Phase 4 Project

Mobile Automation and Cloud Testing

**Project objective:**

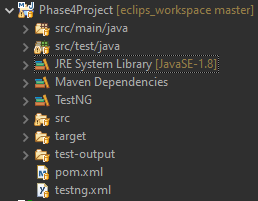
Amazon Web Services (abbreviated AWS) is a collection of remote computing services (also called web services) that together make a cloud computing platform, offered over the Internet by Amazon for an infrastructure. Let's consider the Swiggy application which uses Devops tools like (Jenkins/Appium/Docker) for improved automated testing infrastructure, continuous integration, continuous deployment, and continuous delivery.

Steps followed

* Create Maven project for the Swiggy application.
* Write an Appium script.
* Create EC2 instance, S3 bucket, creating EBS volume, and mounting in AWS console.
* Set up Jenkins server by installing Jenkins in ec2 and by installing required plugins like Docker/Selenium in Jenkins.
* Set up Docker for containerizing your application on Docker.
* Create a CI/CD pipeline in Jenkins with Appium test cases and containerizing the application using Docker.

# Creating a Maven Project

Created Phase4project Maven project

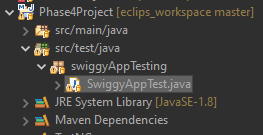


Added all the dependencies in pom.xml file

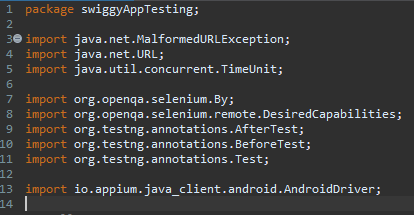


# Writing Appium script

## Create test class “SwiggyAppTest.java” file



## Importing all required libraries

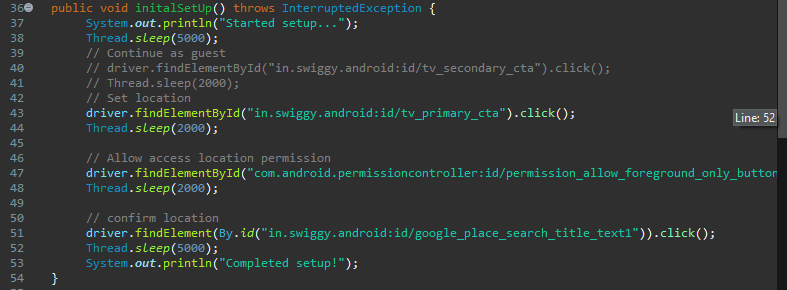


## Created initial setup

Setting up physical android phone with below configuration

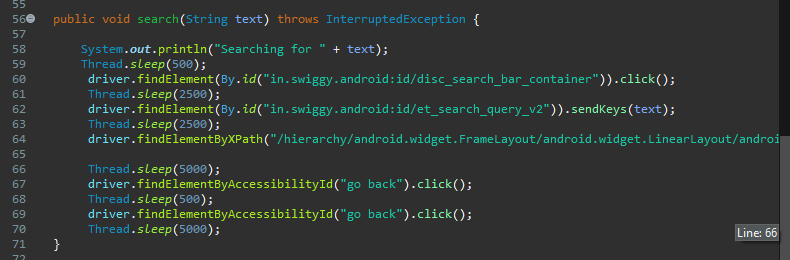


Initial setup for Swiggy application

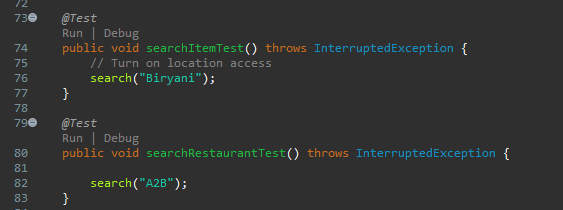


## Test cases to search for an item or restaurant

Common search function

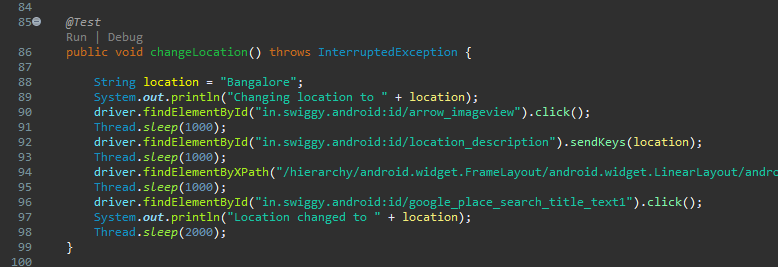


Test cases to search a food item and a restaurant

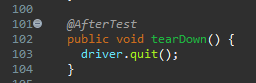


## Test case to change location of Swiggy application

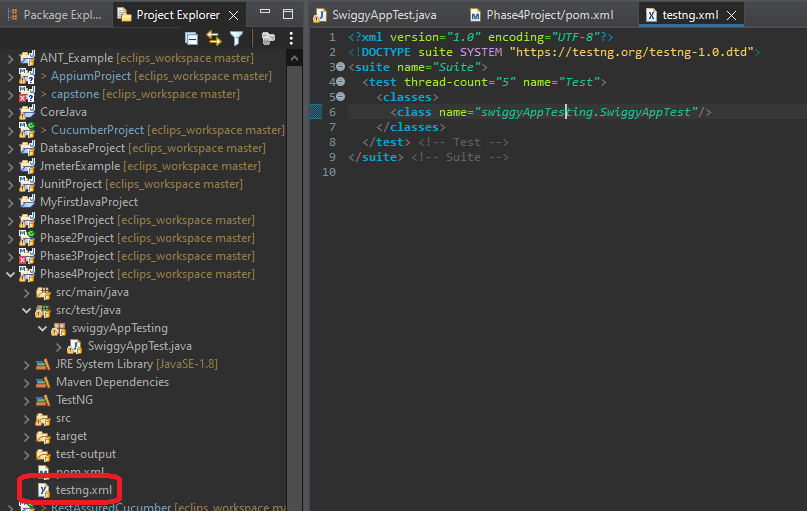
Changing current location to Bangalore



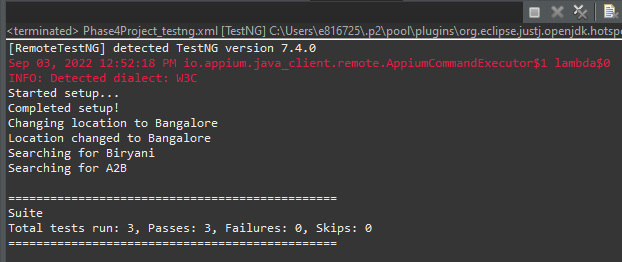
## Quit the application



## Convert the project to TestNG: creating the testing.xml file

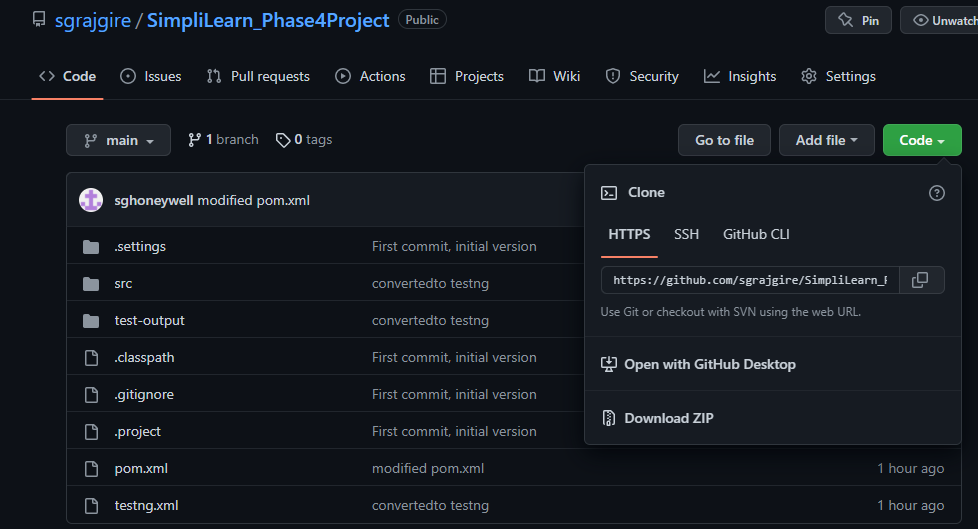


## Running the testing.xml using TestNG locally



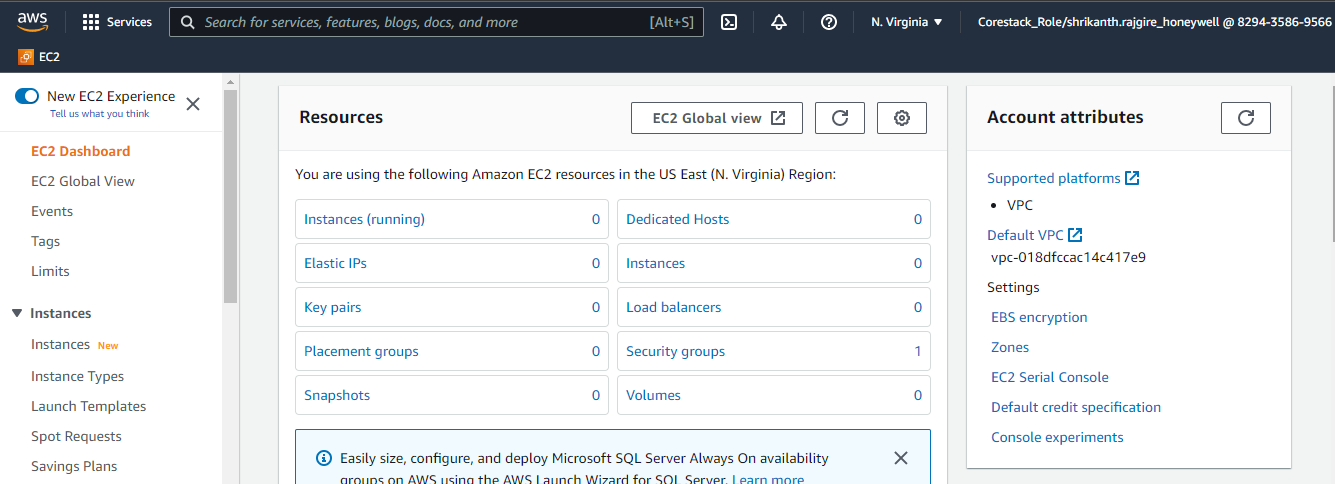
## Moving the code to GitHub

Pushed the code to GitHub : <https://github.com/sgrajgire/SimpliLearn_Phase4Project.git>



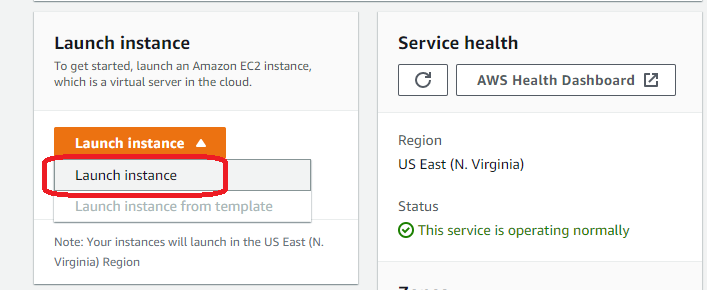
## Creating EC2 Instance in AWS

Opening AWS in lab

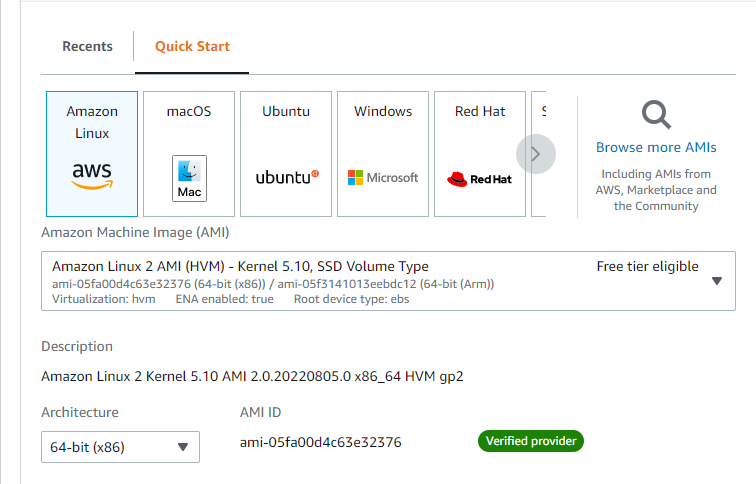


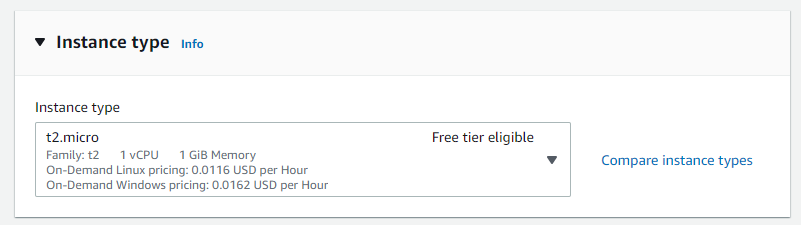
Create the EC2 Instance and connect to that

Start the EC2 instance

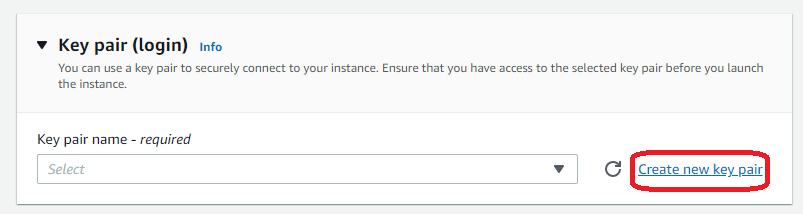


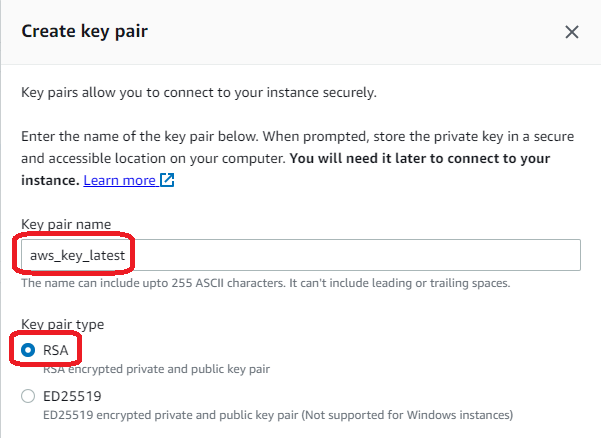
Configure EC2 instance

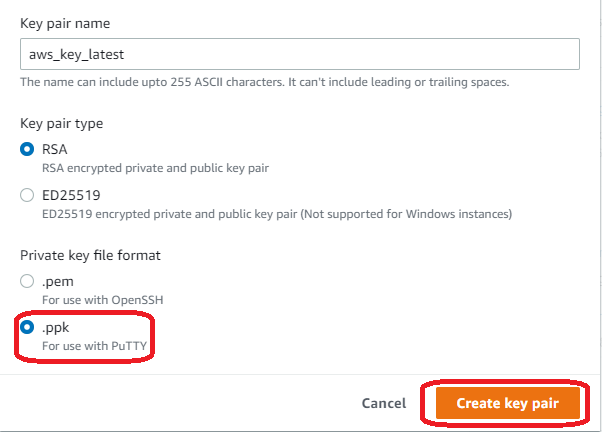




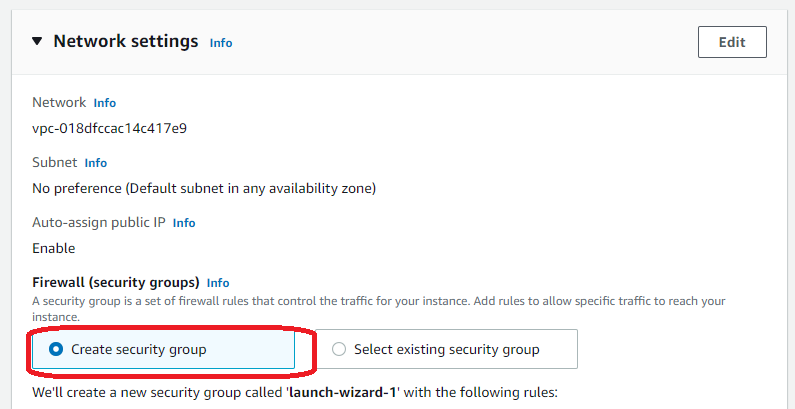
Create a new key pair



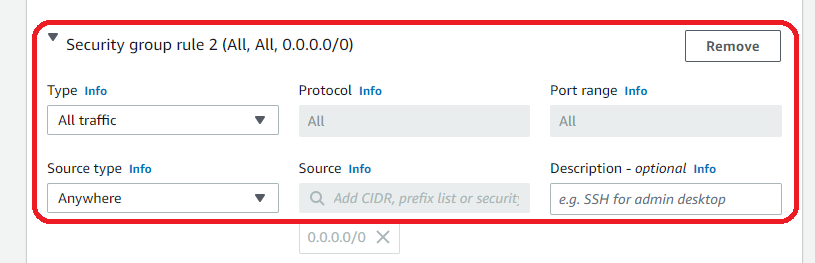




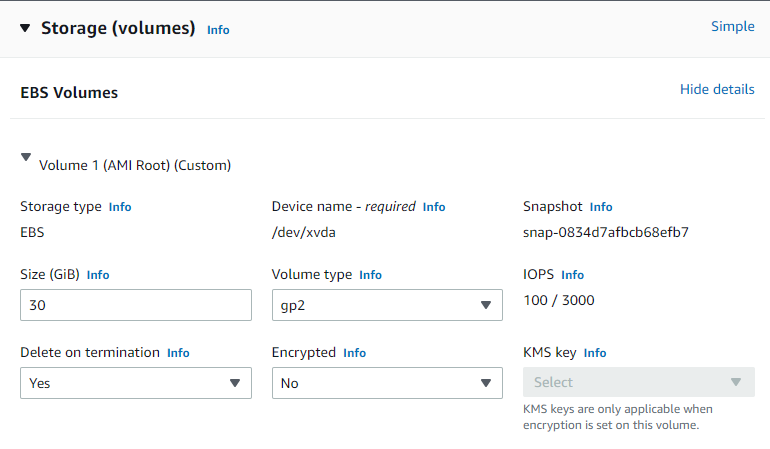
Network settings

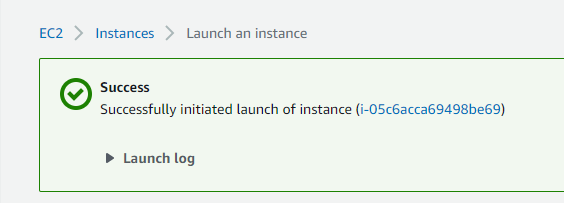


Add new security rule

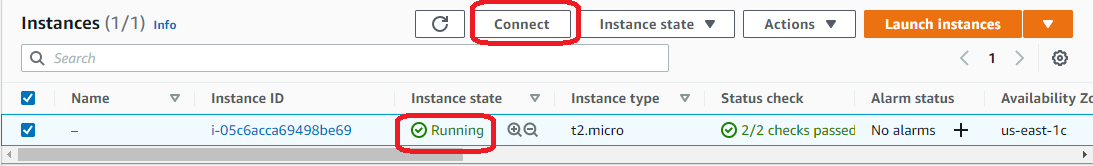


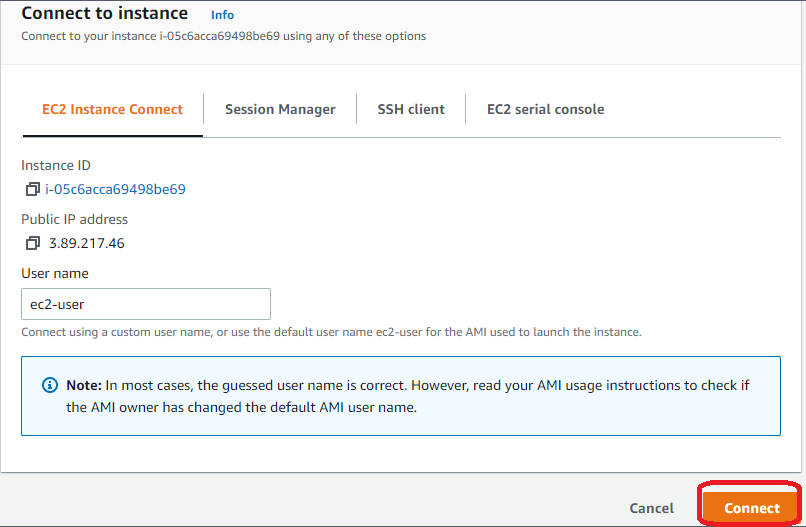
Add storage

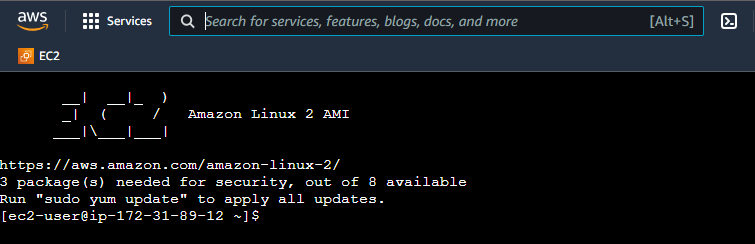




EC2 status and connect to that machine



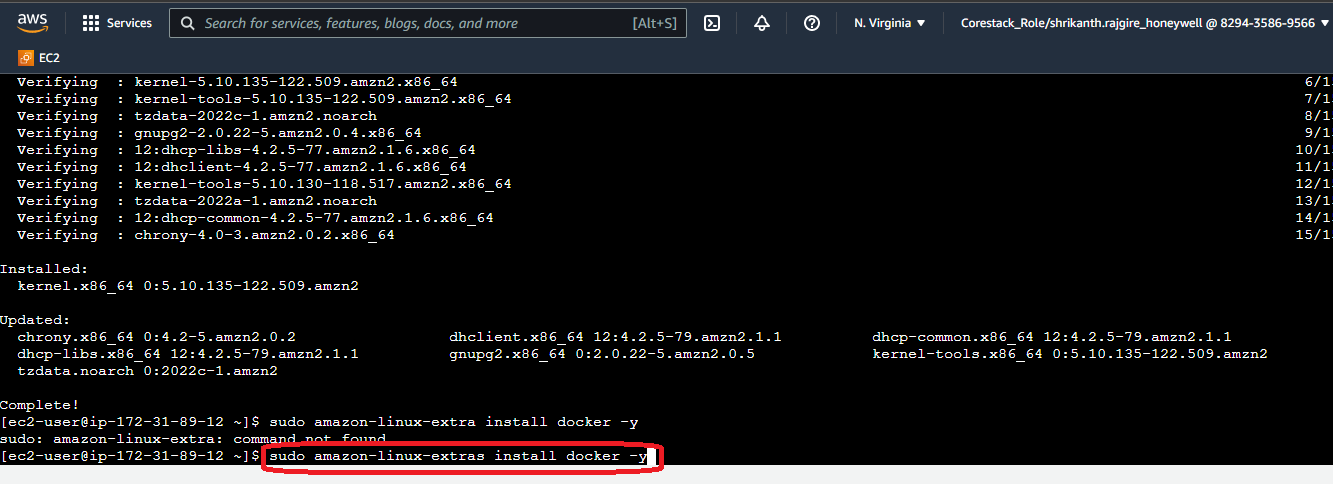




Update : sudo yum update -y

Install docker on EC2 with below command:

sudo amazon-linux-extras install docker -y

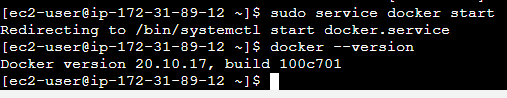


Start the docker on EC2

sudo service docker start

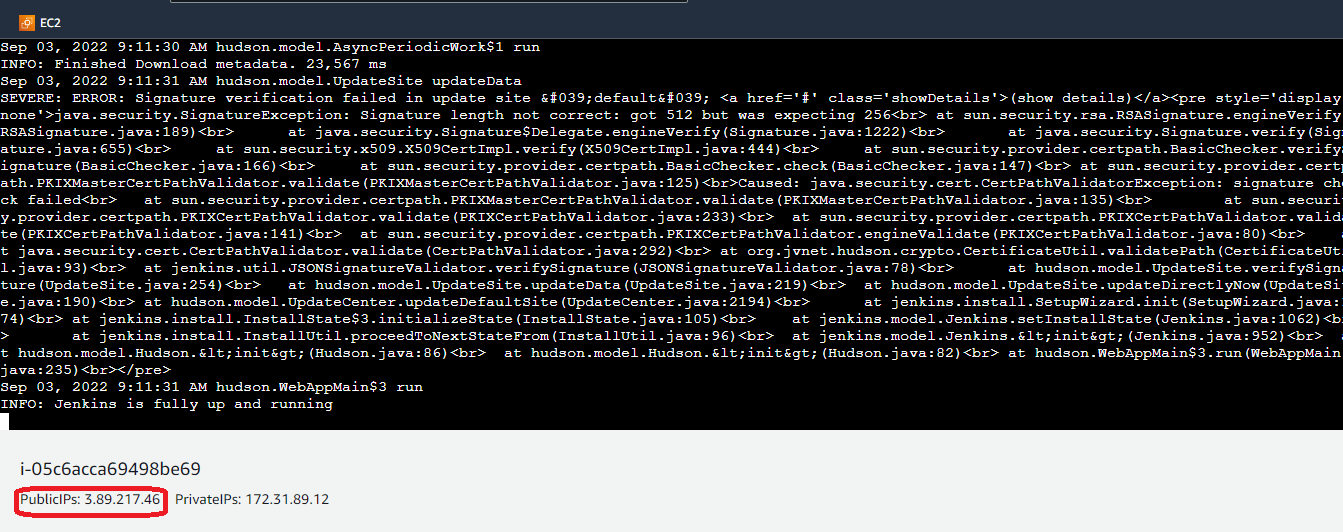
Check the docker version

docker –version



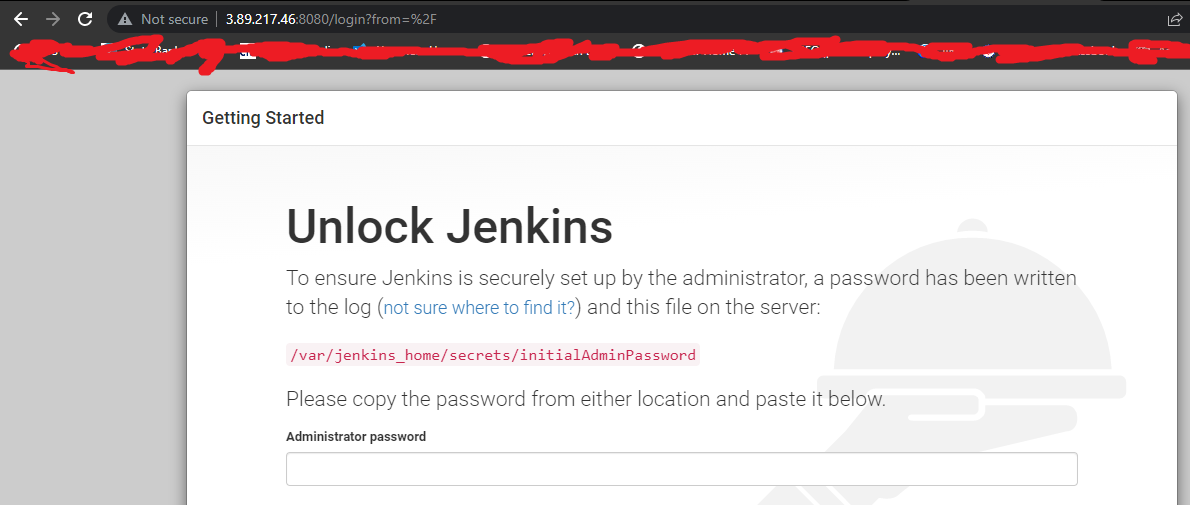
Install & run Jenkins on docker in EC2 machine

docker run -p 8080:8080 -p 50000:50000 jenkins:2.60.3

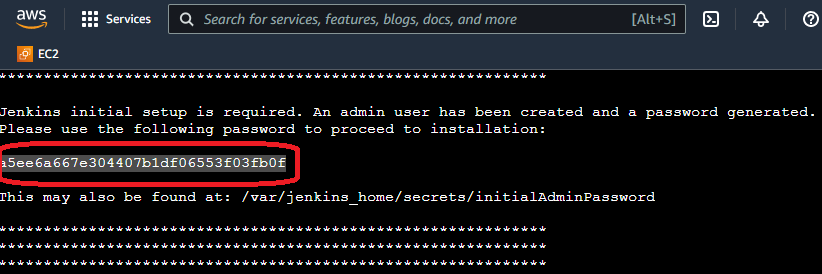


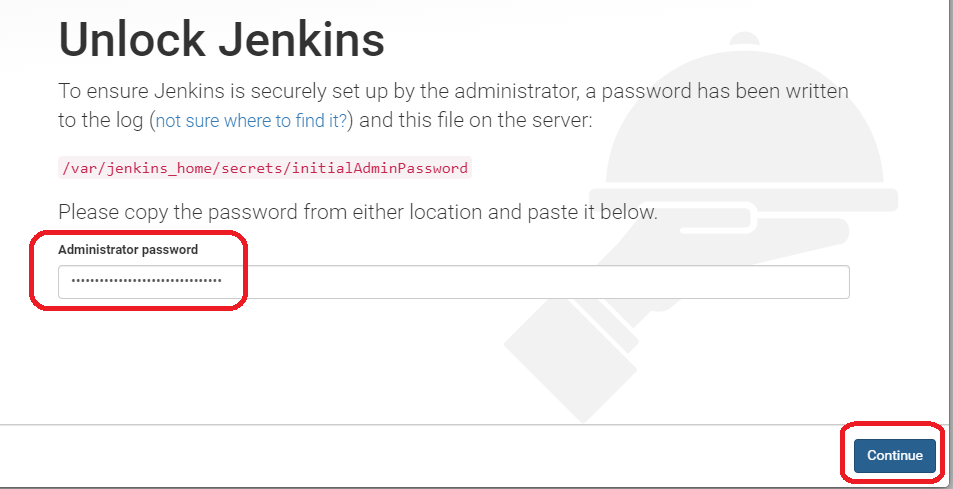
Connect to Jenkins using public 3.89.217.46 and port 8080

<http://3.89.217.46:8080/>

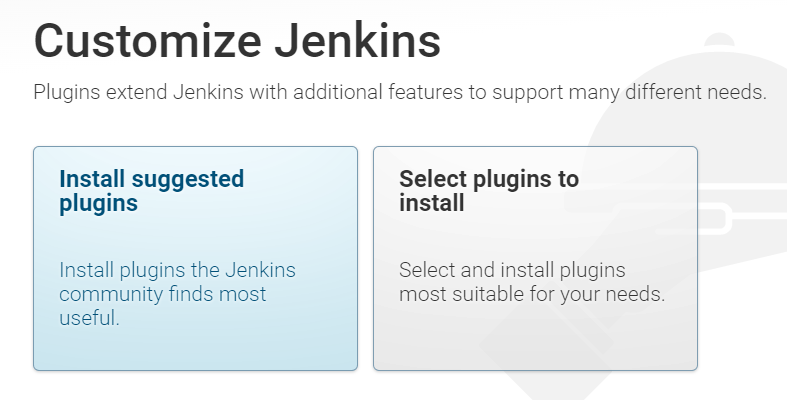


Copy the initial password from below

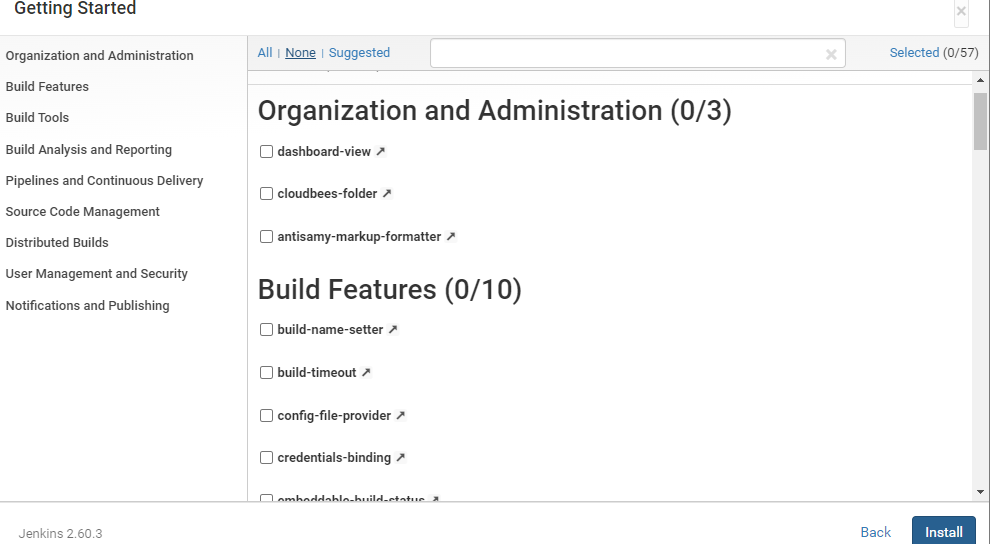




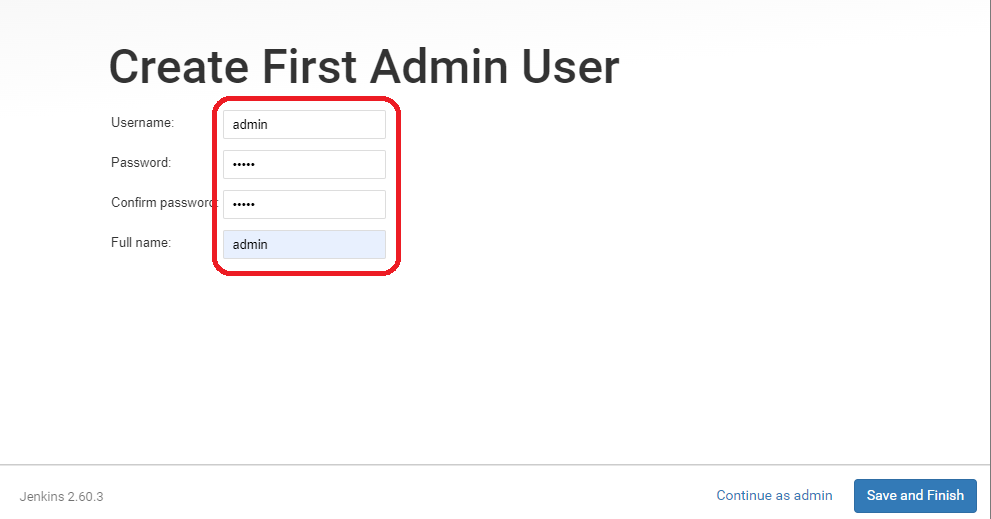
Select plugins to install

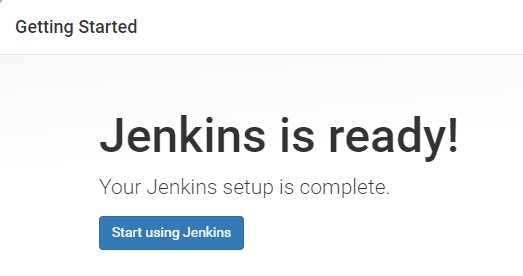


Select plugins and install

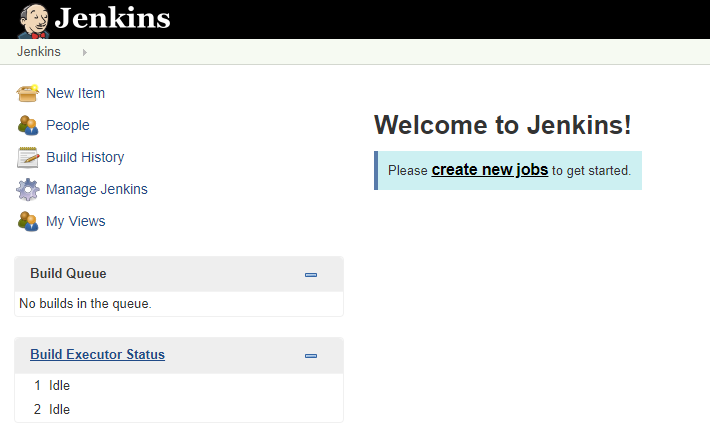


Create first user on Jenkins, Save and finish.





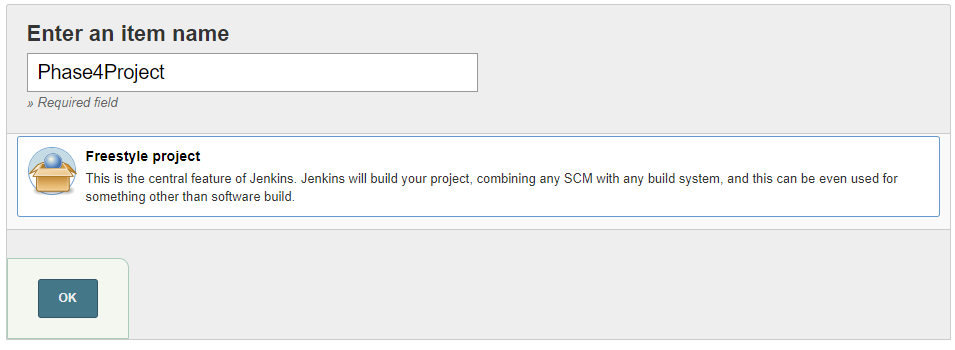
Landing page



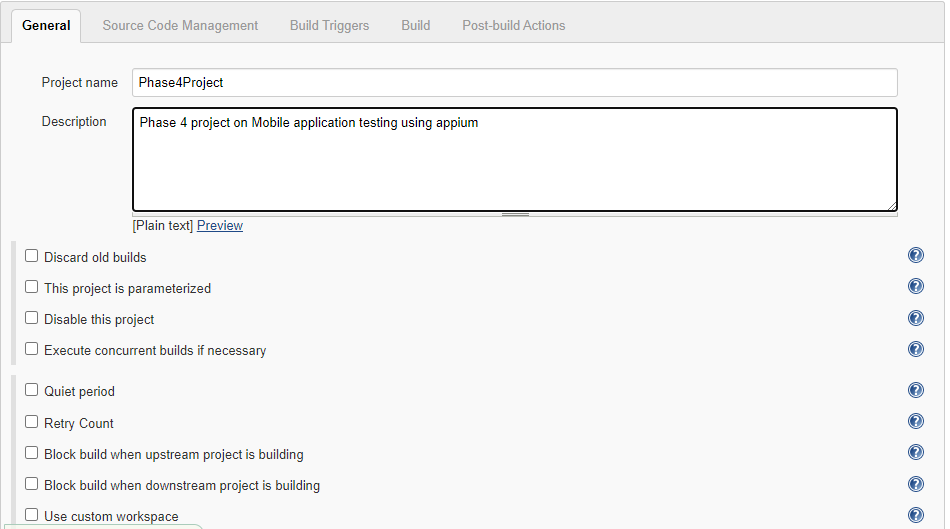
Create new job



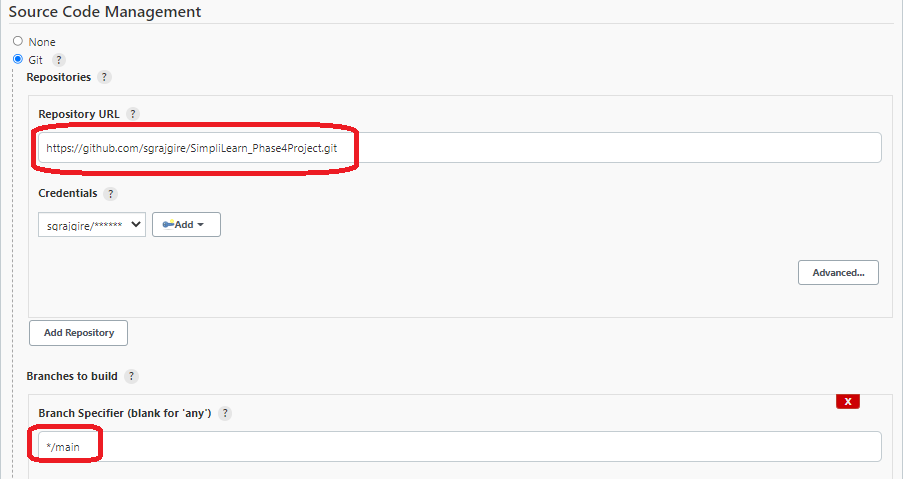
Enter project name and choose free style project



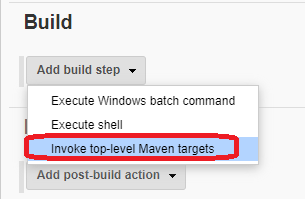
Fill necessary details as below

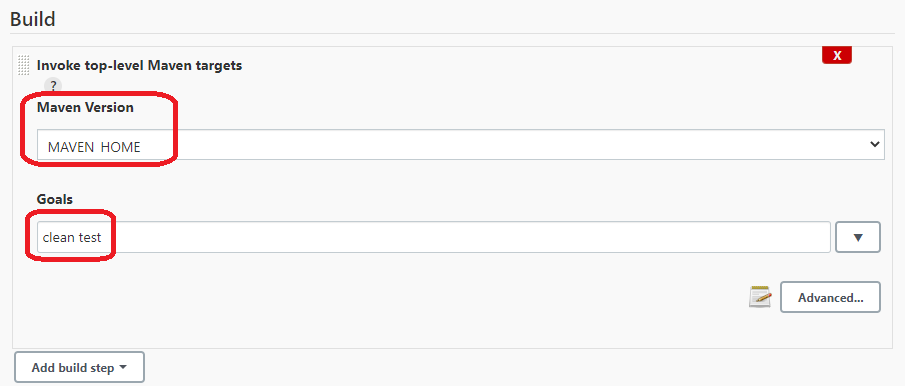


Add Git repository

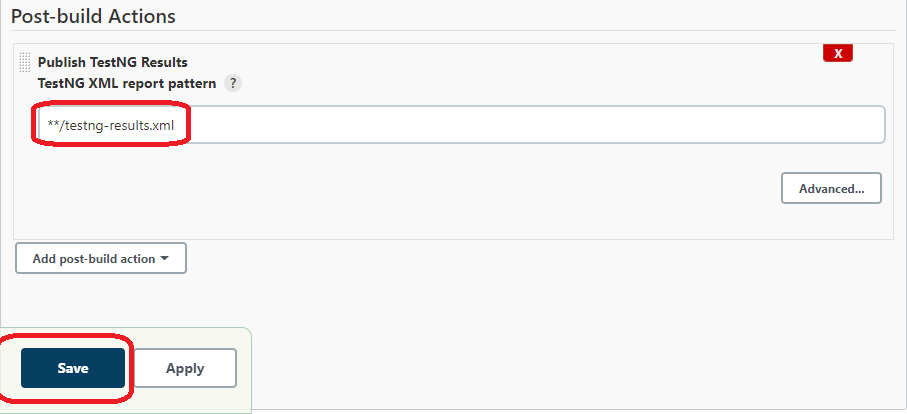


Add build



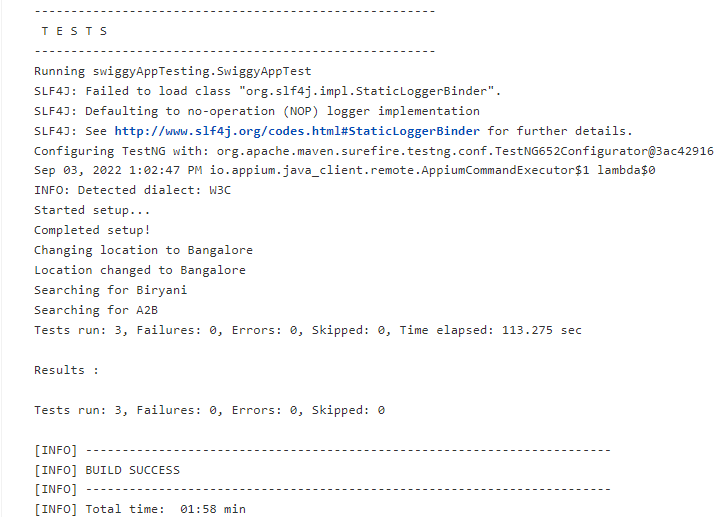


Setup post build with report

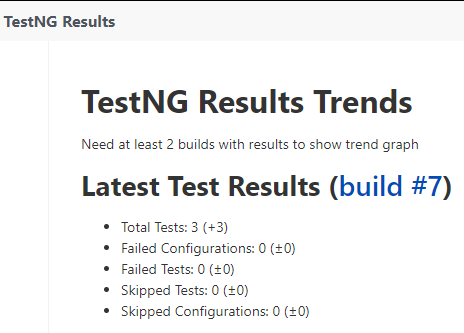


Executed tests on Jenkins under docker and results are below

Online simulator wasn’t available so executed on local system using docker and jenkins



TestNG results



## Github Link to source code

<https://github.com/sgrajgire/SimpliLearn_Phase4Project.git>