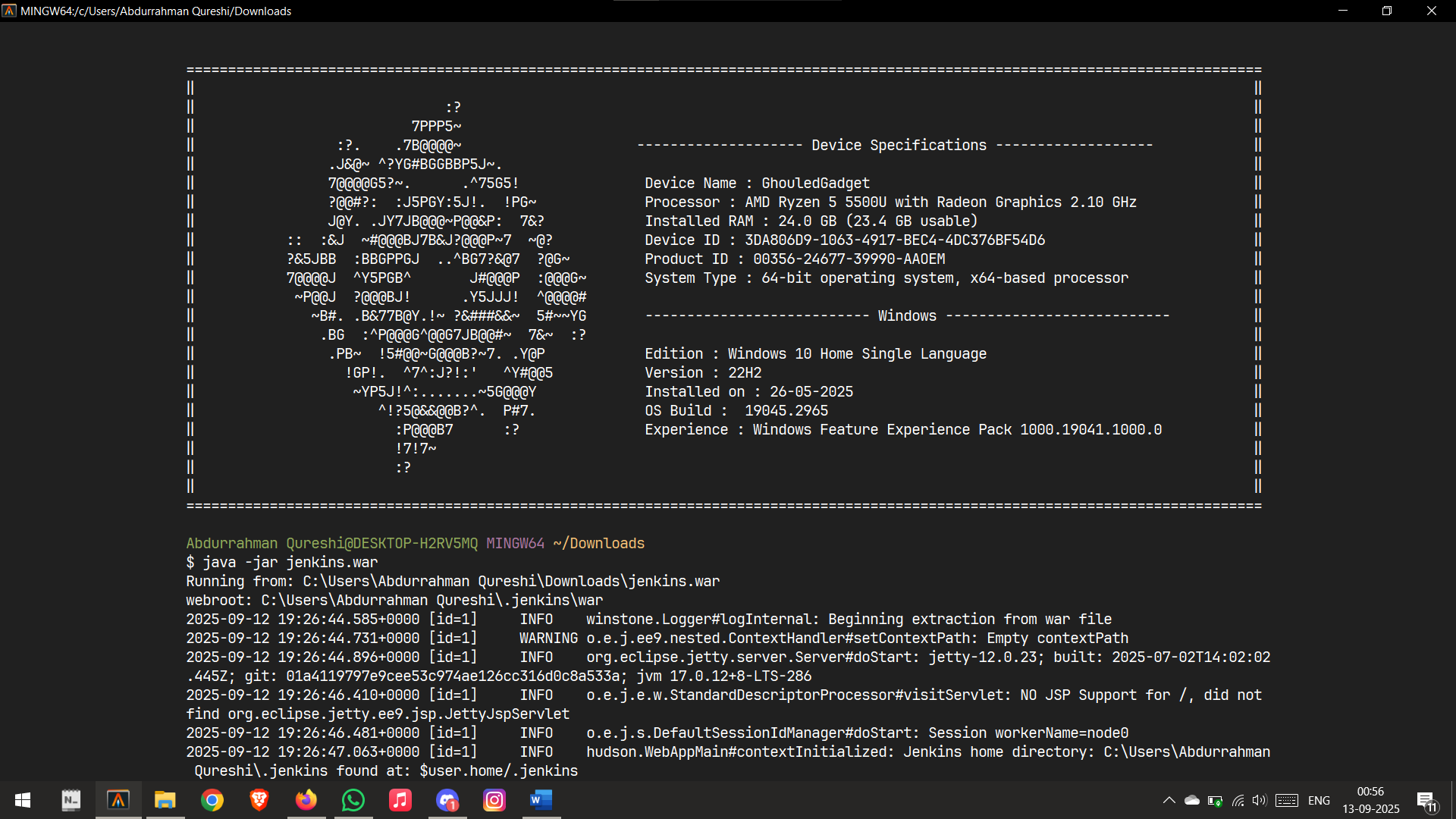
# **Roll No: 242466**

Practical No: 5

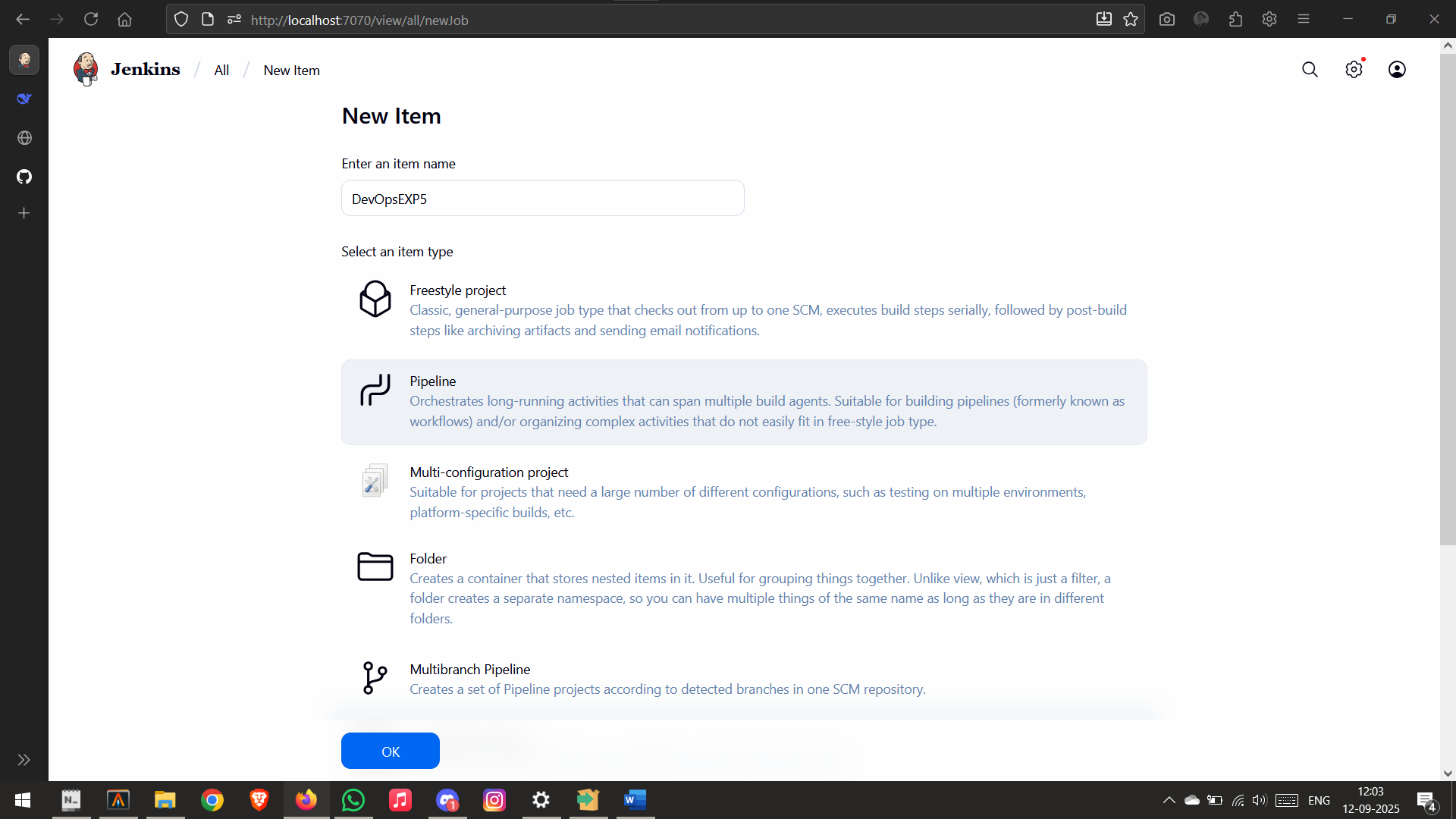
Date Of Performance: 12/09/2025

Aim: To understand Continuous Integration by installing and

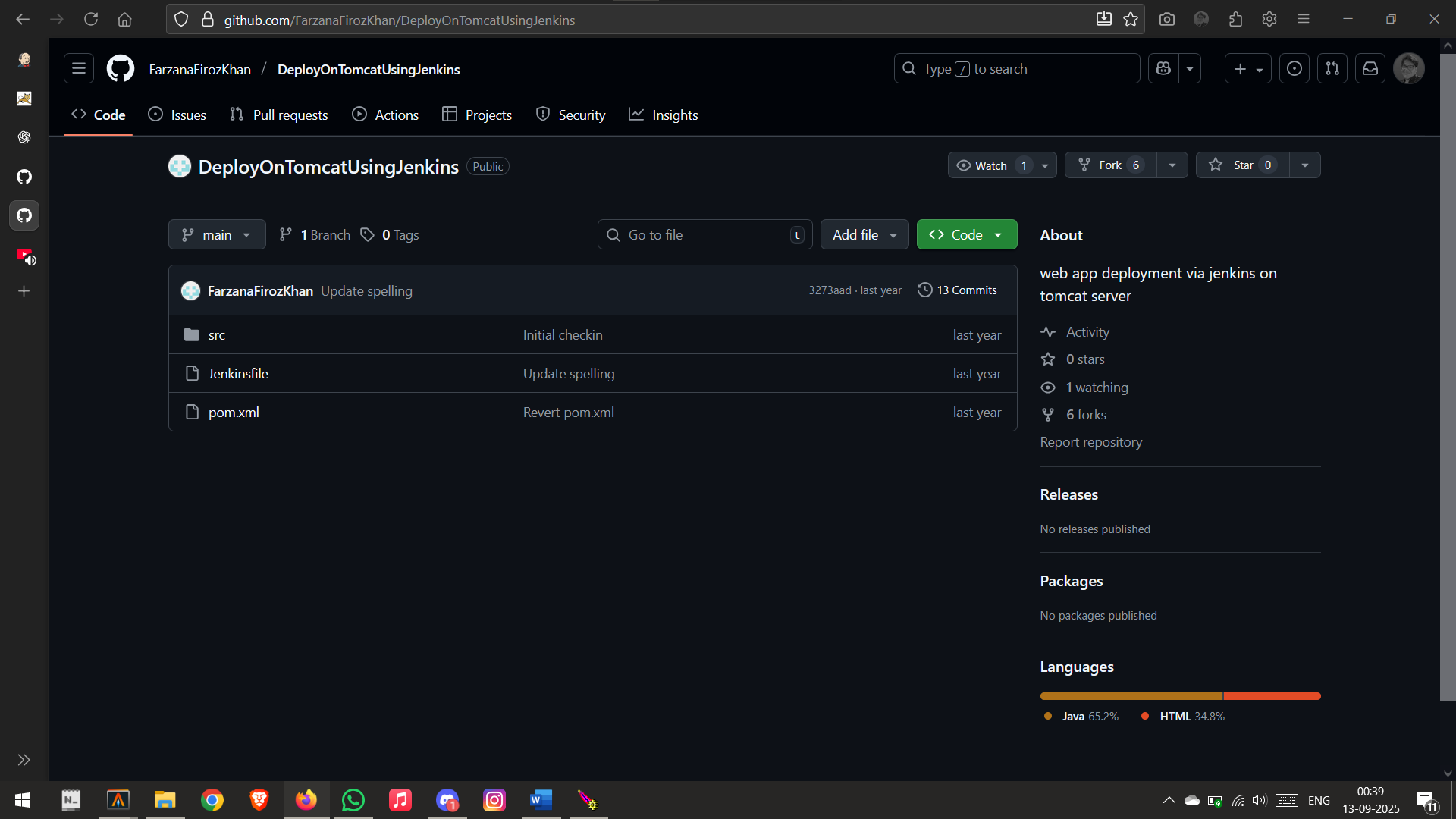
configuring Jenkins with Maven to set up a build job



Launching Jenkins Server



Creating New Item



Copying Repository link

Pom.xml:

<?xml version="1.0" encoding="UTF-8"?>

<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 http://maven.apache.org/xsd/maven-4.0.0.xsd">

<modelVersion>4.0.0</modelVersion>

<groupId>com.mcnz.rps.web</groupId>

<artifactId>roshambo</artifactId>

<version>1.0</version>

<packaging>war</packaging>

<name>roshambo web application</name>

<url>http://www.mcnz.com</url>

<properties>

<project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>

<maven.compiler.source>1.7</maven.compiler.source>

<maven.compiler.target>1.7</maven.compiler.target>

</properties>

<dependencies>

<dependency>

<groupId>junit</groupId>

<artifactId>junit</artifactId>

<version>4.11</version>

<scope>test</scope>

</dependency>

</dependencies>

<build>

<finalName>roshambo</finalName>

<pluginManagement><!-- lock down plugins versions to avoid using Maven defaults (may be moved to parent pom) -->

<plugins>

<plugin>

<artifactId>maven-clean-plugin</artifactId>

<version>3.0.0</version>

</plugin>

<!-- see http://maven.apache.org/ref/current/maven-core/default-bindings.html#Plugin\_bindings\_for\_war\_packaging -->

<plugin>

<artifactId>maven-resources-plugin</artifactId>

<version>3.0.2</version>

</plugin>

<plugin>

<artifactId>maven-compiler-plugin</artifactId>

<version>3.8.1</version>

<configuration>

<source>8</source> <!-- Set to 8 or later -->

<target>8</target> <!-- Set to 8 or later -->

</configuration>

</plugin>

<plugin>

<groupId>org.apache.maven.plugins</groupId>

<artifactId>maven-surefire-plugin</artifactId>

<version>3.0.0</version>

</plugin>

<plugin>

<artifactId>maven-war-plugin</artifactId>

<version>3.2.0</version>

</plugin>

<plugin>

<artifactId>maven-install-plugin</artifactId>

<version>2.5.2</version>

</plugin>

<plugin>

<artifactId>maven-deploy-plugin</artifactId>

<version>2.8.2</version>

</plugin>

<plugin>

<groupId>org.apache.tomcat.maven</groupId>

<artifactId>tomcat7-maven-plugin</artifactId>

<version>2.2</version>

<configuration>

<server>maven-tomcat-war-deplopyment-server</server>

<url>http://localhost:6060/manager/text</url>

<path>/rps</path>

</configuration>

</plugin>

</plugins>

</pluginManagement>

</build>

</project>

JenkinsFile:

pipeline {

agent any

tools {

jdk 'JDK17'

maven 'MAVEN3'

}

environment {

WAR\_FILE = 'target/roshambo.war'

TOMCAT\_URL = 'http://localhost:6060'

TOMCAT\_USER = 'qarq90'

TOMCAT\_PASSWORD = 'qwertyuiop'

}

stages {

stage('Checkout') {

steps {

git branch: 'main', url: 'https://github.com/FarzanaFirozKhan/DeployOnTomcatUsingJenkins.git'

}

}

stage('Clean Project') {

steps {

bat "mvn clean"

}

}

stage('Build Project') {

steps {

bat "mvn package"

}

}

stage('Deploy to Tomcat') {

steps {

script {

def warFilePath = "${WORKSPACE}/${WAR\_FILE}"

if (fileExists(warFilePath)) {

bat """

curl --upload-file "${warFilePath}" ^

--user ${TOMCAT\_USER}:${TOMCAT\_PASSWORD} ^

"${TOMCAT\_URL}/manager/text/deploy?path=/roshambo&update=true"

"""

} else {

error('WAR file not found! Build might have failed.')

}

}

}

}

}

post {

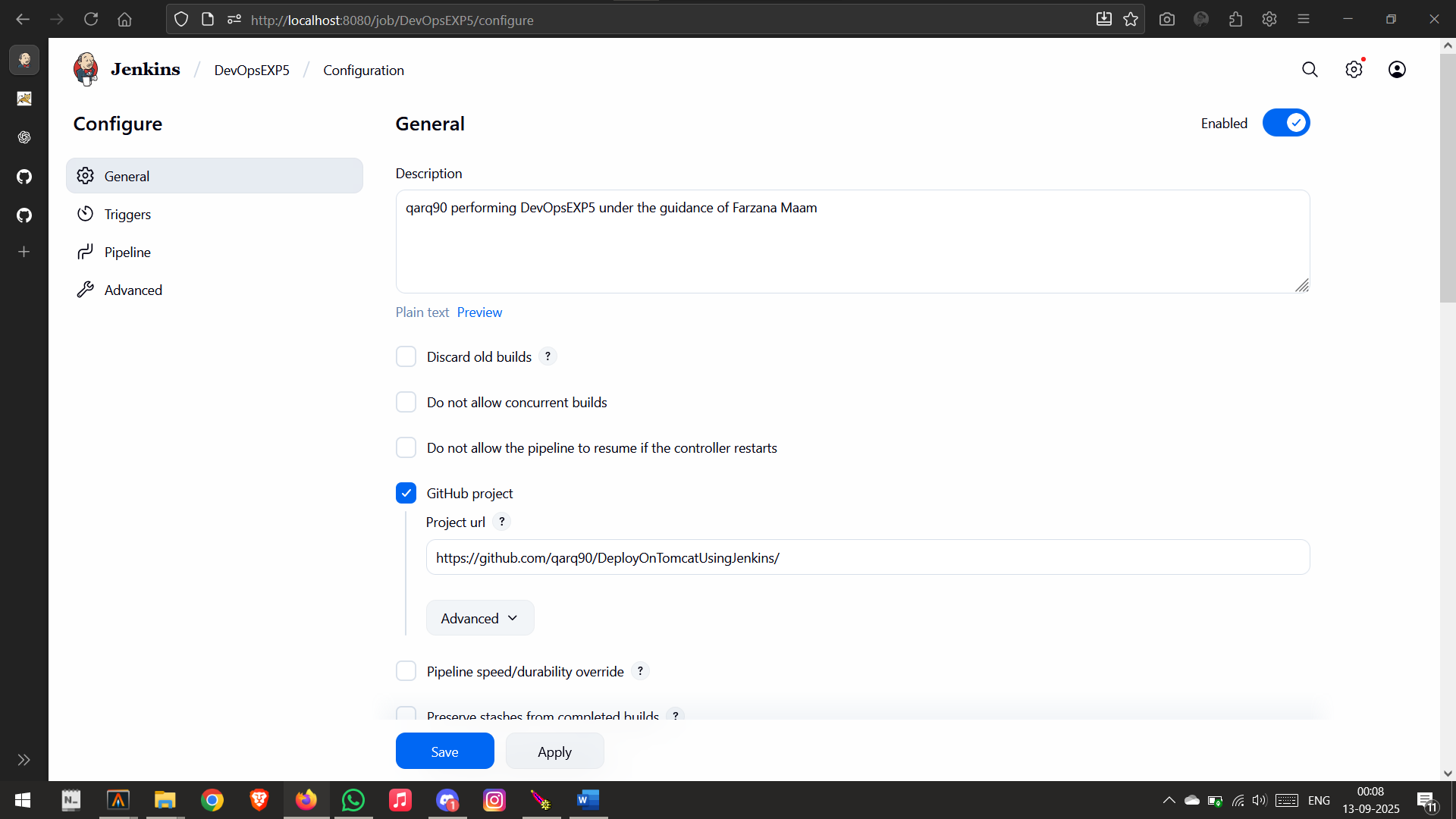
always {

echo 'Build completed'

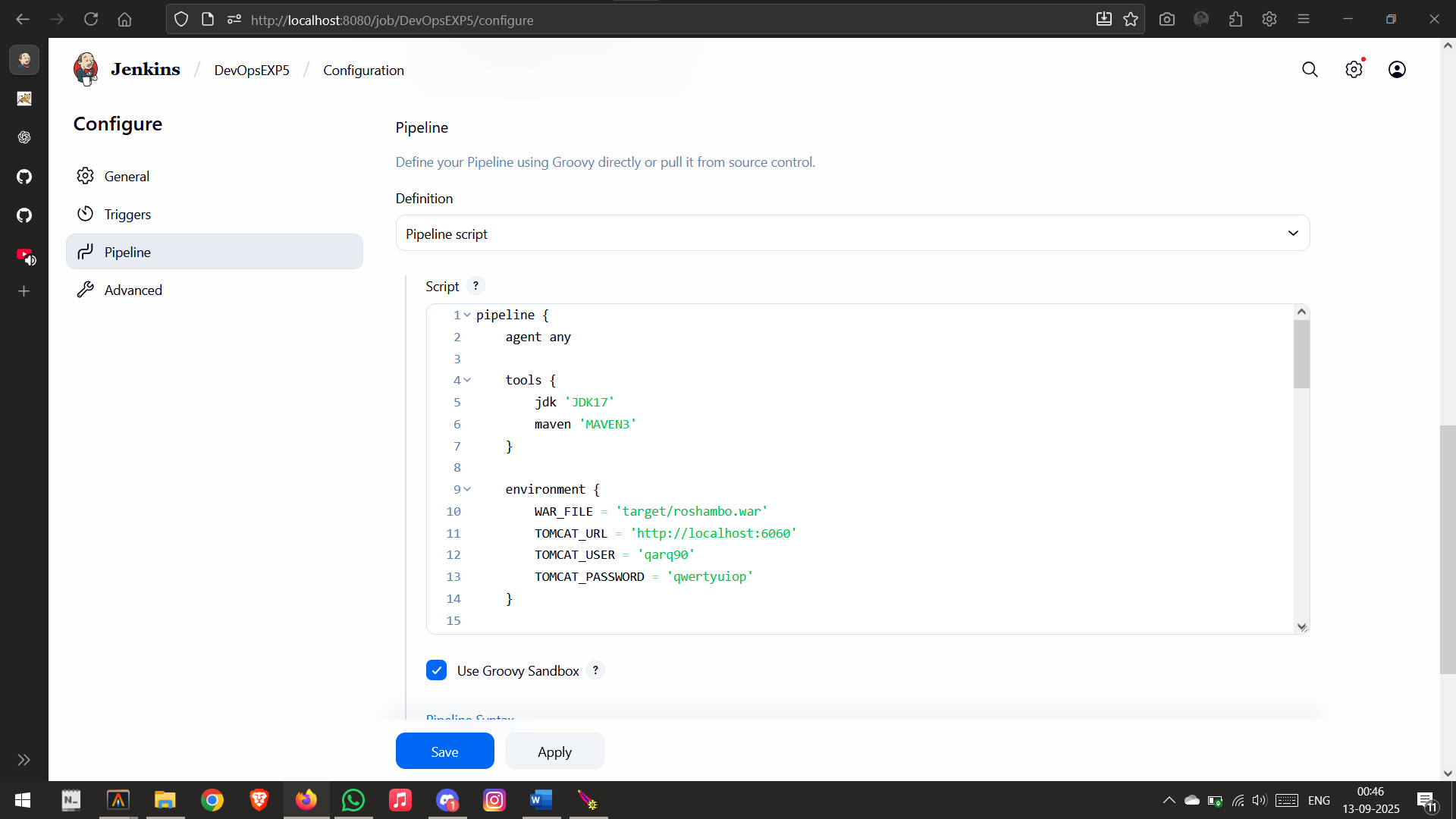
}

}

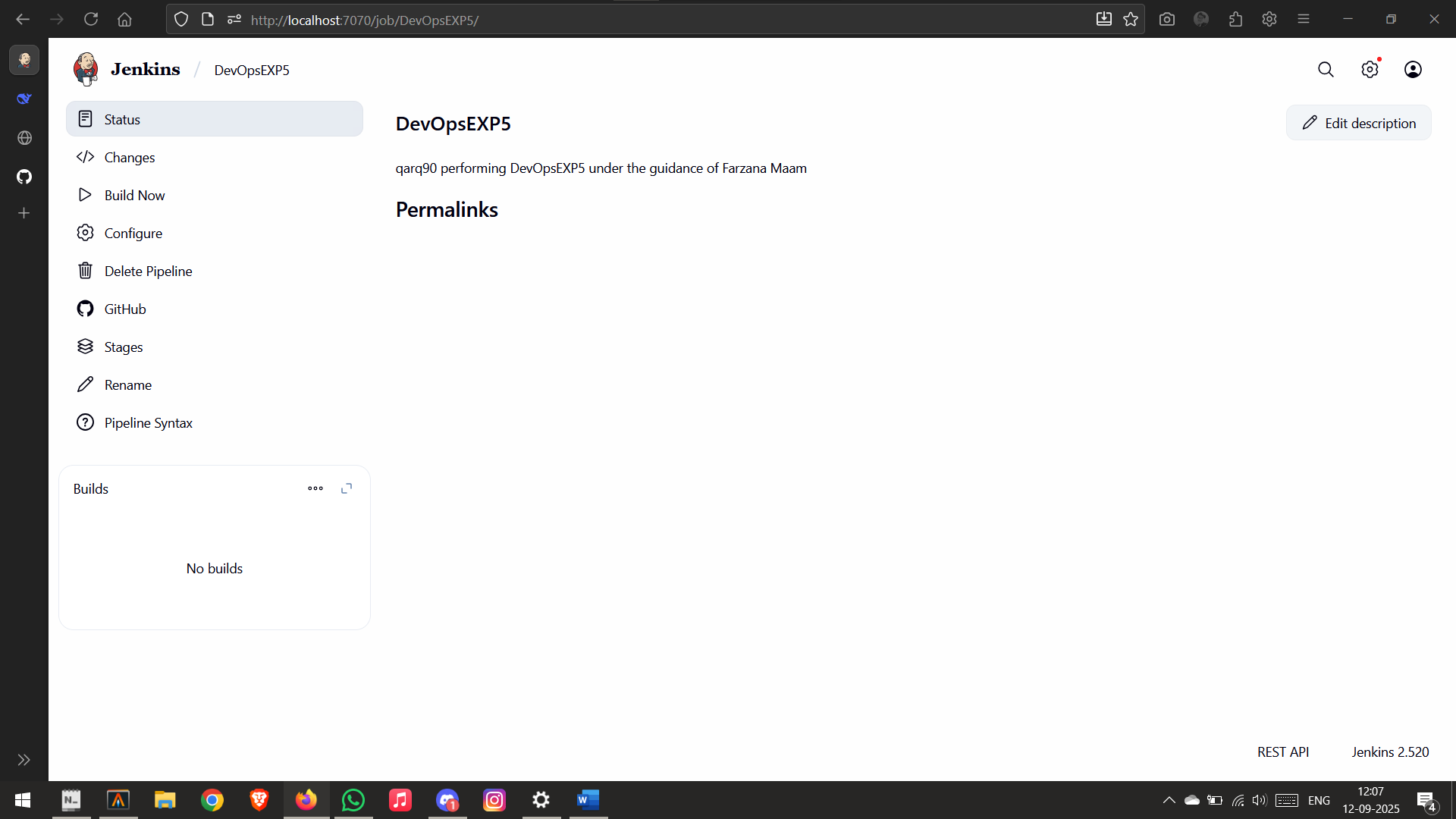
}



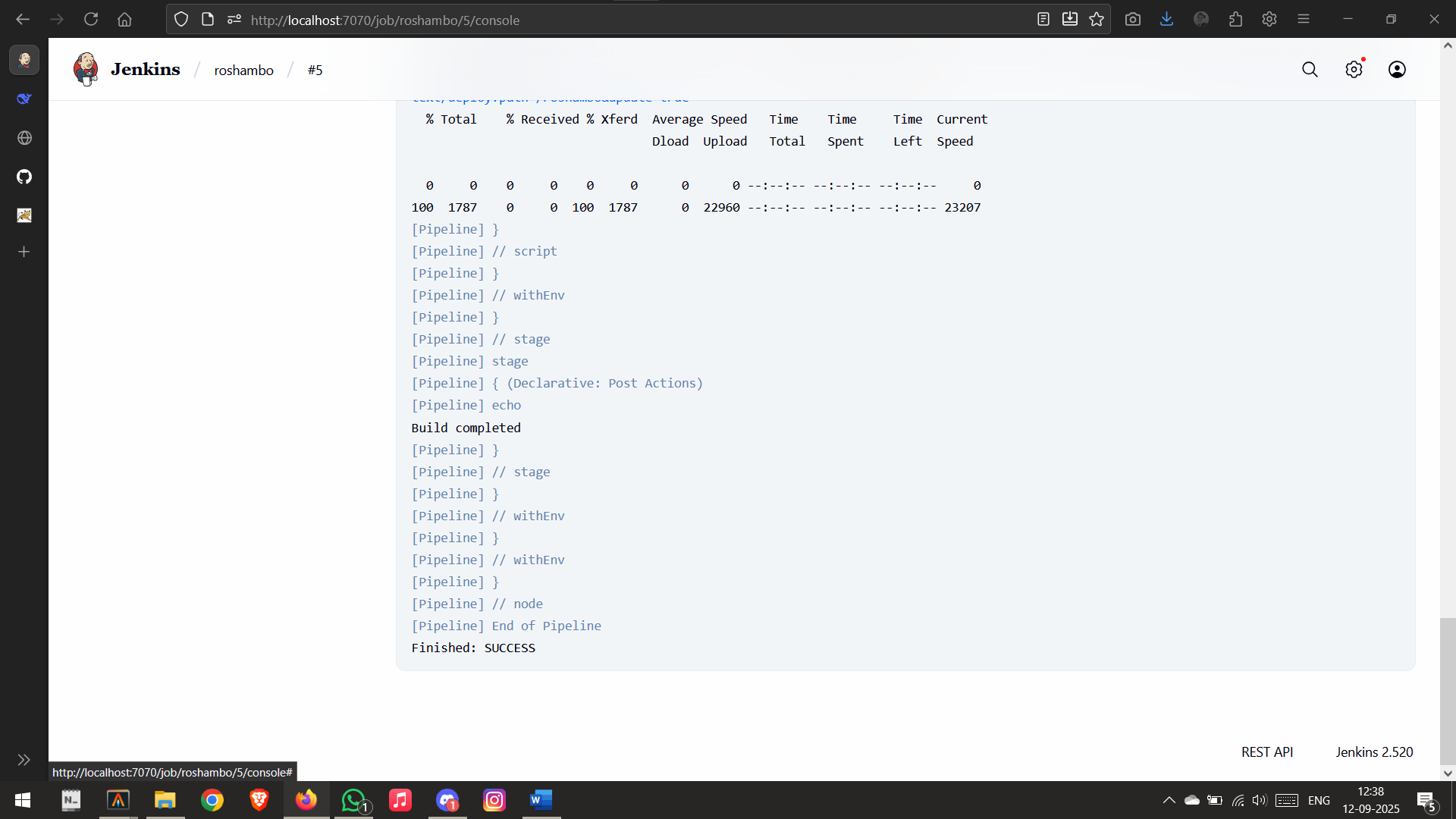
Configuring New Item



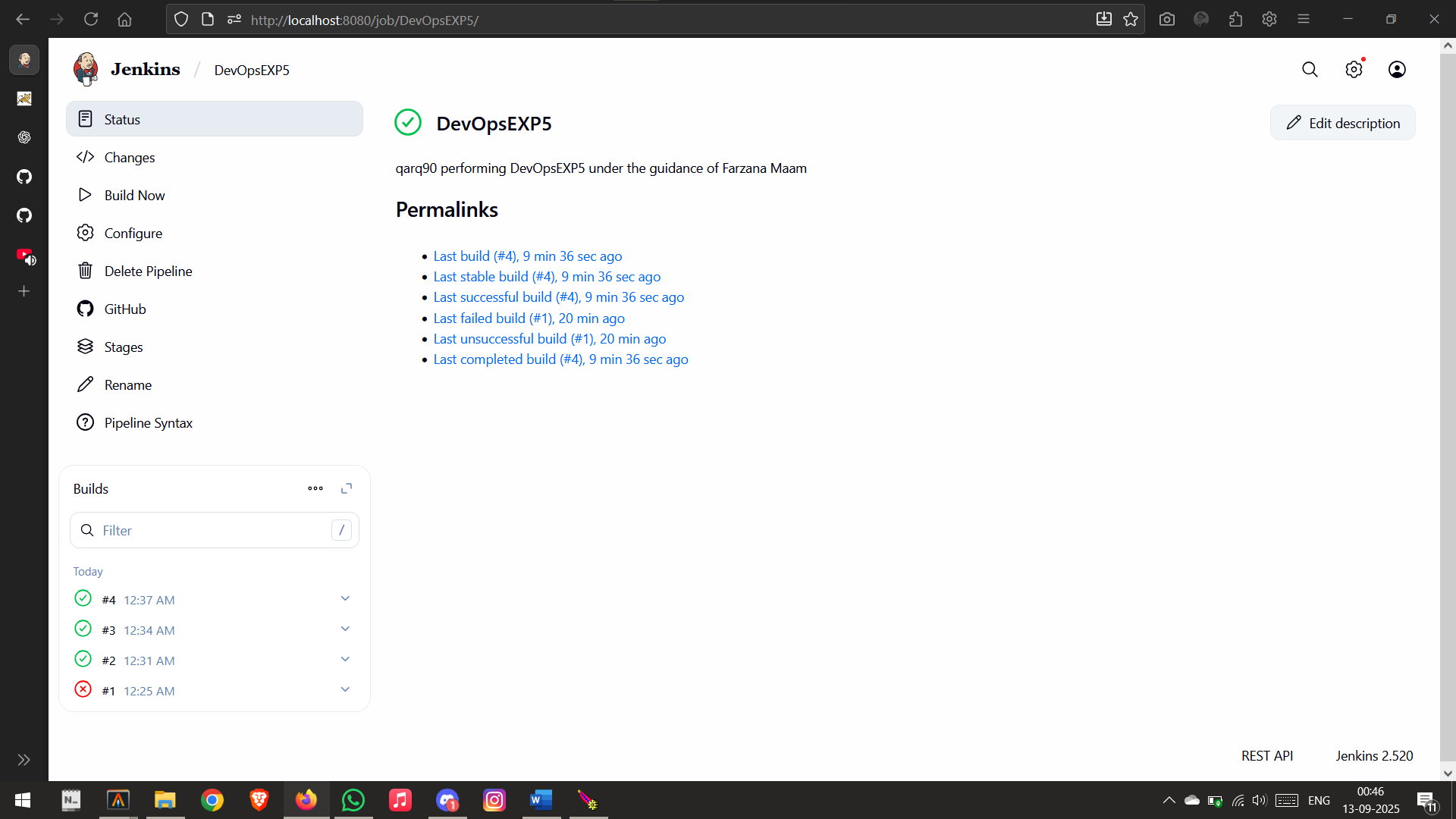
Adding the Pipeline Script



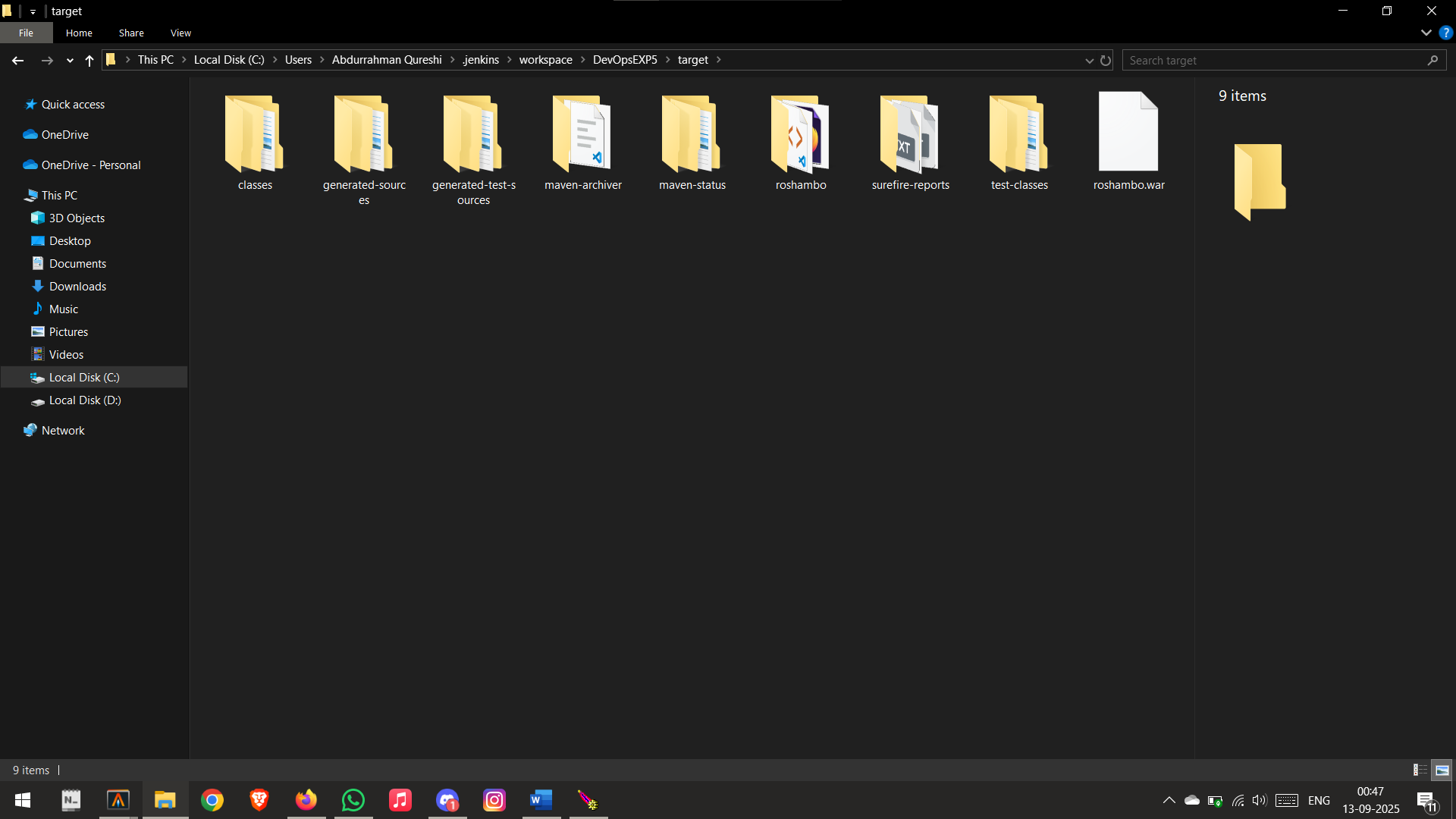
Item Configured



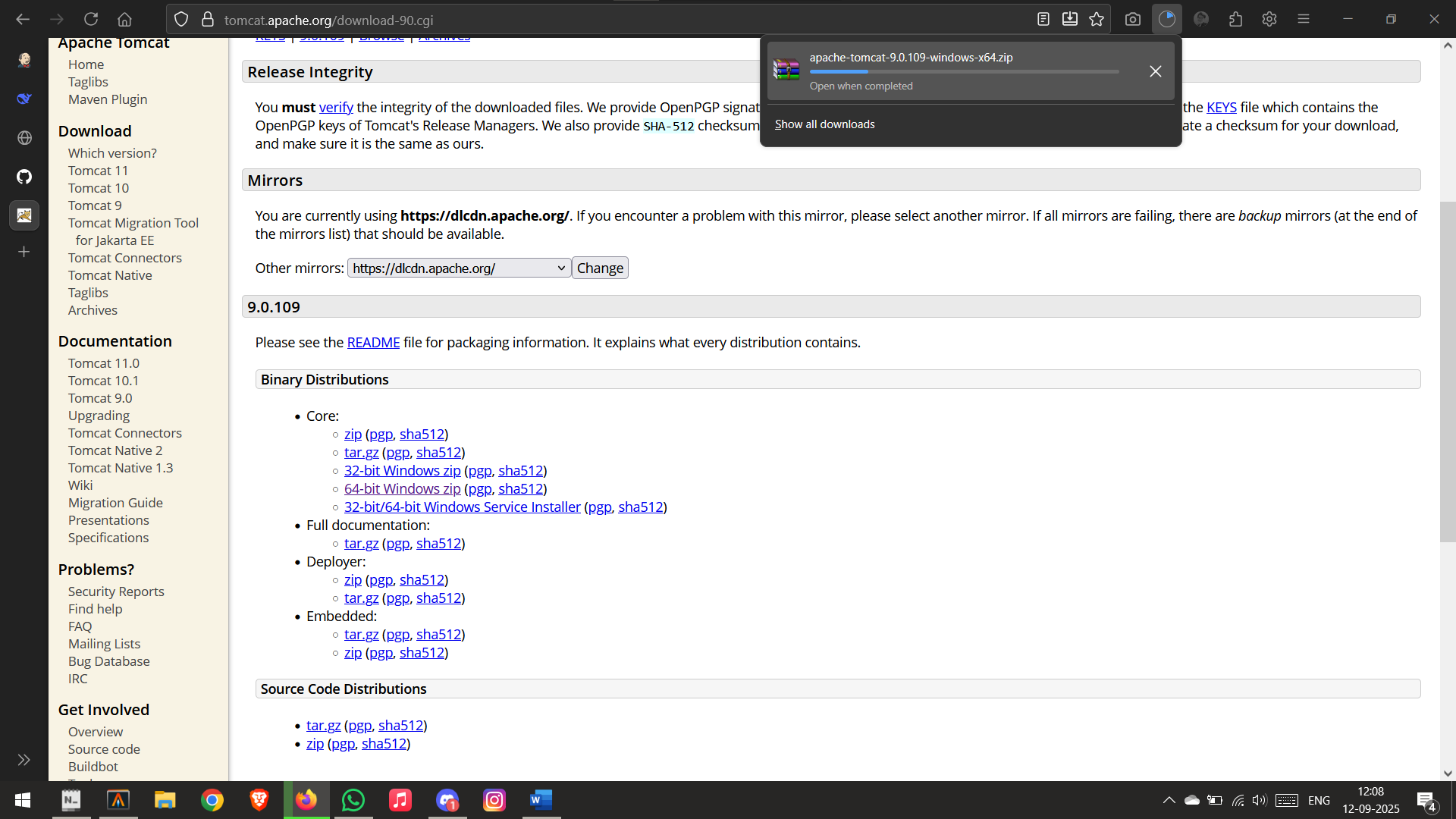
Build Complete



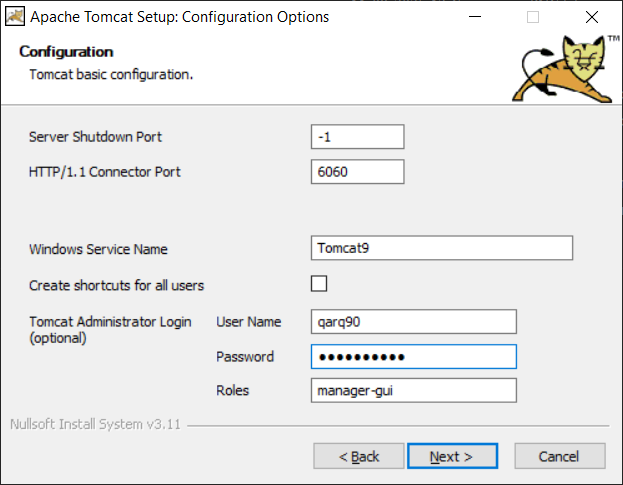
Item Build Successful



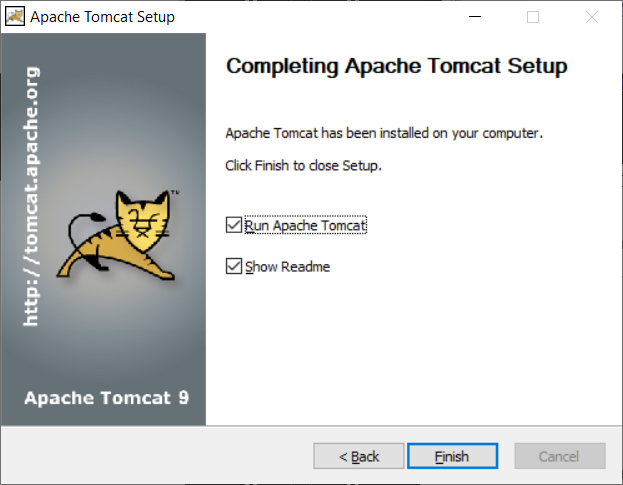
.war File Generated

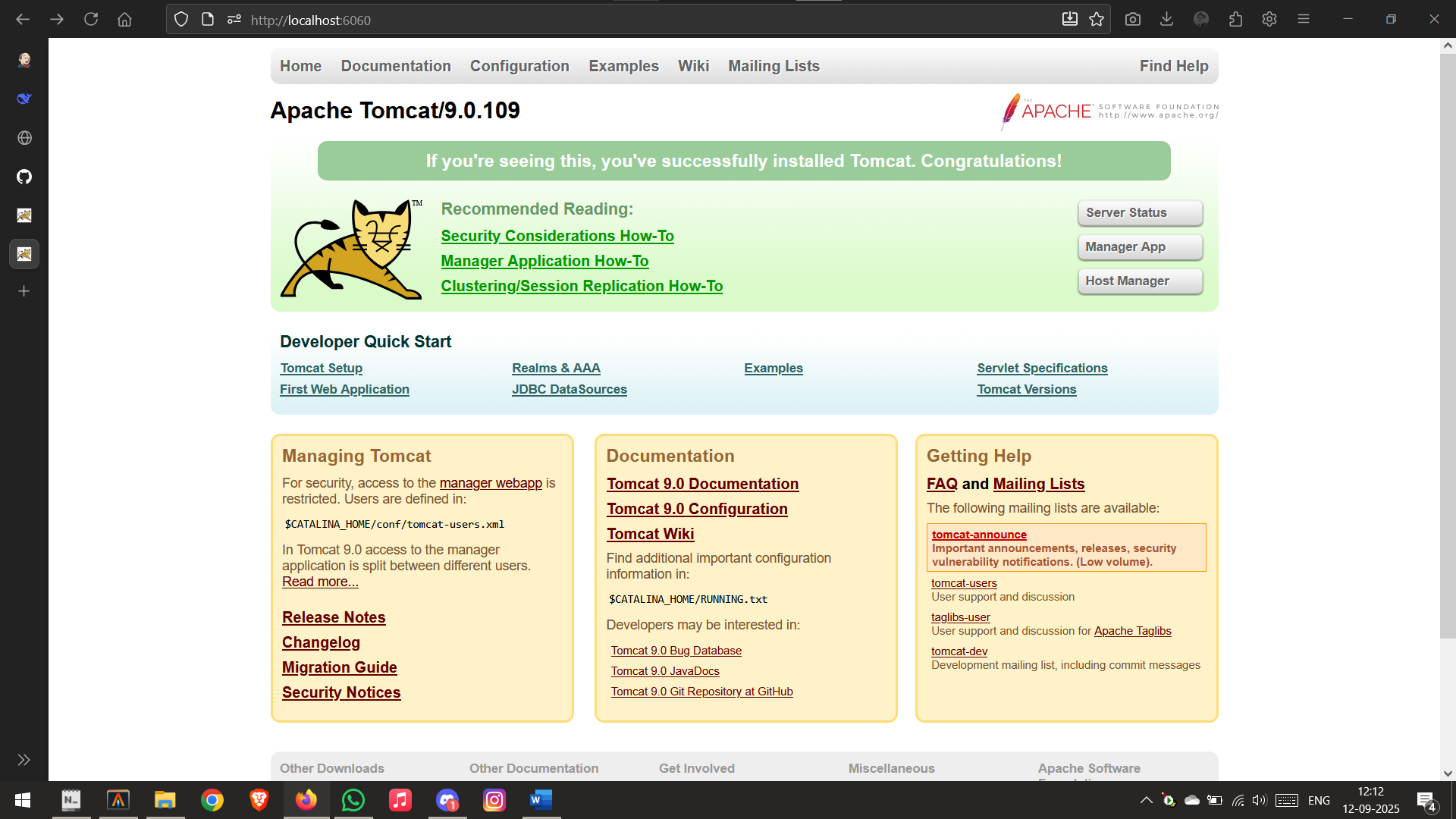


Downloading Tomcat Installer



Setting up Tomcat Server





Tomcat Setup Complete

Tomcat-users.xml:

<?xml version='1.0' encoding='cp1252'?>

<!--

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limitations under the License.

-->

<tomcat-users xmlns="http://tomcat.apache.org/xml"

xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"

xsi:schemaLocation="http://tomcat.apache.org/xml tomcat-users.xsd"

version="1.0">

<role rolename="manager-gui"/>

<role rolename="manager-script"/>

<role rolename="manager-status"/>

<role rolename="manager-jmx"/>

<user username="qarq90" password="qwertyuiop" roles="manager-gui,manager-script" />

<!--

By default, no user is included in the "manager-gui" role required

to operate the "/manager/html" web application. If you wish to use this app,

you must define such a user - the username and password are arbitrary.

Built-in Tomcat manager roles:

- manager-gui - allows access to the HTML GUI and the status pages

- manager-script - allows access to the HTTP API and the status pages

- manager-jmx - allows access to the JMX proxy and the status pages

- manager-status - allows access to the status pages only

The users below are wrapped in a comment and are therefore ignored. If you

wish to configure one or more of these users for use with the manager web

application, do not forget to remove the <!.. ..> that surrounds them. You

will also need to set the passwords to something appropriate.

-->

<!--

<user username="admin" password="<must-be-changed>" roles="manager-gui"/>

<user username="robot" password="<must-be-changed>" roles="manager-script"/>

-->

<!--

The sample user and role entries below are intended for use with the

examples web application. They are wrapped in a comment and thus are ignored

when reading this file. If you wish to configure these users for use with the

examples web application, do not forget to remove the <!.. ..> that surrounds

them. You will also need to set the passwords to something appropriate.

-->

<!--

<role rolename="tomcat"/>

<role rolename="role1"/>

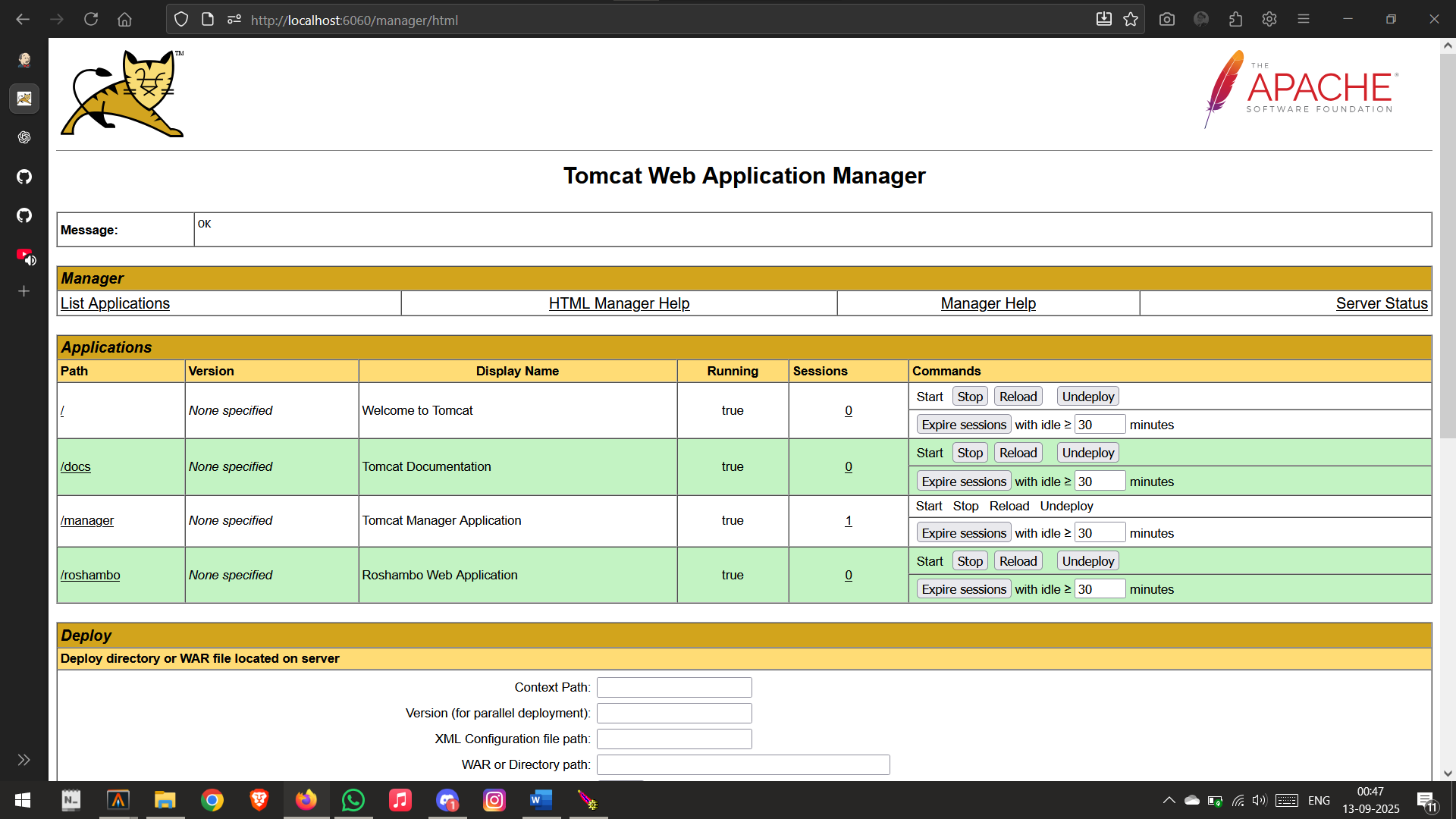
<user username="tomcat" password="<must-be-changed>" roles="tomcat"/>

<user username="both" password="<must-be-changed>" roles="tomcat,role1"/>

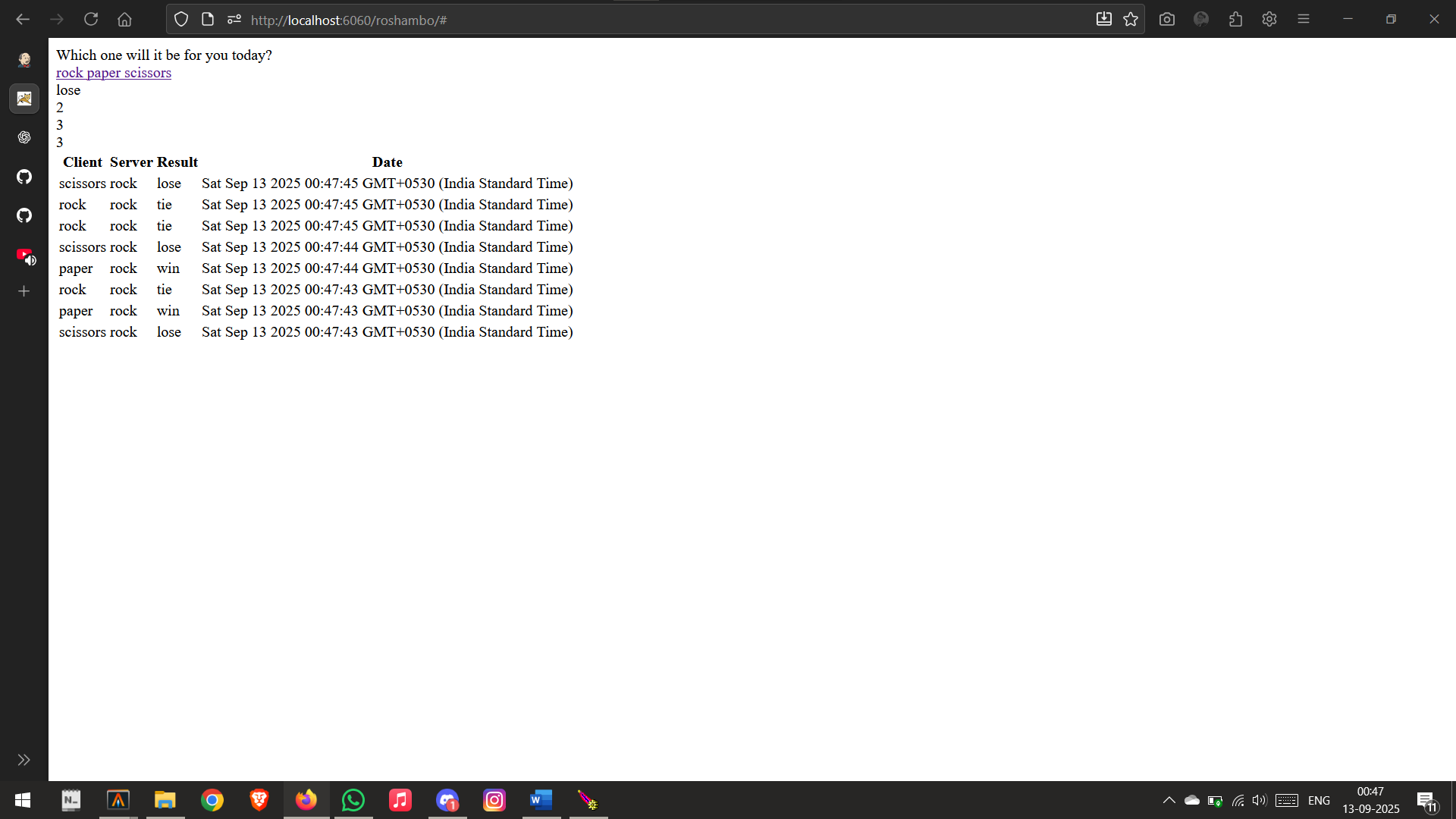
<user username="role1" password="<must-be-changed>" roles="role1"/>

-->

</tomcat-users>



Tomcat Server App Manager Opened



Project Deployed Successfully