Implement Frameworks the DevOps way

FSD: Lab Guide - Phase 3

This section will guide you to:

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

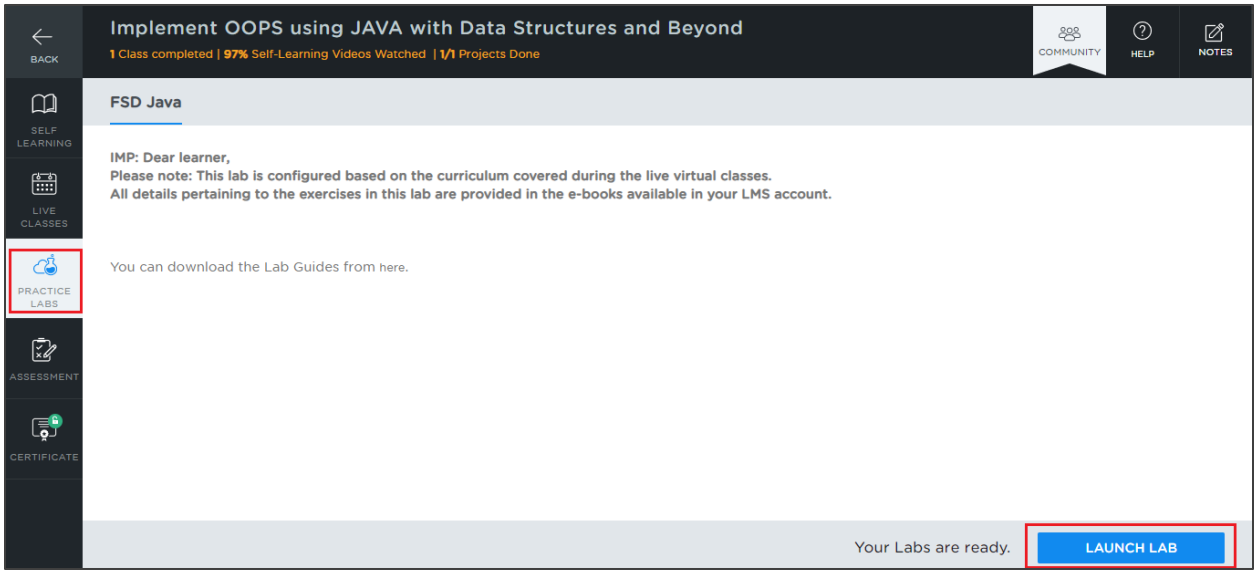
This lab has two subsections, namely:

1. Starting practice labs on LMS
2. Using different IDEs and software required for Phase 3

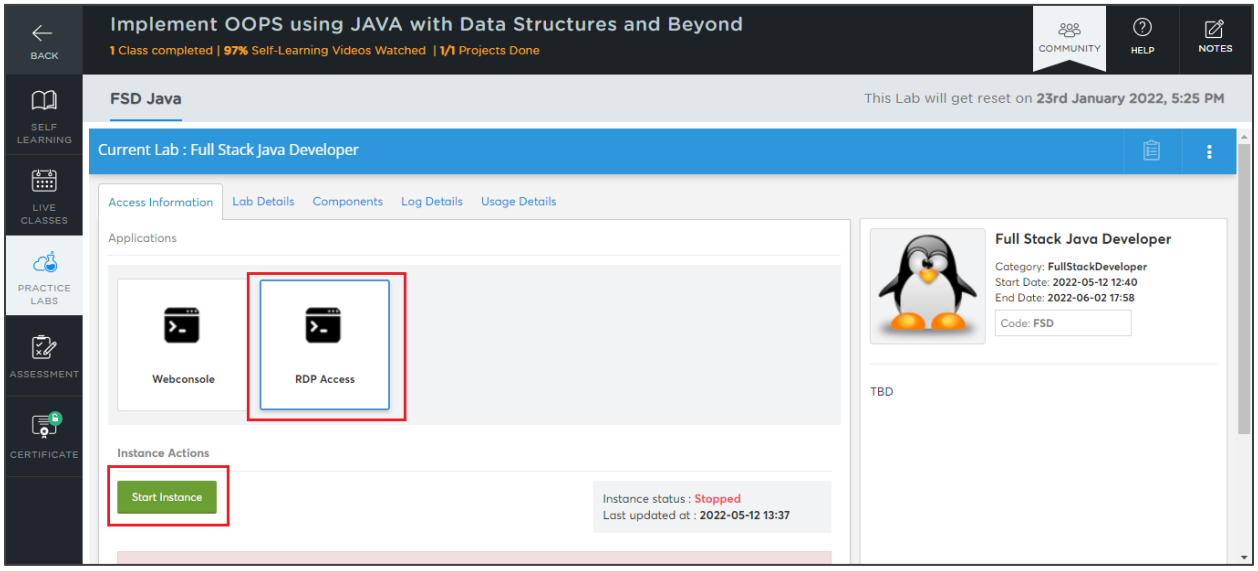
Step 1: Starting practice labs on LMS

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

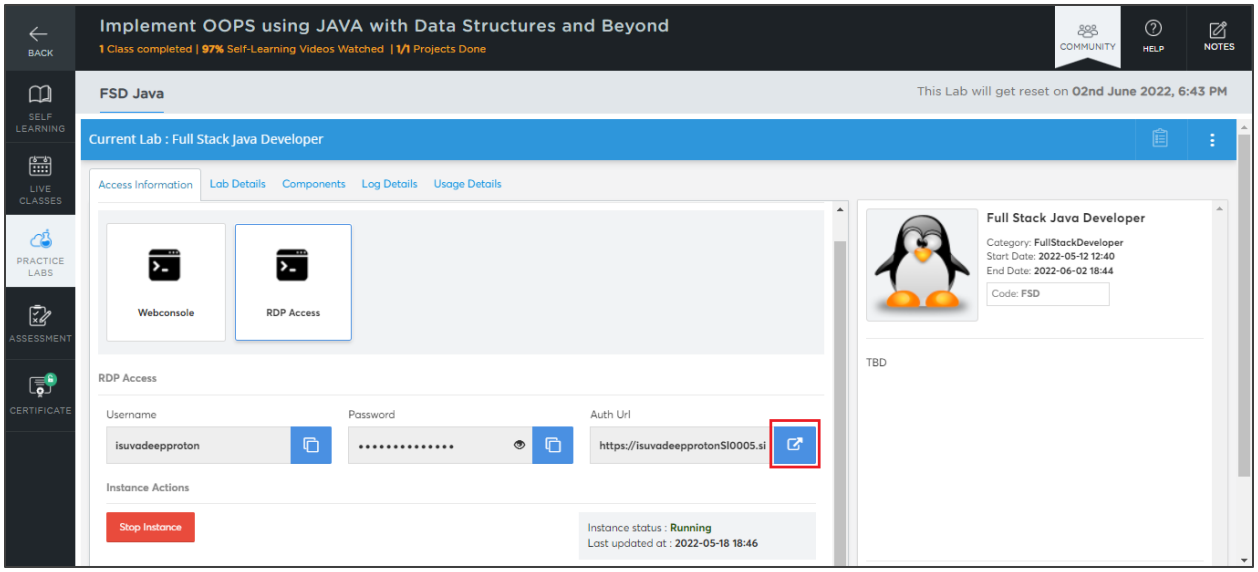
- Click on the respective course (However, since all the courses/phases have same lab, so it can be launched from anyone of them.)
- On the left side, click on **PRACTICE LABS** tab
- As a new window opens, read the instructions and click on **LAUNCH LAB**



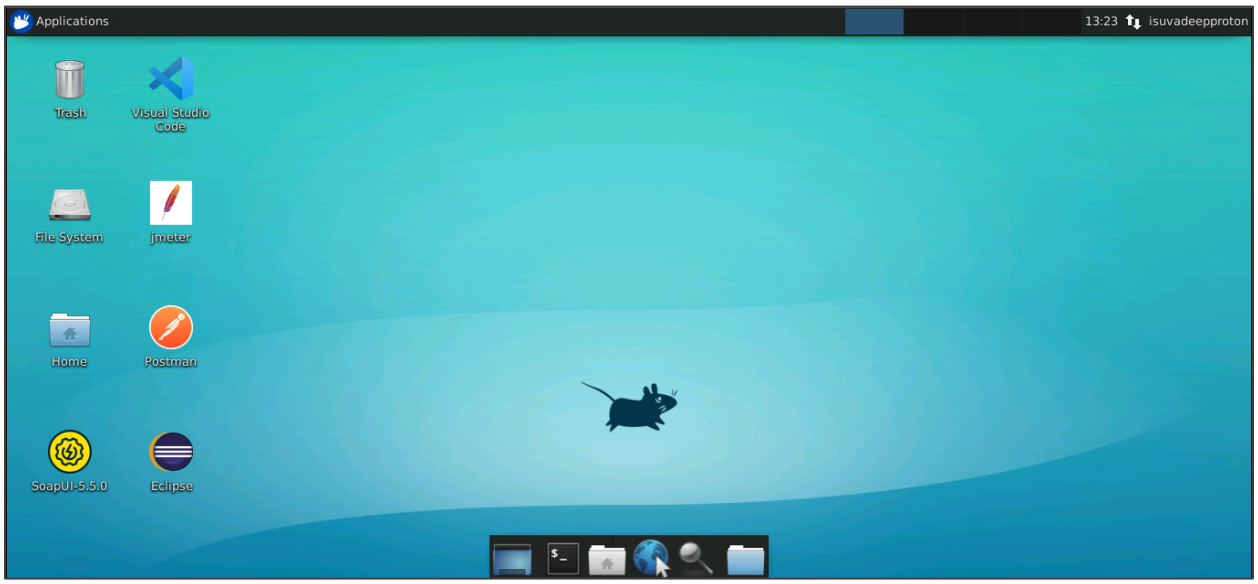
- Select RDP Access and Start Instance



- Click on Auth URL button



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



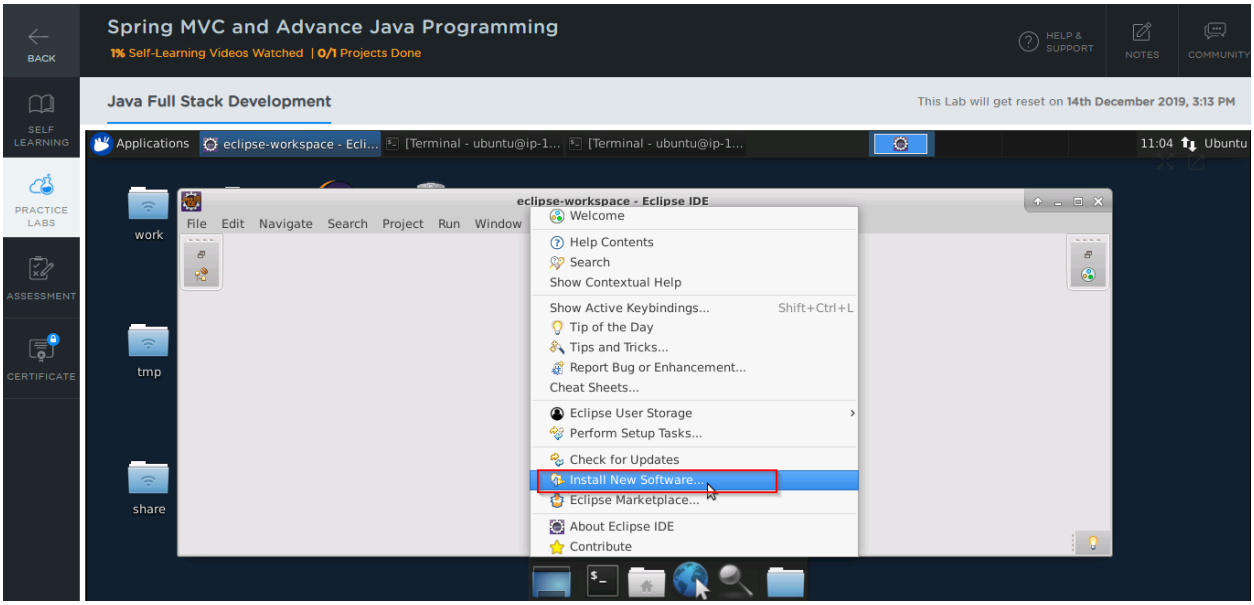
Step 2: Using different IDEs and software required for Phase 3

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

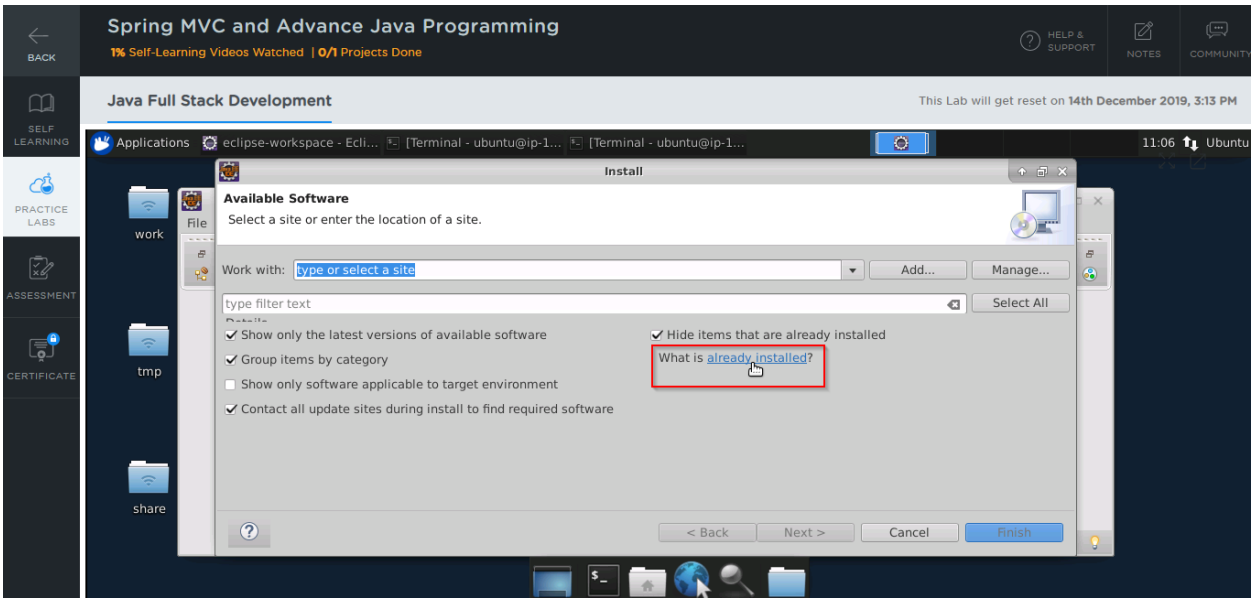
Spring Tool Suite & Spring Boot:

Spring and its packages are already installed in your practice labs

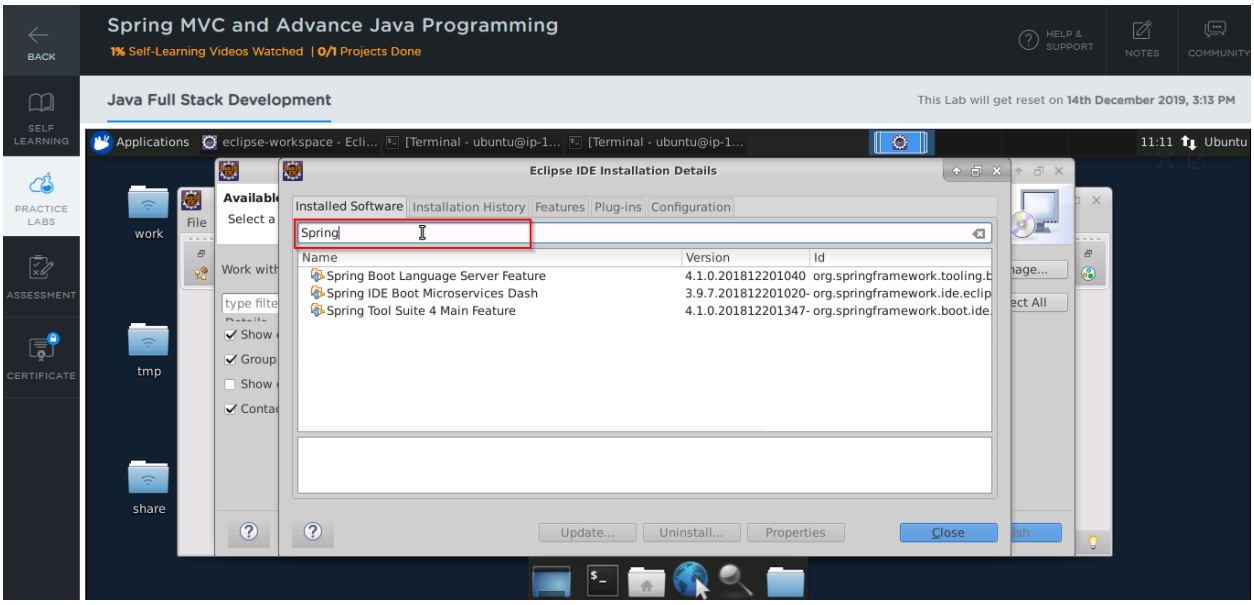
- To verify the installation:
    1. Open the Eclipse environment from your desktop
    2. Go to the **Help** tab and select **Install New Software**



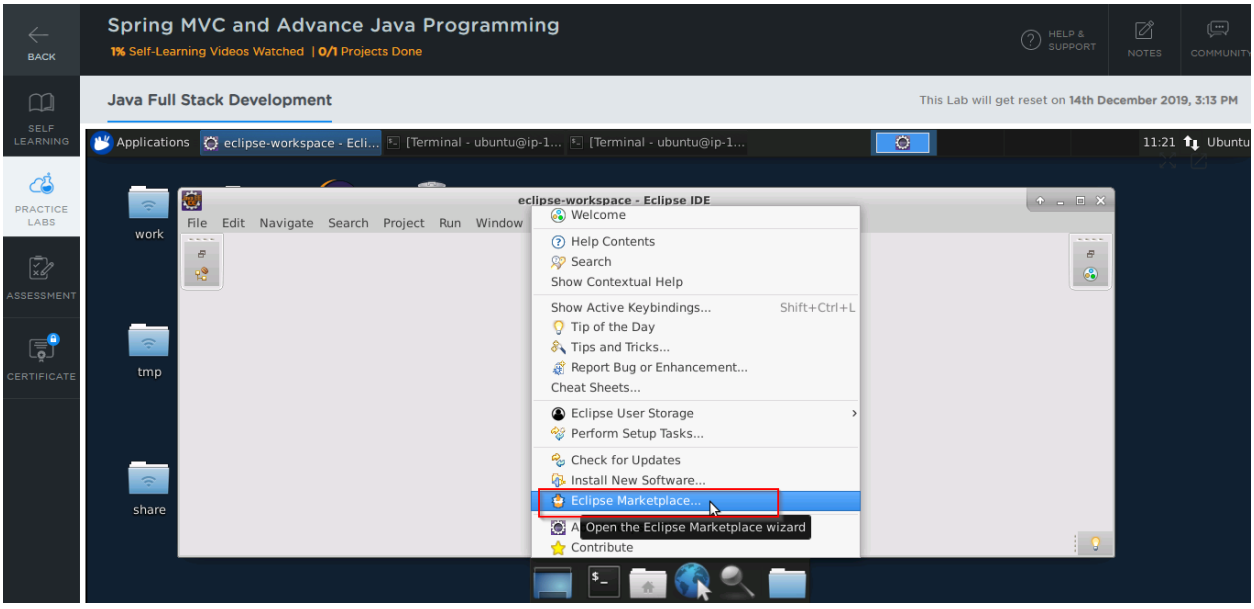
3. In the next window, click on **Already Installed**



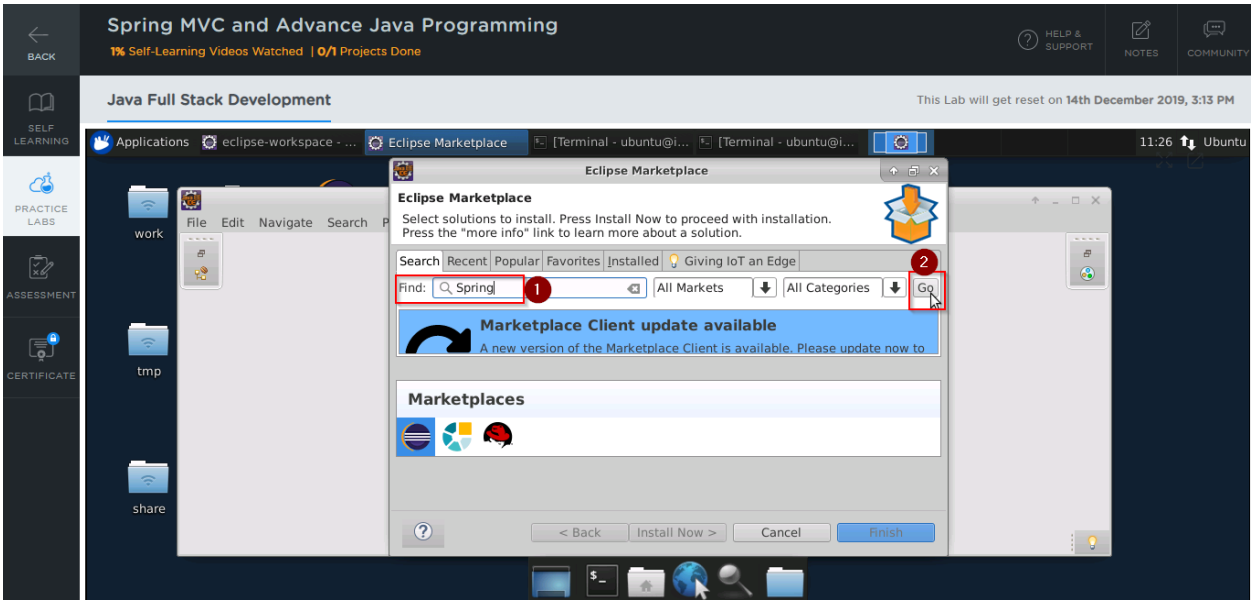
4. In the **filter text** field, type **Spring**



- In case Spring packages are not installed in your practice lab, you can install them following these steps:
    1. Open the Eclipse environment from your desktop, go to the **Help** tab, and click on **Eclipse Marketplace**



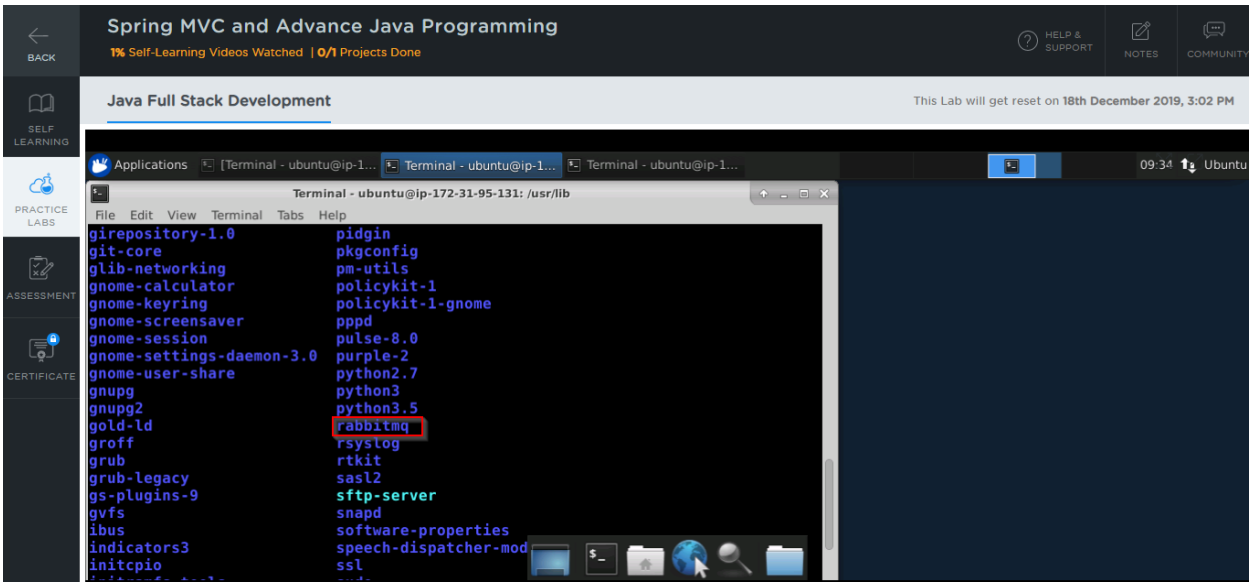
2. Type **Spring** in the **Find** field and click on **Go**



3. You'll find Spring Tool Suite and Spring Boot listed there
4. Click on the **install** button against the package that you want to install

RabbitMQ:

- You can find it in the directory **usr/lib**
- This step is shown below in the screenshot:



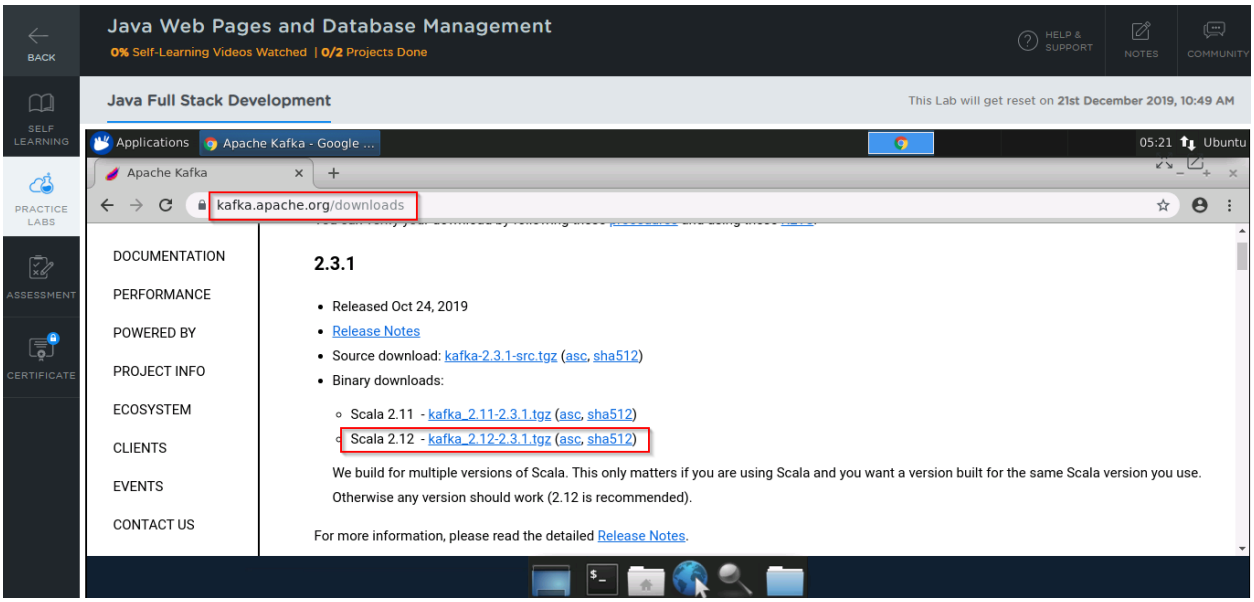
- In case RabbitMQ is not installed in your practice lab, you can install it using the commands:

  sudo apt update
  sudo apt -y install rabbitmq-server

Kafka:

You can use the following steps to install Kafka:

- Go to **https://kafka.apache.org/downloads** and download the latest binary file



- Open the command line and navigate to the **Downloads** folder:
  cd Downloads

- Use the following commands to extract files from the binary file you have downloaded in the previous step:

  tar xzf kafka_2.12-2.3.1.tgz
  mv kafka_2.12-2.3.1 /usr/local/kafka

- Start a Zookeeper instance first using the commands:

  cd /usr/local/kafka
  bin/zookeeper-server-start.sh config/zookeeper.properties

- Start the Kafka server using the command:

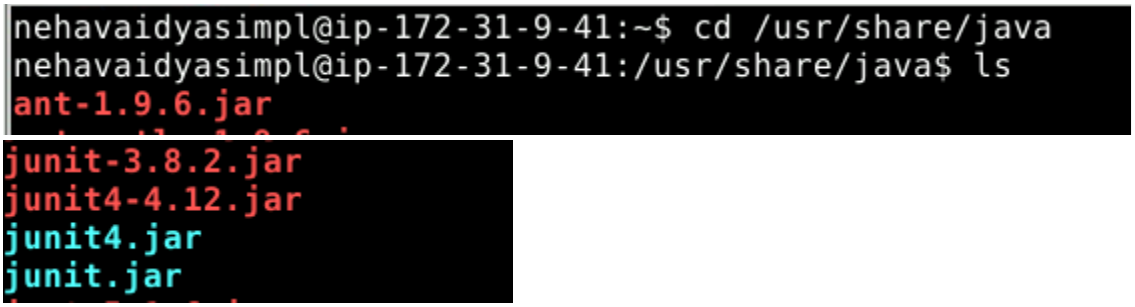
  bin/kafka-server-start.sh config/server.properties

JUnit:

JUnit is already installed in your practice labs, and you can find it in the directory */usr/share/java*

- Use the following command to navigate to the above-mentioned directory:

  cd /usr/share/java/
  ls

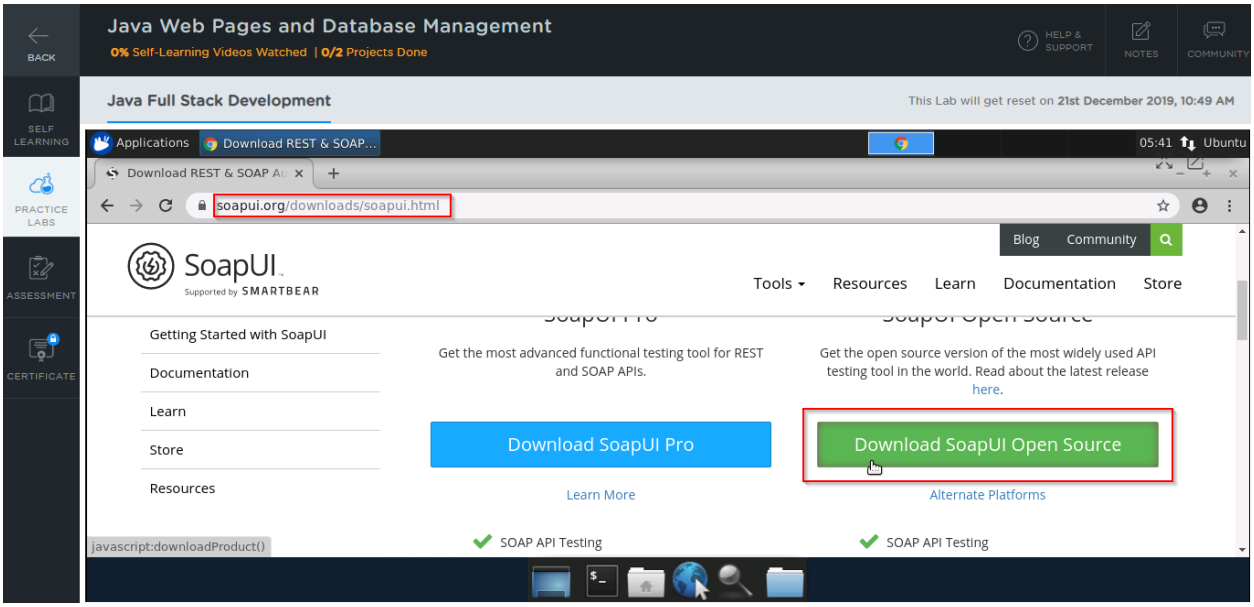


SoapUI:

SoapUI is already installed in your lab

- You can use the following steps to install SoapUI:

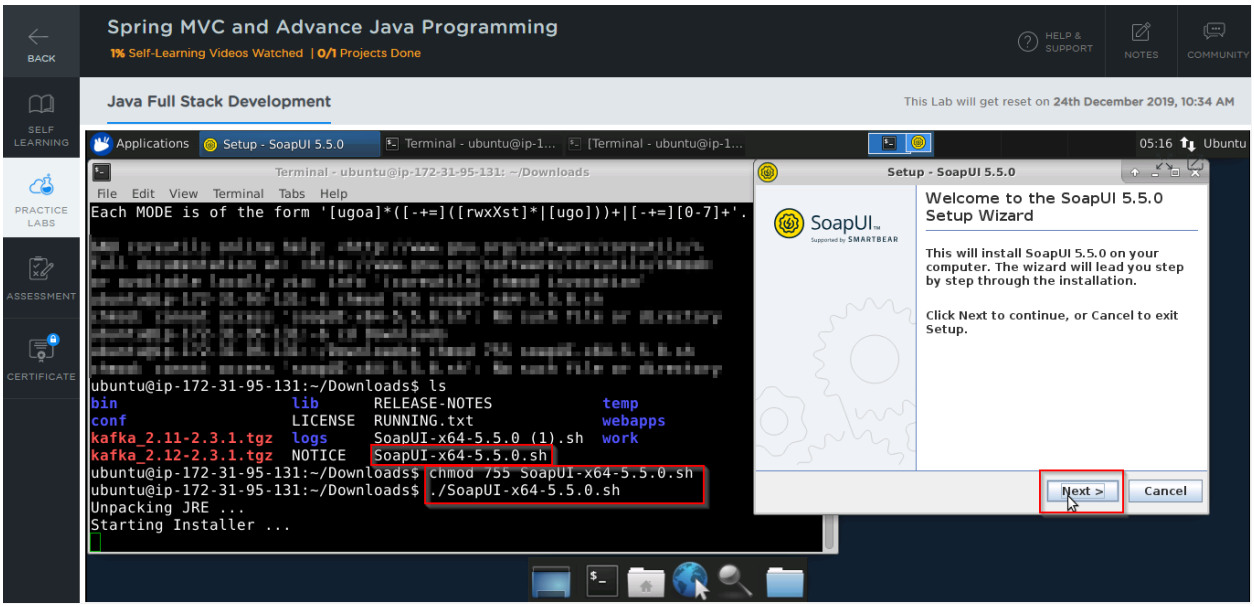
- Go to **https://www.soapui.org/downloads** and click on **Download SoapUI open source**



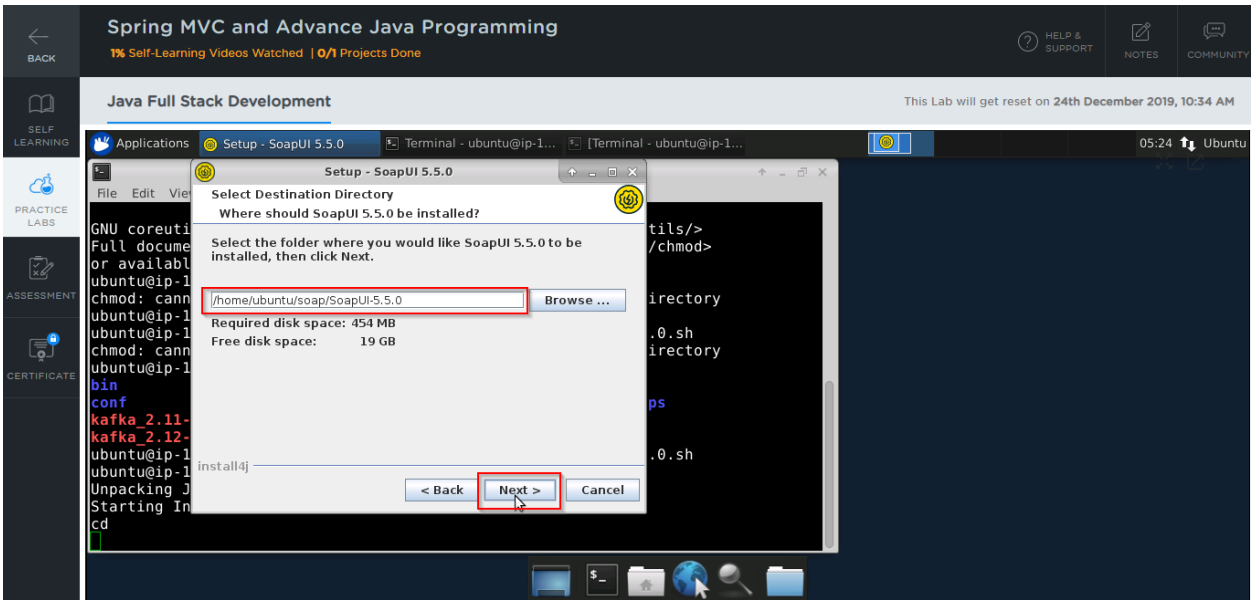
- Open the command line and navigate to the **Downloads** folder:
  cd Downloads

- Run the following commands to initiate the installer:
  chmod 755 SoapUI-x64-5.5.0.sh
  ./SoapUIx-64-5.2.1.sh

- Once the installer is initiated, click on **Next**



- Choose the path where you want to install SoapUI and click on **Next**



- Accept all the default settings and follow the wizard instructions to finish the installation

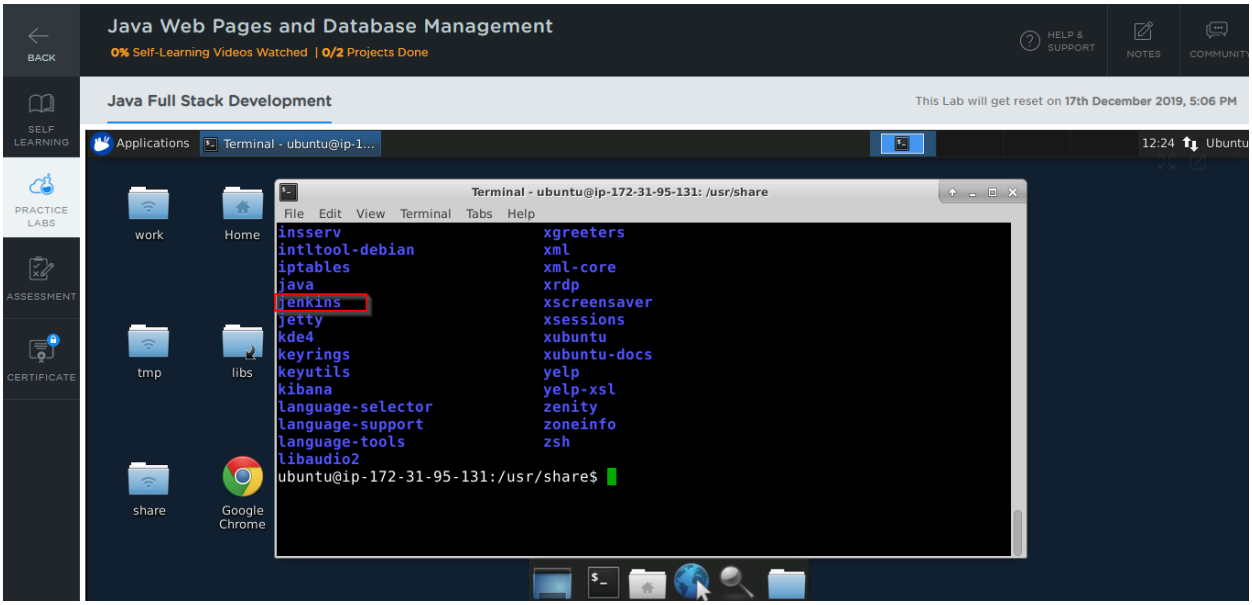
Jenkins:

Jenkins is already installed in your practice labs

- 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

Maven:

Maven is already installed in your practice labs

- You can use the following command to verify the installation:

  mvn -v

```
nehavaidyasimpl@ip-172-31-81-156:~$ mvn -v
Apache Maven 3.3.9
Maven home: /usr/share/maven
Java version: 1.8.0_275, vendor: Private Build
Java home: /usr/lib/jvm/java-8-openjdk-amd64/jre
Default locale: en_US, platform encoding: UTF-8
OS name: "linux", version: "4.4.0-1121-aws", arch: "amd64", family: "unix"
nehavaidyasimpl@ip-172-31-81-156:~$
```

- In case Maven is not installed in your system, you can install it using the commands:

  sudo apt-get update
  sudo apt-get install maven