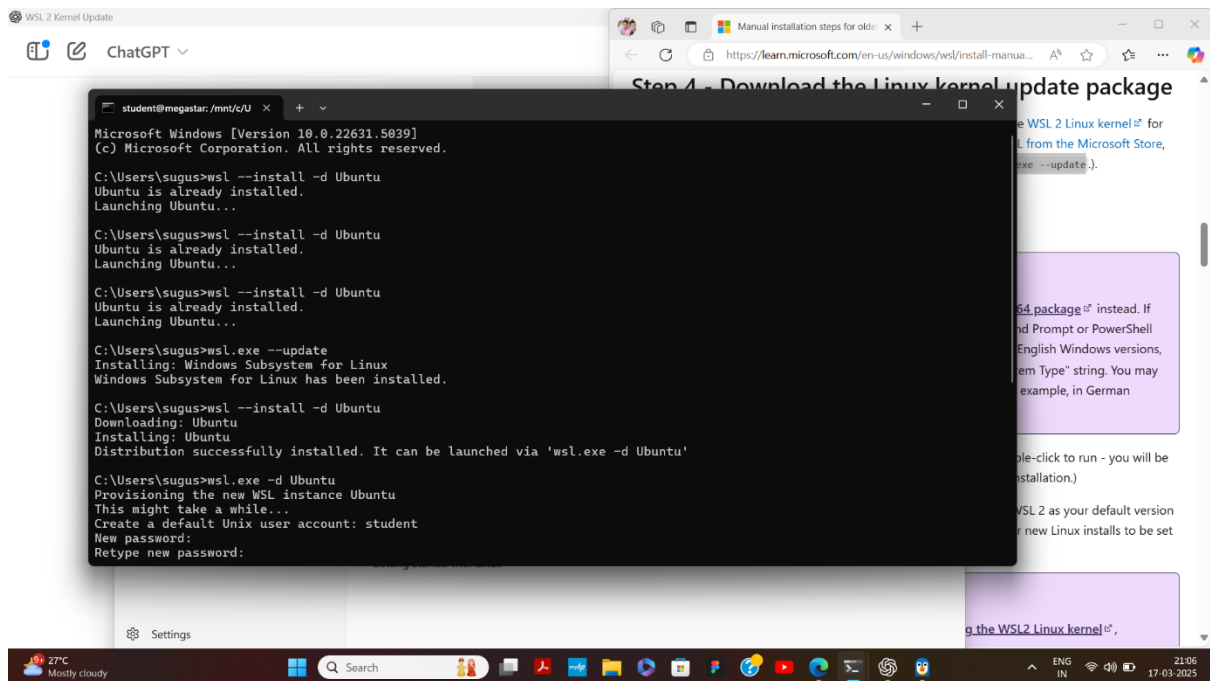


DEVOPS TRAINING

DAY 1 TASK

Step 1:

(Installing Ubuntu)



```
student@megastar: /mnt/c/Windows/Users/sugus> wsl --install -d Ubuntu
Microsoft Windows [Version 10.0.22631.5039]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sugus> wsl --install -d Ubuntu
Ubuntu is already installed.
Launching Ubuntu...

C:\Users\sugus> wsl --install -d Ubuntu
Ubuntu is already installed.
Launching Ubuntu...

C:\Users\sugus> wsl --install -d Ubuntu
Ubuntu is already installed.
Launching Ubuntu...

C:\Users\sugus> wsl.exe --update
Installing: Windows Subsystem for Linux
Windows Subsystem for Linux has been installed.

C:\Users\sugus> wsl --install -d Ubuntu
Downloading: Ubuntu
Installing: Ubuntu
Distribution successfully installed. It can be launched via 'wsl.exe -d Ubuntu'

C:\Users\sugus> wsl.exe -d Ubuntu
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: student
New password:
Retype new password:
```

The screenshot shows a Windows 11 desktop. In the foreground, a terminal window titled 'student@megastar: /mnt/c/Windows/Users/sugus' displays the process of installing and updating the Windows Subsystem for Linux (WSL) and then installing Ubuntu. The terminal output shows that WSL was already installed, and Ubuntu was also already installed. The user then runs 'wsl --update', which updates the WSL to version 2. Finally, the user runs 'wsl --install -d Ubuntu', which downloads and installs the Ubuntu distribution. The terminal prompts for a default Unix user account (student), a new password, and a confirmation to retype the password. In the background, a web browser window is open to the Microsoft Learn page for WSL installation, showing 'Step 4 - Download the Linux kernel update package'. The Windows taskbar at the bottom shows the date and time as 21:06 on 17-03-2025, and the weather as 27°C Mostly cloudy.

Step 2:

(Set New Password)

```
student@megastar:/mnt/c/U x + v
C:\Users\sugus>wsl --install -d Ubuntu
Downloading: Ubuntu
Installing: Ubuntu
Distribution successfully installed. It can be launched via 'wsl.exe -d Ubuntu'

C:\Users\sugus>wsl.exe -d Ubuntu
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: student
New password:
Retype new password:
passwd: password updated successfully
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 5.15.167.4-microsoft-standard-WSL2 x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

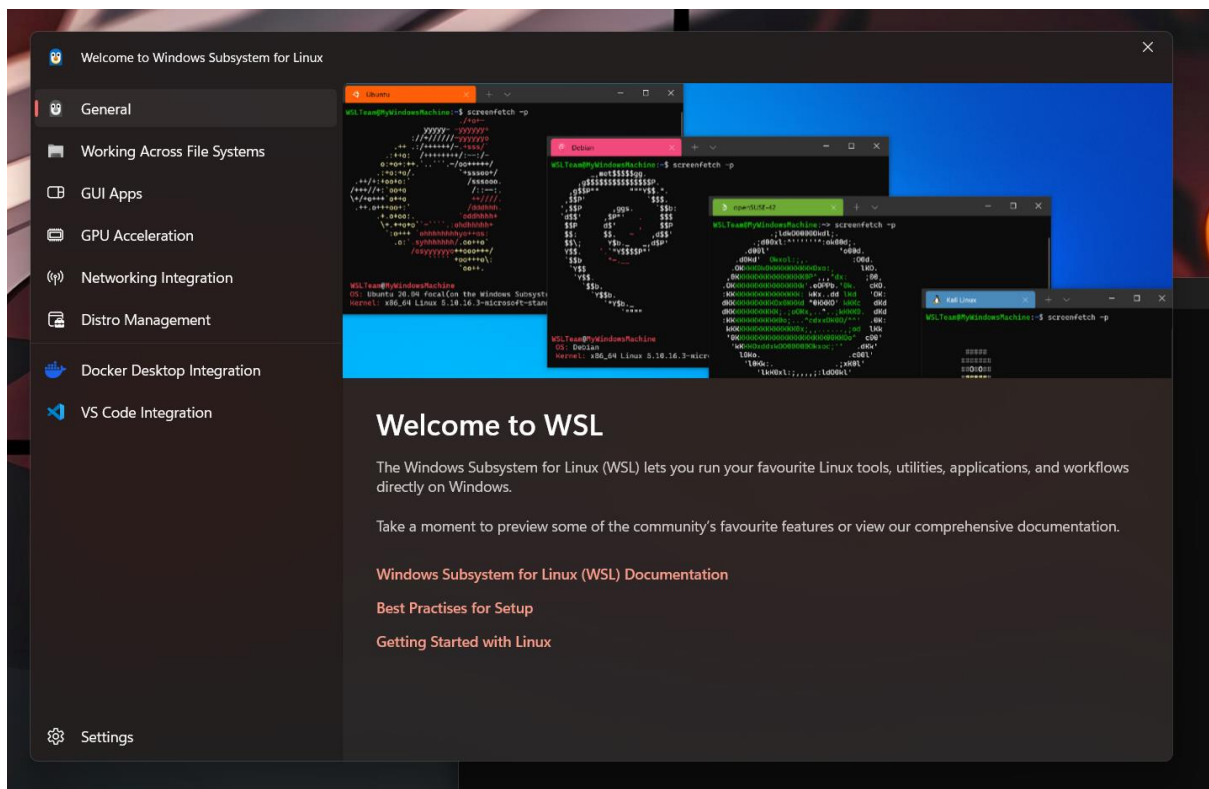
System information as of Mon Mar 17 15:36:24 UTC 2025

System load:  0.12          Processes:            32
Usage of /:   0.1% of 1006.85GB   Users logged in:     0
Memory usage: 5%            IPv4 address for eth0: 172.18.198.50
Swap usage:   0%

This message is shown once a day. To disable it please create the
/home/student/.hushlogin file.
student@megastar:/mnt/c/Users/sugus$ |
```

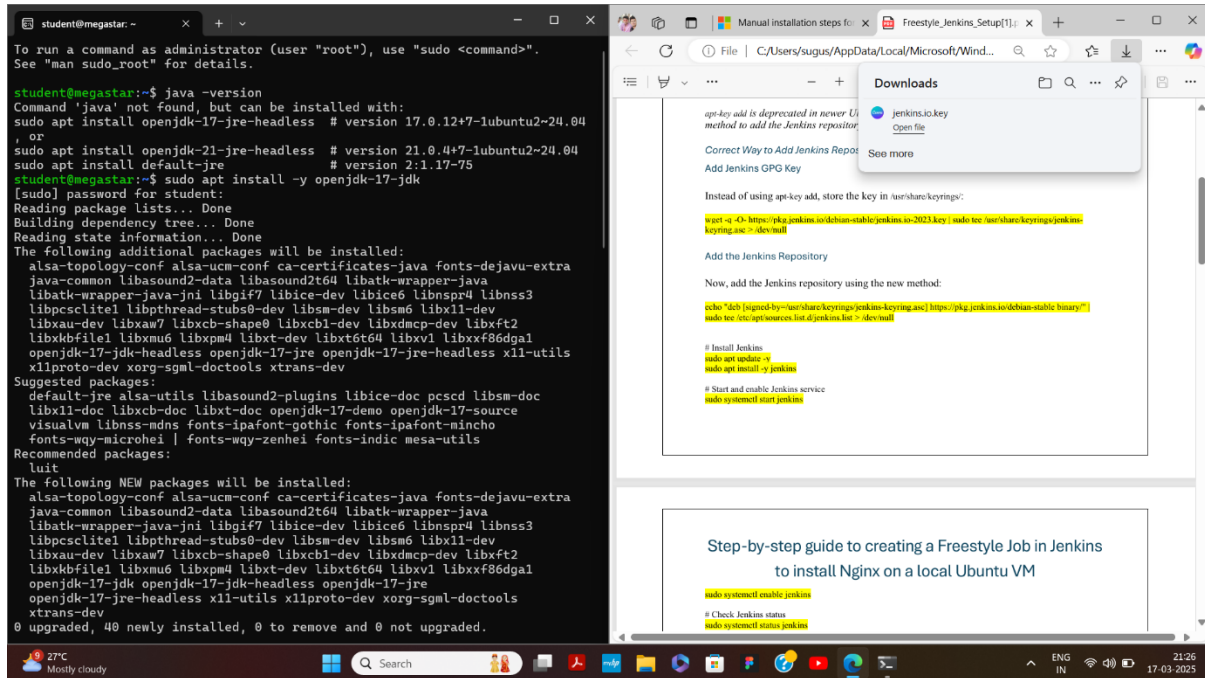
Step 3:

(New WSL Window Will Open)



Step 4:

(Check JDK Version) If not available install it .



(Installing Packages)

```

student@LAPTOP-INTAHKGL:~$
get:13 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [16.9 kB]
get:14 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [726 kB]
get:15 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [146 kB]
get:16 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]
get:17 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 c-n-f Metadata [432 B]
get:18 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [26.2 kB]
get:19 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [4892 B]
get:20 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]
get:21 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [448 B]
get:22 http://archive.ubuntu.com/ubuntu noble/universe Translation-en [5992 kB]
get:23 http://archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]
99% [23 Components-amd64 2155 kB/3871 kB 56%]
get:25 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]
get:26 http://archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]
get:27 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]
get:28 http://archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
get:29 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [921 kB]
get:30 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [209 kB]
get:31 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
get:32 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 c-n-f Metadata [13.4 kB]
get:33 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1040 kB]
get:34 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [262 kB]
get:35 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
get:36 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [25.8 kB]
get:37 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [759 kB]
get:38 http://archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [153 kB]
get:39 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 B]
get:40 http://archive.ubuntu.com/ubuntu noble-updates/restricted amd64 c-n-f Metadata [464 B]
get:41 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [30.1 kB]
get:42 http://archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [5884 B]
get:43 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 B]
get:44 http://archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [656 B]
get:45 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [208 B]
get:46 http://archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [112 B]
get:47 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Packages [14.2 kB]
get:48 http://archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [12.1 kB]
get:49 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [20.0 kB]
get:50 http://archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1926 B]
get:51 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 B]
get:52 http://archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [116 B]
get:53 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]
get:54 http://archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]
etched 32.9 kB in 19s (5707 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
56 packages can be upgraded. Run 'apt list --upgradable' to see them.
student@LAPTOP-INTAHKGL:~$

```

```

student@LAPTOP-INTAWGL:~$
update-alternatives: using /usr/lib/jvm/java-17-openjdk-amd64/bin/serialver to provide /usr/bin/serialver (serialver) in auto mode
update-alternatives: using /usr/lib/jvm/java-17-openjdk-amd64/bin/jshsdb to provide /usr/bin/jshsdb (jshsdb) in auto mode
Setting up openjdk-17-jdk:amd64 (17.0.14+1-24.04) ...
update-alternatives: using /usr/lib/jvm/java-17-openjdk-amd64/bin/jconsole to provide /usr/bin/jconsole (jconsole) in auto mode
student@LAPTOP-INTAWGL:~$ java -version
openjdk version "17.0.14" 2025-01-21
OpenJDK Runtime Environment (build 17.0.14_7-Ubuntu-124.04)
student@LAPTOP-INTAWGL:~$ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add
add: missing URL
Usage: wget [OPTION]... [URL]...

Try 'wget --help' for more options.
Warnings: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
gpg: no valid OpenPGP data found.
student@LAPTOP-INTAWGL:~$ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc >/dev/null
sudo: tee /usr/share/keyrings/jenkins-keyring.asc: command not found
student@LAPTOP-INTAWGL:~$ wget -q -O https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee
/usr/share/keyrings/jenkins-keyring.asc >/dev/null
wget: missing URL
Usage: wget [OPTION]... [URL]...

Try 'wget --help' for more options.
sudo: tee /usr/share/keyrings/jenkins-keyring.asc: command not found
student@LAPTOP-INTAWGL:~$ wget -q -O https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo t
ee /usr/share/keyrings/jenkins-keyring.asc >/dev/null
sudo: tee /usr/share/keyrings/jenkins-keyring.asc: command not found
student@LAPTOP-INTAWGL:~$ wget -q -O https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo t
ee /usr/share/keyrings/jenkins-keyring.asc >/dev/null
student@LAPTOP-INTAWGL:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable binary/" | sudo tee /etc/apt/sources.list.d/jenkins.list >/dev/null
deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable binary/
student@LAPTOP-INTAWGL:~$ sudo apt update -y
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:2 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:3 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Get:4 https://pkg.jenkins.io/debian-stable binary/ Packages [28.7 kB]
Hit:5 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:6 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:7 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Fetched 31.6 kB in 2s (17.6 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
36 packages can be upgraded. Run 'apt list --upgradable' to see them.

```

Step 6:

(Installing Jenkins)

```
student@LAPTOP-INTAVHGL:~$ wget --help
Usage: wget [OPTION]... [URL]...

Try 'wget --help' for more options.
sudo: tee/usr/share/keyrings/jenkins-keyring.asc: command not found
student@LAPTOP-INTAVHGL:~$ wget -q -O- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc && dev/null
sudo: tee/usr/share/keyrings/jenkins-keyring.asc: command not found
student@LAPTOP-INTAVHGL:~$ wget -q -O- https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc && dev/null
student@LAPTOP-INTAVHGL:~$ echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable binary/" | sudo tee /etc/apt/sources.list.d/jenkins.list && dev/null
student@LAPTOP-INTAVHGL:~$ sudo apt update -y
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:2 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:3 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Get:4 https://pkg.jenkins.io/debian-stable binary/ Packages [28.7 kB]
Hit:5 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:6 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:7 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Fetched 31.6 kB in 2s (17.6 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
56 packages can be upgraded. Run 'apt list --upgradable' to see them.
student@LAPTOP-INTAVHGL:~$ sudo apt install -y jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 56 not upgraded.
Need to get 95.0 MB of archives.
After this operation, 97.6 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/main amd64 net-tools amd64 2.10-0.1ubuntu4 [284 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.432.2 [94.0 MB]
32% [2 jenkins 28.7 MB/94.8 MB 30%]
2852 kB/s 23s
```

Step 7:

```

student@LAPTOP-INTAWHGL:~$ sudo systemctl status jenkins
student@LAPTOP-INTAWHGL:~$ sudo systemctl status jenkins
jenkins.service - Jenkins Continuous Integration Server
Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
Active: active (running) since Mon 2025-03-17 17:37:50 UTC; 3min 55s ago
Main PID: 2392 (java)
Tasks: 58 (limit: 9090)
Memory: 949.5M ()
CGroup: /system.slice/jenkins.service
└─2392 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: 6513675f53d24271bfec2b0a9121d6ee
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:50.706+0000 [id=55] INFO
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:50.736+0000 [id=33] INFO
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: [1]: Started jenkins.service - Jenkins Continuous Integration Server
Mar 17 17:37:53 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:53.053+0000 [id=87] INFO
Mar 17 17:37:53 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:53.055+0000 [id=87] INFO
lines 1-19/19 (END)

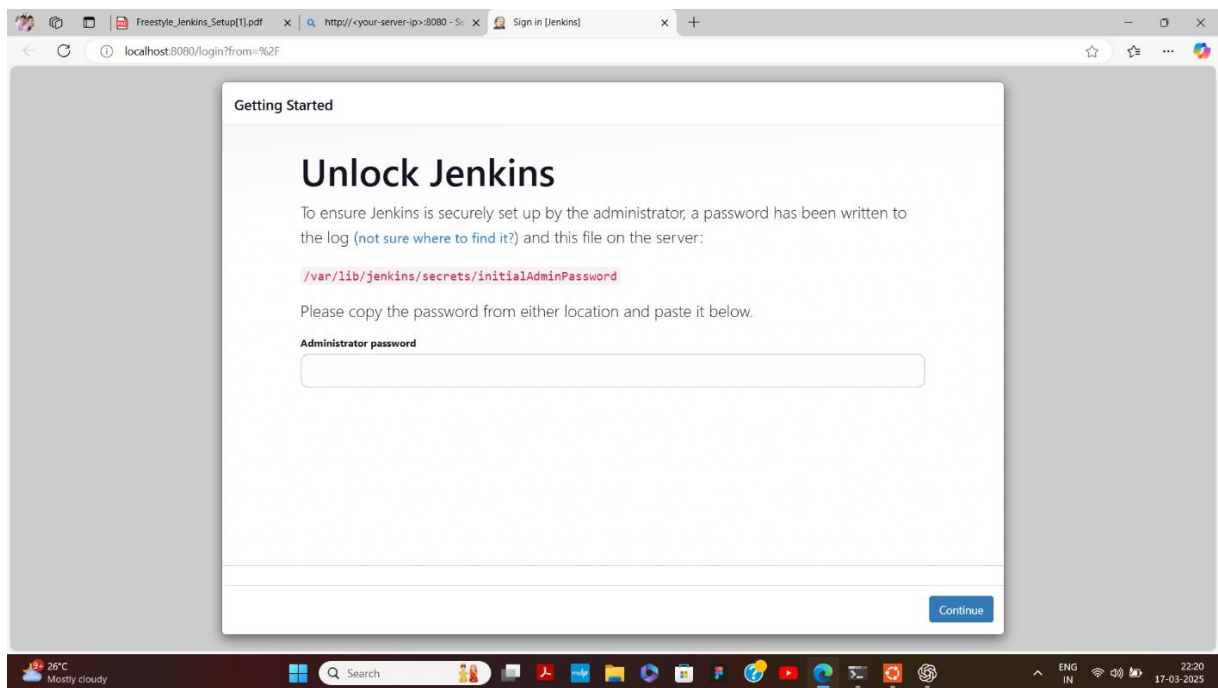
jenkins.service - Jenkins Continuous Integration Server
Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
Active: active (running) since Mon 2025-03-17 17:37:50 UTC; 3min 55s ago
Main PID: 2392 (java)
Tasks: 58 (limit: 9090)
Memory: 949.5M ()
CGroup: /system.slice/jenkins.service
└─2392 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: 6513675f53d24271bfec2b0a9121d6ee
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:41 LAPTOP-INTAWHGL jenkins[2392]: *****
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:50.706+0000 [id=55] INFO
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:50.736+0000 [id=33] INFO
Mar 17 17:37:50 LAPTOP-INTAWHGL jenkins[2392]: [1]: Started jenkins.service - Jenkins Continuous Integration Server
Mar 17 17:37:53 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:53.053+0000 [id=87] INFO
Mar 17 17:37:53 LAPTOP-INTAWHGL jenkins[2392]: 2025-03-17 17:37:53.055+0000 [id=87] INFO
hudson.lifecycle.Lifecycle@0xready: Jenkins is fully up and running
hudson.util.Retrier$Start: Performed the action check updates server successfully at the attempt #1

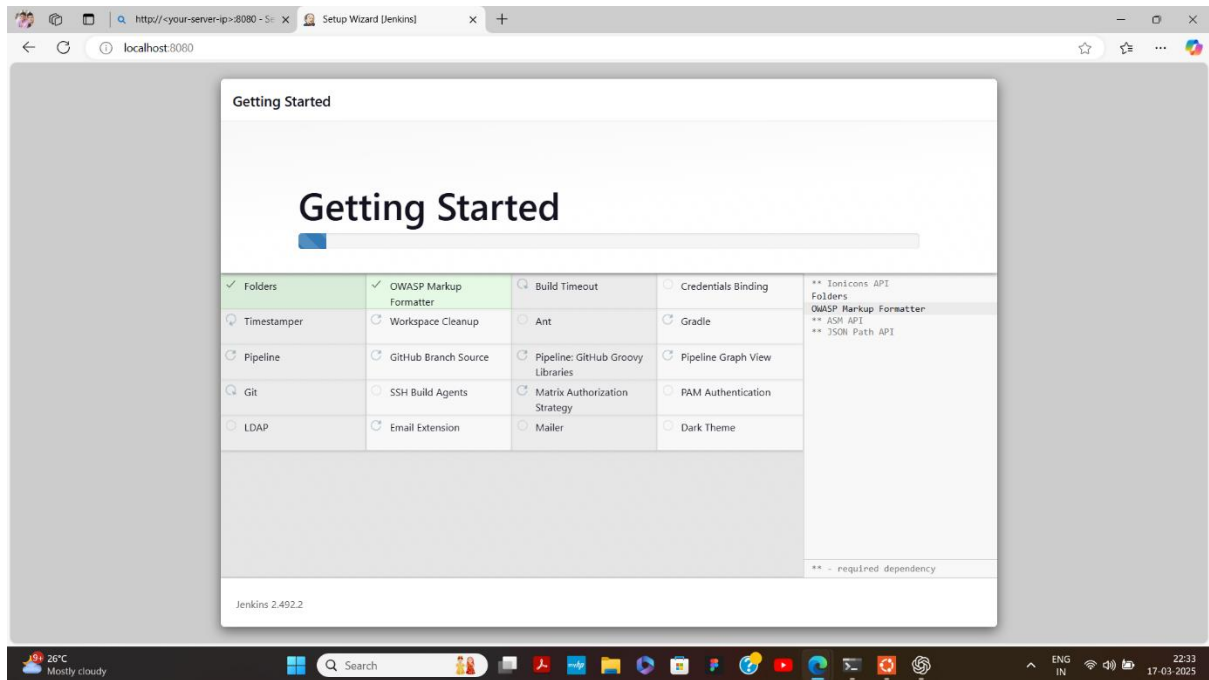
```

Step 8:

(Enter the Administrator Password)

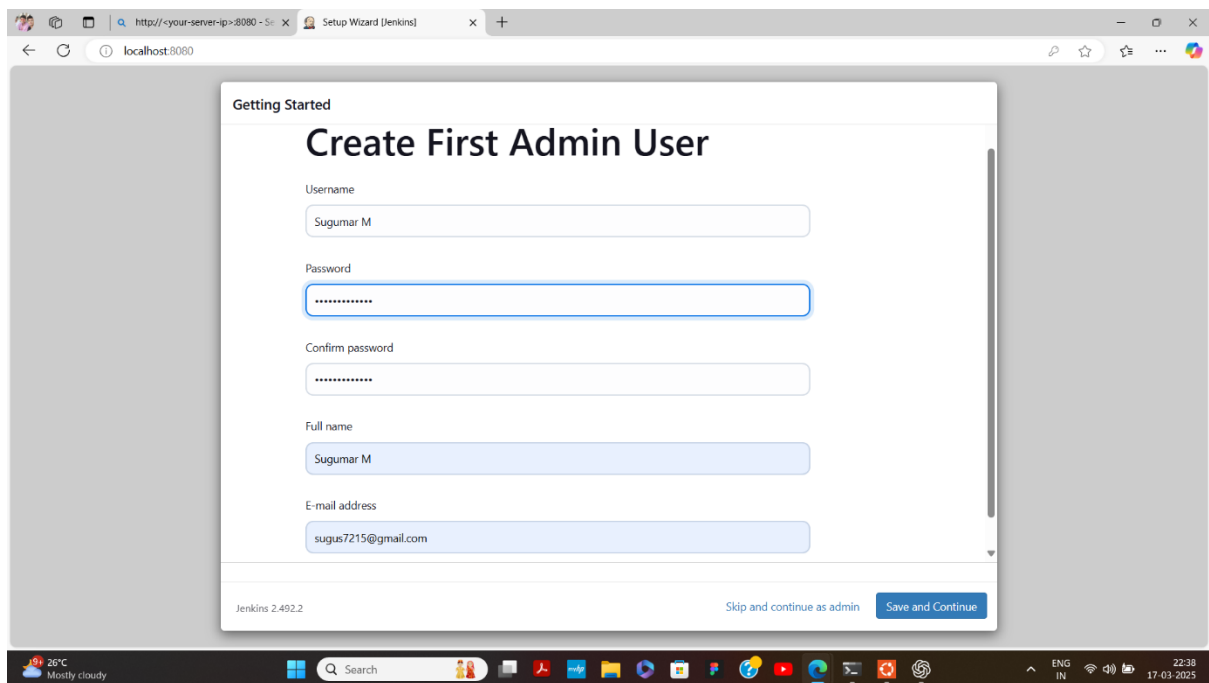


Step 9:



Step 10:

(Create First Admin User)



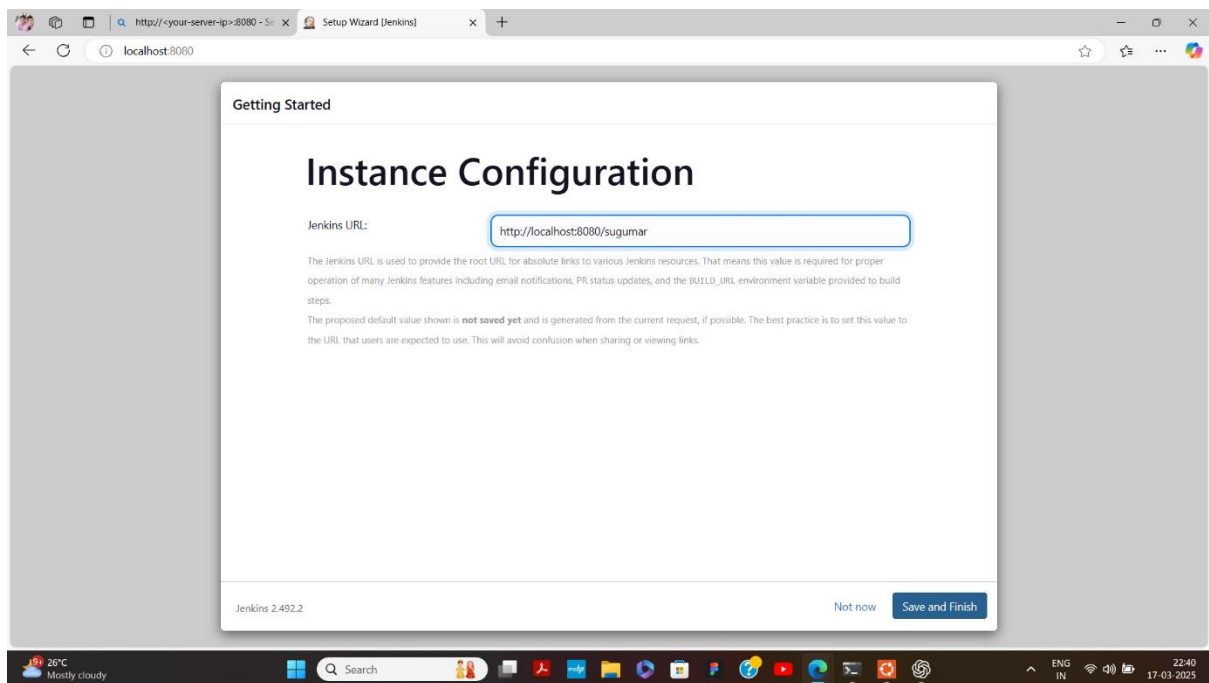
The screenshot shows the Jenkins Setup Wizard interface in a web browser. The page is titled "Getting Started" and "Create First Admin User". It contains several input fields for user creation:

- Username:** A text input field containing "Sugumar M".
- Password:** A password input field with masked characters "*****".
- Confirm password:** A password input field with masked characters "*****".
- Full name:** A text input field containing "Sugumar M".
- E-mail address:** A text input field containing "sugus7215@gmail.com".

At the bottom of the form, there are two buttons: "Skip and continue as admin" and "Save and Continue". The Jenkins version "Jenkins 2.492.2" is displayed in the bottom left corner of the wizard. The browser's address bar shows "localhost:8080". The Windows taskbar at the bottom indicates the system temperature is 26°C, the time is 22:38, and the date is 17-03-2025.

Step 11:

(Enter the URL)



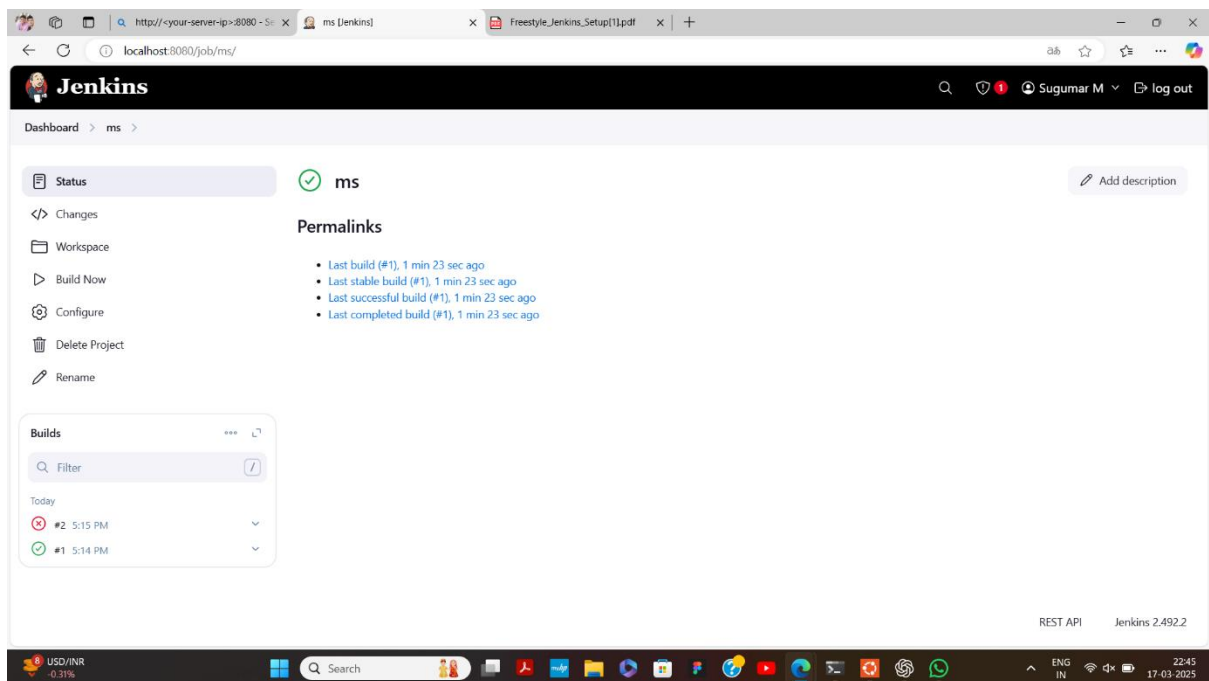
Step 12:

(Create an Project ex:ms)

(In Configure build and Select Execute shell)

(Build the Project)

SELECT BUILD NOW



Step 13:

(We can check the output in console output)

