**AWS detailed instructions:-**

*Reference video: https://www.youtube.com/watch?v=FEBYi8Ia8bk&t=2679s*

1. Create an EC2 instance with the following settings:-
2. Selecting AMI: Select Amazon Linux AMI (the one that appears that first)
3. Choose instance type: t2.micro is free but you may need powerful server’s like ‘cd’ or ‘r’
4. Configure instance details: Don’t change anything at top. But at bottom ‘User data’ section, select ‘text’ on top and copy paste the following (to pre-install Jupyter before starting AWS):

(code reference: https://www.codingforentrepreneurs.com/blog/jupyter-notebook-server-aws-ec2-aws-vpc)

#!/bin/bash

sudo apt-get update -y

sudo apt-get install build-essential libssl-dev libpq-dev libcurl4-gnutls-dev libexpat1-dev gettext unzip -y

sudo apt-get install supervisor -y

sudo apt-get install python3-pip python3-dev python3-venv -y

sudo apt-get install nano -y

sudo apt-get install git -y

sudo apt-get install nginx curl -y

sudo apt-get install ufw -y

sudo ufw allow 'Nginx Full'

sudo ufw allow ssh

sudo python3 -m pip install jupyter

sudo service supervisor start

sudo apt autoremove -y

1. In the next Add storage tab, change the default Size (GiB) number is 8. If we picked a large server like ‘cd’ or ‘r’ series, make sure to change default to something like 100’s of GiB
2. In the next ‘Add tags’ tab, don’t change anything
3. In the next configure security group, change the setting to following:

Type: ‘All Traffic’

Protocol: ‘All’

Port Range: All

Source: Anywhere

IP Address: Don’t need to enter anything. Just let it remain 0.0.0.0/0

Description: Don’t need to enter anything. Leave it blank

I understand the security settings are not really secure! but Jupyter is going to ask for Token or password before loading code. So, no one can really access code anyway

You can either download a new key or choose to use an existing key

1. Go to next screen and hit launch
2. Once launched, open command prompt
3. Run **cd Downloads** (if the notepad key file that was created or selected at the time of instance creation is in downloads folder. Else, u will have to enter folder where that key is)
4. To get into the server, we have to run ssh line (which can be copied from AWS instance directly). It looks like this **ssh -i "Josh.pem"** [**ec2-user@ec2-54-197-166-99.compute-1.amazonaws.com**](mailto:ec2-user@ec2-54-197-166-99.compute-1.amazonaws.com)(josh is the name of key notepad)
5. Once you are inside server, due to recent changes in AWS, Jupyter Notebook has to be configured before accessing it on the server
6. Run **jupyter notebook –generate-config**

Just hit ‘Y’ to overwrite configuration

1. Run **ipython -c “from notebook.auth import passwd; passwd()”**

Set a password to access Jupyter notebook on server. Doesn’t always work. May need to use token in the end to use Jupyter on server

1. Run **nano**

This command get’s you into the weeds of Jupyter notebook and make all the change u want. Inside the nano window, execute the following:

* c = get\_config()
* c.NotebookApp.allow\_origin = ‘<http://54.162.237.110/>’ (change to server IP)
* c.NotebookApp.ip = ‘\*’
* c.NotebookApp.allow\_remote\_access = True
* c.NotebookApp.port = 8888

1. Hit ‘Ctrl’ + ‘X’ on keyboard to exit the nano window
2. When nano window asks the path of Jupyter notebook where you want the newly set configurations to apply, enter **/home/ec2-user/.jupyter/jupyter\_notebook\_config.py**
3. Once you have completely exited nano window, run **jupyter notebook**
4. To access jupyter notebook, just enter 54.162.237.110:8888 in chrome. If the password set earlier doesn’t work, use the token that appears after running earlier step (jupyter notebook)