APRIL 13, 2024

DevOps Classroom Notes – 13/april/2024

**Sonarqube analysis for .net project**

* [Refer Here](https://github.com/dummyrepos/SampleWeb) for the sample dotnet project
* Our jenkinsfile [Refer Here](https://github.com/dummyrepos/SampleWeb/blob/main/Jenkinsfile)

pipeline {

agent any

stages {

stage('vcs') {

steps {

git branch: 'main',

url: 'https://github.com/dummyrepos/SampleWeb.git'

}

}

stage('build and analysis') {

steps {

withSonarQubeEnv(credentialsId: 'SONAR\_CLOUD', installationName: 'sonarcloud') {

sh 'dotnet sonarscanner begin /k:"april24\_sampleweb" /o:april24'

sh 'dotnet build SampleMVC.sln --no-incremental'

sh 'dotnet test SampleMVC.sln'

sh 'dotnet publish -c Release StudentsWeb/StudentsWeb.csproj -o published/'

sh 'dotnet sonarscanner end'

}

}

}

stage("Quality Gate") {

steps {

timeout(time: 1, unit: 'HOURS') {

// Parameter indicates whether to set pipeline to UNSTABLE if Quality Gate fails

// true = set pipeline to UNSTABLE, false = don't

waitForQualityGate abortPipeline: true

}

}

}

}

}

**Package Repository or artifactory**

* To store build artifacts with versioning and history we need pacakge repositories
* There are many tools available for doing this
  + Jfrog
  + Nexus
  + Azure Artifacts
  + Google artifactory
* We will be using Jfrog [Refer Here](https://jfrog.com/start-free/#trialOptions)
* To connect Jenkins with Jfrog [Refer Here](https://github.com/jfrog/jenkins-jfrog-plugin#readme)
* [Refer Here](https://github.com/jfrog/project-examples) for pipeline samples in almost all languages
* [Refer Here](https://directdevops.blog/2023/07/23/devops-classroomnotes-23-jul-2023-2/) for setting up the pipeline to publish to jfrog.