```
pipeline {
    agent any
    tools {
        jdk 'jdk17'
        maven 'maven3'
    }
    environment {
        DOCKER_IMAGE = "sanjay9888/boardgame:${BUILD_NUMBER}"
    stages {
        stage('Checkout') {
             steps {
                 git branch: 'main', url: 'https://github.com/Sanjay6372/boardgame.git'
        stage('Compile and Test with Maven') {
            steps {
                 sh 'mvn compile && mvn test'
        }
        stage('File System Scan with Trivy') {
             steps {
                 sh "trivy fs --format table -o trivy-fs-report.html ."
        stage('Static Code Analysis with SonarQube') {
             environment {
   environment {
      SONAR_URL = "http://51.20.187.155:9000"
       withCredentials([string(credentialsId: 'sonarqube', variable: 'SONAR_AUTH_TOKEN')]) {
          sh 'mvn sonar:sonar -Dsonar.login=$SONAR_AUTH_TOKEN -Dsonar.host.url=${SONAR_URL}'
   }
stage('Build artifacts with Maven') {
   steps {
      sh "mvn package"
stage('Publish artifacts To Nexus') {
   steps {
      withMaven(globalMavenSettingsConfig: 'global-settings', jdk: 'jdk17', maven: 'maven3', mavenSettingsConfig: '', traceability: true)
         sh 'mvn clean deploy -X'
   }
stage('Build & Tag Docker Image') {
   steps {
      script {
          withDockerRegistry(credentialsId: 'docker-cred') {
                                                                                            Activate Windows
             sh "docker build -t ${DOCKER_IMAGE} ."
```

```
}
   }
stage('Docker Image Scan') {
   steps {
       sh "trivy image --format table -o trivy-image-report.html ${DOCKER_IMAGE}"
stage('Push Docker Image') {
   steps {
       script {
           withDockerRegistry(credentialsId: 'docker-cred') {
              sh "docker push ${DOCKER_IMAGE}"
           }
       }
}
stage('Update Deployment File') {
   environment {
       GIT_REPO_NAME = "boardgame"
       GIT_USER_NAME = "Sanjay6372"
   steps {
       withCredentials([string(credentialsId: 'sanjugithub', variable: 'GITHUB_TOKEN')]) {
               git config --global user.email "sanjay@gmail.com"
               git config --global user.name "sanjay"
```

```
git config --global user.email "sanjay@gmail.com"
                 git config --global user.name "sanjay"
                 sed -i "s/18/${BUILD_NUMBER}/g" src/deployment.yml
                 git add src/deployment.yml
                 git commit -m "Update deployment image to version ${BUILD_NUMBER}"
                 }
      }
   }
}
post {
   always {
       emailext (
          subject: "Pipeline Status: ${BUILD_NUMBER}",
          body: '''
             <html>
                 <body>
                    Build Status: ${BUILD_STATUS}
                    Build Number: ${BUILD_NUMBER}
                    Check the <a href="${BUILD_URL}">console output</a>.
                 </body>
             </html>
          to: 'sanjukumar6372@gmail.com',
          from: 'jenkins@example.com',
          from: 'jenkins@example.com',
          replyTo: 'jenkins@example.com',
          mimeType: 'text/html',
          attachmentsPattern: 'trivy-image-report.html'
      )
   }
```