**Project 1**

**devops ci /cd pipeline : deploy code into tomcat and check the code qulity using sonar and upload the artifacts into nexus**

**Steps**

**1.Take the source code from git hub**

**2. build the war using maven**

**3.check the code quality using sonar**

**4.upload the artifacts into sonar nexus**

**5.deploy the war file into tomcat**

**Plugins to install**

**Git**

**Maven**

**Sonarqube scanner**

**Nexus artifactory**

**Deploy to container**

**Then we integrate into Jenkins**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  |  | | --- | --- | --- | --- | | **Git** | | |  | |  | Name |  |  | |  | |  |  | |  | Path to Git executable |  |  | |  | |  |  | |  |  | |  | |  |  |  |  | | Install automatically   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Maven**   |  |  |  |  | | --- | --- | --- | --- | |  | Name |  |  | |  | |  |  | |  | MAVEN\_HOME |  |  | |  | |  |  | |  |  |  |  | | Install automatically | | |  | | | | |  | |  |  | |  | | Delete Git | | | | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SonarQube Scanner   |  |  |  |  | | --- | --- | --- | --- | |  | Name |  |  | |  | |  |  | |  | SONAR\_RUNNER\_HOME |  |  | |  | |  |  | |  |  |  |  | | Install automatically | | |  | |  |  | |  | |  |  | Delete SonarQube Scanner |  | |

**And sonarqube will do the system configuration pass the sonar qube server details**

|  |
| --- |
|  |
| **SonarQube servers** | | | |
|  | Environment variables | Enable injection of SonarQube server configuration as build environment variables |  |
|  | |  |  |
|  | | If checked, job administrators will be able to inject a SonarQube server configuration as environment variables in the build. |  |
|  | SonarQube installations | |  |  |  |  | | --- | --- | --- | --- | |  | Name |  |  | |  | |  |  | |  | Server URL |  |  | |  | |  |  | |  | |  |  | |  |

Server authentication token

**Create a job name tomcat and configure it given below**

General

Source Code Management

Build Triggers

Build Environment

Pre Steps

Build

Post Steps

**Build Settings**

Post-build Actions

Top of Form

|  |  |  |  |
| --- | --- | --- | --- |
|  | | | |
|  | Description | [Plain text] [Preview](http://192.168.76.129:8080/job/tomcat/configure) |  |
|  | |  |  |
|  |  |  |  |
|  |  |  |  |
| Discard old builds | | |  |
|  |  | |  |
|  |  |  |  |
| GitHub project | | |  |
| This build requires lockable resources | | |  |
|  |  |  |  |
| This project is parameterized | | |  |
|  |  | |  |
|  |  |  |  |
| Throttle builds | | |  |
|  |  | |  |
| Disable this project | | |  |
|  |  | |  |
|  |  |  |  |
| Execute concurrent builds if necessary | | |  |
|  |  | |  |
|  |  |  |  |
| Restrict where this project can be run | | |  |
|  |  | |  |
|  |  |  |  |
|  |  | Advanced... |  |
| **Source Code Management** | | | |
| None | | |  |
| Git | | |  |
|  |  |  |  |
|  | Repositories | |  |  |  |  | | --- | --- | --- | --- | |  | Repository URL |  |  | |  | |  |  | |  |  | |  | |  | Credentials | Add |  | |  | |  |  | |  |  | Advanced... |  | |  |  | Add Repository |  | |  | |  |  | |  |
|  | |  |  |
|  |  | |  |
|  | Branches to build | |  |  |  |  | | --- | --- | --- | --- | |  | Branch Specifier (blank for 'any') |  |  | |  | |  |  | |  |  | |  | |  |  | Add BranchDelete Branch |  | |  | |  |  | |  |
|  | |  |  |
|  | Repository browser |  |  |
|  | | |  | | --- | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | |  | | |
|  |  | |  |
|  | Additional Behaviours | Add |  |
|  | |  |  |
| Subversion | | |  |
|  |  | |  |
| **Build Triggers** | | | |
| Build whenever a SNAPSHOT dependency is built | | |  |
|  |  | |  |
| Trigger builds remotely (e.g., from scripts) | | |  |
|  |  | |  |
| Build after other projects are built | | |  |
|  |  | |  |
| Build periodically | | |  |
|  |  | |  |
| GitHub hook trigger for GITScm polling | | |  |
|  |  | |  |
| Poll SCM | | |  |
|  |  | |  |
| **Build Environment** | | | |
| Delete workspace before build starts | | |  |
| Use secret text(s) or file(s) | | |  |
|  |  | |  |
| Provide Configuration files | | |  |
|  |  | |  |
| Send files or execute commands over SSH before the build starts | | |  |
|  |  | |  |
| Send files or execute commands over SSH after the build runs | | |  |
|  |  | |  |
| Abort the build if it's stuck | | |  |
| Add timestamps to the Console Output | | |  |
| Inspect build log for published Gradle build scans | | |  |
| SSH Agent | | |  |
| With Ant | | |  |
|  |  | |  |
| **Pre Steps** | | | |
| |  |  |  |  | | --- | --- | --- | --- | | **Execute SonarQube Scanner** | | |  | |  | Task to run |  |  | |  | |  |  | |  |  | |  | |  | JDK |  |  | |  | |  |  | |  | | JDK to be used for this SonarQube analysis |  | |  |  | |  | |  | Path to project properties |  |  | |  | |  |  | |  |  | |  | |  | Analysis properties |  |  | |  | |  |  | |  |  | |  | |  | Additional arguments | |  |  | | --- | --- | |  |  | |  | |  | |  |  | |  |  | |  | |  | JVM Options | |  |  | | --- | --- | |  |  | |  | |  | |  |  | |  |  | |  | | Delete | | | |   Add pre-build step | | | |
| **Build** | | | |
|  | Root POM |  |  |
|  | |  |  |
|  |  | |  |
|  | Goals and options |  |  |
|  | |  |  |
|  |  | |  |
|  |  | Advanced... |  |
| **Post Steps** | | | |
|  |  | Run only if build succeeds Run only if build succeeds or is unstable Run regardless of build result |  |
|  | |  |  |
|  | | Should the post-build steps run only for successful builds, etc. |  |
| |  |  |  |  | | --- | --- | --- | --- | | **Nexus artifact uploader** | | |  | | **Nexus Details** | | | | |  | Nexus Version |  |  | |  | |  |  | |  | Protocol |  |  | |  | |  |  | |  | Nexus URL |  |  | |  | |  |  | |  |  | |  | |  | Credentials | Add |  | |  | |  |  | |  | GroupId |  |  | |  | |  |  | |  | Version |  |  | |  | |  |  | |  | Repository |  |  | |  | |  |  | |  |  | |  | |  | Artifacts | Artifact   |  |  |  |  | | --- | --- | --- | --- | |  | | | | |  | ArtifactId |  |  | |  | |  |  | |  | Type |  |  | |  | |  |  | |  |  | |  | |  | Classifier |  |  | |  | |  |  | |  |  | |  | |  | File |  |  | |  | |  |  | |  |  | |  | |  |  | Delete |  | |  | |  |  |   Add |  | |  | |  |  | | Delete | | | |   Add post-build step | | | |
| **Build Settings** | | | |
| E-mail Notification | | |  |
| **Post-build Actions** | | | |
| |  |  |  |  | | --- | --- | --- | --- | | **Deploy war/ear to a container** | | |  | |  | WAR/EAR files |  |  | |  | |  |  | |  |  | |  | |  | Context path |  |  | |  | |  |  | |  |  | |  | |  | Containers | |  |  |  |  | | --- | --- | --- | --- | | **Tomcat 8.x** | | |  | |  | Credentials | Add |  | |  | |  |  | |  | Tomcat URL |  |  | |  | |  |  | | Delete | | | |   Add Container |  | |  | |  |  | |  | Deploy on failure |  |  | |  | |  |  | | Delete | | | |   Add post-build action | | | |
| SaveApply | | | |

Bottom of Form