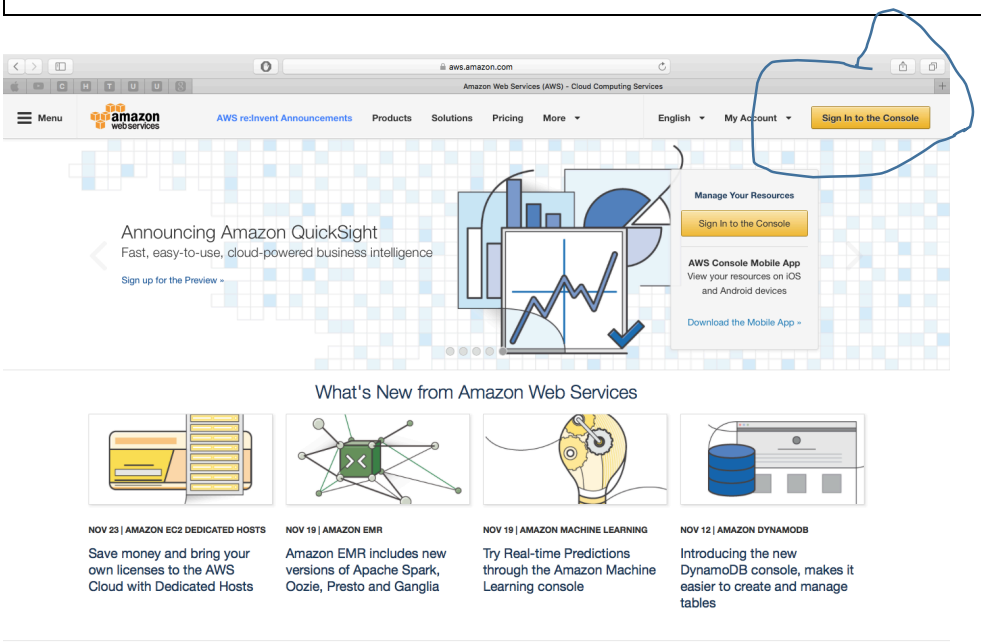
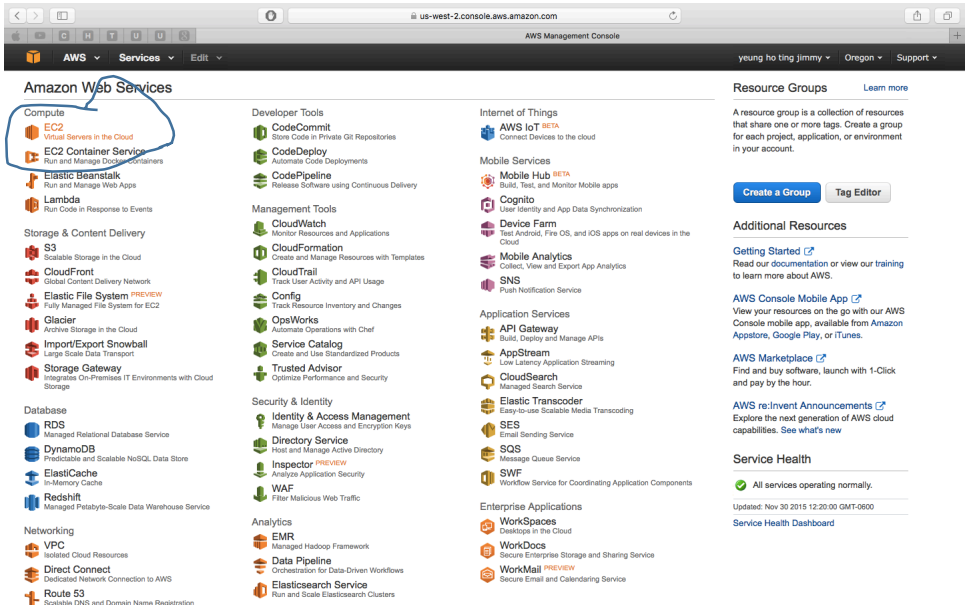
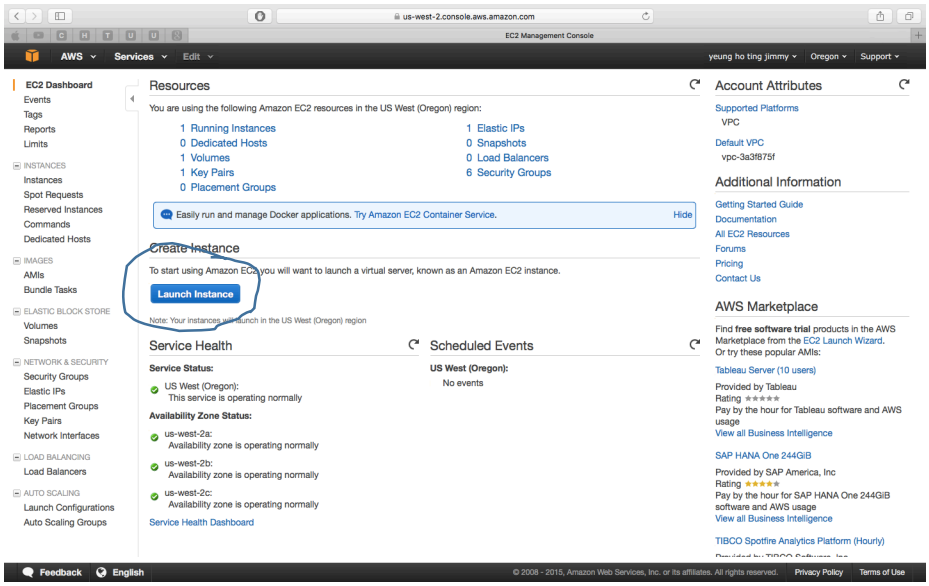
Go to Amazon Web Services and click on sign in the Console. Create an account there if you don't have one, and you will get one year free to try it out.
Note: You do need to enter your credit card info, but you won't be charged unless you change to other services.

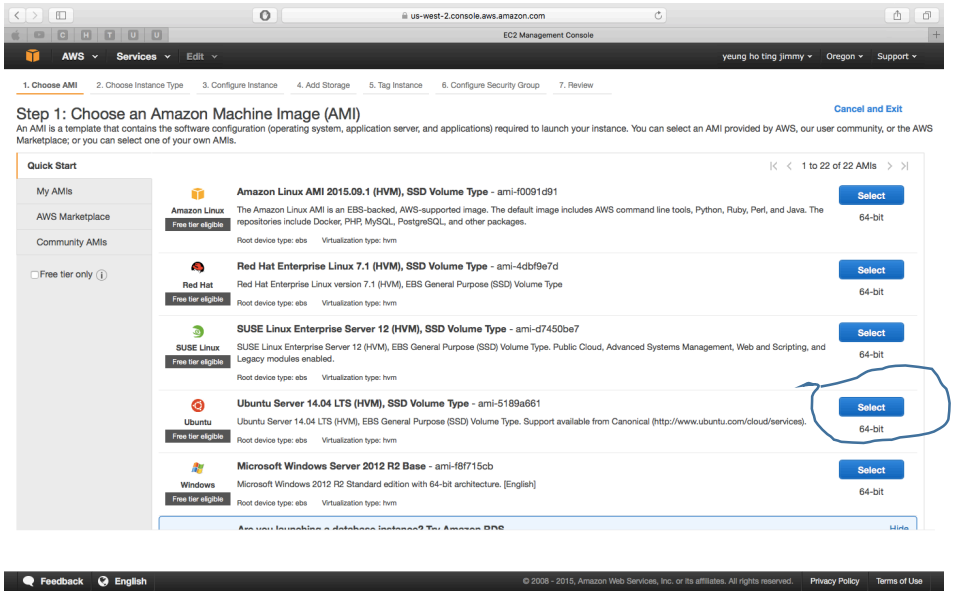


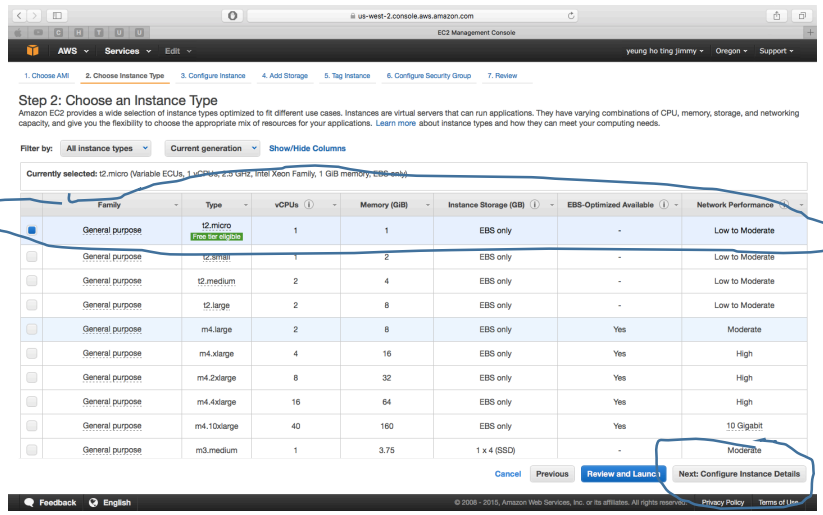
Select EC2 and then select Launch Instance



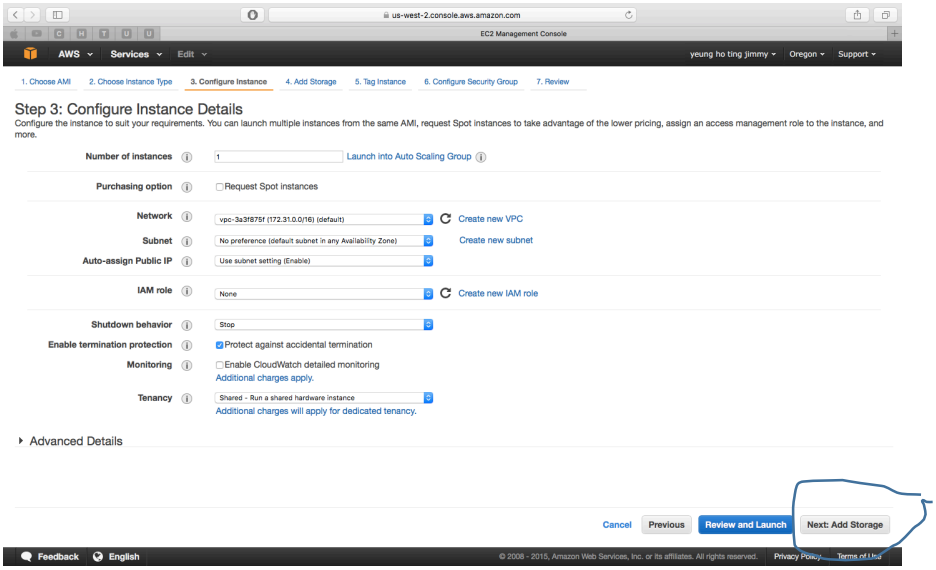


You can select an Amazon Machine Image that has Free Tier eligible. For this tutorial, we will be using Ubuntu Server 14.04. Click on Select, then click Next: Configure instances details.

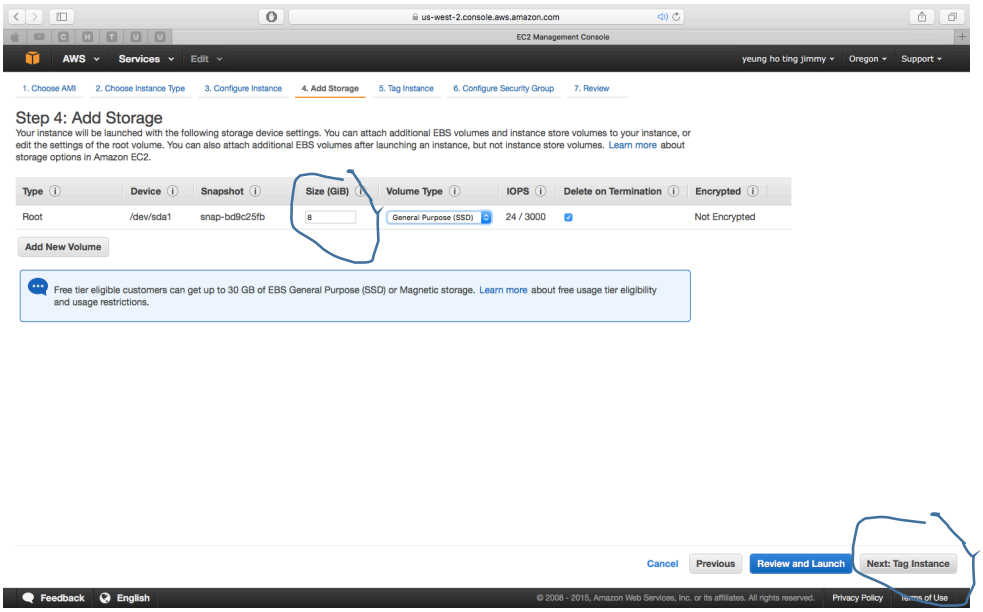




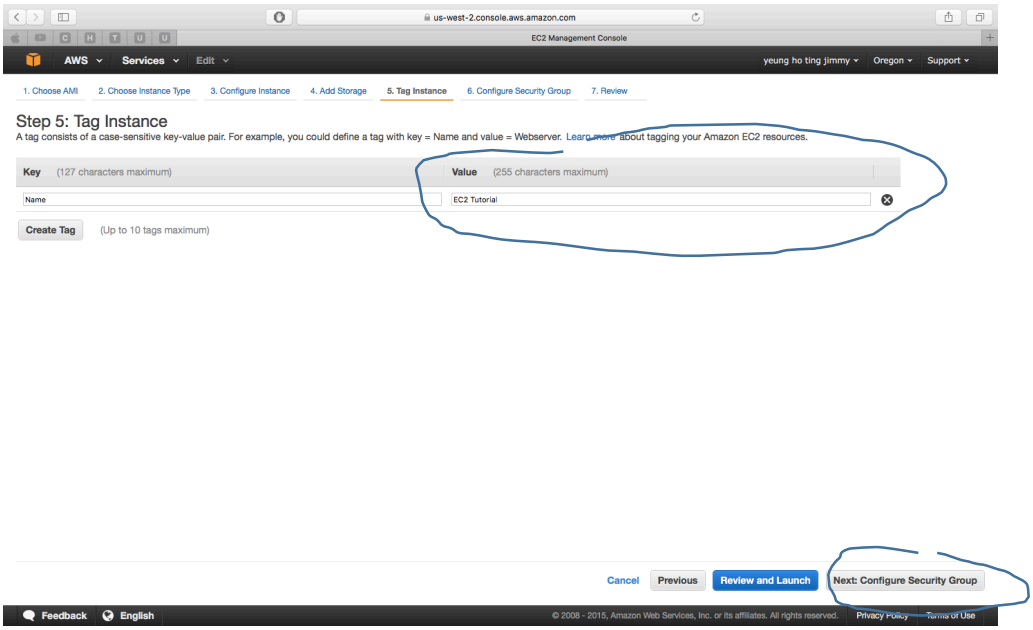
Since this is just a tutorial, we can skip this section for now. Click Next: Add Storage.



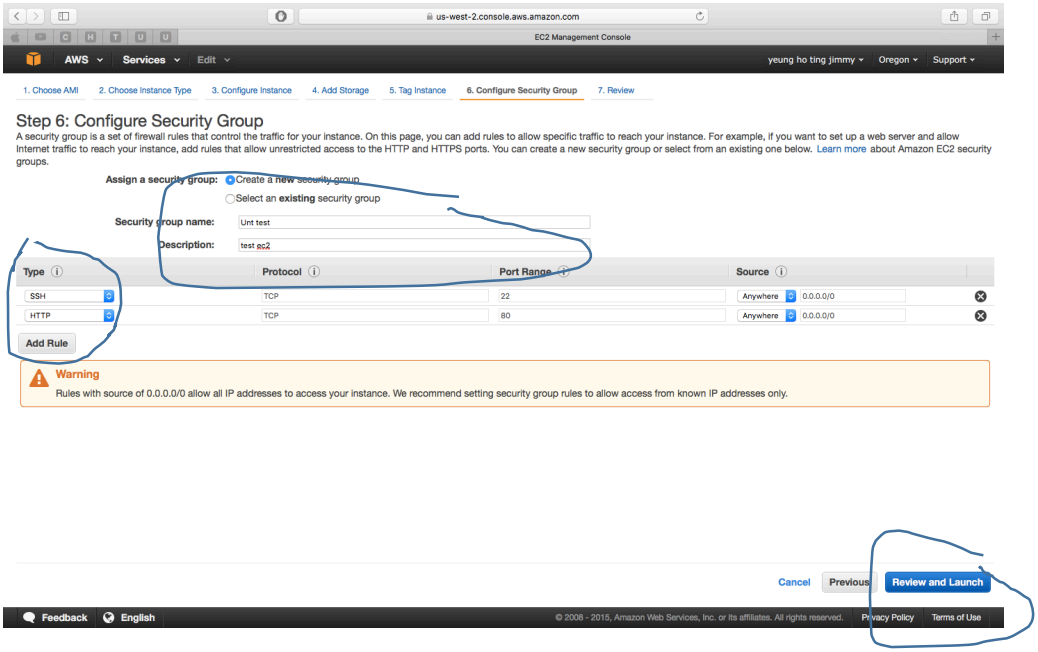
For free tier users, you can get up to 30GB of storage for your instance for free. For now, we will just keep it to 8 GB. Click Next: Tag Instance



You can give your instance a name on this page. Here, we will call it EC2 Tutorial. Click Next: Configure Security Group

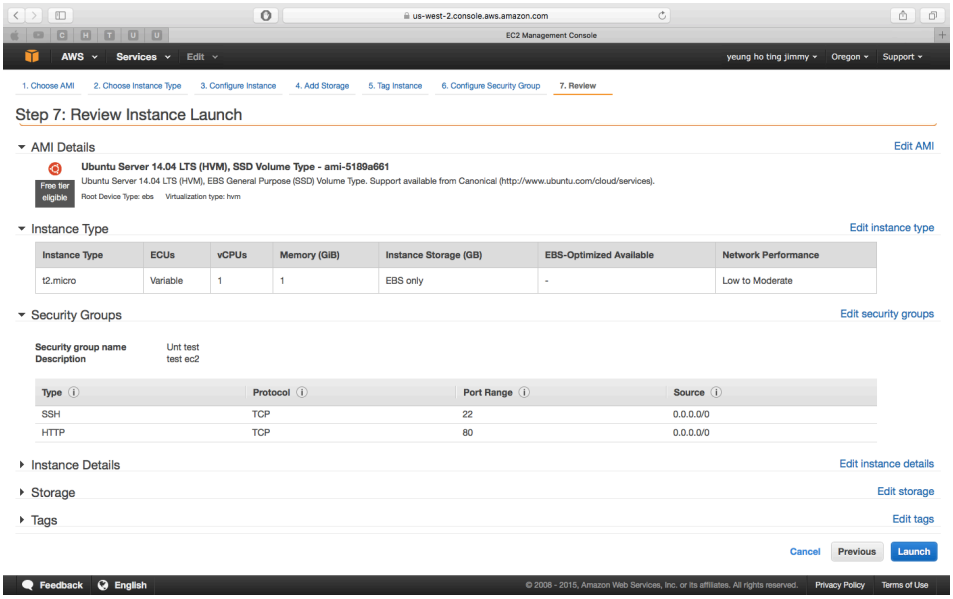


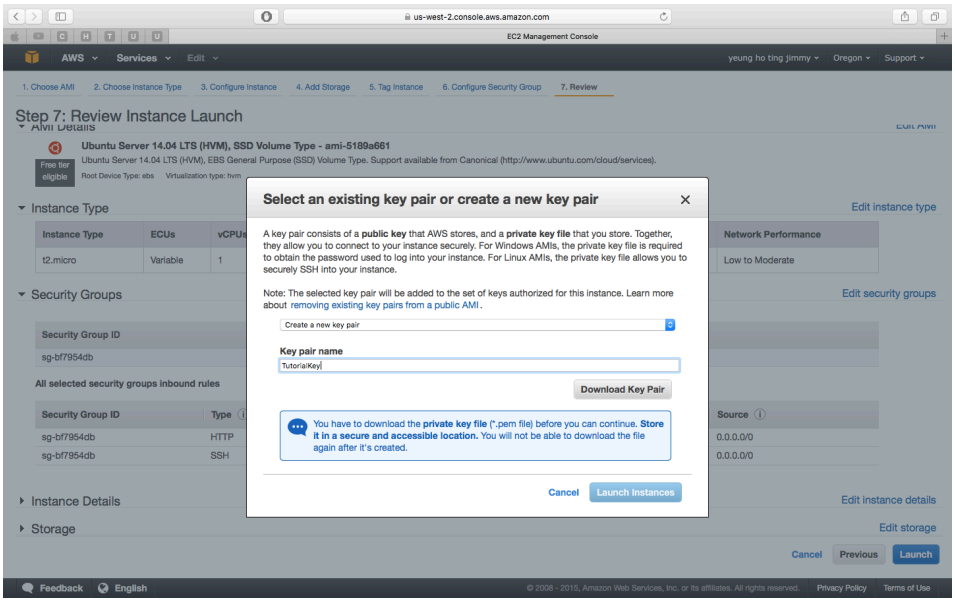
You can add your own rules for specific traffic to reach your instance. The default setting has only one rule, which is the SSH rule. Let's add another one as HTTP because we are setting up a web server that needs to allow internet traffic. To do this, just click add rule and select HTTP as the type. Also, you may want to give this security group a name and description. When finished, click Review and Launch.



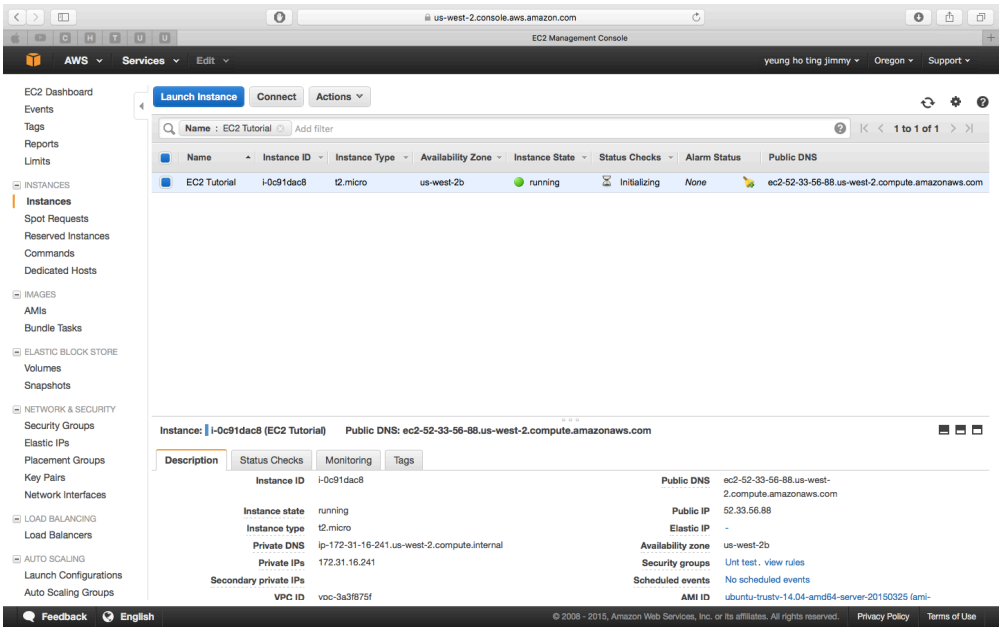
Review all the info before launching the instance. When ready, click on launch. Next, we will need to select a key pair for this instance. Key pair is like the password of your instance, and you should keep the key pair file safe. Let's create a new key pair for this instance for the sake of this tutorial and name it as "TutorialKey". Click Download Key Pair, and you should get the key pair file. Click Launch Instance.

Note: AWS will only give you the key pair file once, if you lose the file, you won't be able to get access to your instance anymore, which is really bad.





Congratulation, you have just created an ec2 instance on your account. You will see your instance on ec2 dashboard. It will take a few minutes for Amazon to set up a new instance on their servers. The instance will be ready once you see the status checks tab turns to checked. Then you can continue to install apache, MySQL, and PHP on the instance.

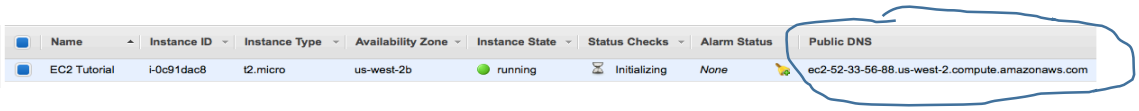


Install Apache, MYSQL, and PHP on EC2

First of all, open terminal if you're a MAC user. For windows users, Putty will do the work. In terminal, go to the directory that you put your key pair file. In my case, I put it on my desktop. Once you are on the correct directory, we need to change the permission of the key pair file to read only for owner. To do that, enter the following command.

```
Jimmys-MacBook-Air:~ Jimmy$ cd Desktop/
Jimmys-MacBook-Air:Desktop Jimmy$ chmod 400 TutorialKey.pem
```

Once you are done, go back to your ec2 dashboard and copy the public DNS for your instance



Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
EC2 Tutorial	i-0c91dac8	t2.micro	us-west-2b	running	Initializing	None	ec2-52-33-56-88.us-west-2.compute.amazonaws.com

Next, go back to terminal and enter the following command to access your instance then press enter. Enter "yes" if something comes up. For Ubuntu users, ubuntu will always be your user name. For other systems, check on AWS website and see what are the user names.

```
Jimmys-MacBook-Air:Desktop Jimmy$ ssh ubuntu@ec2-52-33-56-88.us-west-2.compute.amazonaws.com -i TutorialKey.pem
```

Replace this with your instance's public DNS or IP.

Replace this by your key file name if your key file name is different than mine.

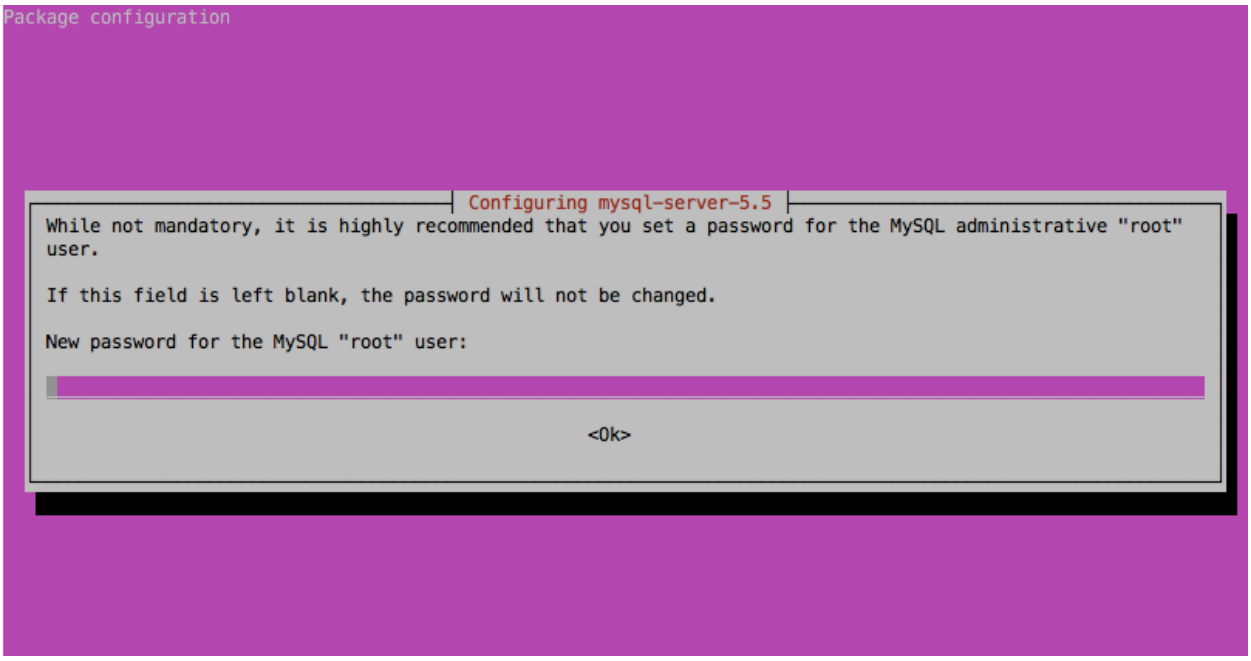
Now you should be inside your server. Before we install anything, we need to make sure the server is up-to-date. To do this, just enter the following command and press enter. It may take a while to load.

```
ubuntu@ip-172-31-16-241:~$ sudo apt-get update
```

Once the update is done, we can now install Apache, PHP and MYSQL. Simplify enter the following command and press enter. Enter "y" if asked.

```
ubuntu@ip-172-31-16-241:~$ sudo apt-get install php5 apache2 libapache2-mod-php5 mysql-server php5-mysql
```

Next thing you need to do is create a password for you MYSQL server. Enter your desire password if you see this screen. Press enter, and you will need to re-enter your password again. Press enter again.



Once the installation is done, we will need to restart the apache server just to be safe. Enter the following command to restart the server.

```
ubuntu@ip-172-31-16-241:~$ sudo service apache2 restart
```

Next, we will need to do some security setting for MYSQL server. Enter the following command.

```
ubuntu@ip-172-31-16-241:~$ mysql_secure_installation
```

Then, you need enter the password you just set up for your MYSQL server. If it asks you for making a new password, just enter “n”. For the next few settings, just enter all “y” for now. Once you are done, you should see the following lines.

```
All done!  If you've completed all of the above steps, your MySQL
installation should now be secure.

Thanks for using MySQL!
```

Now, everything should be successfully installed. To check if the server is working fine, just enter your public DNS as the URL to any browser and see if anything comes up. Also, you can go to your html directory and make a PHP file to check the version and other information of PHP. To do this, enter the following commands.

```
ubuntu@ip-172-31-16-241:~$ cd ..
ubuntu@ip-172-31-16-241:/home$ cd ..
ubuntu@ip-172-31-16-241:/$ ls
bin   dev  home        lib    lost+found  mnt  proc  run   srv  tmp  var
boot  etc  initrd.img  lib64  media       opt  root  sbin  sys  usr  vmlinuz
ubuntu@ip-172-31-16-241:/$ cd var/www/html
ubuntu@ip-172-31-16-241:/var/www/html$ sudo pico phpinfo.php
```

Here you just need to enter the code as following and then press control+x, and then enter.

```
 GNU nano 2.2.6                File: phpinfo.php                     Modified

<?php
phpinfo();
?>

                              [ New File ]
^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text ^T To Spell
```

Now, go to any browser and enter “http://www.yourPublicDNS/phpinfo.php” as URL. Replace “yourPublicDNS” as your instance’s public DNS or IP. You should able to see all the information that relates to the PHP on your server. Congratulation, you just learned how to use AWS EC2 and install Apache, PHP and MYSQL on it.