



UNIVERSITY WITH A PURPOSE

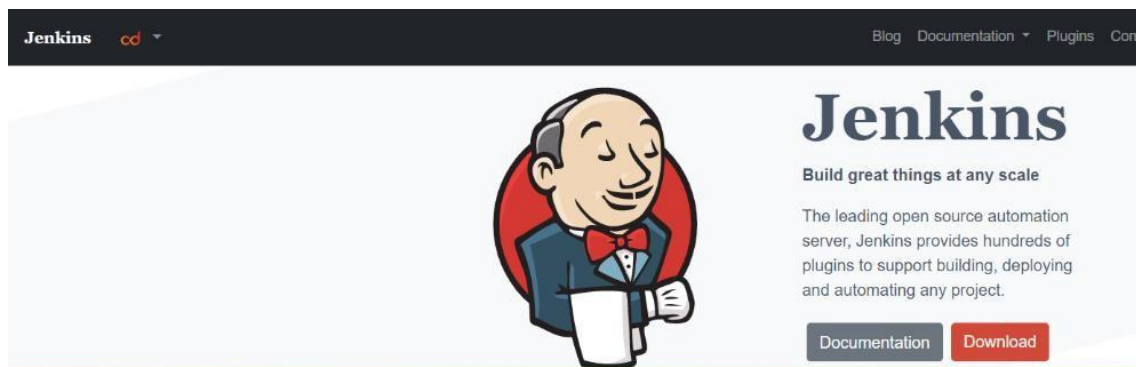
Name: Vanshika

SAP: 500069061

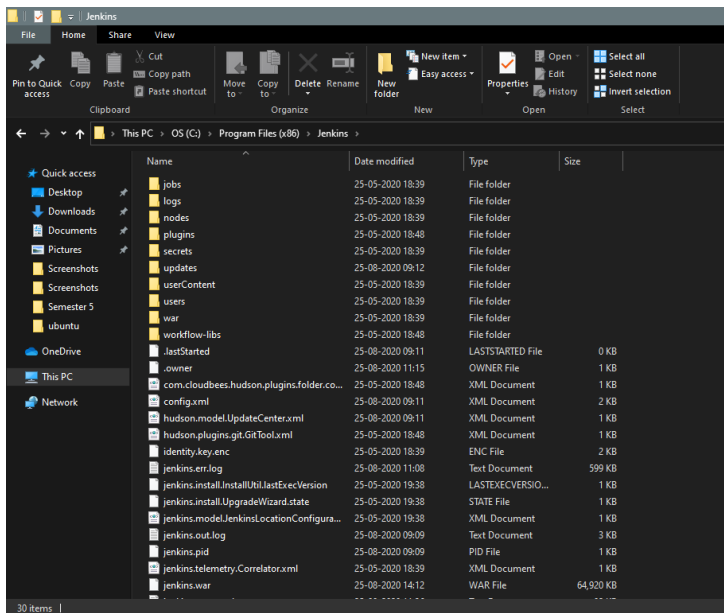
Roll number: R171218110

CICD EXPERIMENT 1

- 
- Go to <https://www.jenkins.io/download/> to download your specified version of Jenkins.



- After you have downloaded Jenkins, go to the location where you've saved it. Copy the path.



- Go to your cmd(Command Prompt) and change the current directory to the location of your Jenkins folder.

Enter the command as **java -jar Jenkins.war -httpPort=8383**

```
C:\WINDOWS\system32\cmd.exe - java -jar jenkins.war -httpPort=8383
Microsoft Windows [Version 10.0.19041.508]
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C:\Users\Dell>cd C:\Program Files (x86)\Jenkins

C:\Program Files (x86)\Jenkins>java -jar jenkins.war --httpPort=8383
Error: Unable to access jarfile jenkins.war

C:\Program Files (x86)\Jenkins>java -jar jenkins.war --httpPort=8383
Running from: C:\Program Files (x86)\Jenkins\jenkins.war
webroot: $user.home/.jenkins
2020-10-08 19:56:10.262+0000 [id=1] INFO org.eclipse.jetty.util.log.Log#initialized: Logging initialized @2805ms
to org.eclipse.jetty.util.log.JavaUtilLog
2020-10-08 19:56:10.393+0000 [id=1] INFO winstone.Logger#logInternal: Beginning extraction from war file
2020-10-08 19:56:10.440+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPath
2020-10-08 19:56:10.523+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: jetty-9.4.30.v20200611; built:
2020-06-11T12:24:51+0200; git: 271836e4cf4612f12b7bb13ef5a92a927634b0d; jvm 11.0.8+10-LTS
2020-10-08 19:56:14.217+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /,
did not find org.eclipse.jetty.jsp.JettyJspServlet
2020-10-08 19:56:14.483+0000 [id=1] INFO o.e.j.s.s.DefaultSessionIdManager#doStart: DefaultSessionIdManager workin
gName=node0
2020-10-08 19:56:14.483+0000 [id=1] INFO o.e.j.s.s.DefaultSessionIdManager#doStart: No SessionScavenger set, usin
g defaults
2020-10-08 19:56:14.502+0000 [id=1] INFO o.e.j.server.session.HouseKeeper#startScavenging: node0 Scavenging every
660000ms
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by com.thoughtworks.xstream.core.util.Fields (file:/C:/Users/Dell/.jenkins/war/WEB-INF/lib/xstream-1.4.7-jenkins-1.jar) to field java.util.TreeMap.comparator
WARNING: Please consider reporting this to the maintainers of com.thoughtworks.xstream.core.util.Fields
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
```

- Once you see “Jenkins is up and running” on cmd, now you need to go to your localhost with the same port as you set and put in your password(first for the first time) given by jenkins(in a file called “initialAdminPassword”)

## Getting Started

# Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

`C:\Program Files (x86)\Jenkins\secrets\initialAdminPassword`

Please copy the password from either location and paste it below.

Administrator password


- Set up as your First Admin User by signing up and download the required plugins.


## Getting Started


# Create First Admin User


Username:	<input type="text" value="admin"/>
Password:	<input type="password" value="*****"/>
Confirm password:	<input type="password"/>
Full name:	<input type="text"/>
E-mail address:	<input type="text"/>

- After downloading the required plugins go to your dashboard and select “New Item” (on the left) to start and brand new project.


 **Jenkins**


 2


 vanshika


 log out


Jenkins >


 New Item


 People


 Build History

 Manage Jenkins










 My Views

 Lockable Resources




 New View

 add description

All +

S	W	Name ↓	Last Success	Last Failure	Last Duration	
		exp1	27 min - #2	N/A	0.67 sec	
		lab3	N/A	19 days - #3	2.3 sec	
		try2	N/A	19 days - #1	9.8 sec	

Icon: S M L

[Legend](#)  Atom feed for all  Atom feed for failures  Atom feed for just latest builds

Build Queue

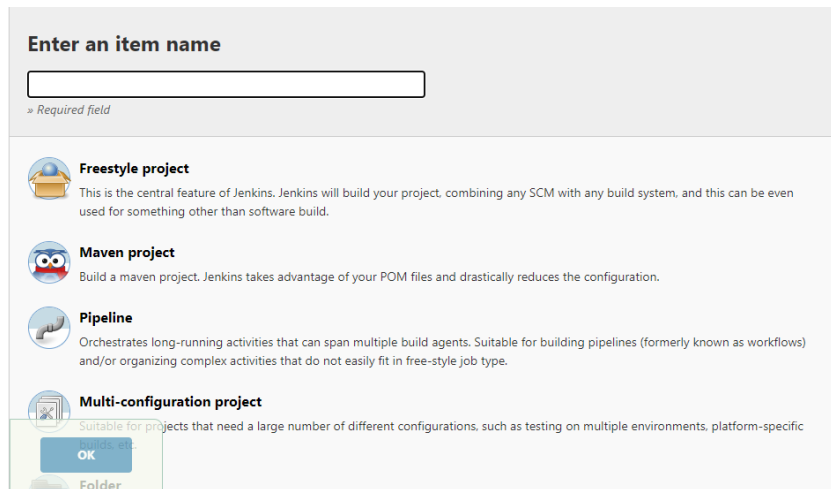
No builds in the queue.

Build Executor Status

1 idle

2 idle

- Select the desired type of project form the options. (I've selected "Freestyle Project" to execute a simple job in Jenkins.)

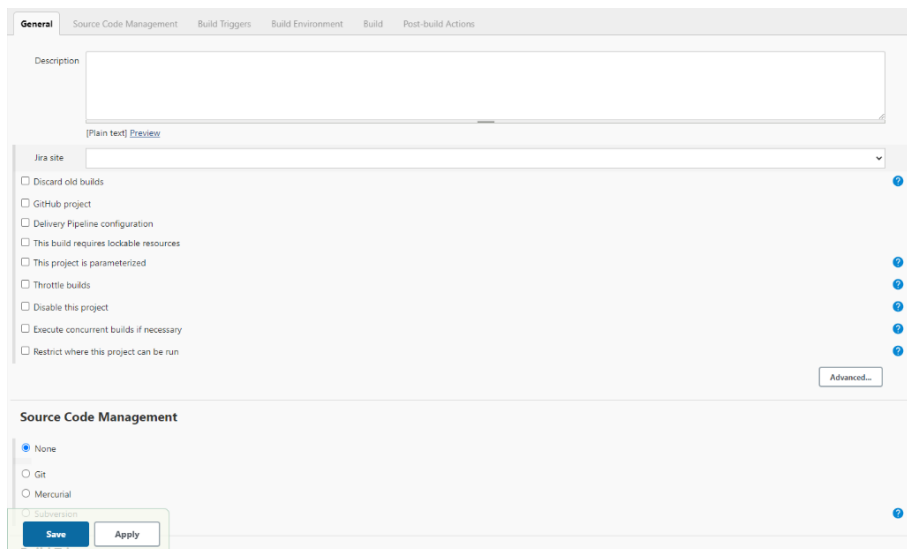


The screenshot shows the 'New Item' form in Jenkins. At the top, there is a section titled 'Enter an item name' with an empty text input field and a note '» Required field'. Below this, there are four project type options, each with an icon and a description:

- 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.
- Maven project**: Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
- 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.

At the bottom of the form, there are two buttons: 'OK' and 'Folder'.

- To execute a simple job in Jenkins like printing a message on the screen.



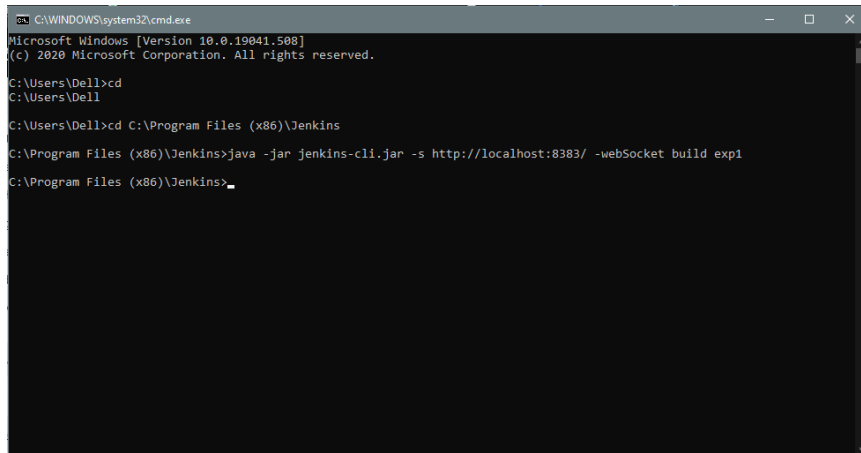
The screenshot shows the 'Configure' page for a new Jenkins job. The 'General' tab is selected, showing various configuration options:

- Description**: A large text area for entering a description.
- Plain text**: A link to view the plain text of the description.
- Jira site**: A dropdown menu for selecting a Jira site.
- Options**: A list of checkboxes for configuring the job:
  - ☐ Discard old builds
  - ☐ GitHub project
  - ☐ Delivery Pipeline configuration
  - ☐ This build requires lockable resources
  - ☐ This project is parameterized
  - ☐ Throttle builds
  - ☐ Disable this project
  - ☐ Execute concurrent builds if necessary
  - ☐ Restrict where this project can be run
- Advanced...**: A button to expand advanced options.
- Source Code Management**: A section for selecting a source code management system:
  - ☒ None
  - ☐ Git
  - ☐ Mercurial
- Save** and **Apply** buttons at the bottom.

- Go to "manage Jenkins" in the menu on the left and then go to "Jenkins Cli" and download it. Make sure to save it at the same place as Jenkins.war file.
- Open cmd again. Change the directory again to the same location as Jenkins.war file.
- Enter the following command

```
java -jar jenkins-cli.jar -s http://localhost:8383/ -  
webSocket build JOB
```

JOB here will be the name of the project. This command is in the “build” part of the Jenkins cli.



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 10.0.19041.508]
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C:\Users\Dell>cd
C:\Users\Dell>
C:\Users\Dell>cd C:\Program Files (x86)\Jenkins
C:\Program Files (x86)\Jenkins>java -jar jenkins-cli.jar -s http://localhost:8383/ -webSocket build exp1
C:\Program Files (x86)\Jenkins>
```

*BRAVO! You successfully executed a simple Jenkins job all by yourself.*