API Build-Test-Release Jenkins CI-CD Pipeline

In this lab, we will build a Jenkins CI-CD pipeline for spring boot based microservice application that service REST API calls to perform CRUD operations.

The GitHub Code repository for this Jenkins CI-CD pipeline is available at

https://github.com/foxwas/customerserviceAPI

If you do not have Jenkins on your system, download, install and set it up.

Let us use the Jenkins in our lab machine.

1. Open a command window, change directory to Jenkins directory and **start Jenkins OR If Jenkins is running as a service, make sure the service is running.**

2. Open a browser, go to Jenkins home page, Use the Jenkins user credentials to login. Ask your Instructor about Jenkins set up in your lab environment.
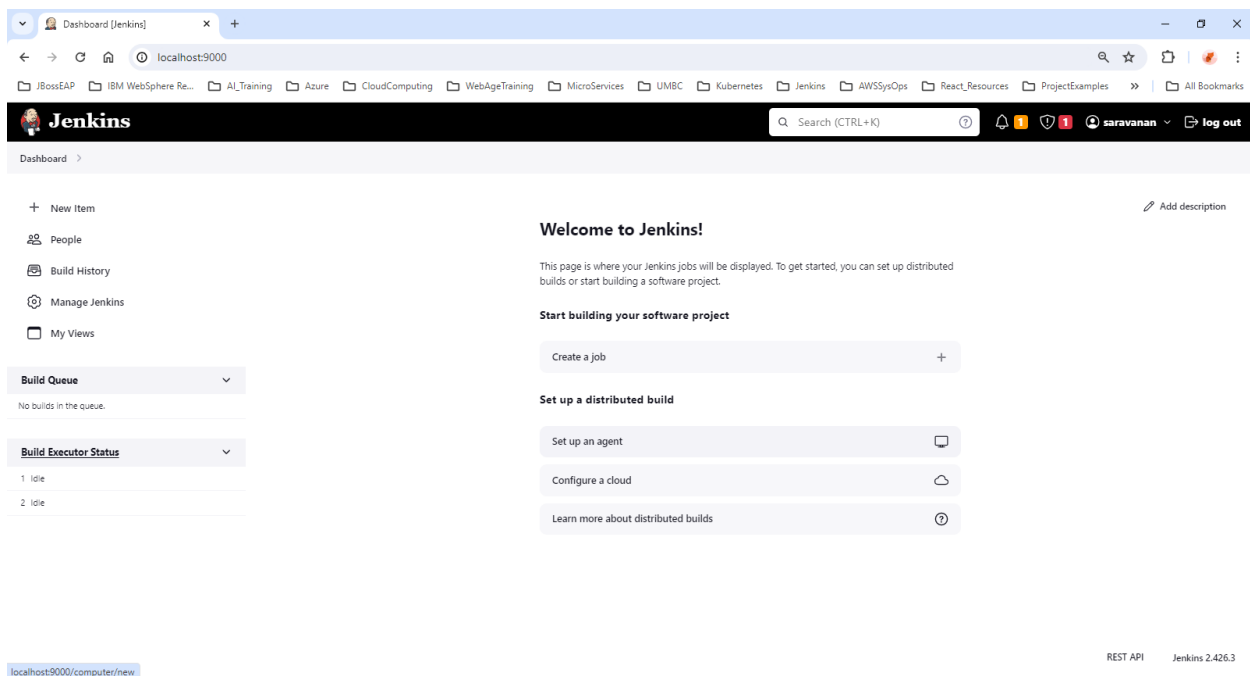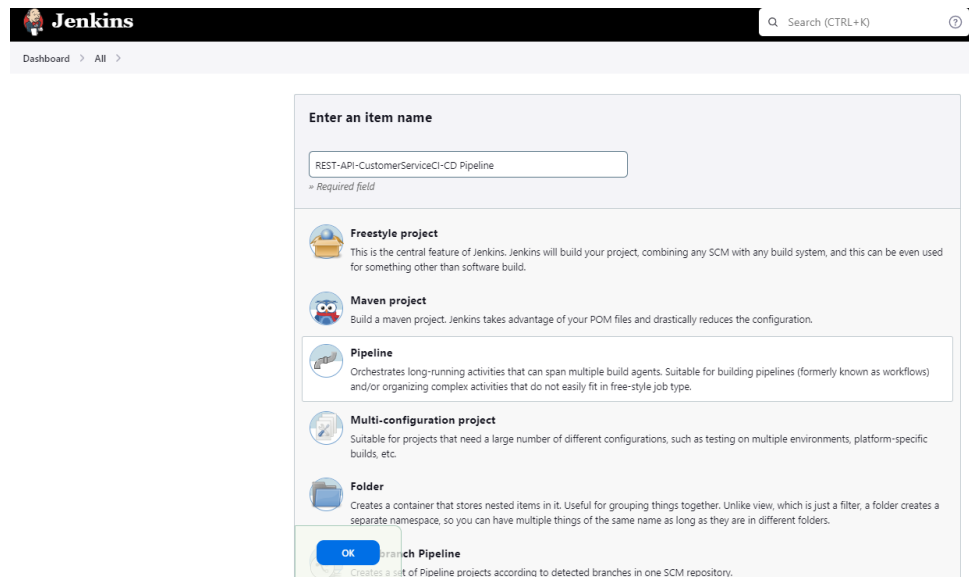

3. In the Jenkins Dashboard page, click on **New Item**

4. Let us create a Pipeline item with the following configuration.

Name: **REST-API-CustomerServiceCI-CD Pipeline**
Project type: Pipeline

Click **Ok.**

5. In the Pipeline configuration page, scroll down to Pipeline section, use the following configuration.

   select the option: **Pipeline script from SCM**
    SCM**:**   **Git**
    Repository URL: https://github.com/foxwas/customerserviceAPI.git
    Credentials: none
    Branch Specifier: */main
    Script Path: Jenkinsfile

    Click on **Apply** and then **Save**.

6. You may review the pipeline script at the site

    https://github.com/foxwas/customerserviceAPI/blob/main/Jenkinsfile

7.   In The pipeline page, Click on **Build Now**.
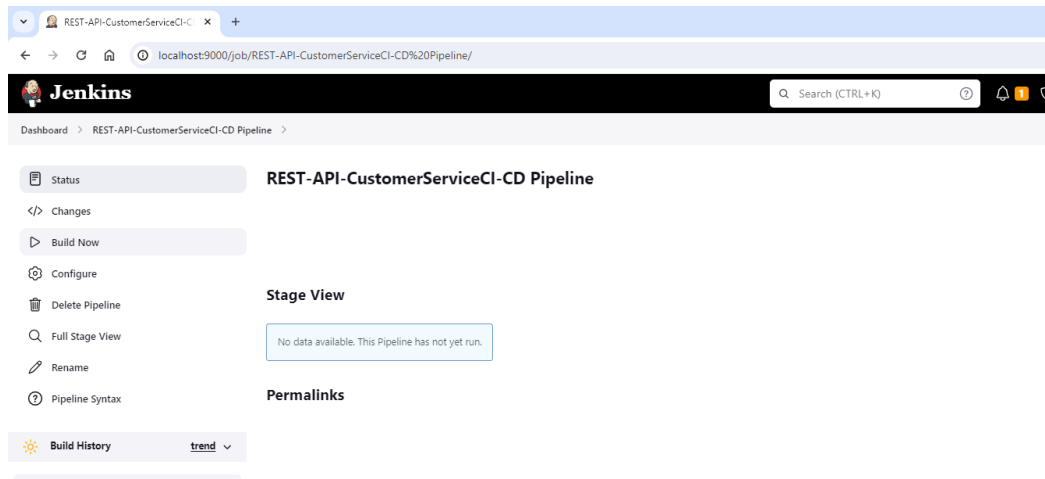
8.   Review the pipeline stages, each stage log messages.

9.   In the User Acceptance Stage click on the stage, select Yes, and click on **Proceed.**
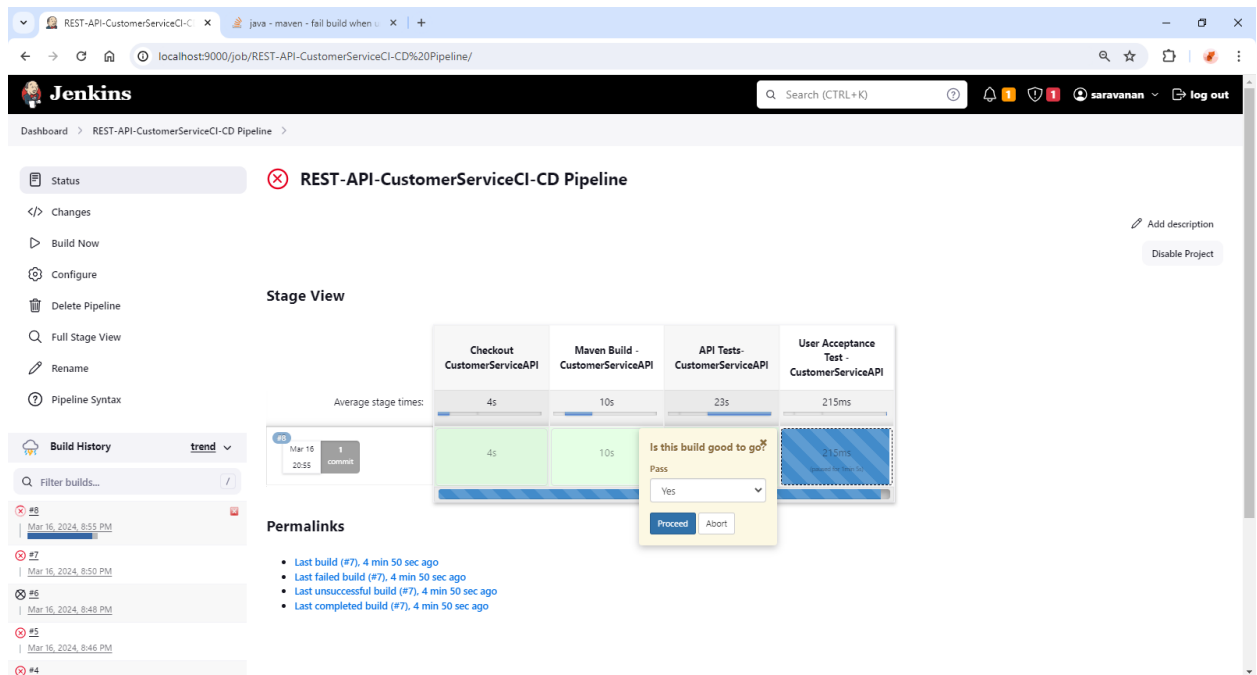
10. Review the pipeline stages and log messages.

11. Select the build → Click on Console output and review the console log messages.

12. Select any customer in the list, Edit customer data to update the customer and Save.