Testing in a DevOps Lifecycle

FSD: Lab Guide - Phase 5

This section will guide you to:

- Use practice labs to execute all demos included in this course

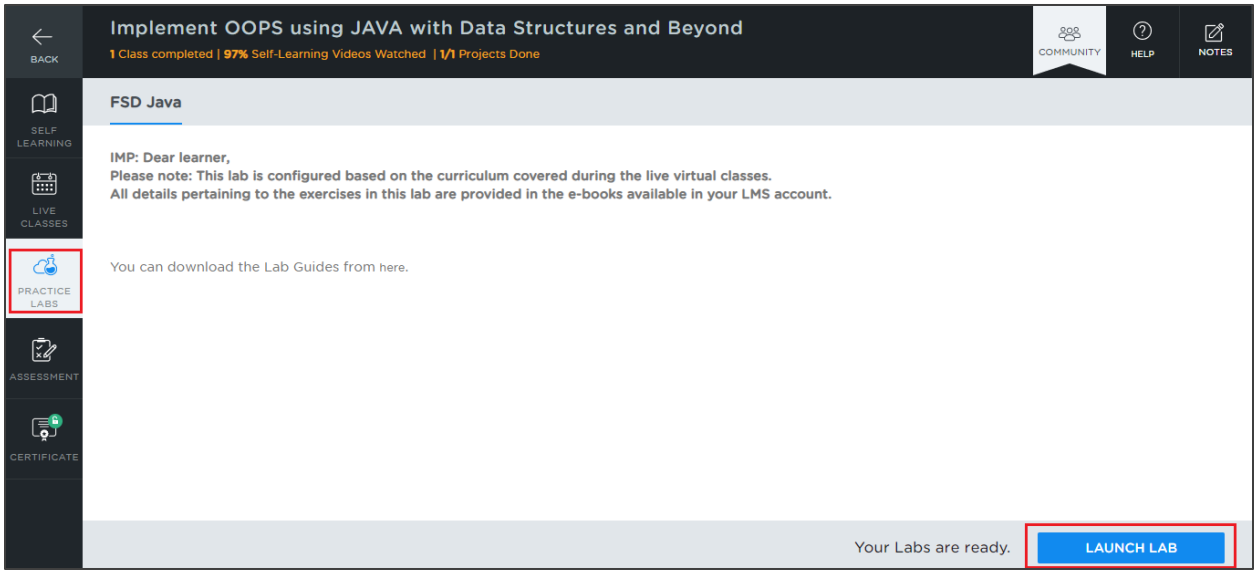
This lab has two subsections, namely:

1. Starting practice labs on LMS
2. Using different IDEs and software required for Phase 5

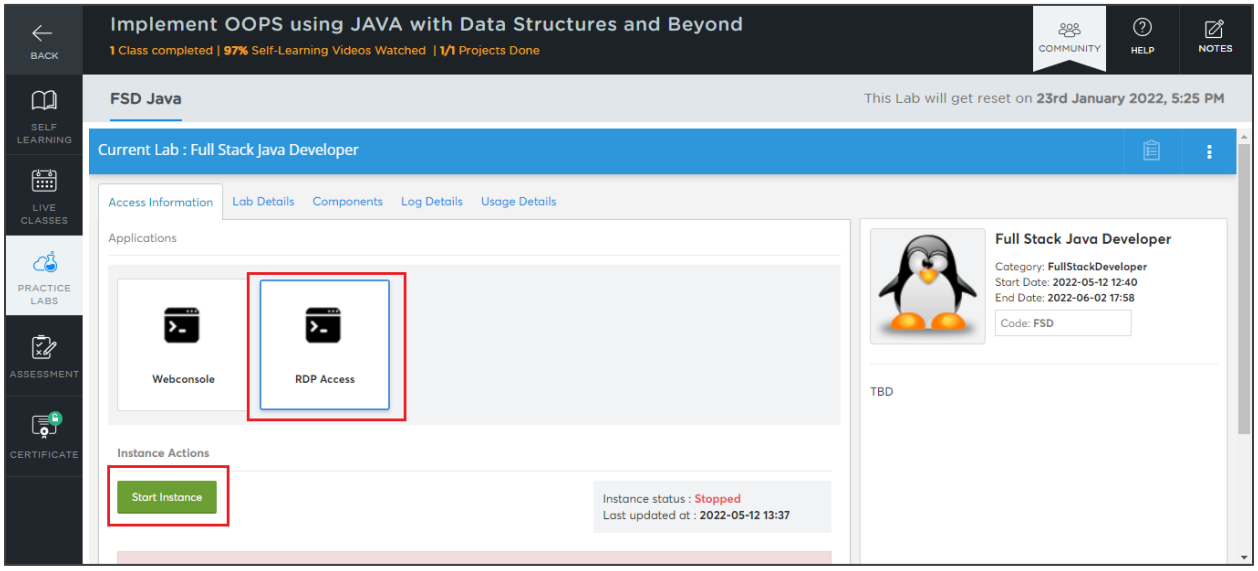
Step 1: Starting practice labs on LMS

- Login to Simplilearn LMS
- Select Master Program and then Go to Program

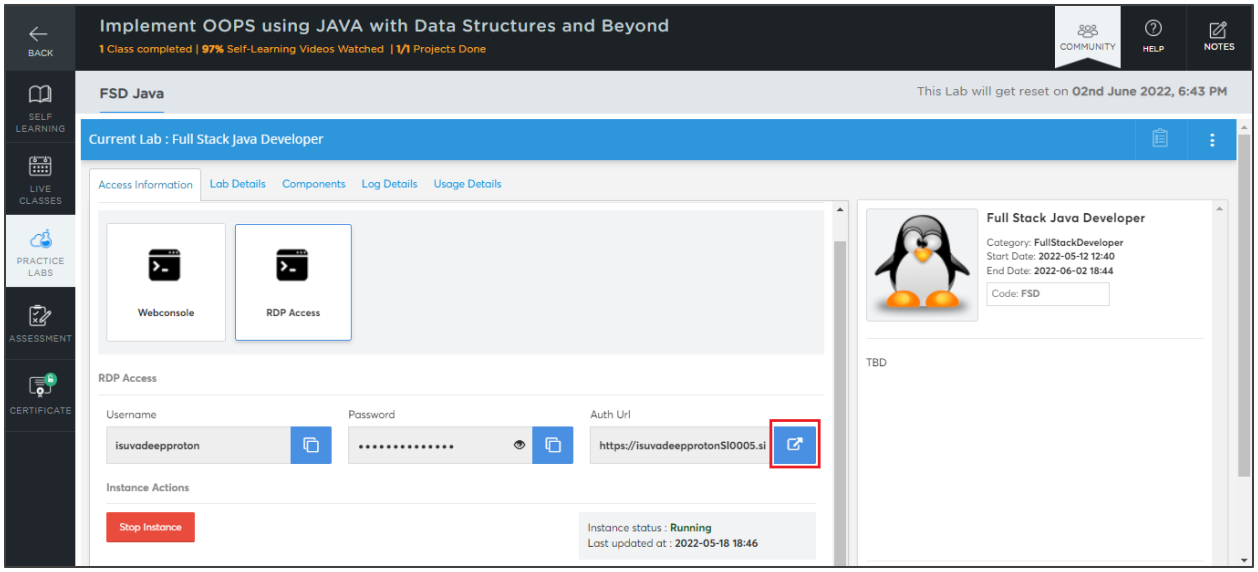
- Click on the respective course (However, since all the courses/phases have same lab, so it can be launched from anyone of them.)
- On the left side, click on **PRACTICE LABS** tab
- As a new window opens, read the instructions and click on **LAUNCH LAB**



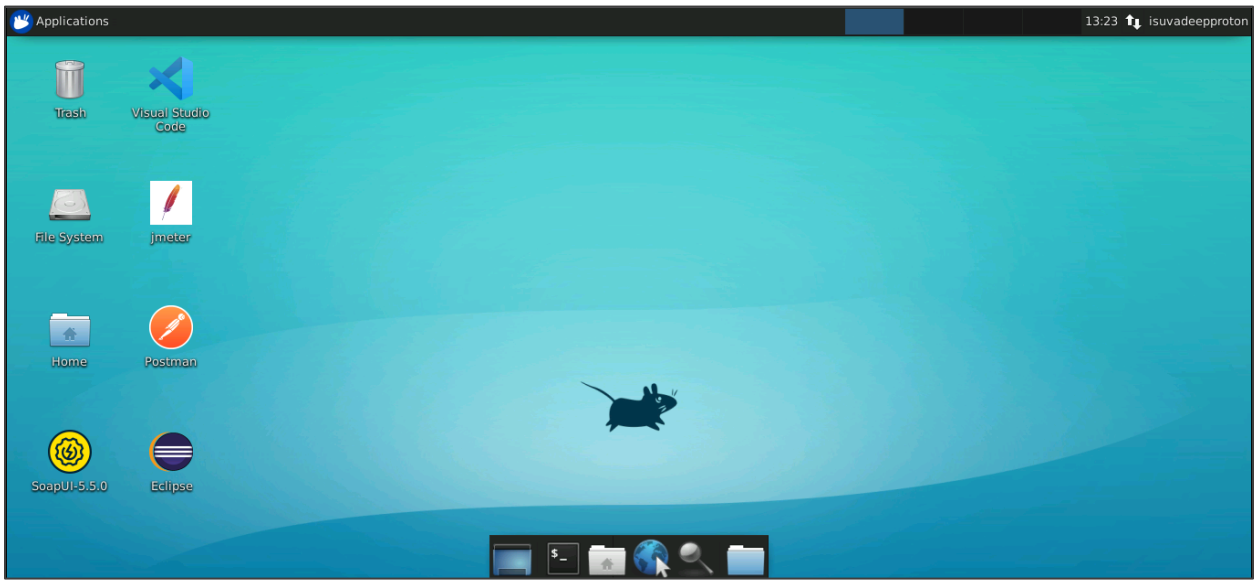
- Select RDP Access and Start Instance



- Click on Auth URL button



- You will be able to access IDEs and software which are present in labs



Step 2: Using different IDEs and software required for Phase 5

All the required IDEs and software can be accessed from the labs

Selenium:

- You will find Selenium in the directory */usr/share* which is shown in the screenshot below:

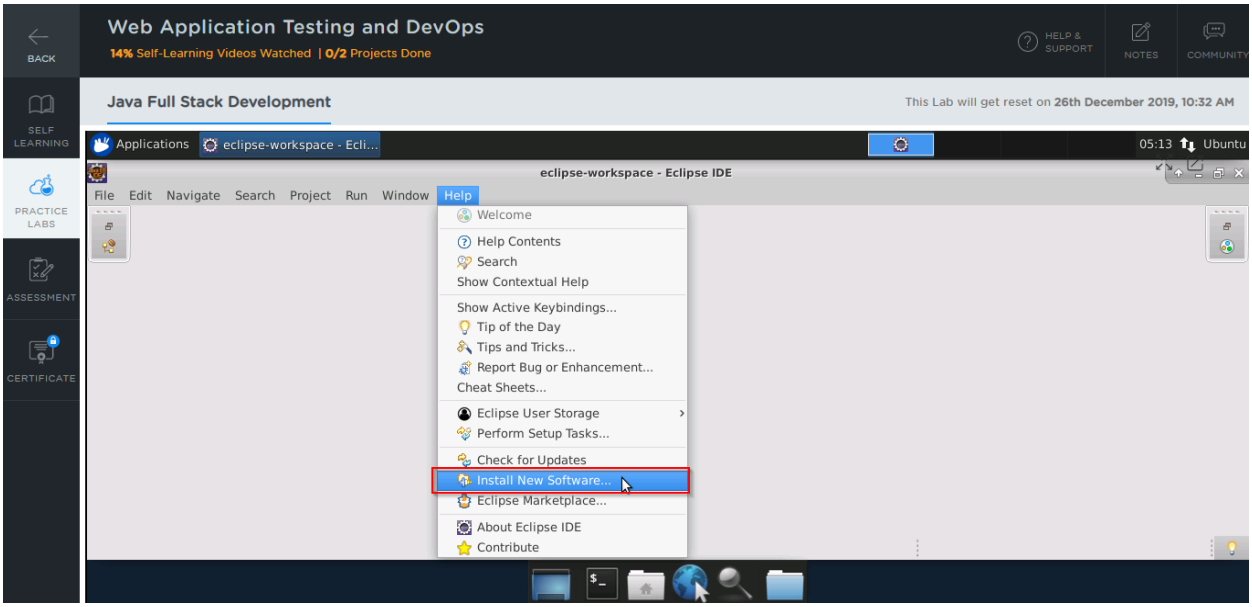
```
nehavaidyasimpl@ip-172-31-81-156:~$ locate selenium
/usr/share/selenium
/usr/share/selenium/selenium-server-standalone.jar
nehavaidyasimpl@ip-172-31-81-156:~$
```

- In case Selenium is not installed in your practice lab, you can install it using the command:

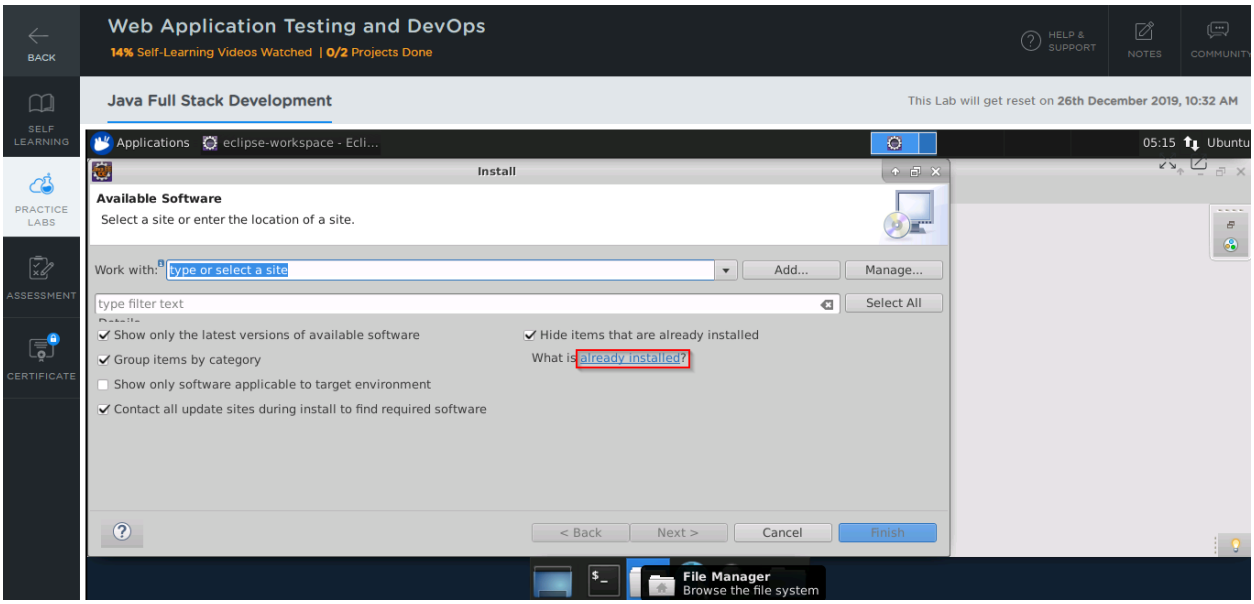
  sudo npm install selenium-standalone@latest -g

TestNG:

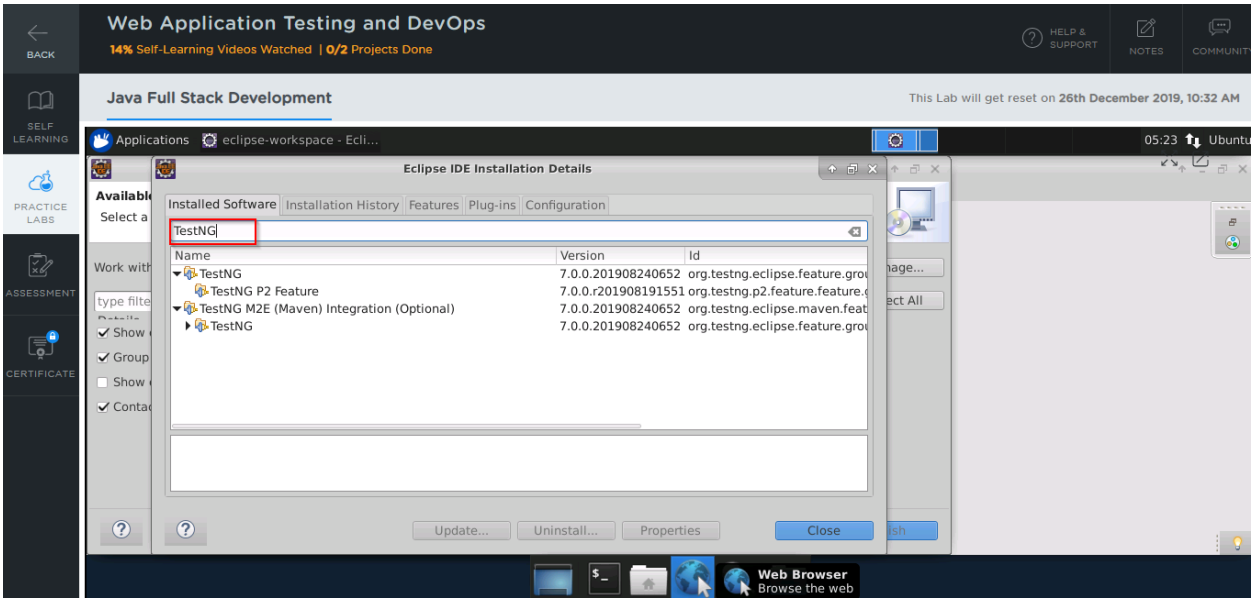
- TestNG is installed as an Eclipse plugin in your practice lab
- To verify the installation:
  1. Open the Eclipse environment from your desktop
  2. Click the **Help** tab and select **Install New Software**



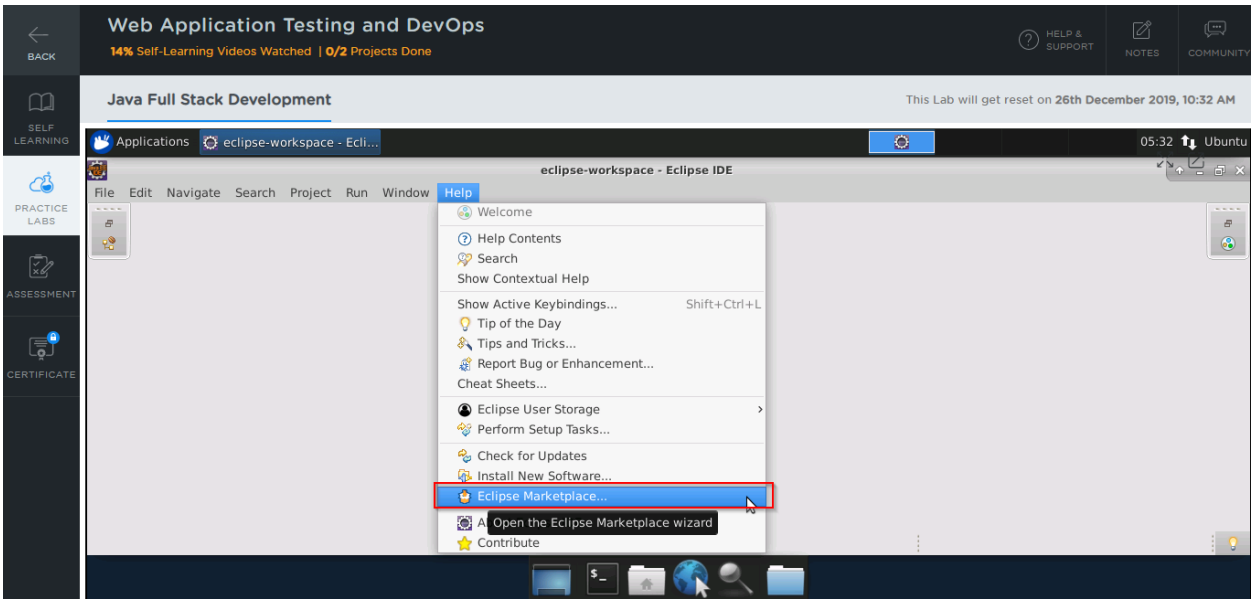
3. In the next window, click on **Already Installed**



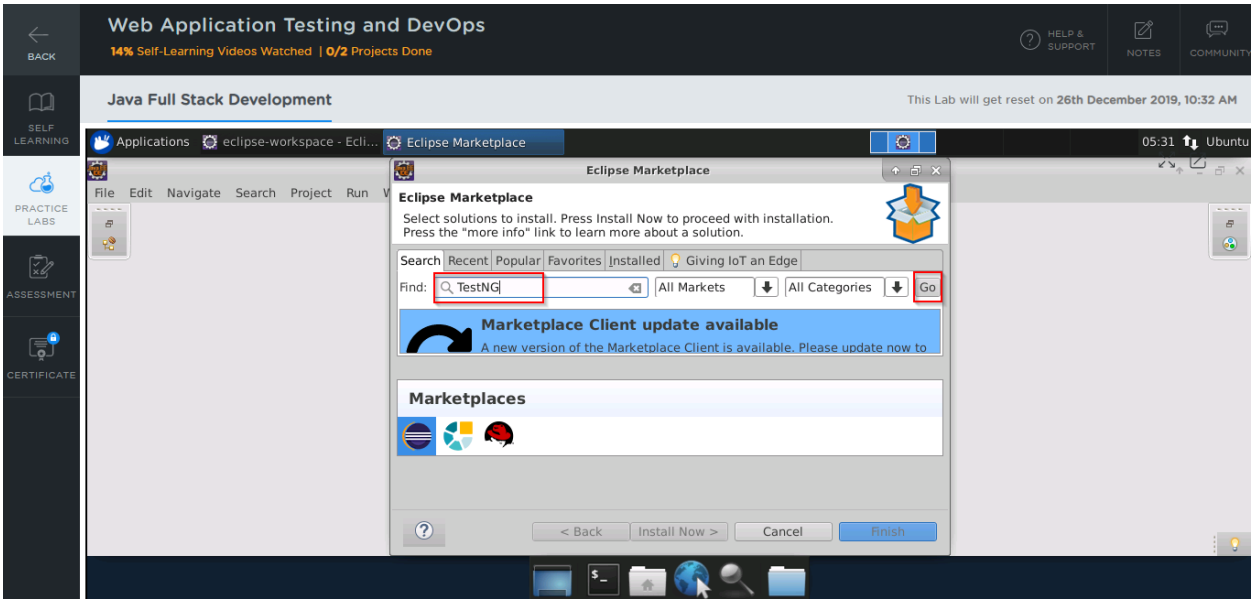
4. In the **filter text** field, type **TestNG**



- In case TestNG is not installed in your practice lab, you can install it following these steps:
    1. Open the Eclipse environment from your desktop, navigate to the **Help** tab, and click on **Eclipse Marketplace**



2. Type **TestNG** in the **Find** field and click on **Go**



3. In the next window, you will see the TestNG tool
4. Click on the **Install** button to start the installation

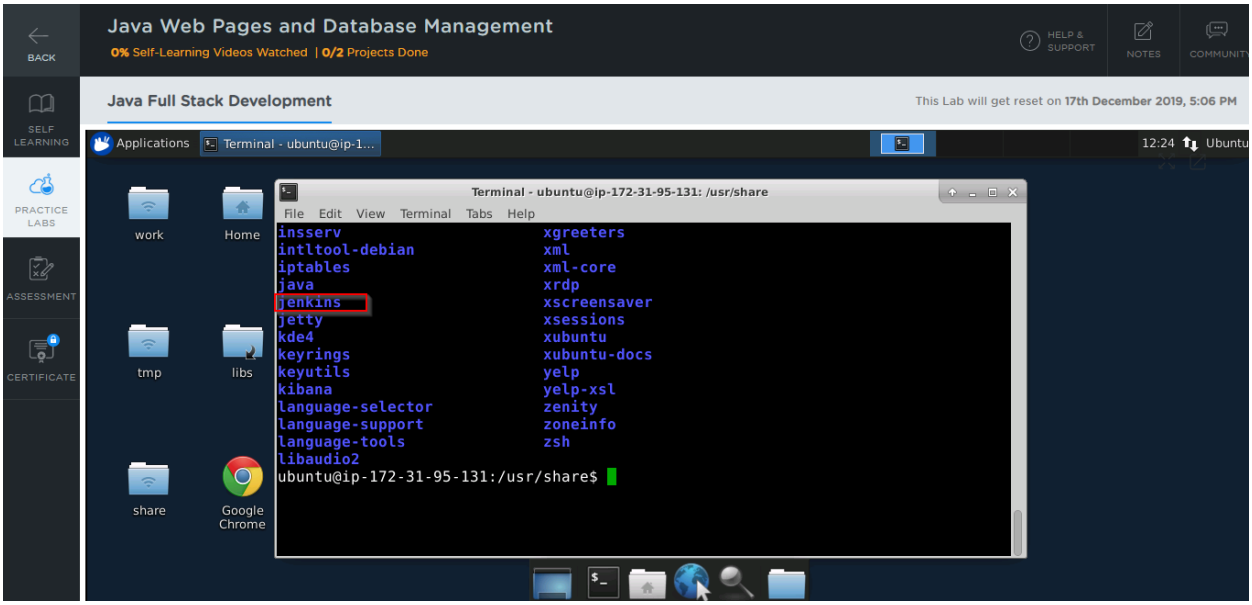
Jenkins:

- Jenkins is already installed in your practice lab

- You will find it in the directory */usr/share*

- Use the following commands to navigate to the above-mentioned directory

  cd /usr/share
  ls

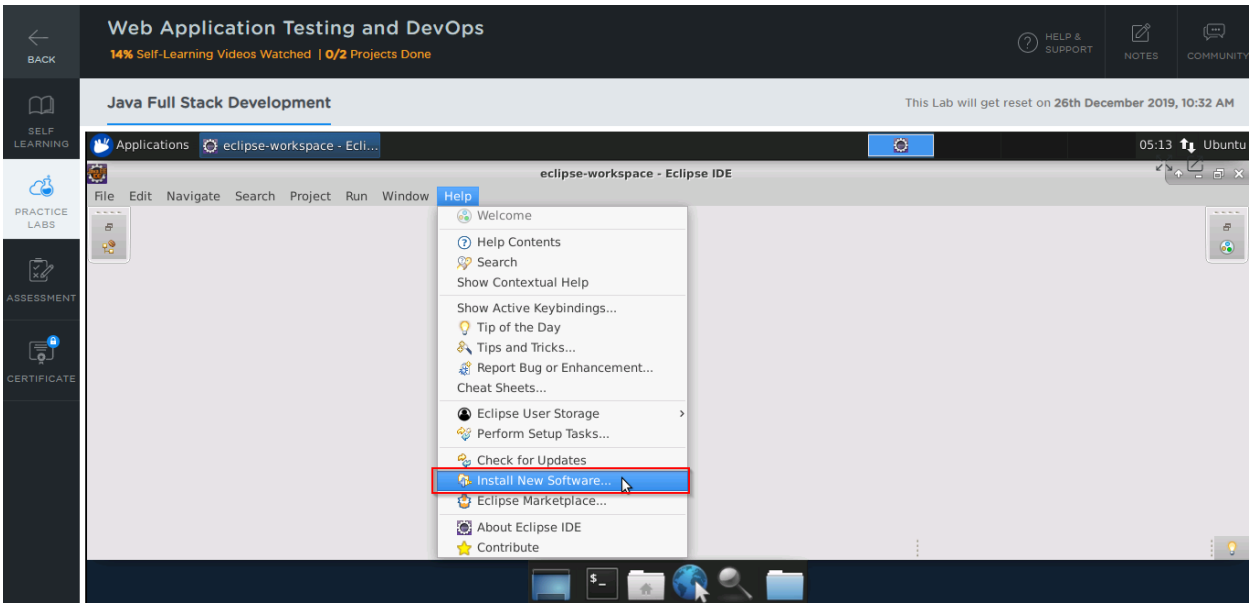


- In case Jenkins is not installed in your practice lab, you can install it using the commands:

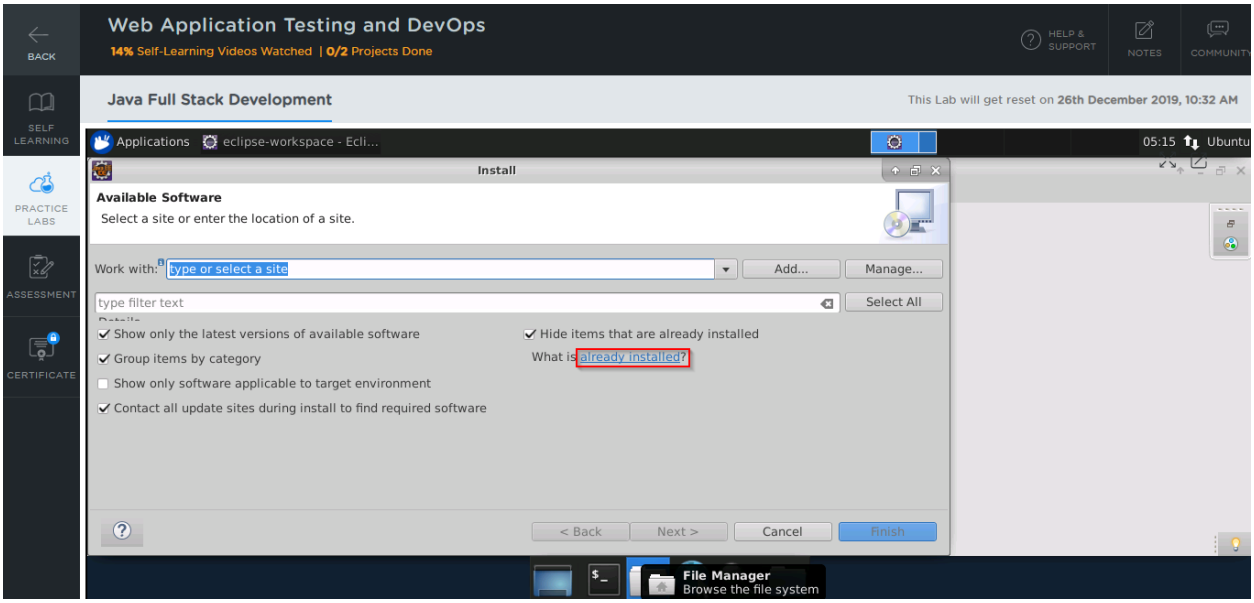
  sudo apt update
  sudo apt install jenkins

Cucumber:

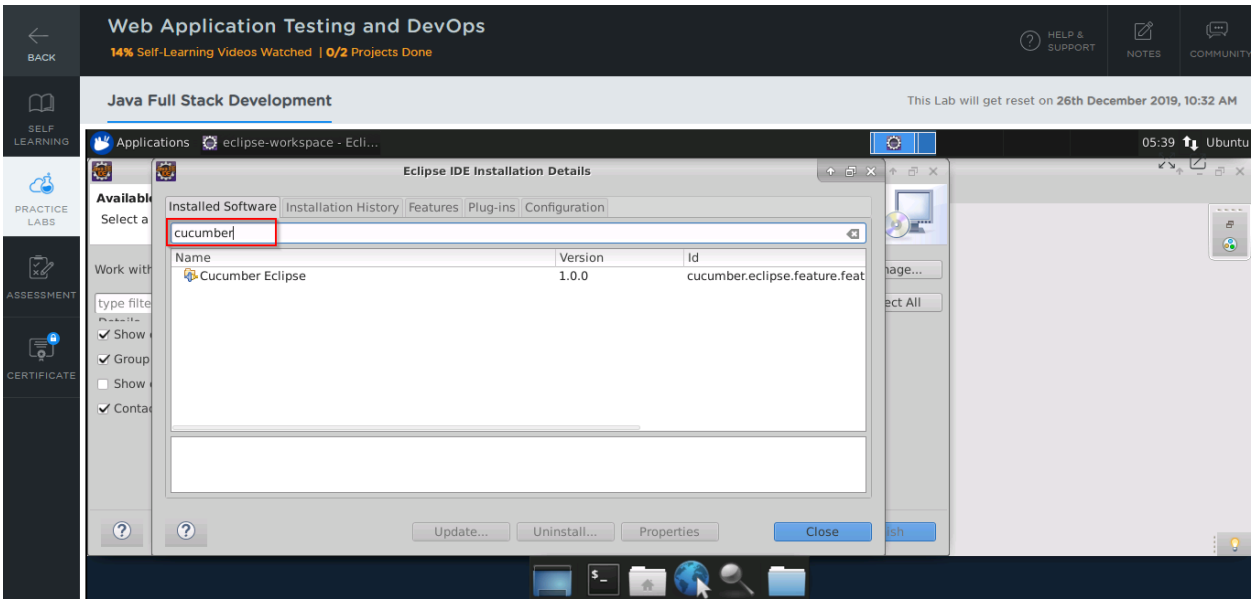
- Cucumber is installed as an Eclipse plugin in your practice lab
- To verify the installation:
  1. Open the Eclipse environment from your desktop
  2. Click the **Help** tab and select **Install New Software**



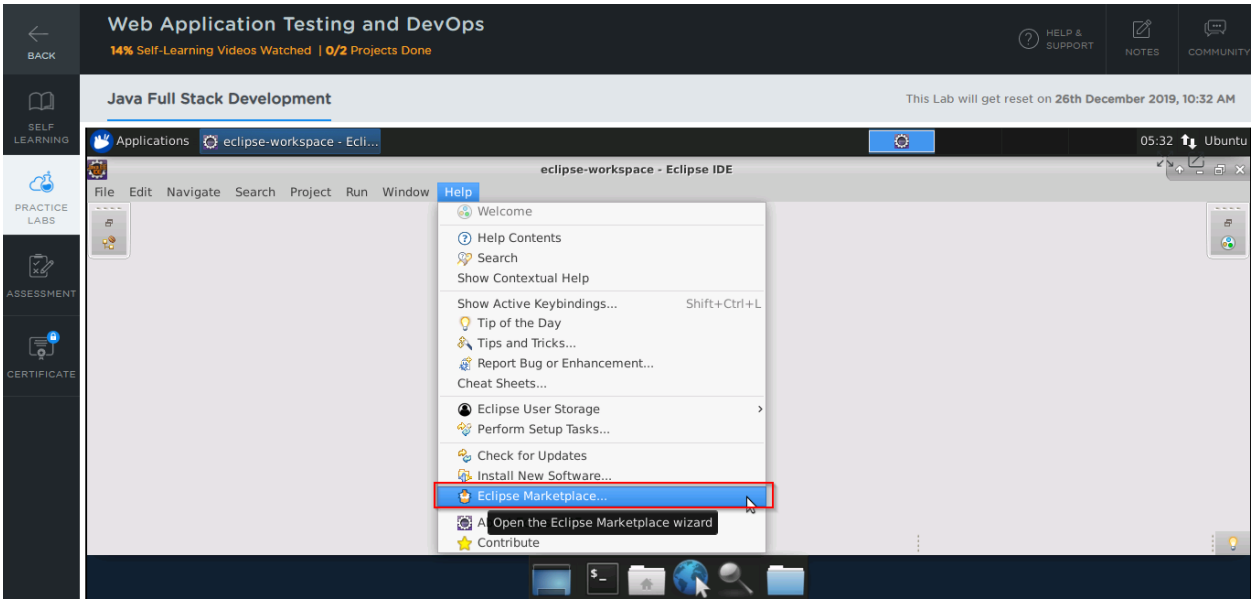
3. In the next window, click on **Already Installed**



4. In the **filter text** field, type **Cucumber**



- In case Cucumber is not installed in your practice lab, you can install it following these steps:
    1. Open the Eclipse environment from your desktop, navigate to the **Help** tab, and click on **Eclipse Marketplace**

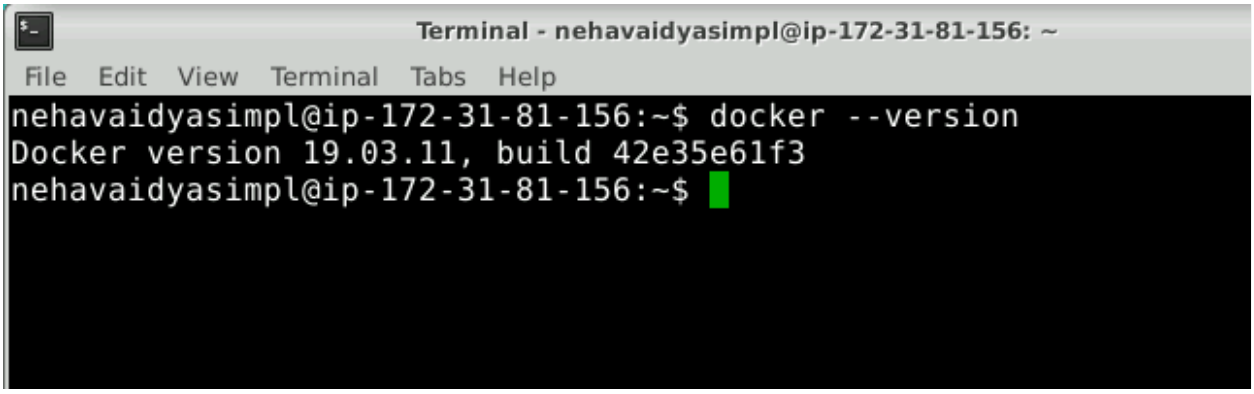


    2. Type **Cucumber** in the **Find** field and click on **Go**
    3. In the next window, you will see the Cucumber tool
    4. Click on the **Install** button it to start the installation

Docker:

- Docker version 19.03.11 is already installed in your practice lab
- To verify the installation:
    1. Open the command-line interface
    2. Type the command:

        docker --version



- In case Docker is not installed in your practice lab, you can install it following these steps:
    1. Set up the Docker repository using the following commands:

        sudo apt-get update

        sudo apt-get install apt-transport-https ca-certificates curl software-properties-common

        curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -

        sudo add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"

    2. Install Docker using the command:

        sudo apt-get install docker-ce

Kubernetes:

- Kubernetes is already installed in your practice lab
- To verify the installation:
    1. Open the command-line interface
    2. Type the command:

    kubeadm version

- In case Kubernetes is not installed in your practice lab, you can install it following these steps:
    1. Set up the repository using the following commands:

    curl -s https://packages.cloud.google.com/apt/doc/apt-key.gpg | apt-key add -

    echo 'deb http://apt.kubernetes.io/ kubernetes-xenial main' | sudo tee /etc/apt/sources.list.d/kubernetes.list

    2. Install Kubernetes using the command:

    sudo apt-get install kubelet kubeadm kubectl -y