AWS(Cloud Computing)

History:

- First service to start is SQS (Amazon Simple Queue Service) -2004
- AWS Officially started in 2006
- AWS started certifications in 2013

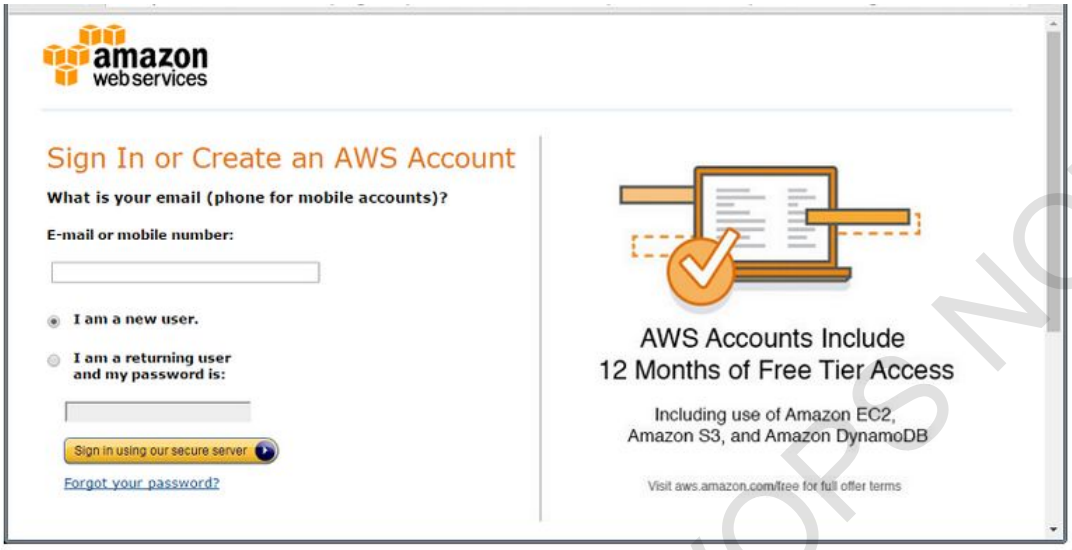
AWS Features :

- Largest public cloud Vendor
- Availability of 99.99 %
- More than 1100 + Services
- Free Tier Account policy
- Pay-Per-User model

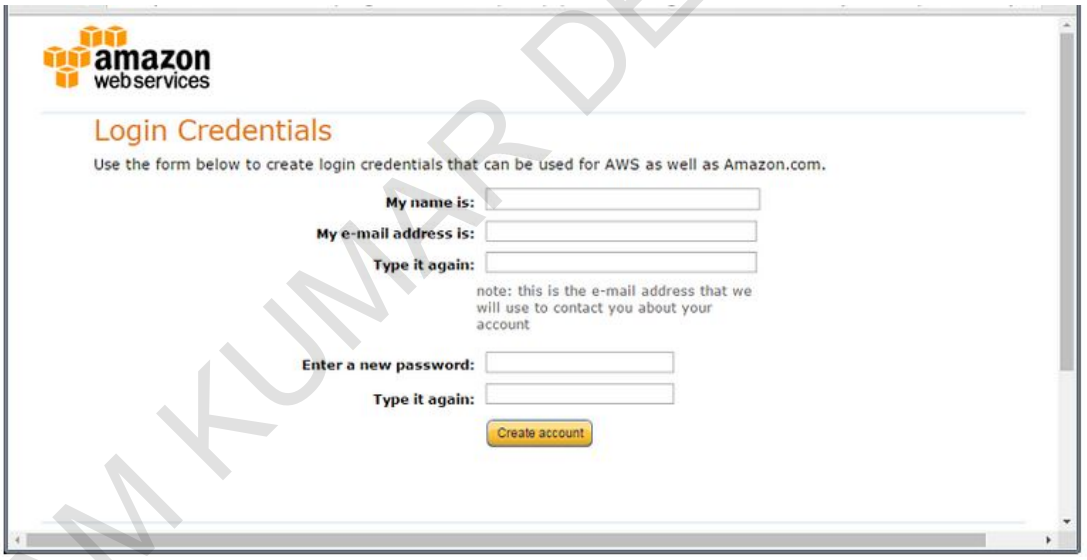
AWS account creation:

Step1: Go to the Amazon Web Services home page.Choose Create an AWS Account.
Note: If you've signed in to AWS recently, the button might say Sign In to the Console.

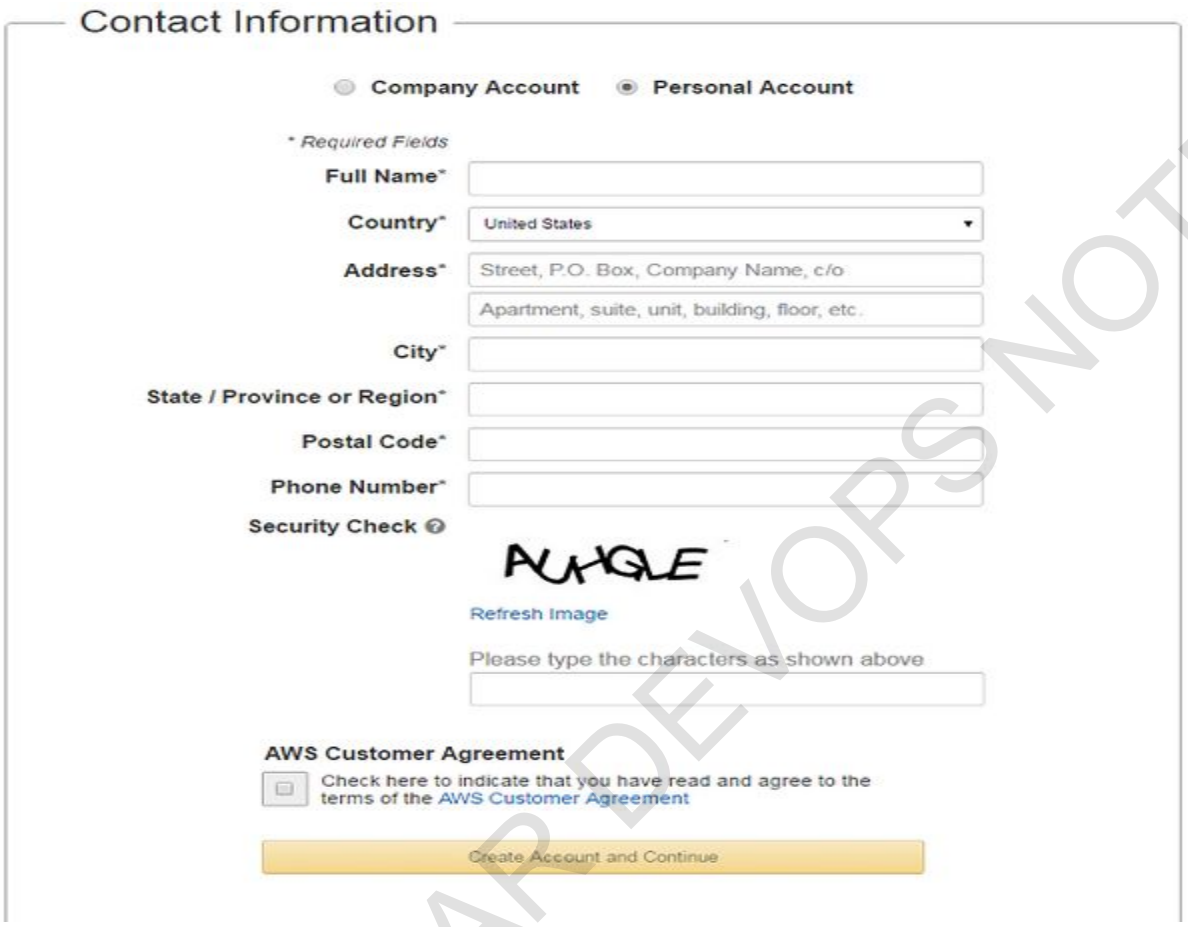
Step 2: Enter your email address. You may use an existing Amazon account (i.e. an account you use for shopping at amazon.com) if you have one or select I am a new user.



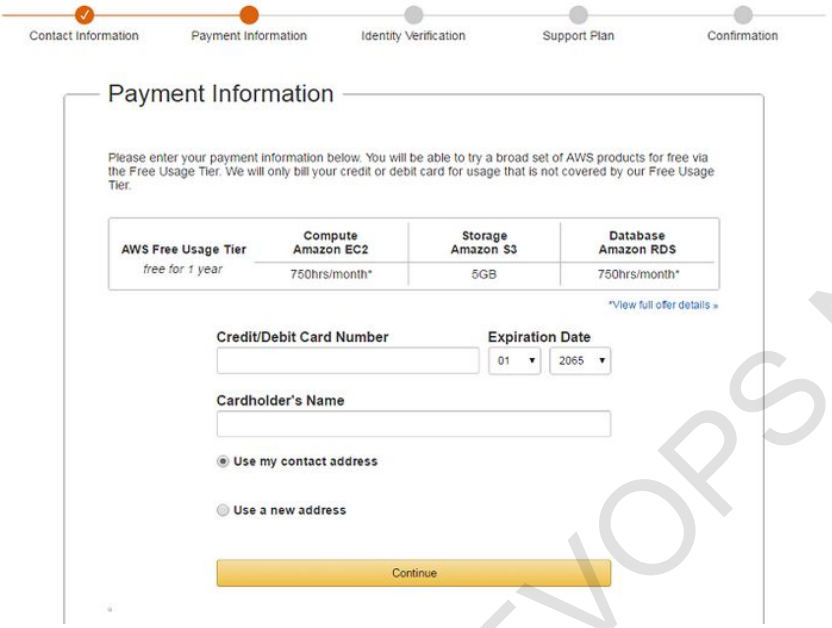
Step 3: Enter the requested information and click Create Account.



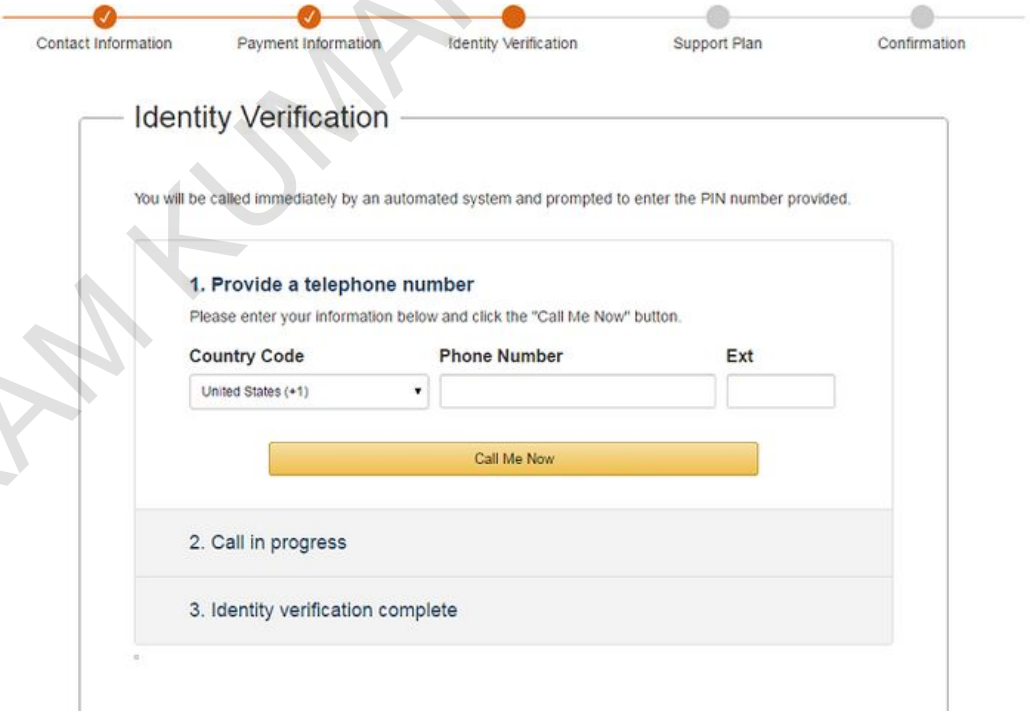
Step 4: Select Personal Account, enter your contact information, and complete the security check. Click Create Account and Continue when finished.



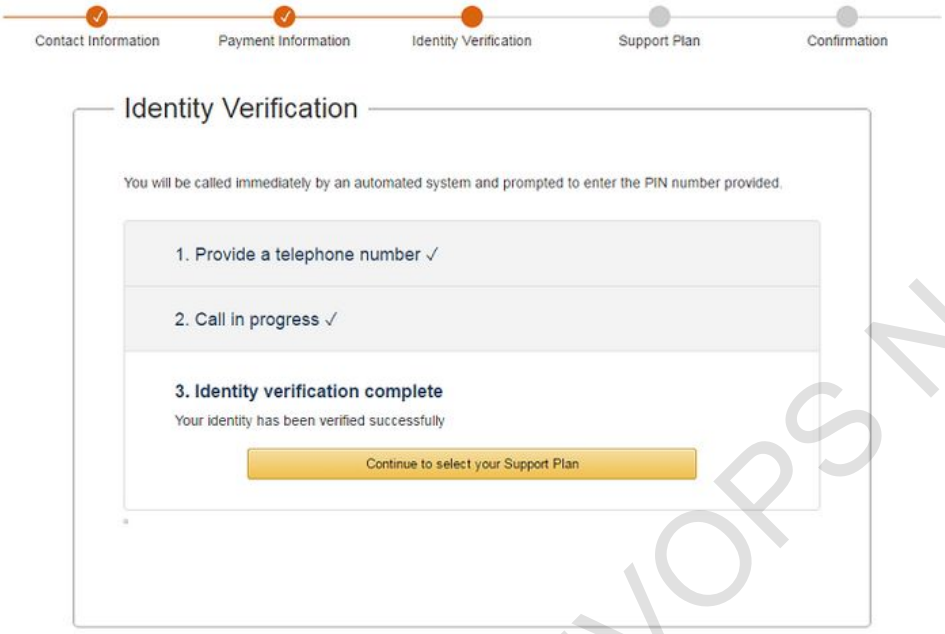
Step 5: Enter payment information and click Continue. Your credit card will not be charged until you begin using services above and beyond the Free Tier (if applicable) and any AWS credit codes entered into your account.



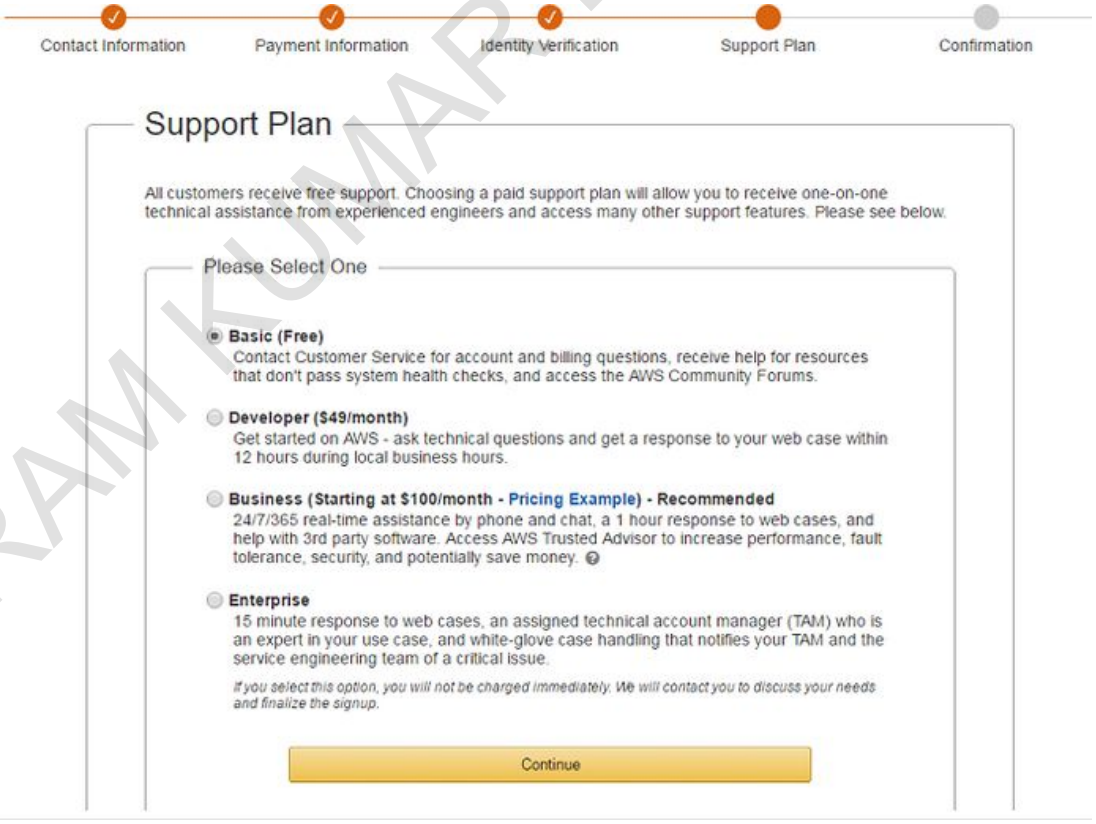
Step 6: Provide a phone number for Identity Verification and click Call Me Now. You must be able to receive a voice call from Amazon's automated identity verification system. A PIN will be displayed on your screen. Enter the PIN number when prompted by the identity verification system.



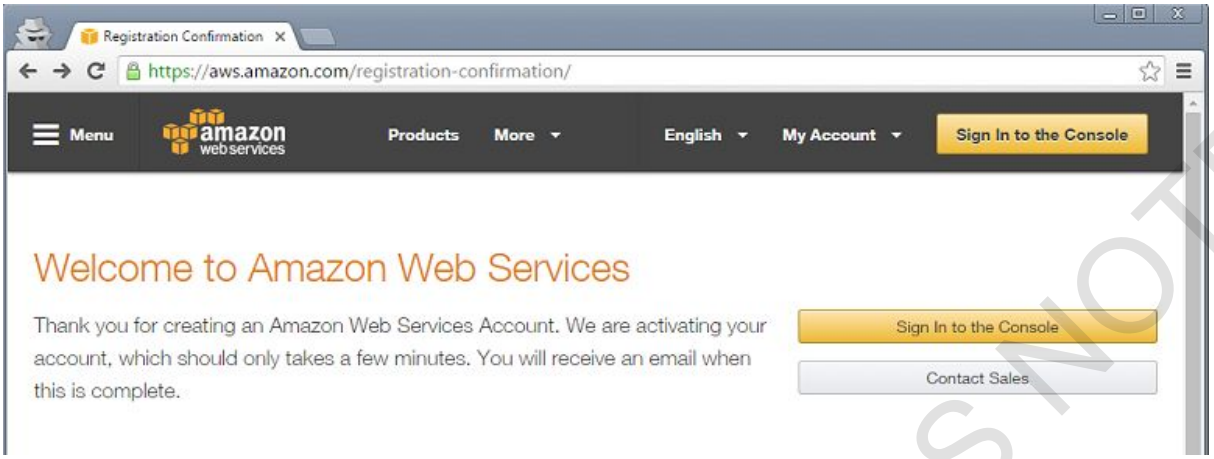
Step 7: Once this process is completed, you will be able to continue the registration process.



Step 8: Select a Support Plan and click Continue. Most students will use the Basic (free) level. Support fees are not eligible for coverage by AWS credits.

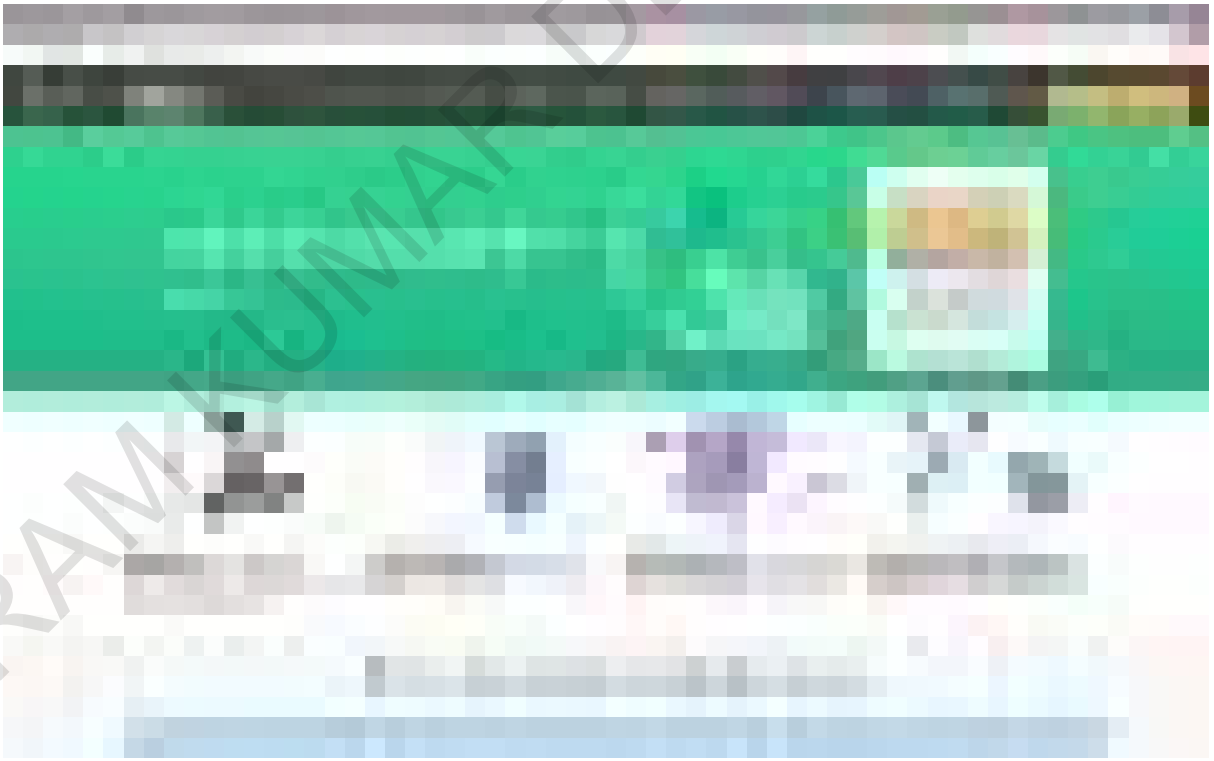


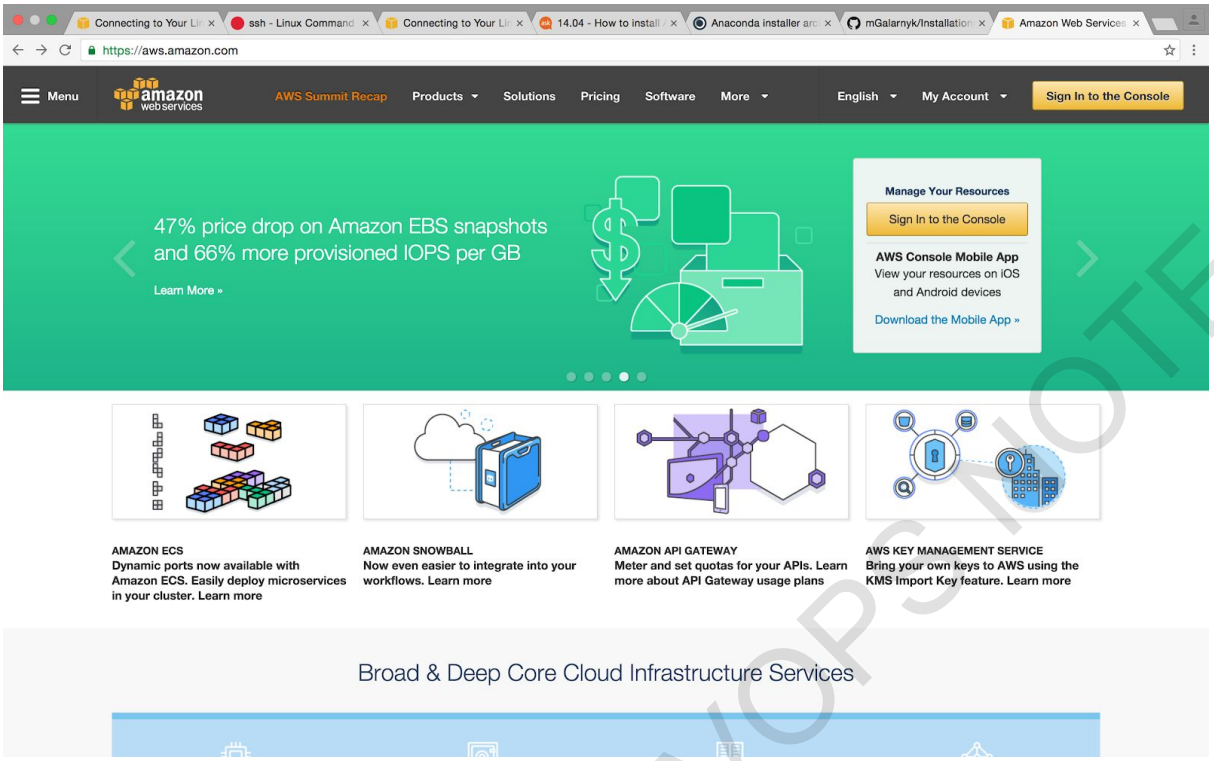
Step 9: You will be returned to the AWS login screen. Click Sign in to the Console.After logging using the account you just created



EC2 Instance Creation :

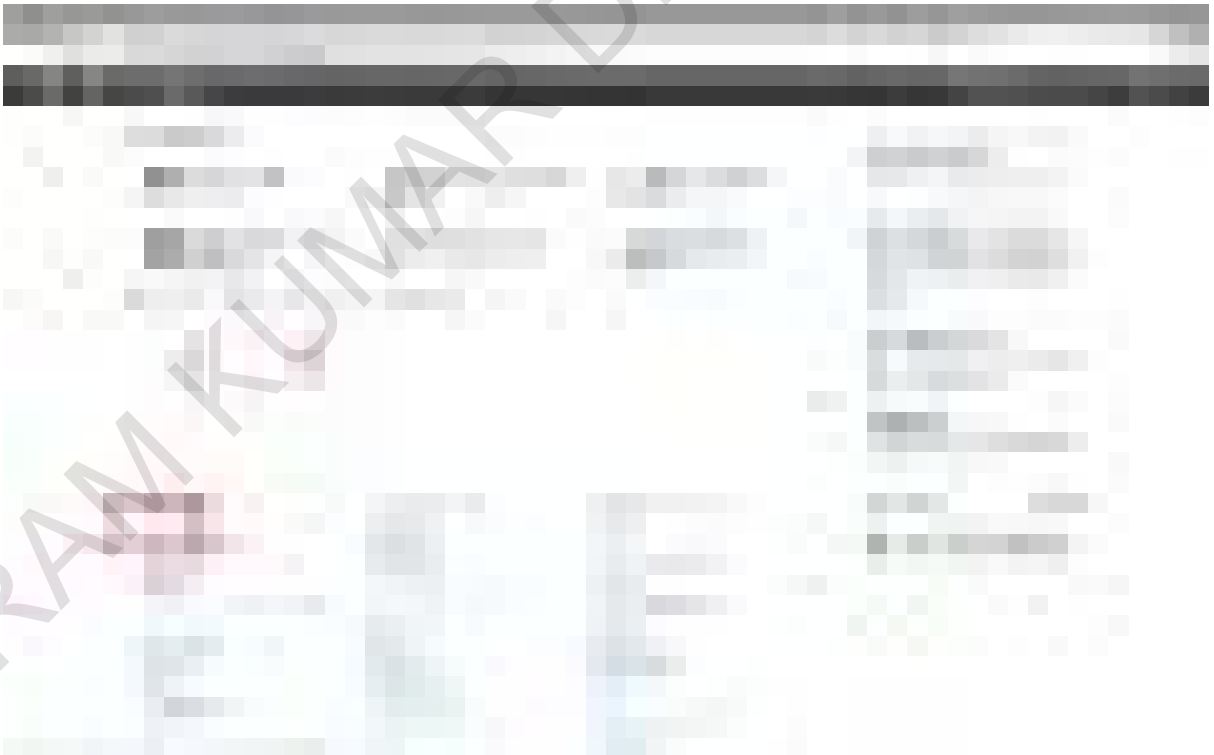
- Go to Amazon Web Services' Website.

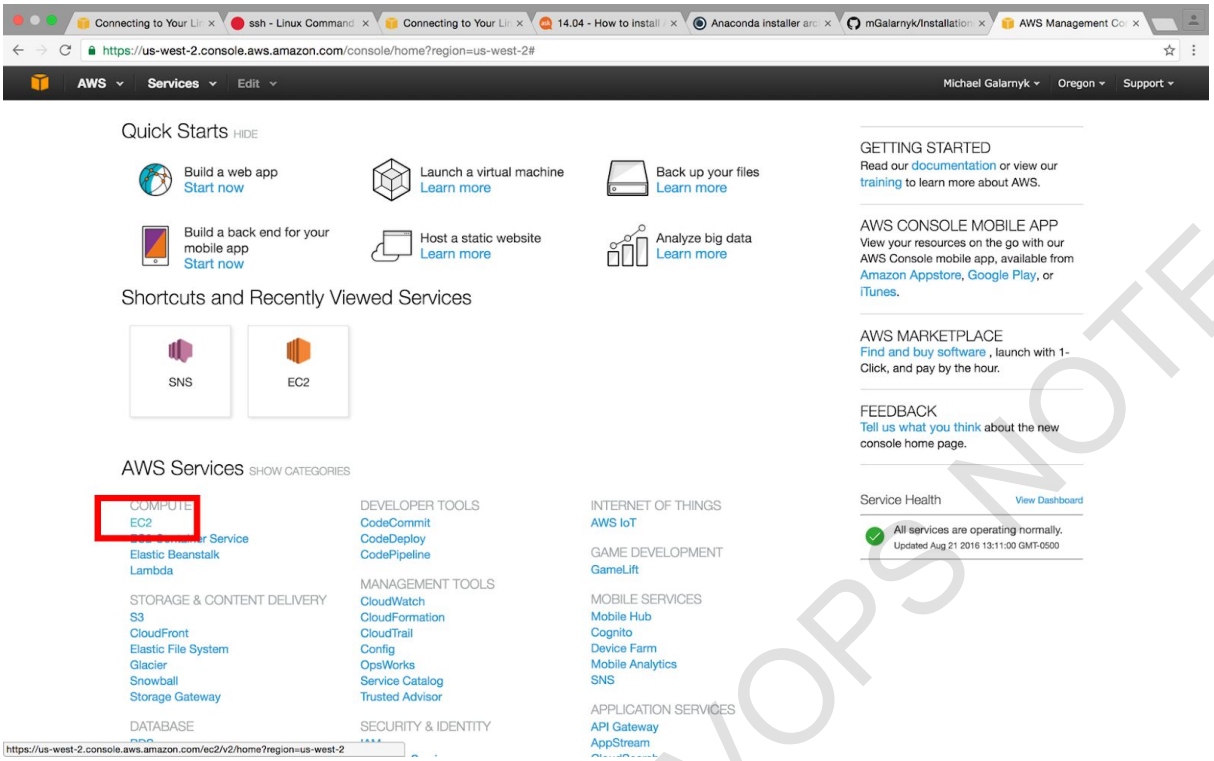




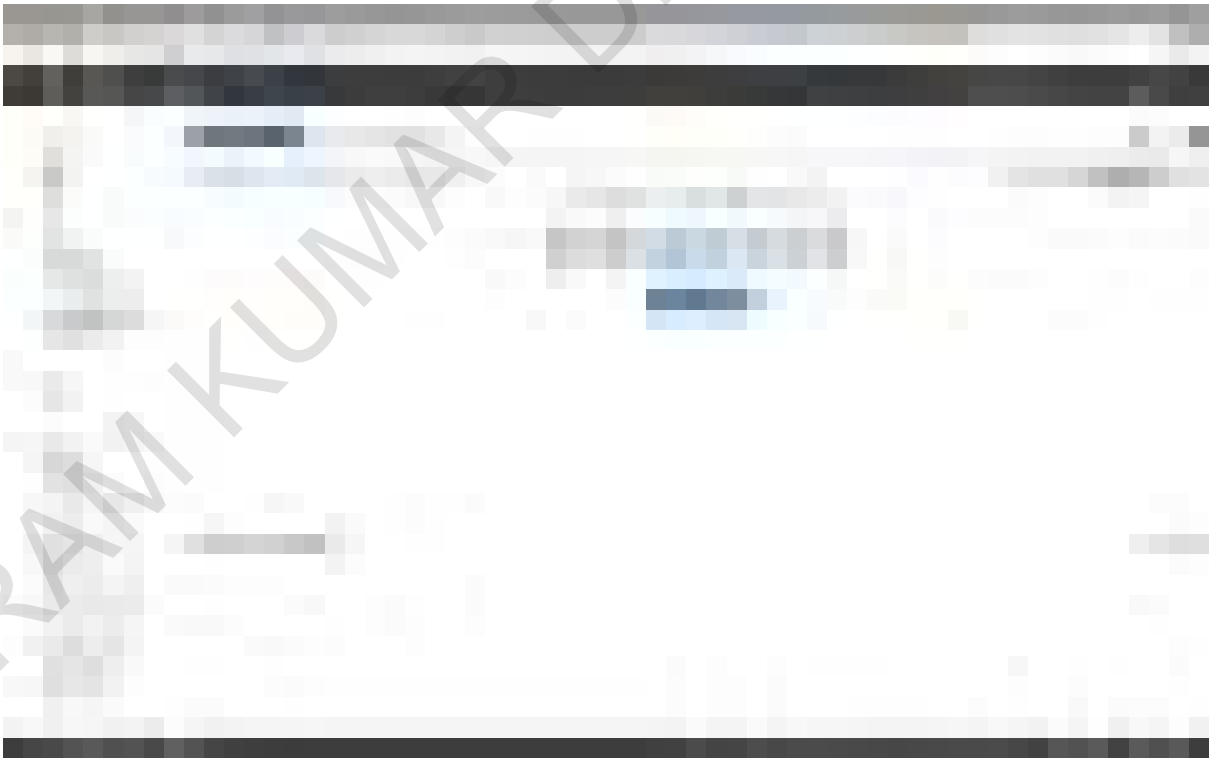
2. Sign in if you have account, if not make one

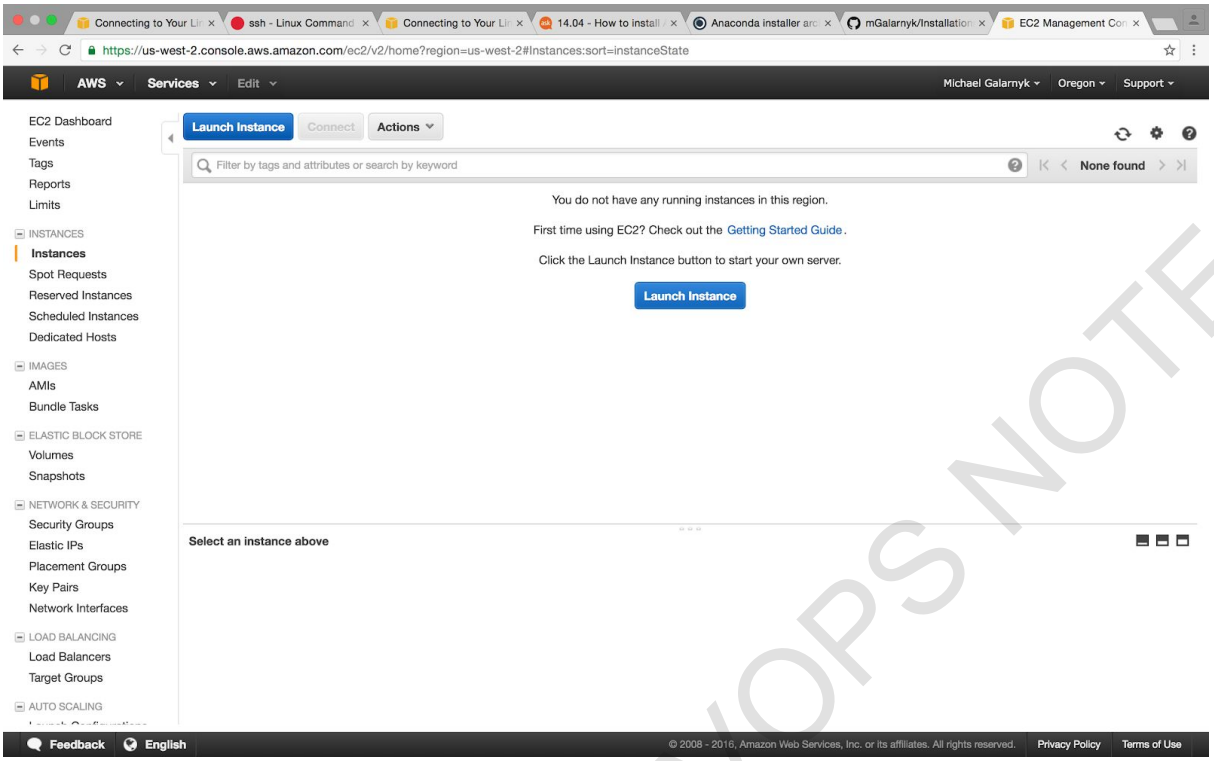
3. Click on EC2



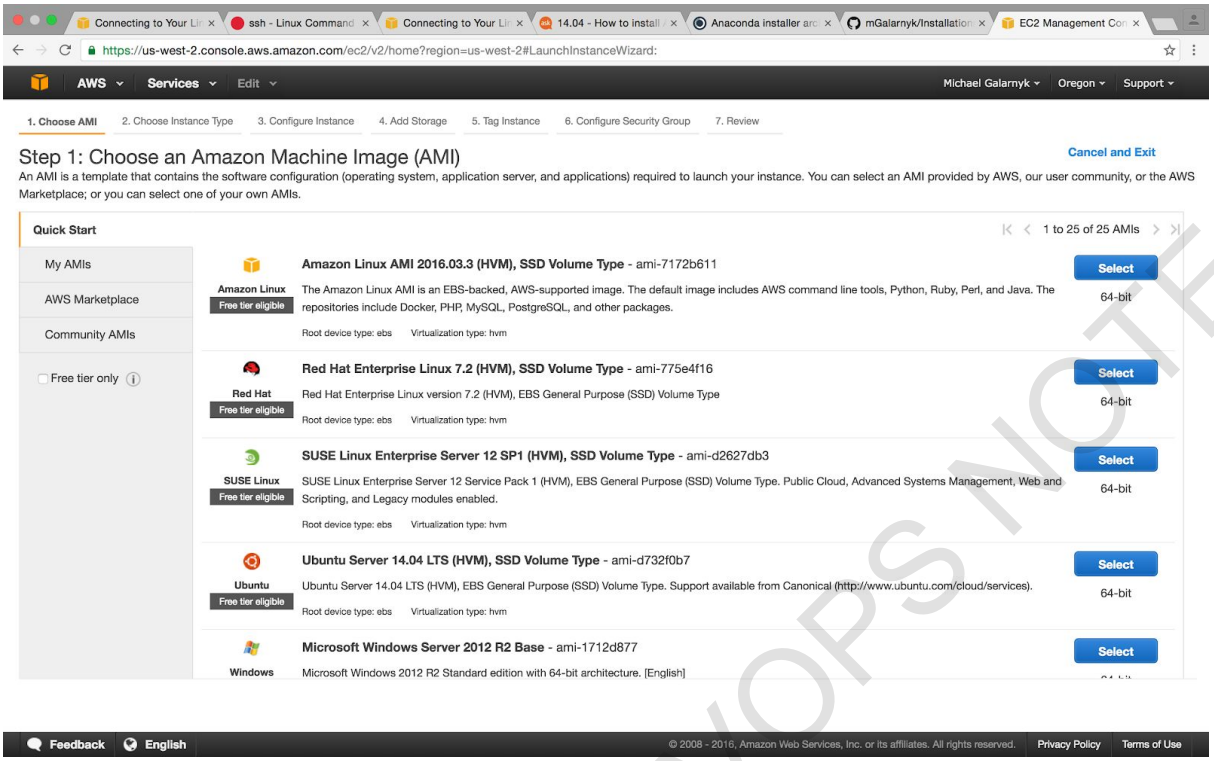


4. Click on Launch Instance

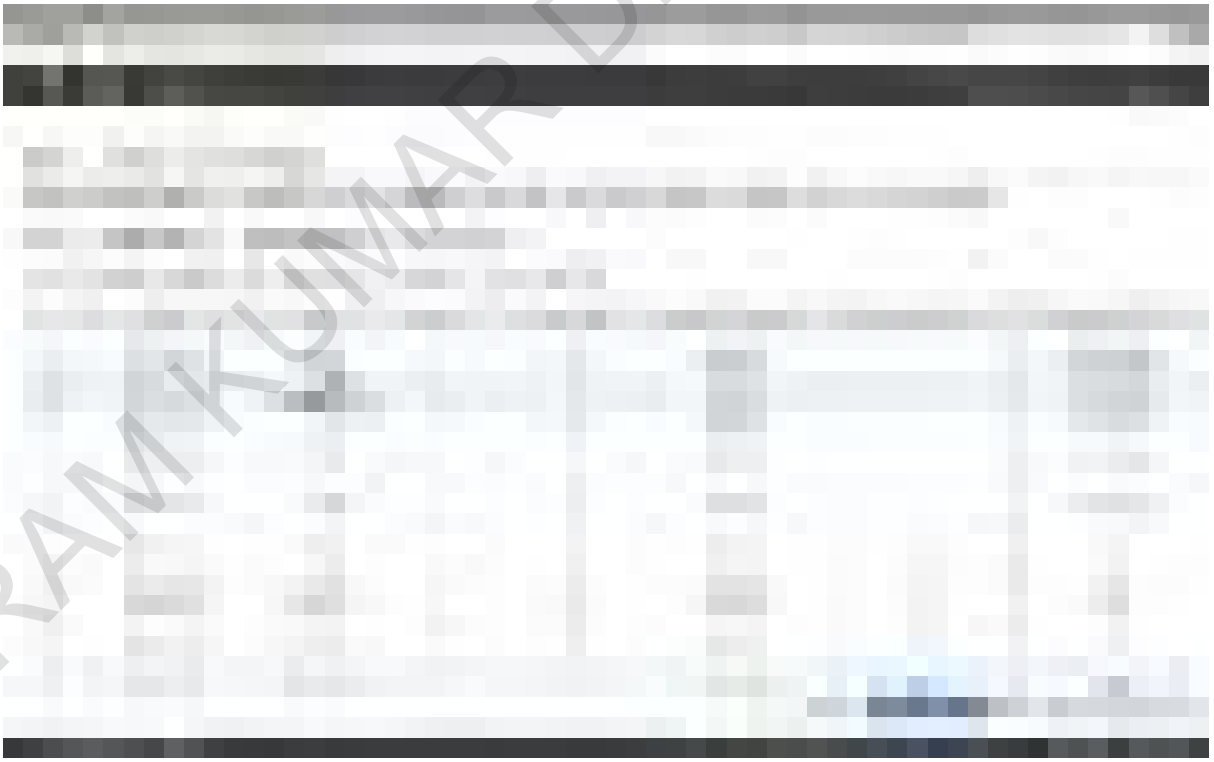


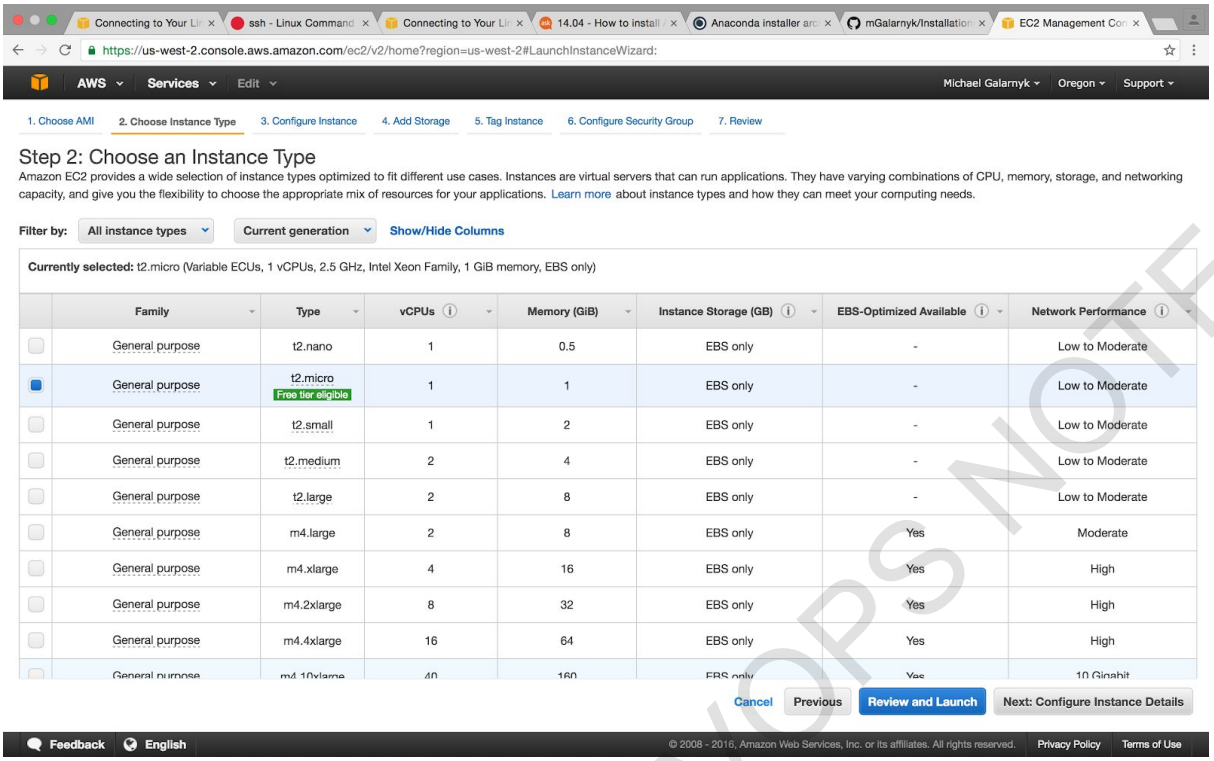


5. Select AMI of your choice

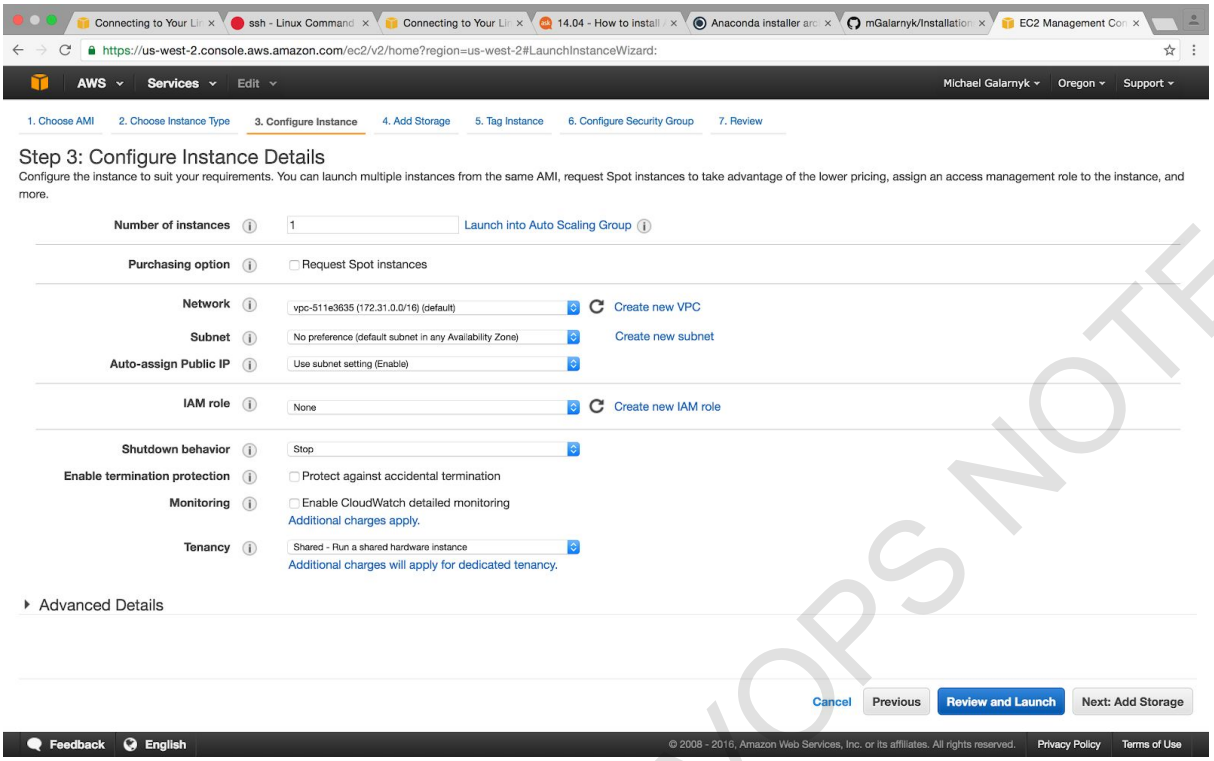


6. Select Free Tier t2 micro

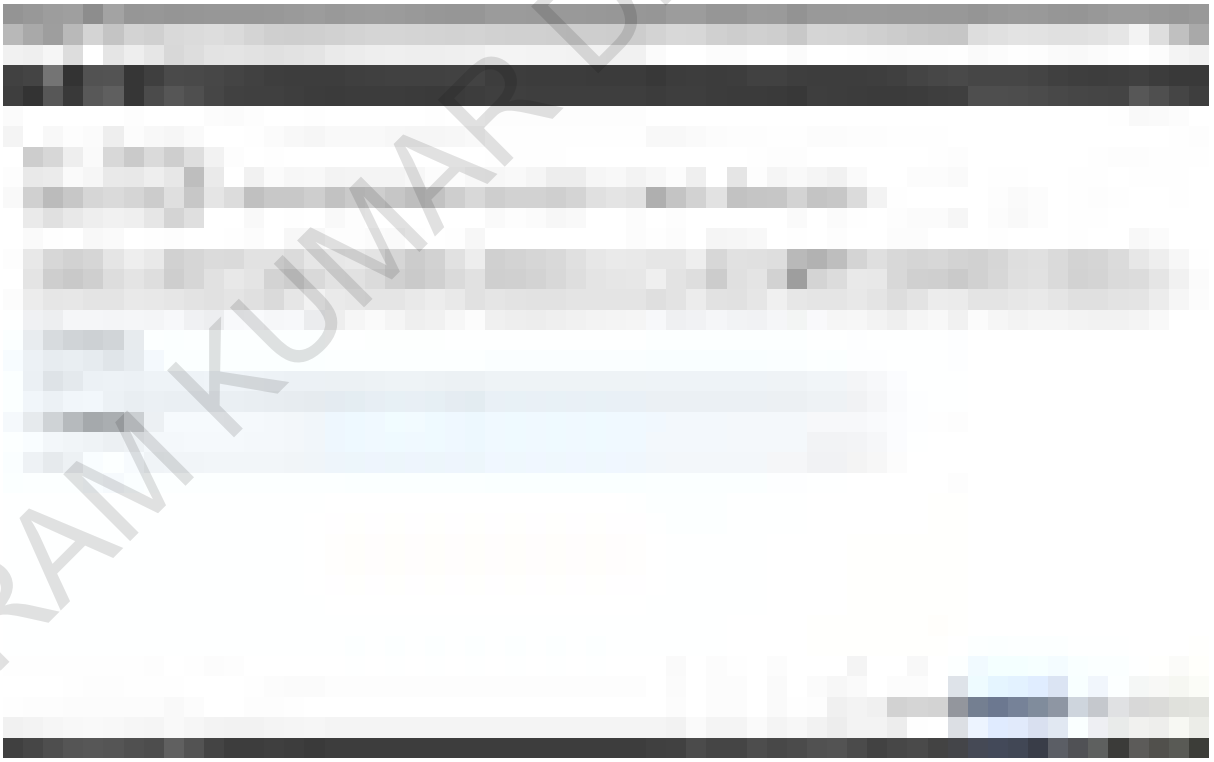


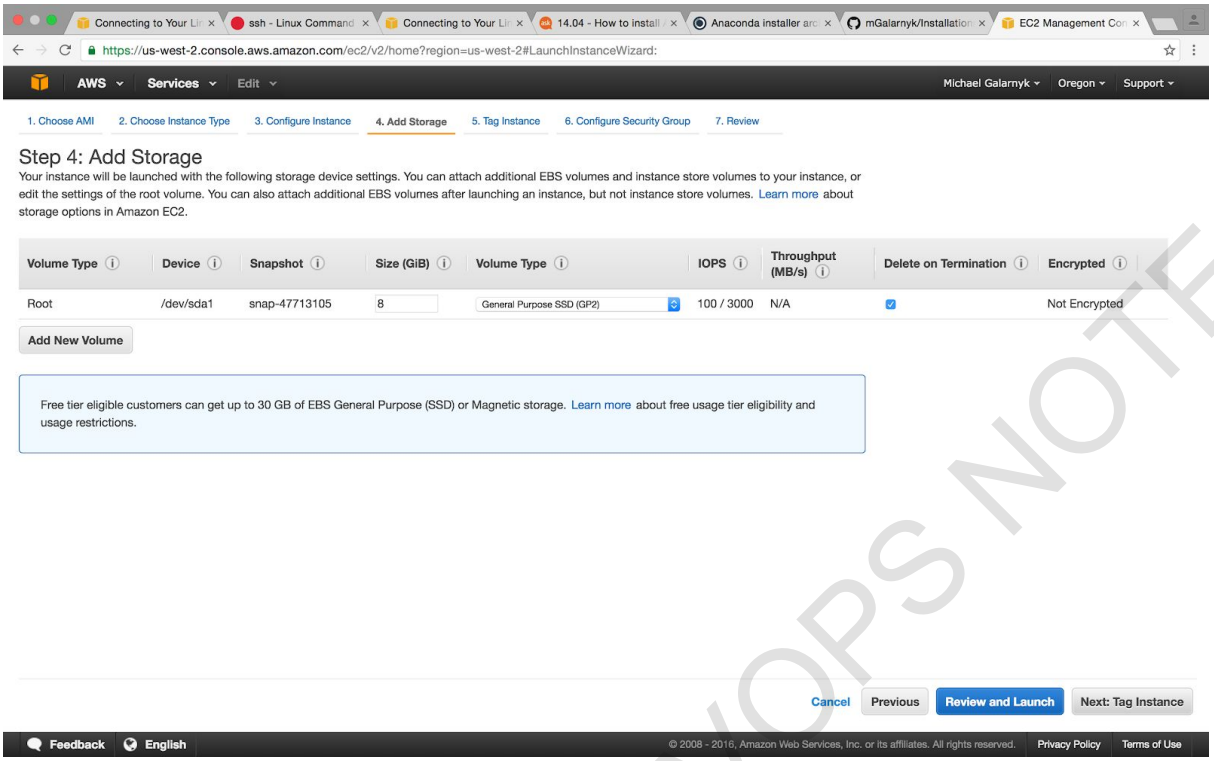


7. Configure Instance Details

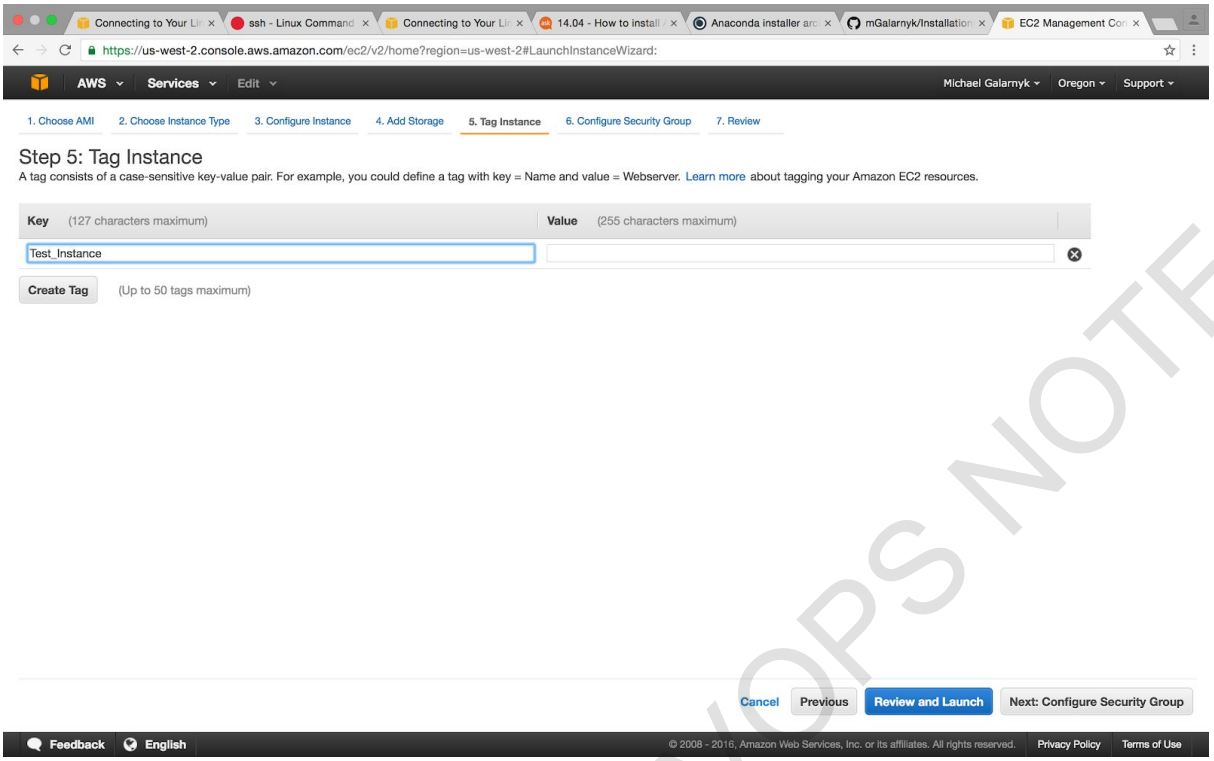


8. Add Storage if you need it

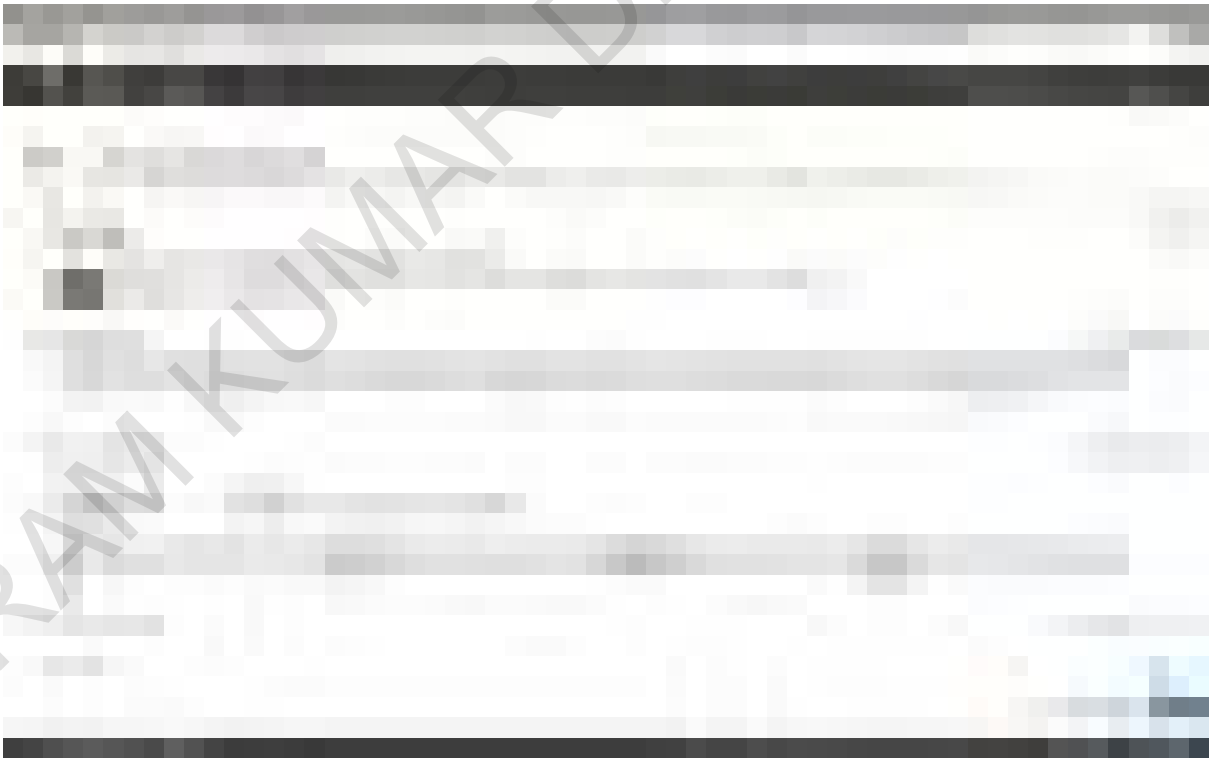


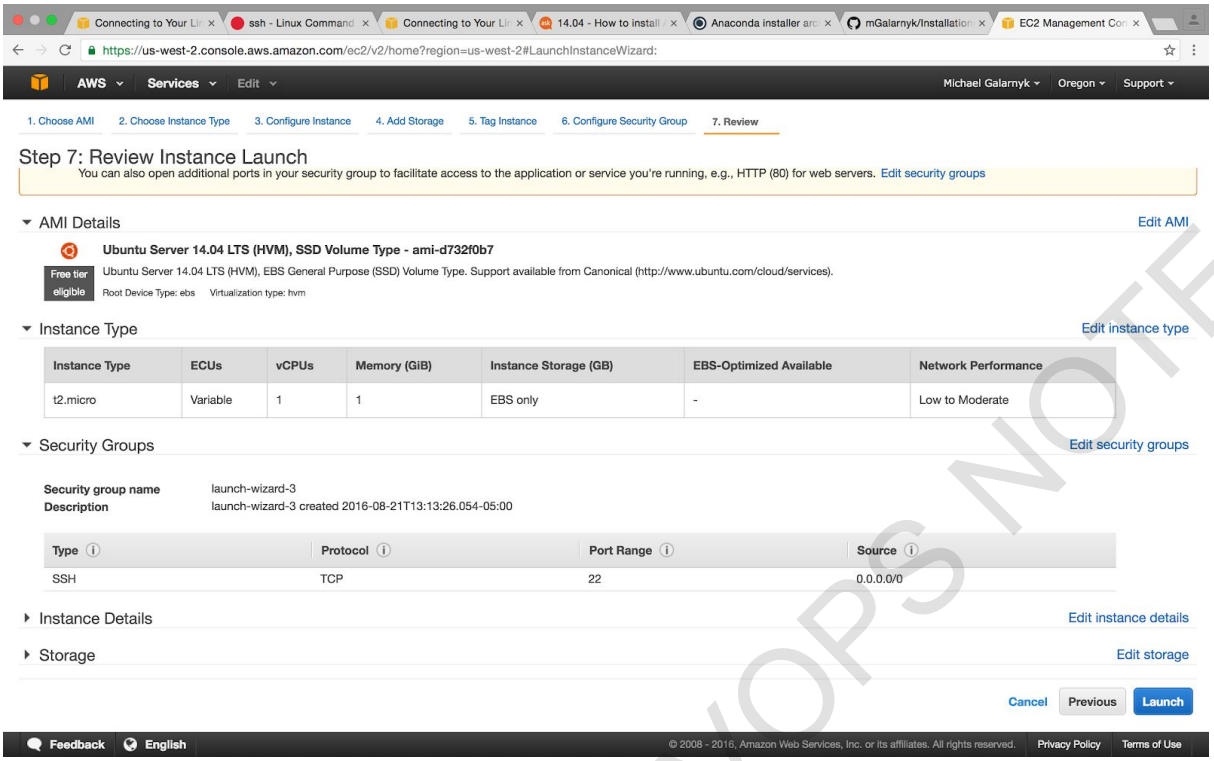


9. Add a tag if you want to

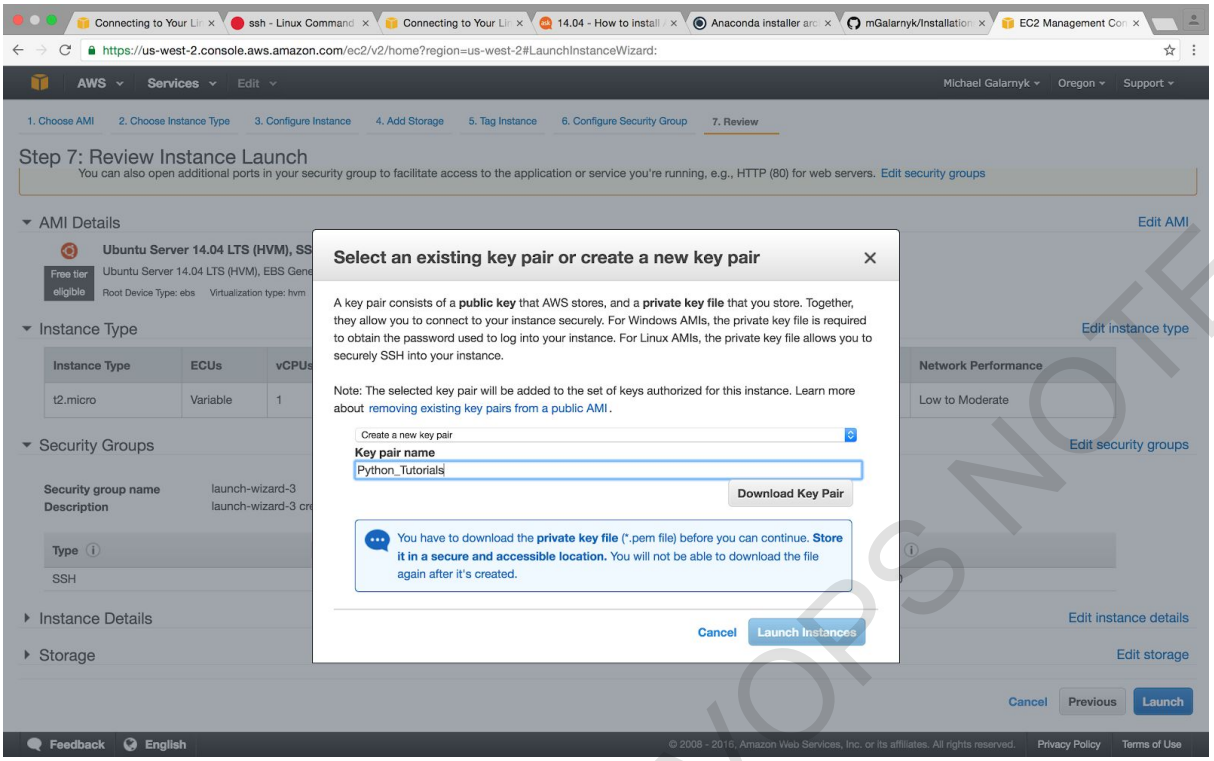


10. Launch your instance





11. Create a key pair and make sure to save it somewhere safe. You won't be able to replace it.



12. Launch the instance. Done!

Windows server,Linux server,Web server:

Windows server	Linux server	Web server
Windows Server is basically a Microsoft product and is a brand name for a group of server operating systems.	Linux is basically an open-source software operating system that builds around the Linux kernel.	It is a computer program that accepts the request for data and sends the specified documents.
Windows servers use graphic user interface to implement the operations	Linux is mainly based on command line mode of operation	Web server is useful or fitted for static content.
It is vulnerable to security threats and cyber crimes	It is very secured and less prone to any cyber threats	Web server consumes or utilizes less resources.
It is user-friendly and based on graphical user interface approach	It's not that user-friendly when compared to that of windows servers	Web servers arrange the run environment for web applications.

It is not a favorable option from the multi-user perspective.	It supports multitasking functionality	In web servers, multithreading is not supported.

Load balancer:

- A load balancer distributes incoming application traffic across multiple EC2 instances in multiple Availability Zones.
- This increases the fault tolerance of your applications.
- Elastic Load Balancing detects unhealthy instances and routes traffic only to healthy instances.
- a load balancer serves as a single point of contact for clients. This increases the availability of your application.
- You can add and remove instances from your load balancer as your needs change, without disrupting the overall flow of requests to your application.