



**FORMAN
CHRISTIAN
COLLEGE**
(A CHARTERED UNIVERSITY)

Course title:

CSCS 351 – Software Quality Assurance

Section: A

Instructor:

Dr Saad Bin Saleem

Instrument:

Assignment 3

Student name & roll number:

Sundas Javaid 19-10685

Semester: SP 22'

Submission date:

June 21st, 2022

Introduction

The task is to install and create a CI/ CD pipeline for a project using Jenkins tool. Followings are the screenshots provided for the execution of the task.

Execution

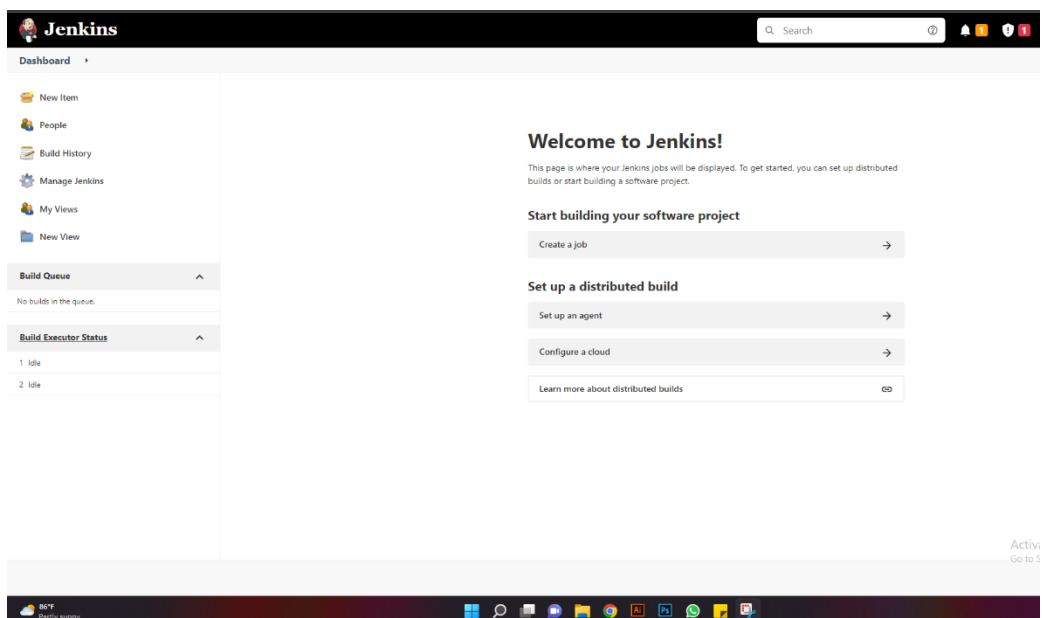
Java installation:

```
Command Prompt
Microsoft Windows [Version 10.0.22000.739]
(c) Microsoft Corporation. All rights reserved.

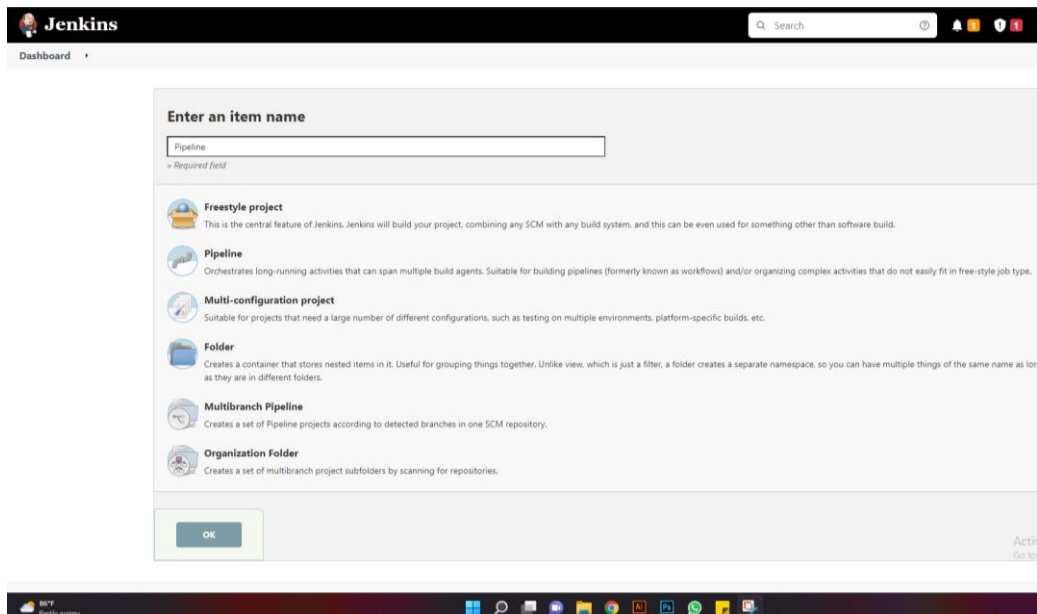
C:\Users\Lenovo>java -version
java version "1.8.0_202"
Java(TM) SE Runtime Environment (build 1.8.0_202-b08)
Java HotSpot(TM) 64-Bit Server VM (build 25.202-b08, mixed mode)

C:\Users\Lenovo>
```

Jenkins installation:



Creating pipeline:

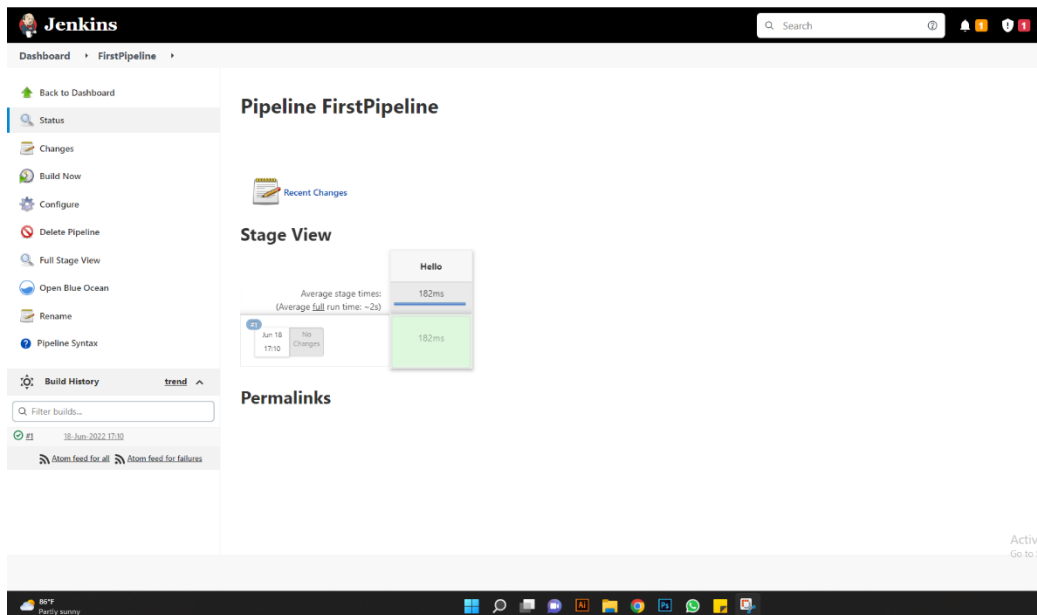


The screenshot shows the Jenkins 'Create New Item' dialog. At the top, there's a search bar and a 'Dashboard' link. The main heading is 'Enter an item name', followed by a text input field containing 'Pipeline' and a note '> Required field'. Below this, several item types are listed with icons and descriptions:

- Freestyle project**: This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.
- Pipeline**: Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.
- Multi-configuration project**: Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.
- Folder**: Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.
- Multibranch Pipeline**: Creates a set of Pipeline projects according to detected branches in one SCM repository.
- Organization Folder**: Creates a set of multibranch project subfolders by scanning for repositories.

At the bottom left is an 'OK' button. At the bottom right, there's a 'Active Go to' link.

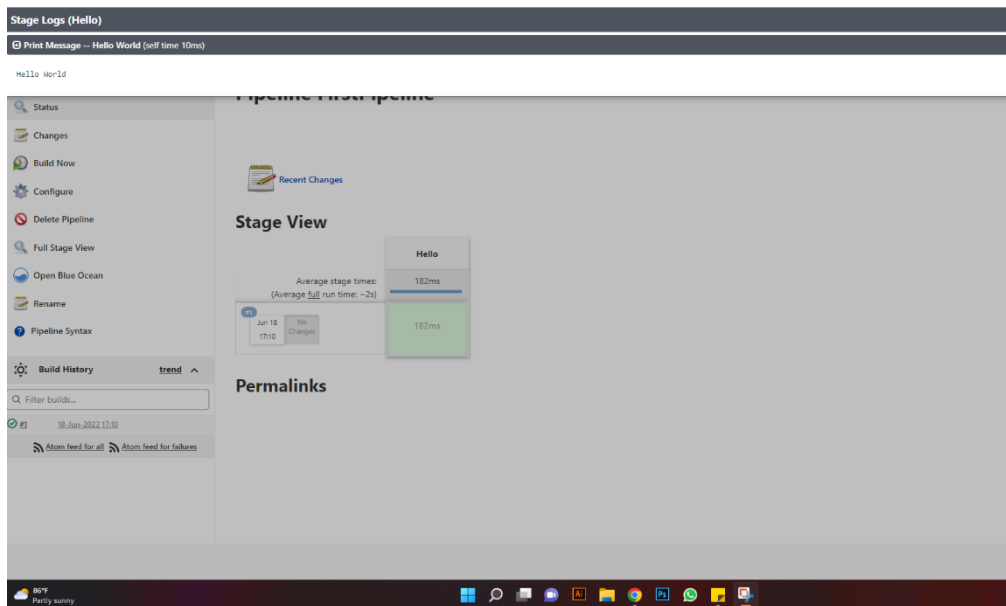
Creating pipeline stage:



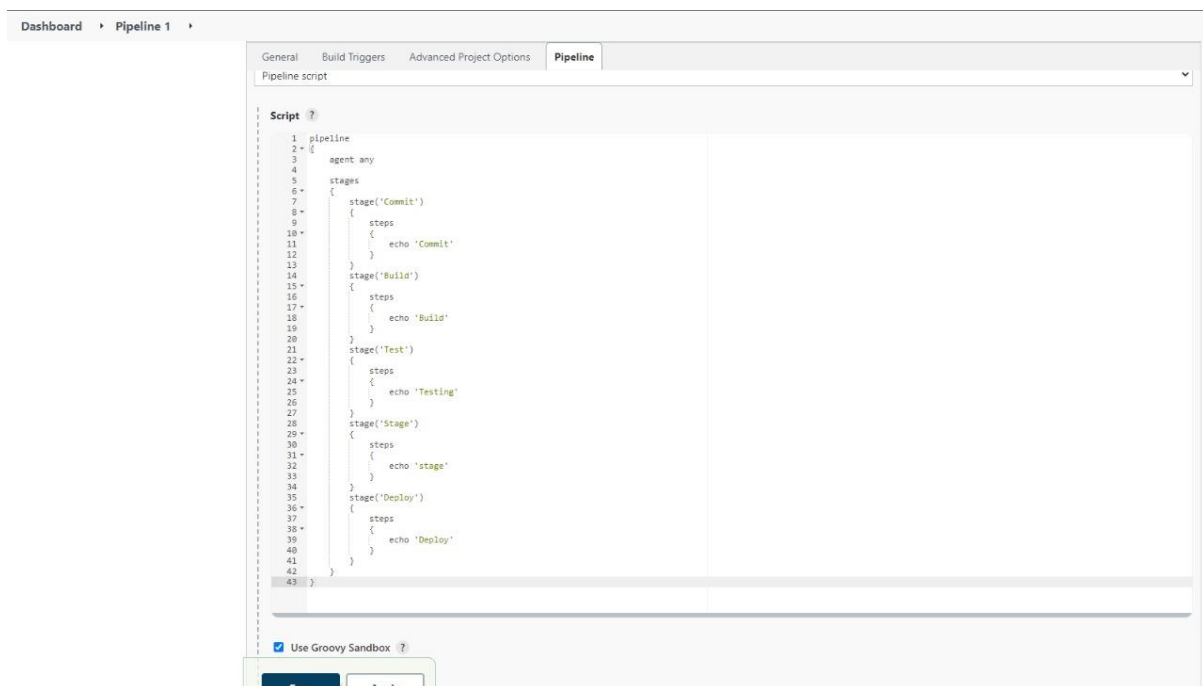
The screenshot shows the Jenkins 'Pipeline View' for a pipeline named 'FirstPipeline'. The left sidebar contains navigation links: 'Back to Dashboard', 'Status', 'Changes', 'Build Now', 'Configure', 'Delete Pipeline', 'Full Stage View', 'Open Blue Ocean', 'Rename', and 'Pipeline Syntax'. Below these is a 'Build History' section with a search bar and a table of builds.


The main content area is titled 'Pipeline FirstPipeline' and includes a 'Recent Changes' section. Below that is the 'Stage View' section, which displays a diagram of the pipeline stages. The stages are 'Hello' and 'Hello', both with a duration of 182ms. The 'Hello' stage is highlighted in green. Below the stage view is a 'Permalinks' section.




At the bottom right, there's a 'Active Go to' link.




Creating CI/CD pipeline:





Jenkins





Dashboard > Pipeline 1 >


 Back to Dashboard


 Status


 Changes


 Build Now


 Configure


 Delete Pipeline

 Full Stage View


 Open Blue Ocean

 Rename



 Pipeline Syntax

 Build History


trend ^

 #1

20-Jun-2022 21:03

 Atom feed for all  Atom feed for failures

Pipeline Pipeline 1

 Recent Changes

Stage View

#1

Jun 20 21:03

No Changes

Commit	Build	Test	Stage	Deploy
175ms	83ms	64ms	74ms	50ms
175ms	83ms	64ms	74ms	50ms

Permalinks

* * * * *