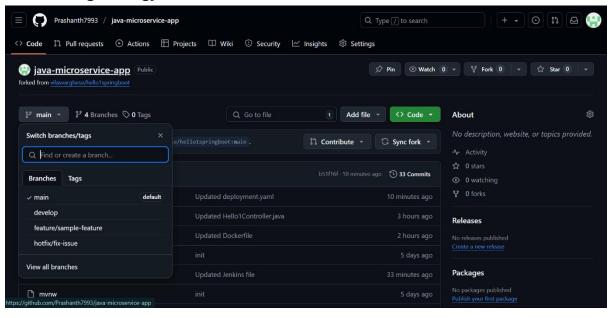
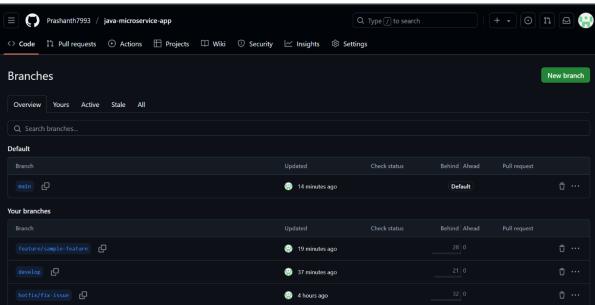
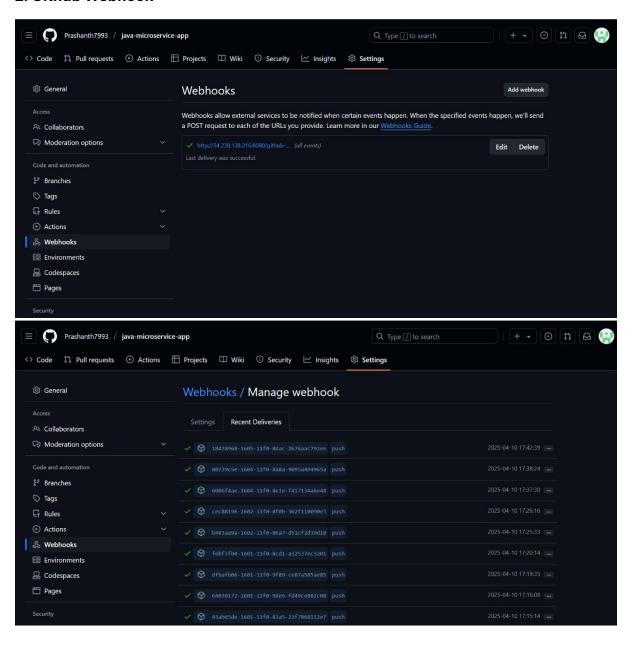
1: Branching Strategy and Execution Rules.

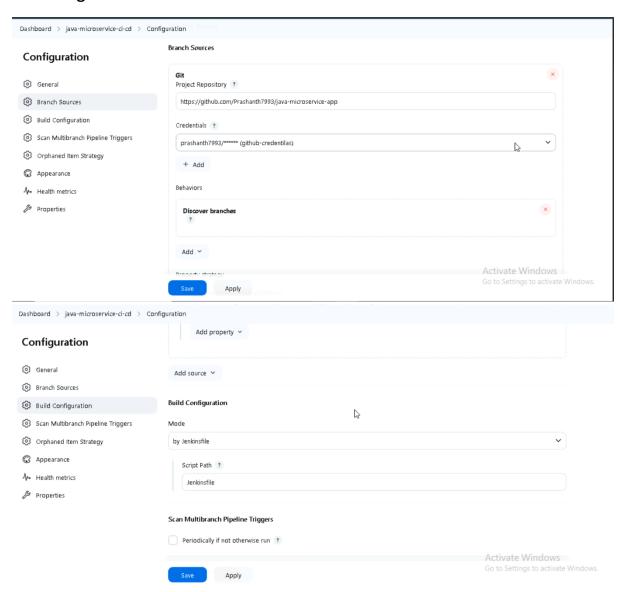




2: Github Webhook

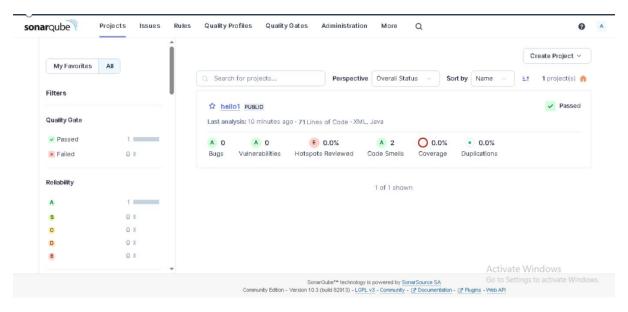


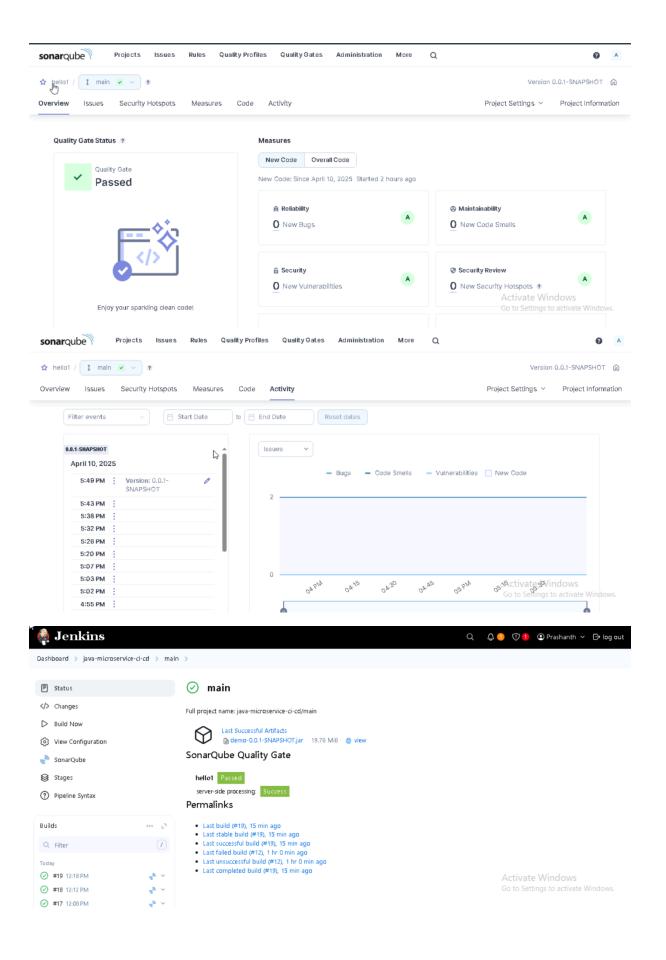
3:Building Java Code with Maven



```
Dashboard > java-microservice-ci-cd > main > #19
                                              [Pipeline] stage
                                             [Pipeline] { (Build with Maven)
                                             [Pipeline] sh
                                              + mvn clean package -DskipTests
                                             [\square[1;34mINFO\square[m] Scanning for projects...
                                             [0[1:34mINFO0[m]
                                             [8[1;34mINFO8[m] 8[1mBuilding hello1 0.0.1-SNAPSHOT8[m
                                             [B[1;34mINFOB[m]]B[1m-------B[m]
                                             [8[1;34mINFO8[m] 8[1m--- 8[0;32mmaven-clean-plugin:3.4.1:clean8[m 8[1m(default-clean)8[m @ 8[36mdemo8[0;1m ---8[m
                                             [0[1;34mINFO0[m] Deleting /var/lib/jenkins/workspace/java-microservice-ci-cd_main/target
                                              [8[1;34mINFO8[m] 8[1m--- 8[0;32mmaven-resources-plugin:3.3.1:resources8[m 8[1m(default-resources)8[m @ 8[36mdemo8[0;1m ---8[m
                                             [B[1:34mINFOB[m] Copying 1 resource from src/main/resources to target/classes
                                             [B[1;34mINFOB[m] Copying 0 resource from src/main/resources to target/classes
                                             [8[1;34mINFO8[m]
                                             [B[1;34mINFOB[m] B[1m--- B[0;32mmaven-compiler-plugin:3.13.0:compileB[m B[1m(default-compile)B[m B B[36mdemoB[0;1m ---B[m
                                             [B[1;34mINFOB[m] Recompiling the module because of B[1mchanged source codeB[m.
                                              [B[1;34mINFOB[m] Compiling 2 source files with javac [debug parameters release 17] to target/classes
                                             [B[1:34mINFOB[m]
                                             [B[1;34mINFOB[m] B[1m--- B[0;32mmaven-resources-plugin:3.3.1:testResourcesB[m B[1m(default-testResources)B[m @ B[36mdemoB[0;1m
                                             [8[1;34mINFO8[m] skip non existing resourceDirectory /var/lib/jenkins/workspace/java-microservice-cile Windows
                                              cd_main/src/test/resources
                                             [B[1;34mINFOB[m]
 Dashboard > java-microservice-ci-cd > main > #19
                                               [ @[1;34mINFO@[m] \ 12:19:06.574 \ CPD \ Executor \ 2 \ files \ had \ no \ CPD \ blocks \\ [ @[1;34mINFO@[m] \ 12:19:08.575 \ CPD \ Executor \ Calculating \ CPD \ for \ 0 \ files 
            B
                                              [0[1;34mINFO0[m] 12:19:08.575 CPD Executor CPD calculation finished (done) | time=@ms
                                              [0[1;34mINFO0[m] 12:19:08.657 Analysis report generated in 71ms, dir size=152.2 kB \,
                                              [0[1;34mINFO0[m] 12:19:08.680 Analysis report compressed in 22ms, zip size=23.0 kB
                                              [0[1;34mINFO0[m] 12:19:08.702 Analysis report uploaded in 22ms
                                              [B[1;34mINFOB[m] 12:19:08.703 ANALYSIS SUCCESSFUL, you can find the results at: http://34.238.138.216:9000/dashboard?
                                              [0[1;34mINFO0[m] 12:19:08.703 Note that you will be able to access the updated dashboard once the server has processed the
                                              [8[1;34mINFO8[m] 12:19:08.703 More about the report processing at http://34.238.138.216:9000/api/ce/task?id=AZYfo8UU7vtx-
                                              [0[1;34mINFO0[m] 12:19:08.719 Analysis total time: 6.412 s
                                              [0[1:34mINFO0[m] 0[1m-----
                                              [8[1;34mINFO8[m] 8[1;32mBUILD SUCCESS8[m
                                              [8[1;34mINFO8[m] 8[1m-----
                                              [0[1;34mINFO0[m] Total time: 8.863 s
                                              [0[1;34mINFO0[m] Finished at: 2025-04-10T12:19:08Z
                                              [B[1;34mINFOB[m] B[1m------
                                              [Pipeline] }
```

4: SonarQube code Analysis and Quality Gate





5: Docker Conatinerization and Image Push to docker registry.

```
GNU nano 7.2

FROM openjdk:11-jre-slim

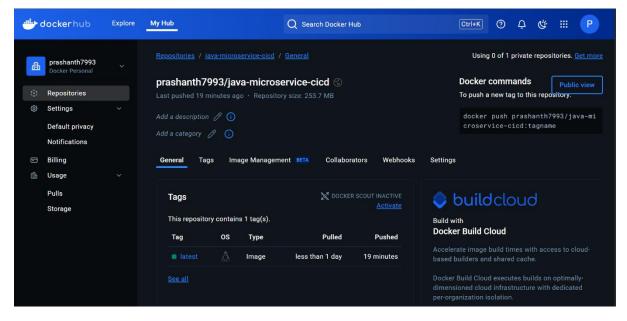
WORKDIR /app

COPY target/*.jar ./app.jar

EXPOSE 8080

ENTRYPOINT ["java", "-jar", "./app.jar"]
```

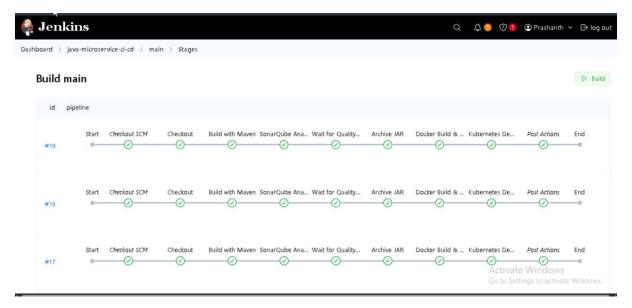
root@kmaster:~/java-microservice-app/kubernetes# docker images REPOSITORY TAG IMAGE ID CREATED SIZE prashanth7993/java-microservice-cicd latest 10187a0ab415 25 minutes ago 244MB root@kmaster:~/java-microservice-app/kubernetes#



6: Kubernetes Deployment

```
apiVersion: apps/v1
kind: Deployment
metadata:
 name: java-microservices-cicd
spec:
 replicas: 2
 selector:
   matchLabels:
     app: java-microservices-cicd
  template:
   metadata:
      labels:
       app: java-microservices-cicd
    spec:
      containers:
        - name: java-microservices-cicd
          image: prashanth7993/java-microservices-cicd:latest
          ports:
            - containerPort: 8080
^G Help
                    Write Out
                                      Where Is
                                                                          Execute
                                                        Cut
  Exit
                     Read File
                                       Replace
                                                         Paste
                                                                           Justify
```





Reference:

https://github.com/Prashanth7993/java-microservice-app