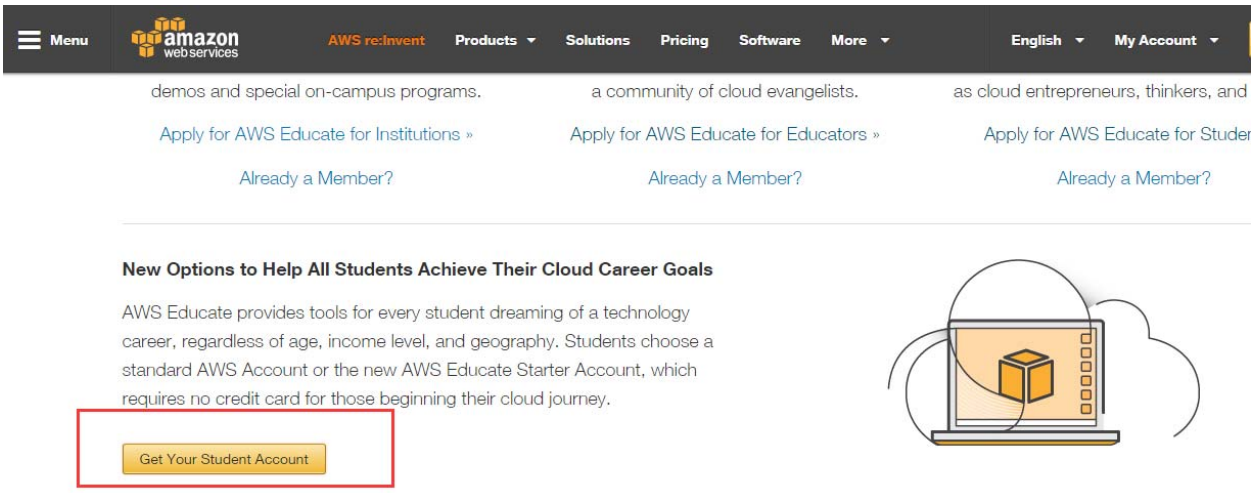
MIS 304: Using and Managing Information Systems

Lab Session 3: Cloud Services – AWS EC2

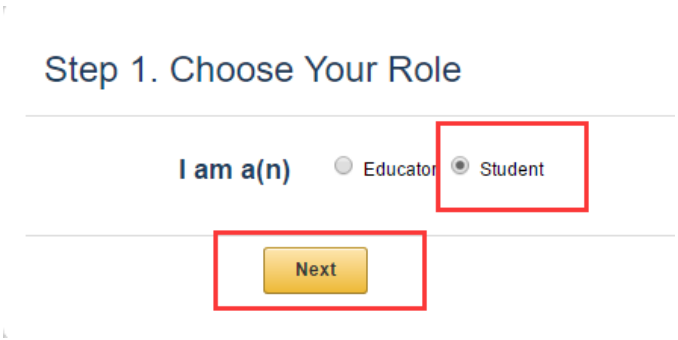
This lab session is designed to enable you to get hands-on experience with Amazon Web Services (AWS). AWS provides free tools and resources needed to accelerate cloud-related learning endeavors for every student.

We will first create an AWS Student Account. Then start using AWS Cloud services.

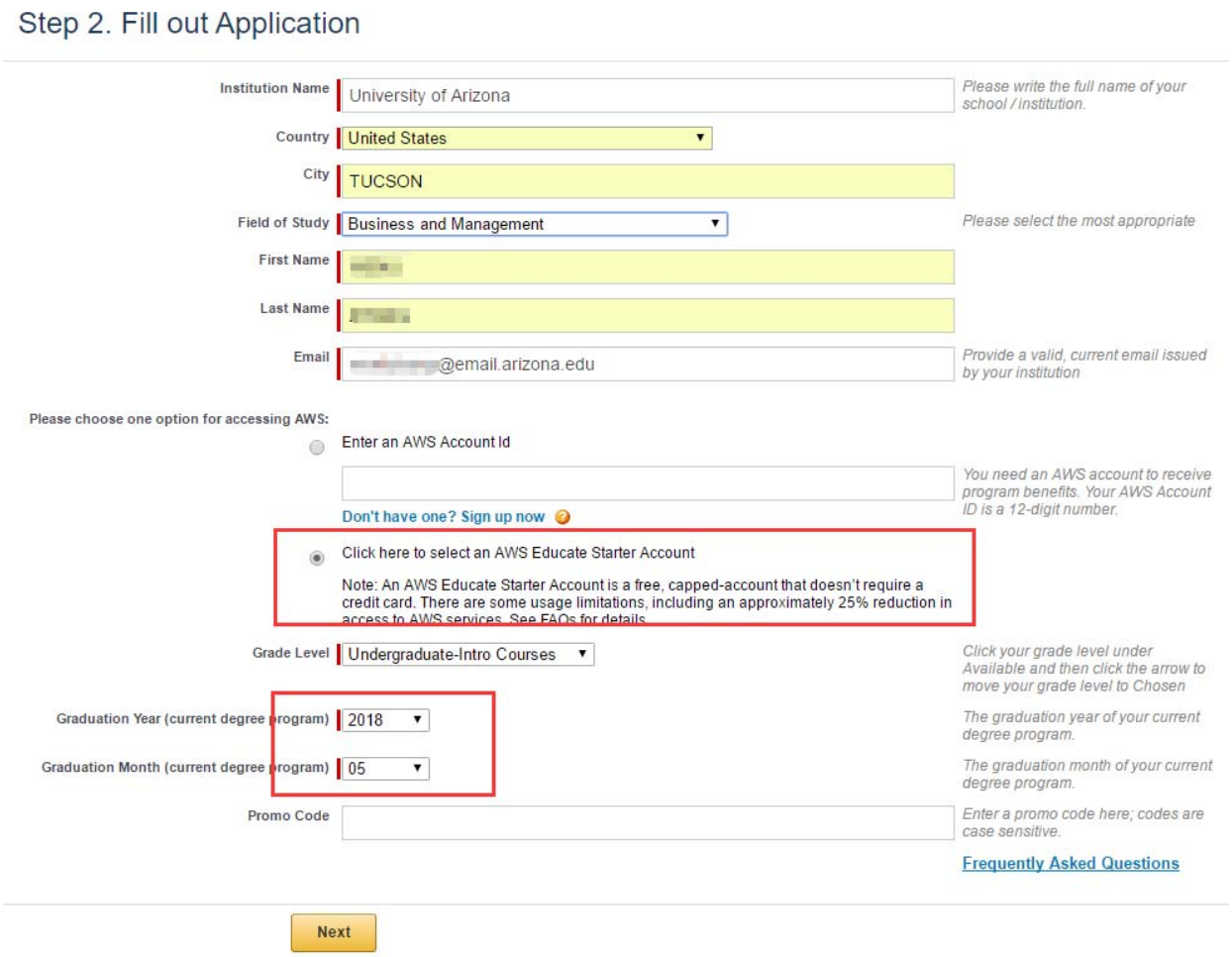
1. Sign up for an AWS Student Account.
   (1) Go to https://aws.amazon.com/education/awseducate/, and click "Get Your Student Account".



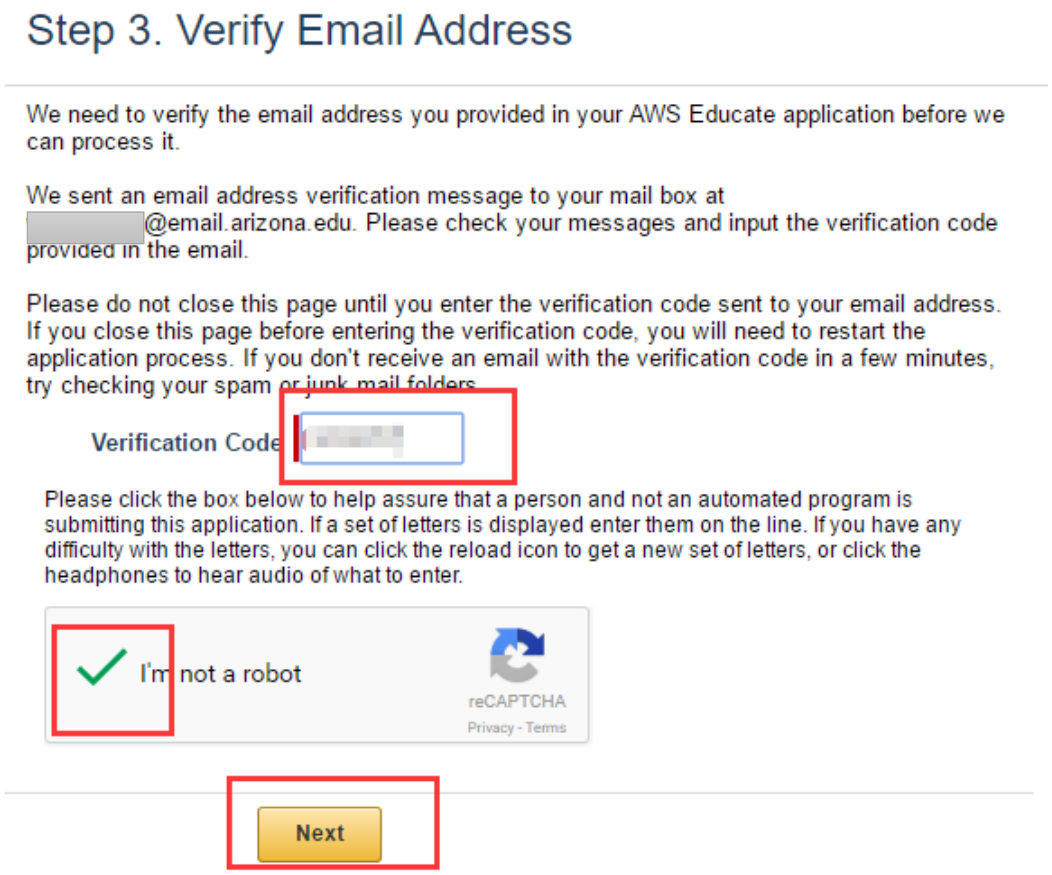
   (2) Choose your role as a "Student". Then click "Next".



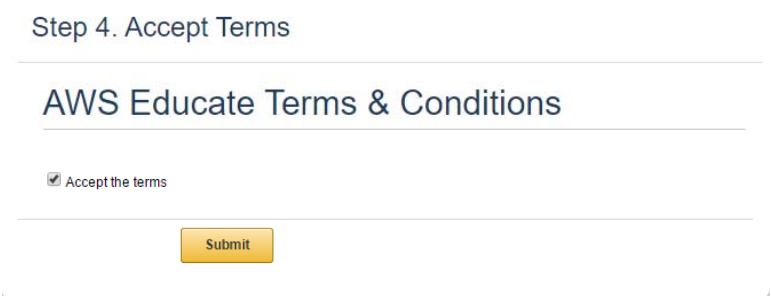
   (3) Follow the instructions. Use your catmail account and fill out the application.



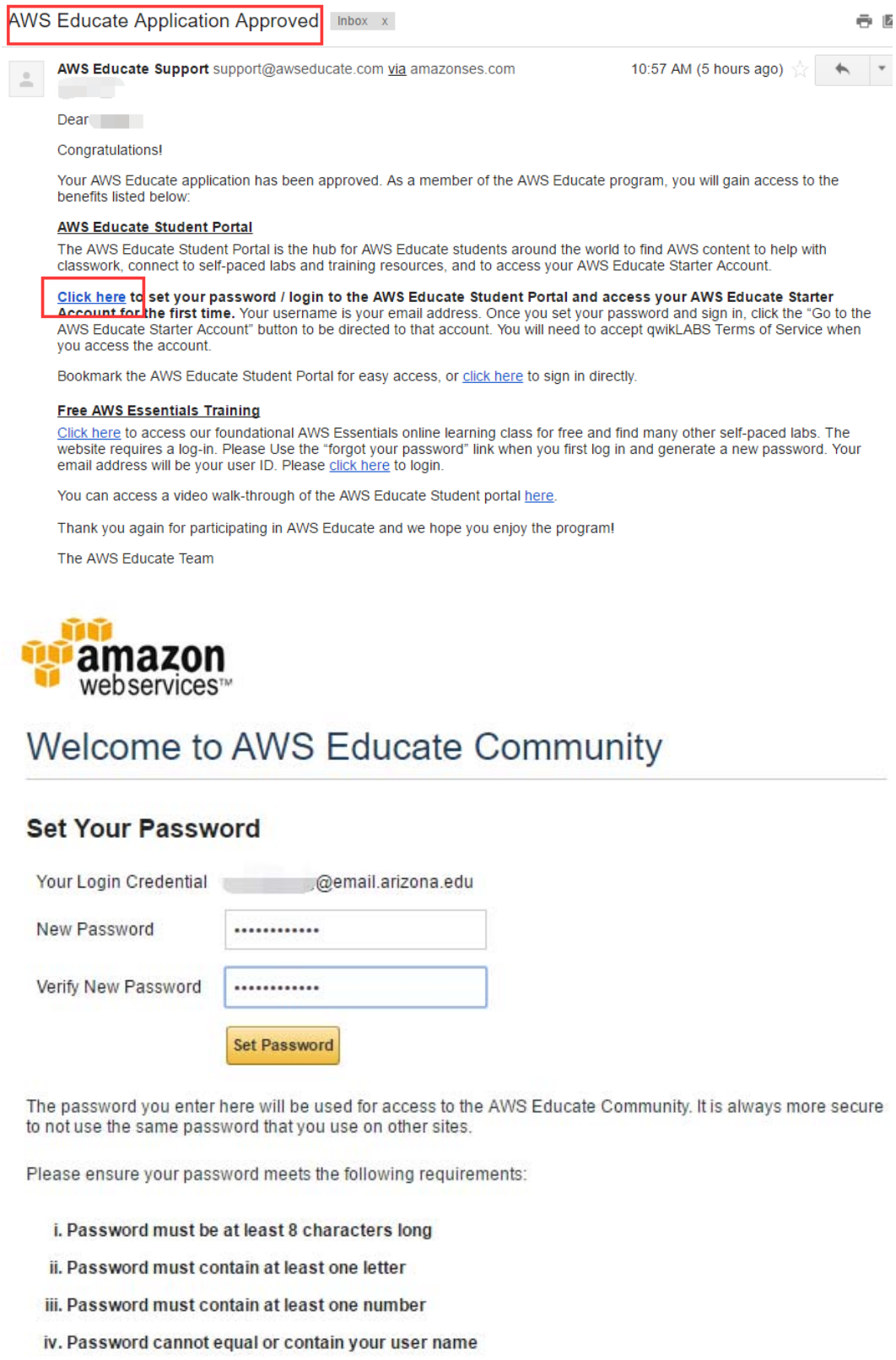
(4) Verify your email address. You will get a verification message. Check your catmail and enter the verification code.



(5) Accept the terms and click "Submit".



(6) Wait about 3-5 minutes. You will receive an email from Amazon again. Click the link provided in the email to set your password.



AWS Educate Application Approved Inbox x

AWS Educate Support support@awseducate.com via amazonses.com 10:57 AM (5 hours ago)

Dear [redacted]

Congratulations!

Your AWS Educate application has been approved. As a member of the AWS Educate program, you will gain access to the benefits listed below:

AWS Educate Student Portal

The AWS Educate Student Portal is the hub for AWS Educate students around the world to find AWS content to help with classwork, connect to self-paced labs and training resources, and to access your AWS Educate Starter Account.

Click here **to set your password / login to the AWS Educate Student Portal and access your AWS Educate Starter Account for the first time.** Your username is your email address. Once you set your password and sign in, click the "Go to the AWS Educate Starter Account" button to be directed to that account. You will need to accept qwikLABS Terms of Service when you access the account.

Bookmark the AWS Educate Student Portal for easy access, or click here to sign in directly.

Free AWS Essentials Training

Click here to access our foundational AWS Essentials online learning class for free and find many other self-paced labs. The website requires a log-in. Please Use the "forgot your password" link when you first log in and generate a new password. Your email address will be your user ID. Please click here to login.

You can access a video walk-through of the AWS Educate Student portal here.

Thank you again for participating in AWS Educate and we hope you enjoy the program!

The AWS Educate Team

amazon web services™

Welcome to AWS Educate Community

Set Your Password

Your Login Credential [redacted]@email.arizona.edu

New Password ••••••••••••

Verify New Password ••••••••••••

Set Password

The password you enter here will be used for access to the AWS Educate Community. It is always more secure to not use the same password that you use on other sites.

Please ensure your password meets the following requirements:

i. Password must be at least 8 characters long

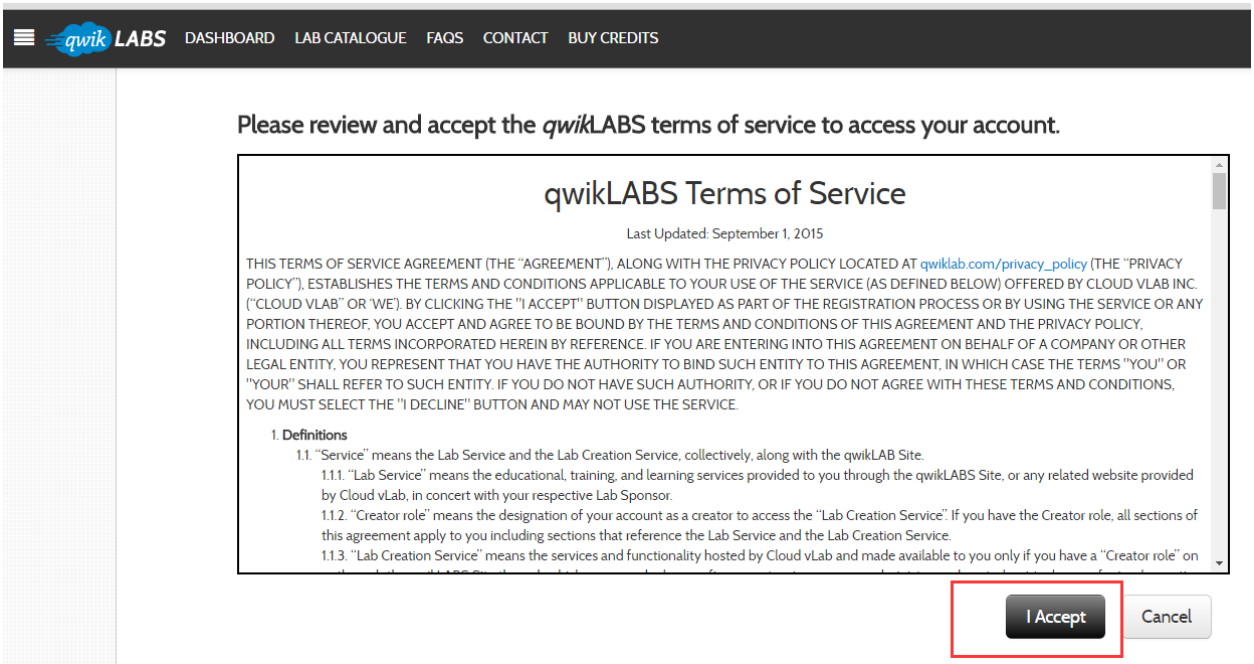
ii. Password must contain at least one letter

iii. Password must contain at least one number

iv. Password cannot equal or contain your user name

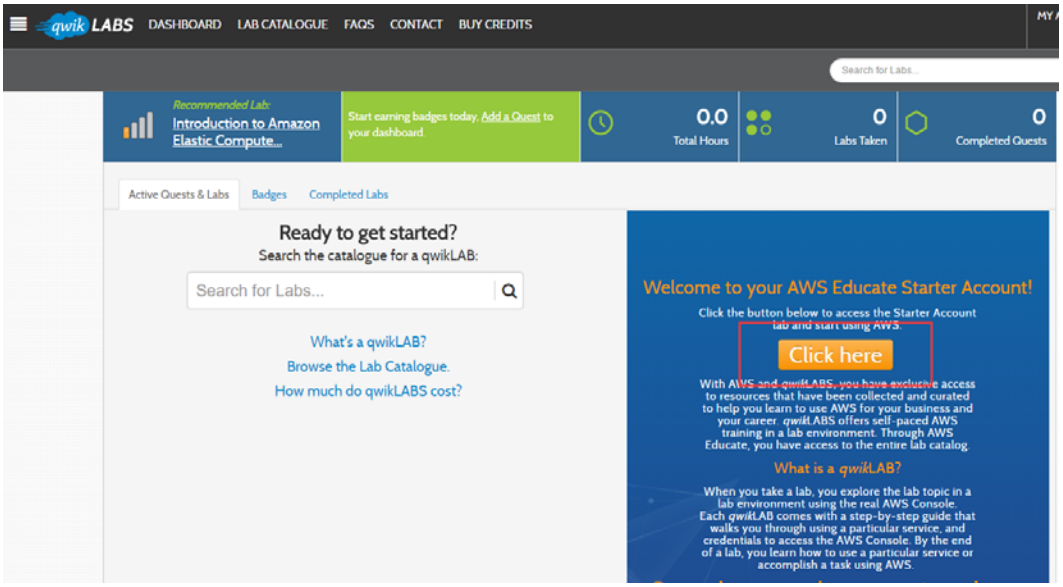
Your username is your catmail address. Once you set your password and sign in, click the "Go to the AWS Educate Starter Account" button to be directed to that account.

You will need to accept qwikLABS Terms of Service when you access the account.

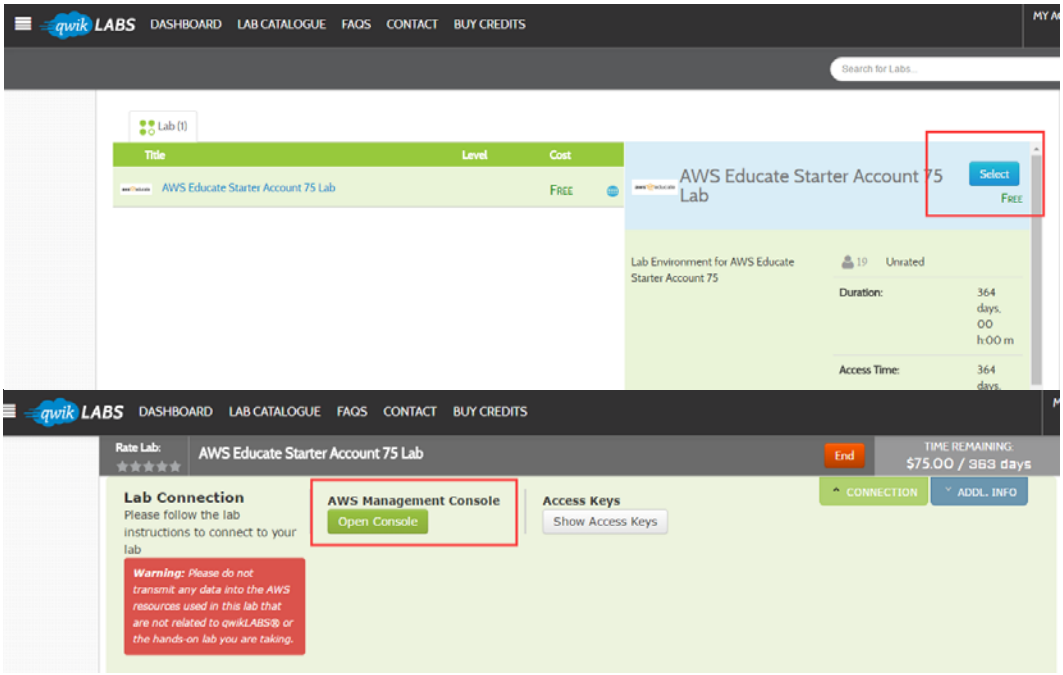


2. Start using AWS cloud service.
   (1) Log into your AWS account. https://www.awseducate.com/microsite/SiteLogin

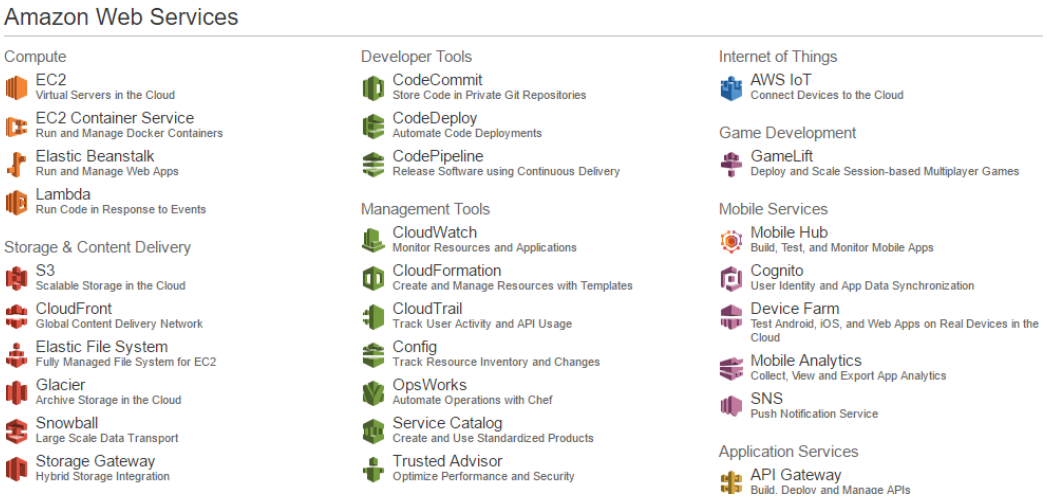
   (2) Click "Click here" on the right side.



(3) Click "Select" on the right side. Then Click "Open Console".

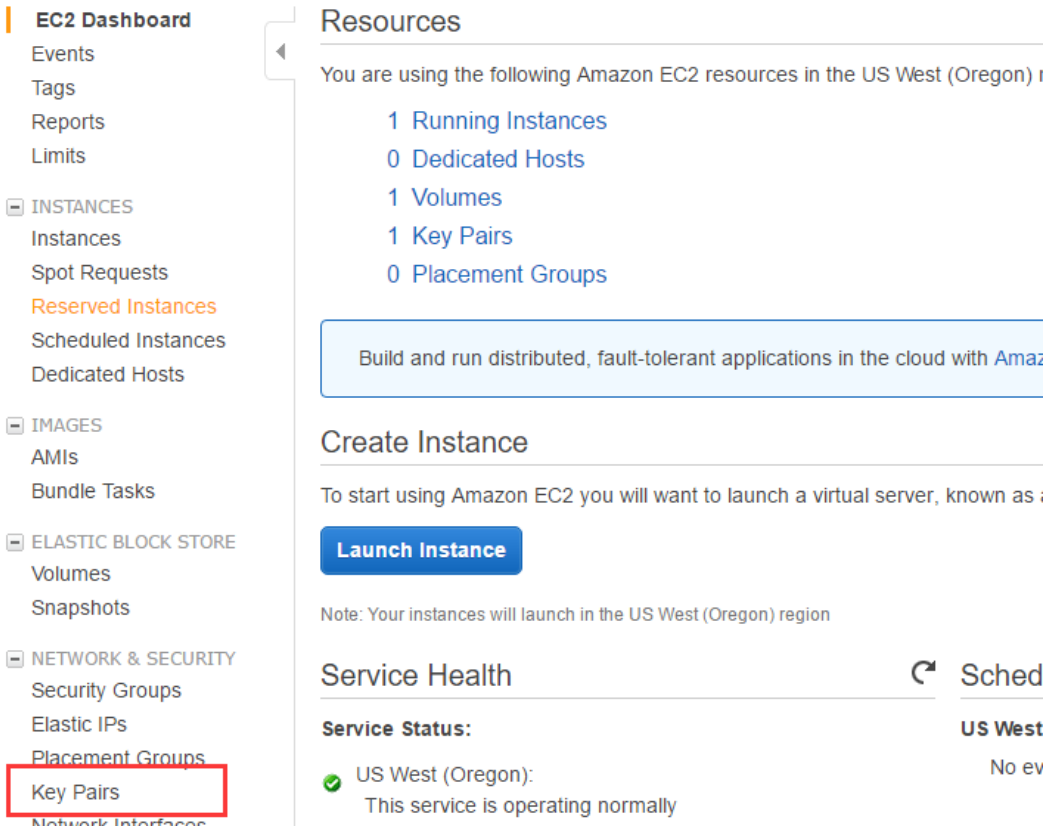


(4) You should now login to Amazon Web Services panel.

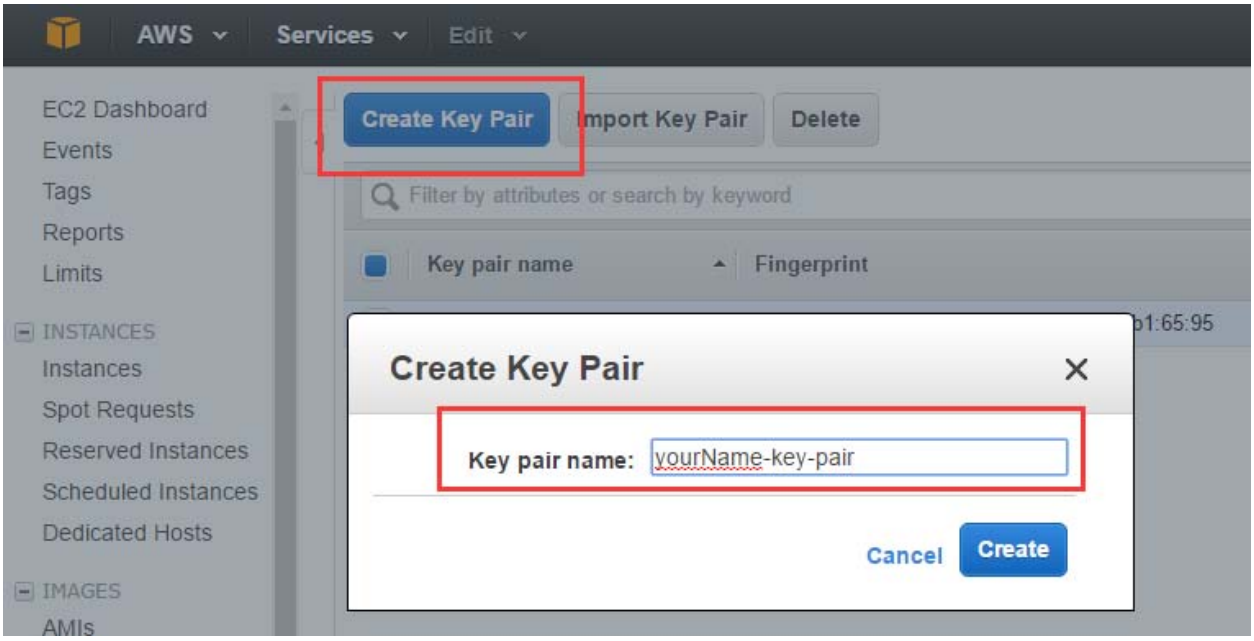


(5) Now we need to generate key-pairs to encrypt and decrypt login information for AWS services. Under the group of links titled "NETWORK & SECURITY", you can locate "Key Pairs". Click "Key Pairs" in the navigation pane.

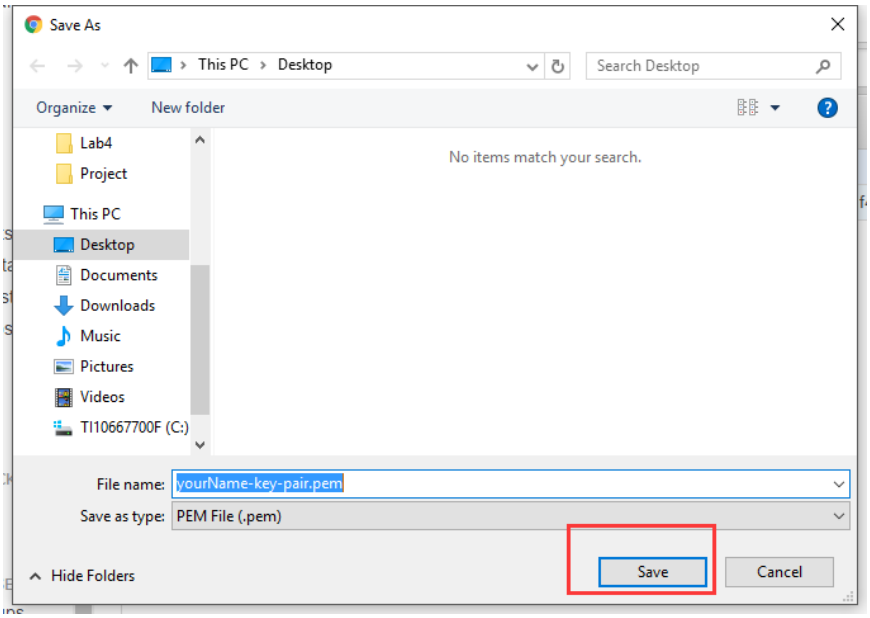
What is key-pair? Read:
http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-key-pairs.html



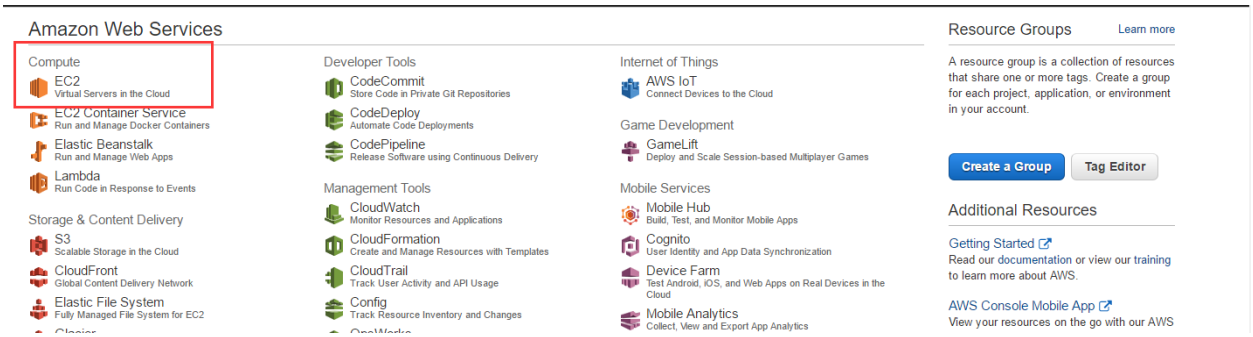
(6) Click "Create Key Pair". Enter a name for the new key pair (for example, *yourname*-key-pair). Then click "Create".



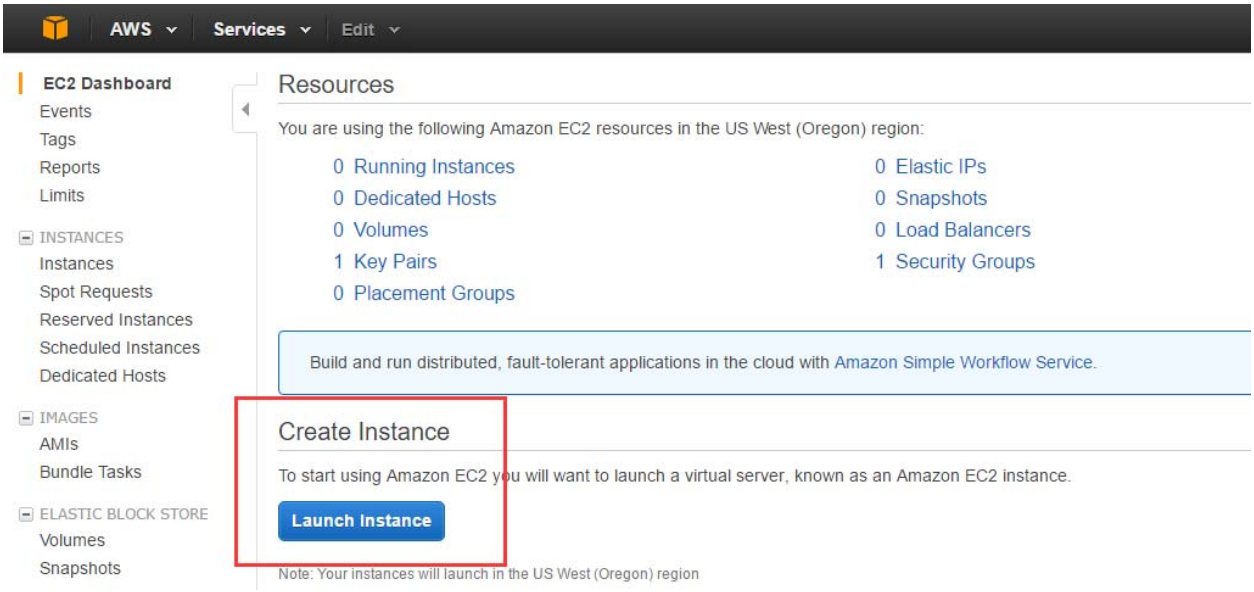
(7) The private key file is automatically downloaded by your browser. The base file name is the name you specified as the name of your key pair, and the file name extension is *.pem*. Save the private key file in a safe place. **Important**: this is the only chance for you to save the private key file. You'll need to provide the name of your key-pair when you launch an instance and the corresponding private key each time you connect to the instance.



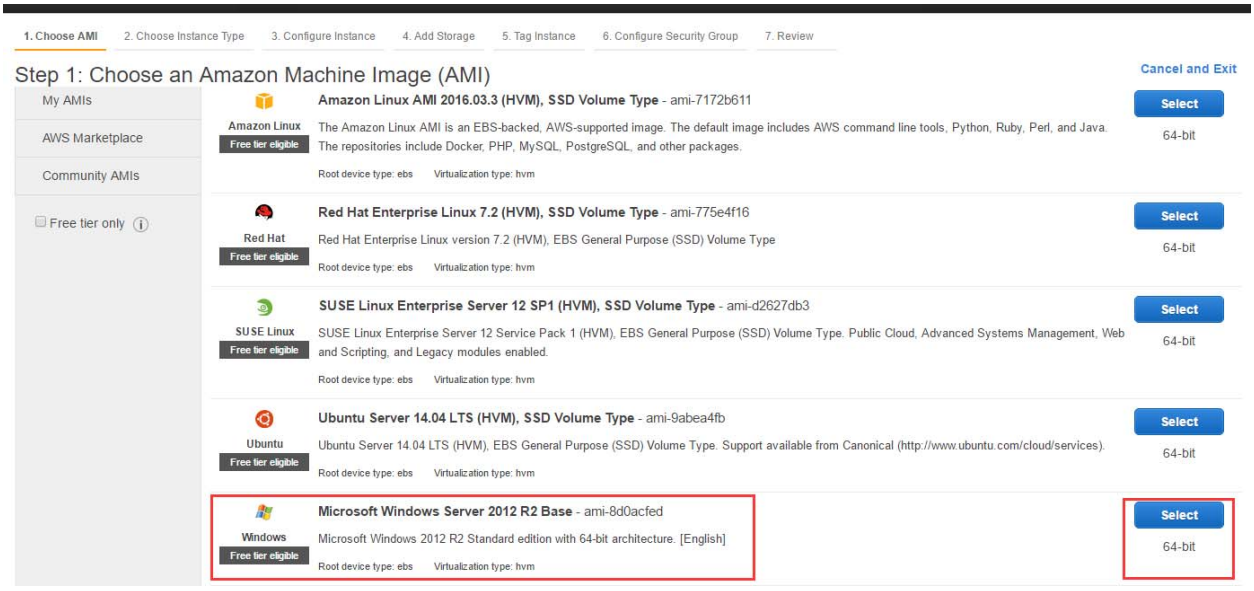
(8) We will now start a virtual servers in the cloud. Go back to Amazon Web Services panel. Click “EC2”.



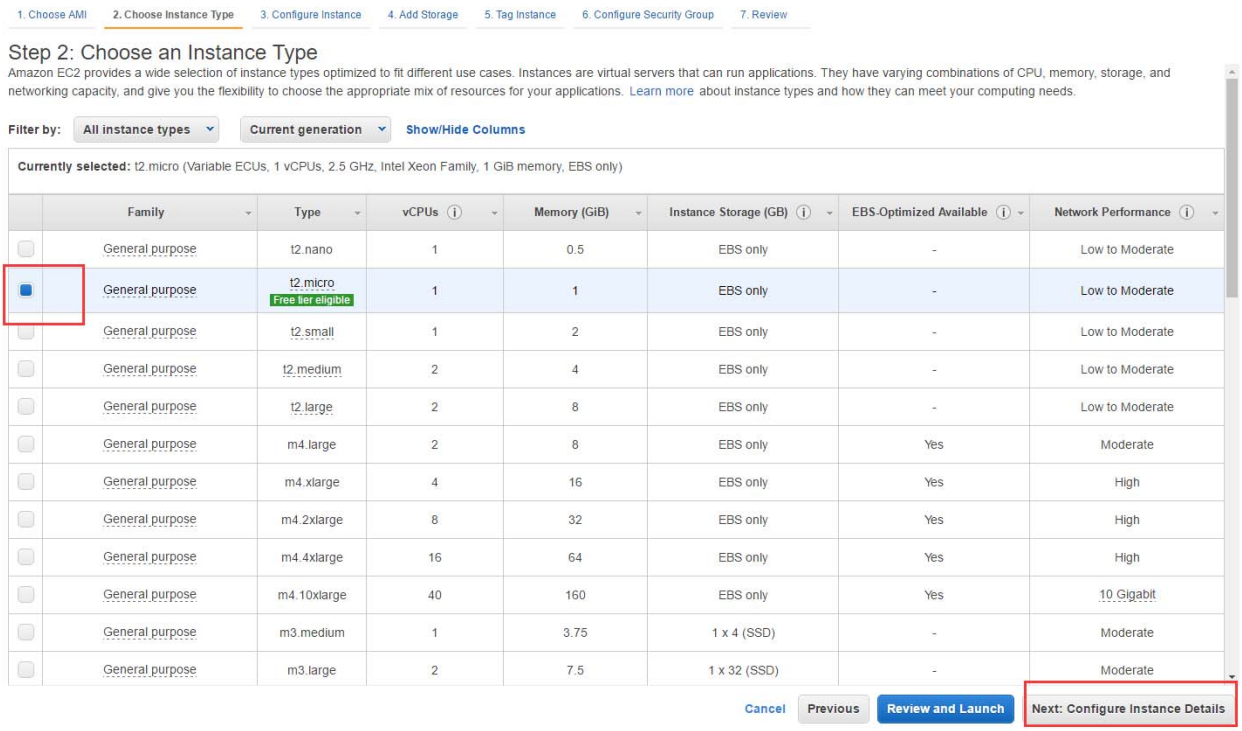
(9) Click “Launch Instance”.



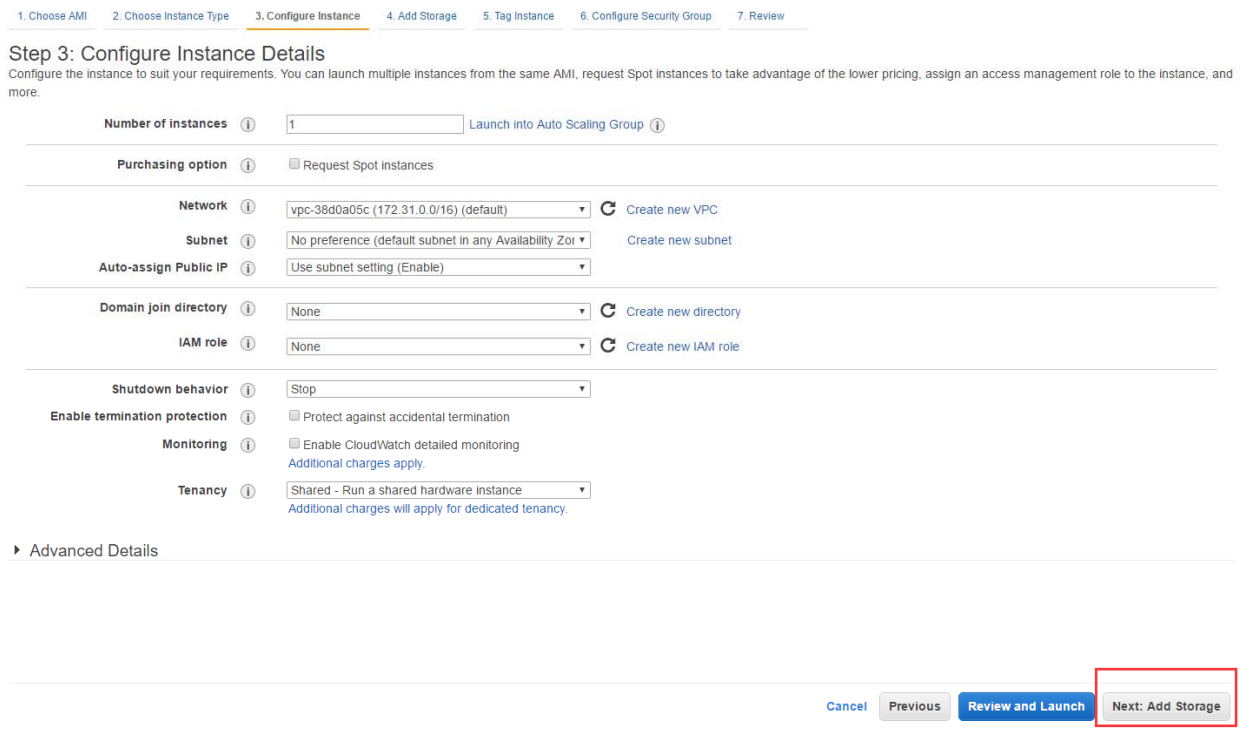
(10) Select Microsoft Windows Sever 2012 R2 Base (free).



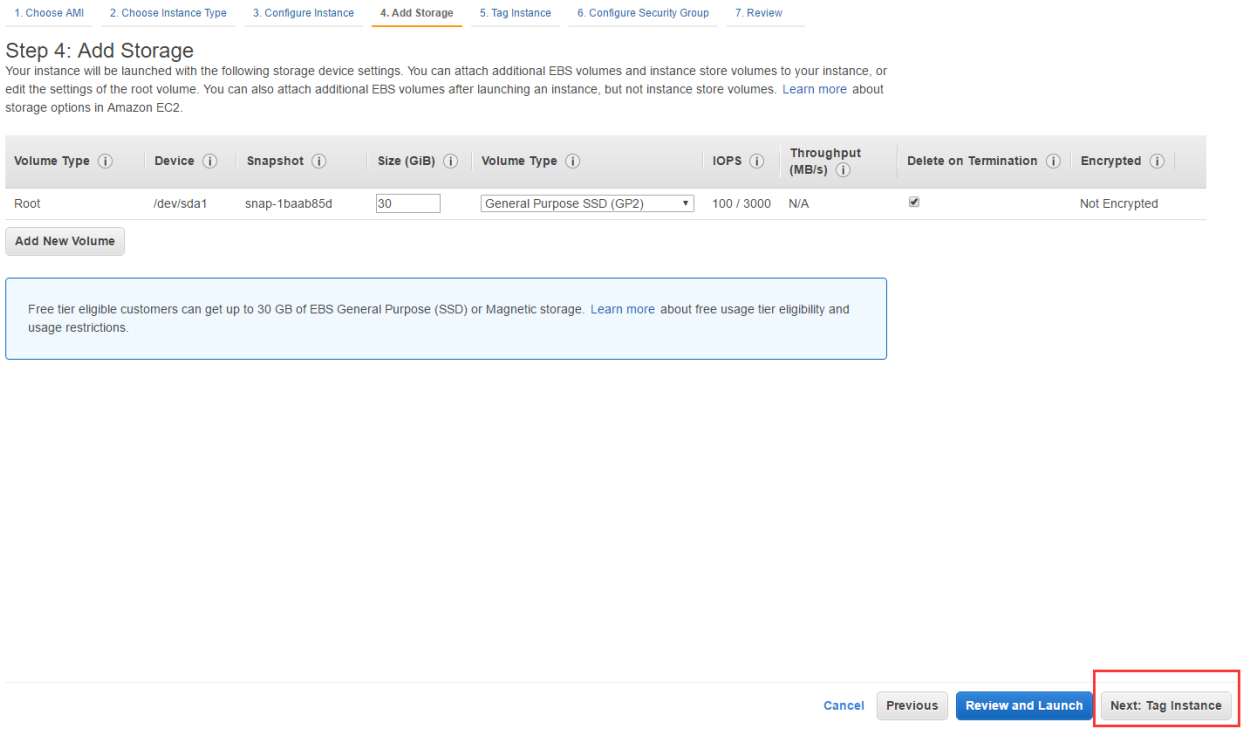
(11) Choose “t2.micro” (free). Then click “Next: configure Instance Details”.



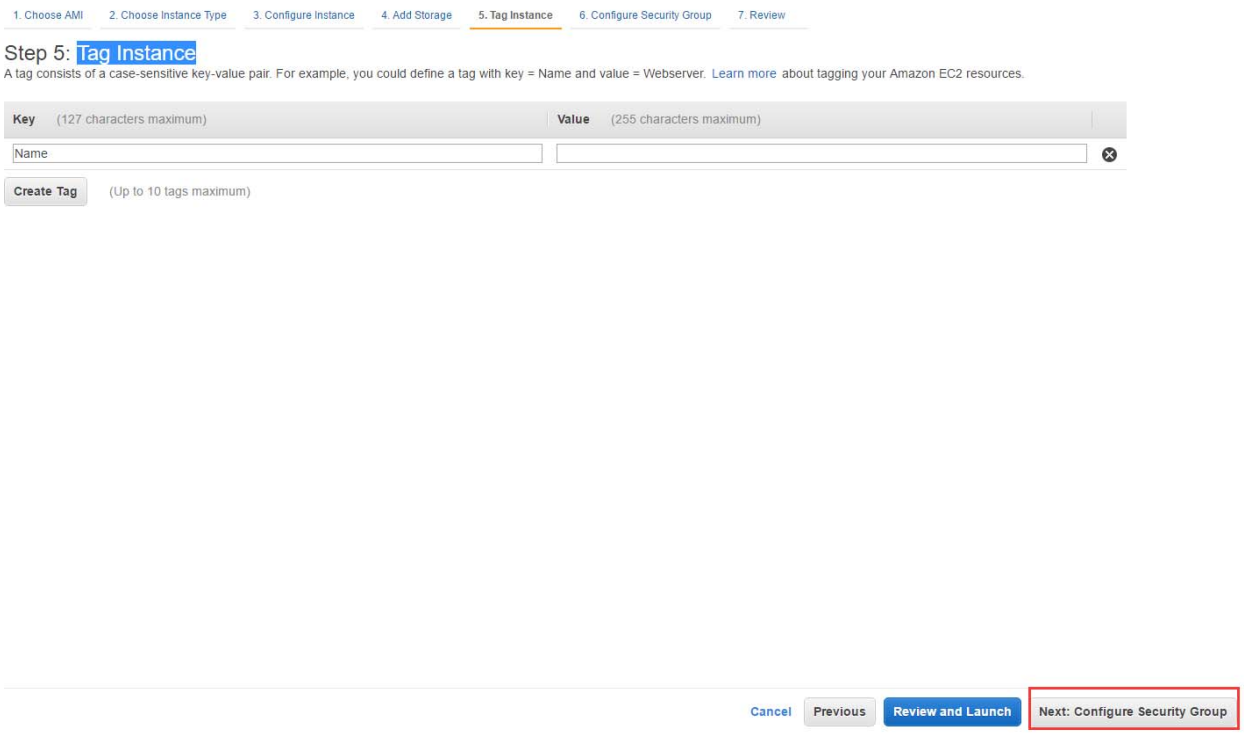
(12) Click “Next: add Storage”.



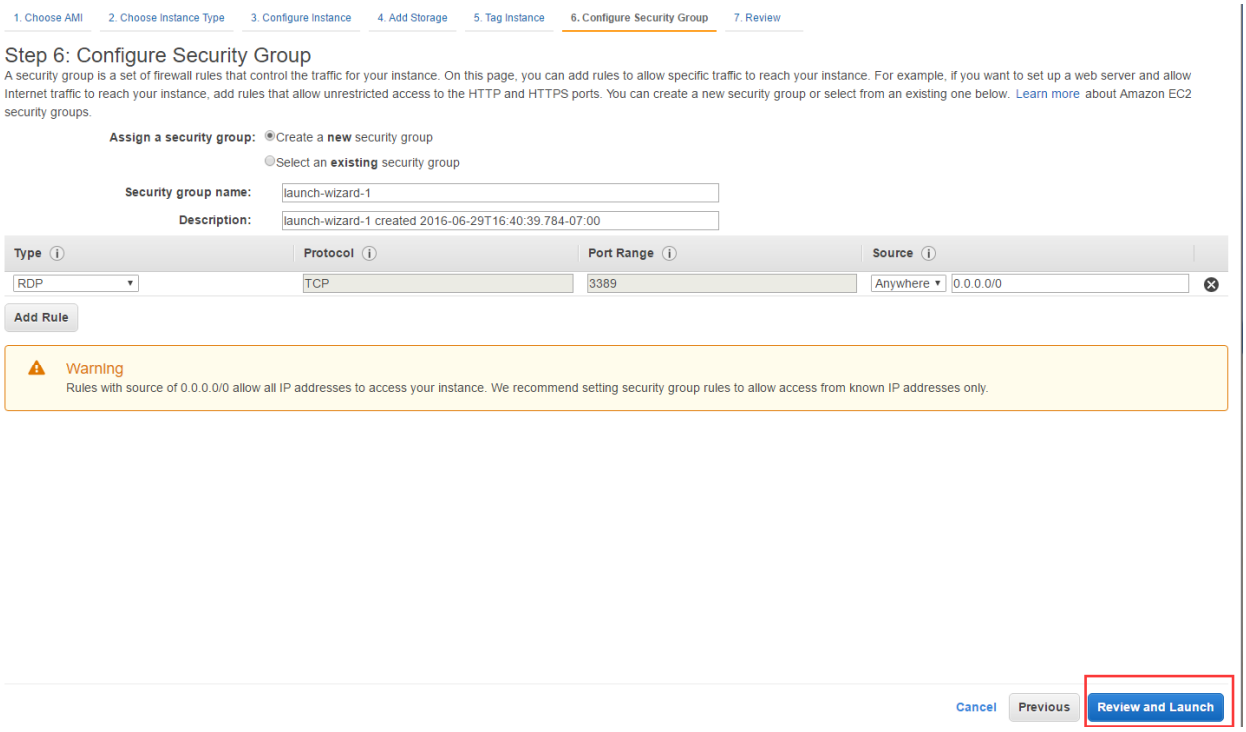
(13) Click “Next: Tag Instance”.



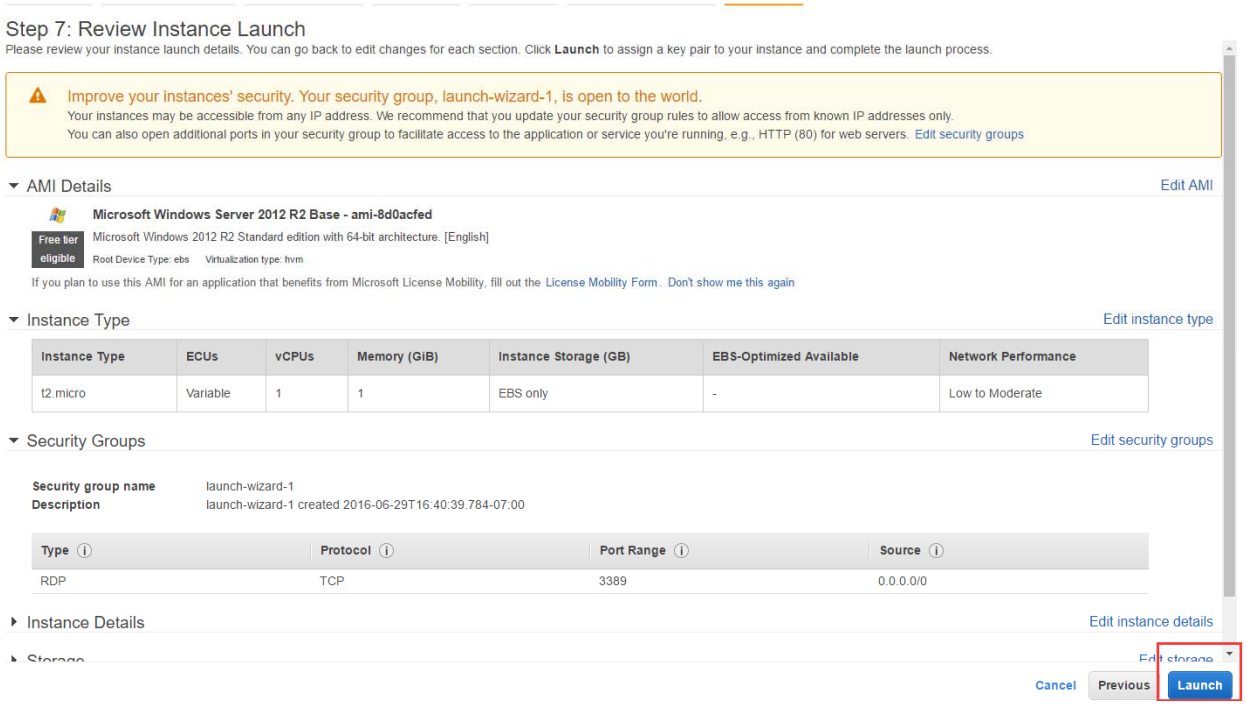
(14) Click "Next: Configure Security Group".



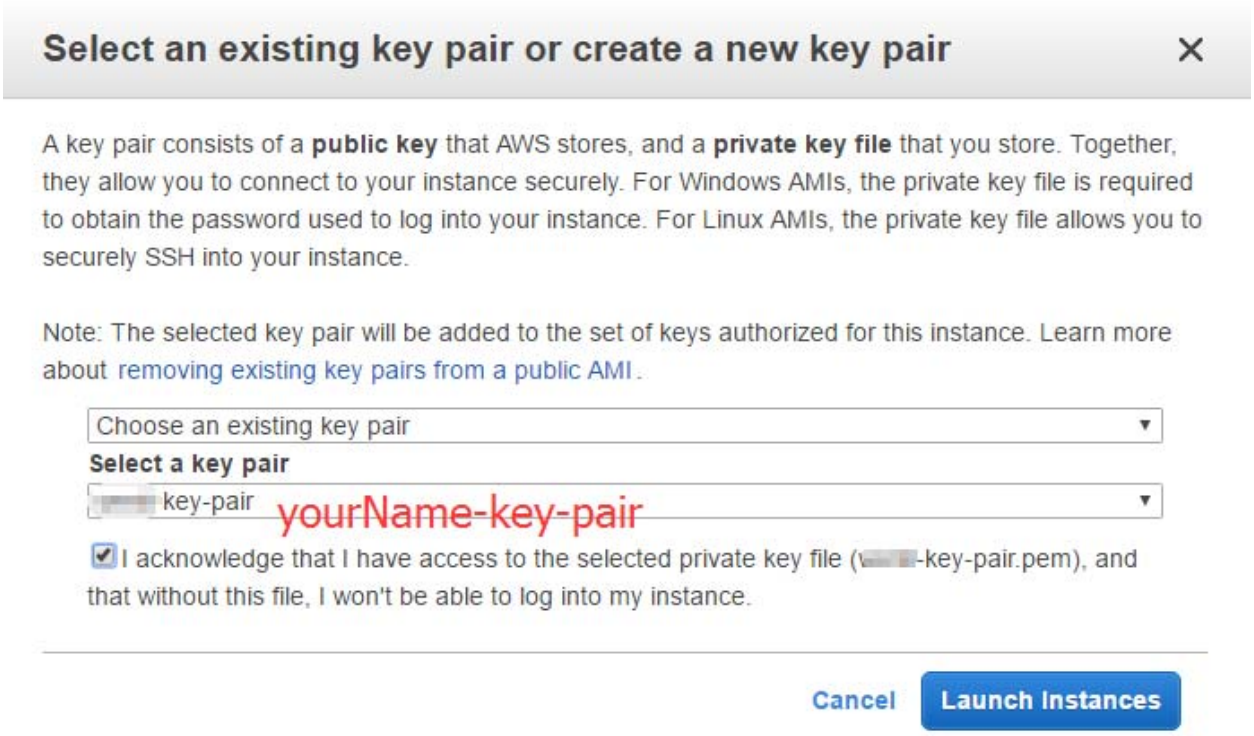
(15) Click "Review and launch".



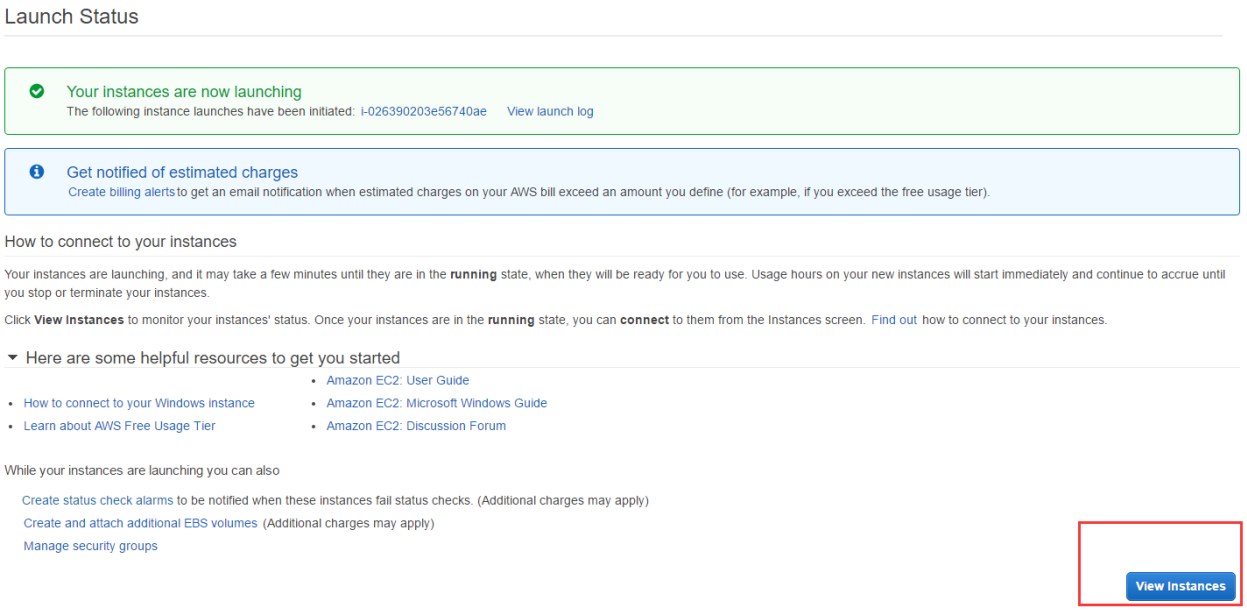
(16) Click “Launch”.



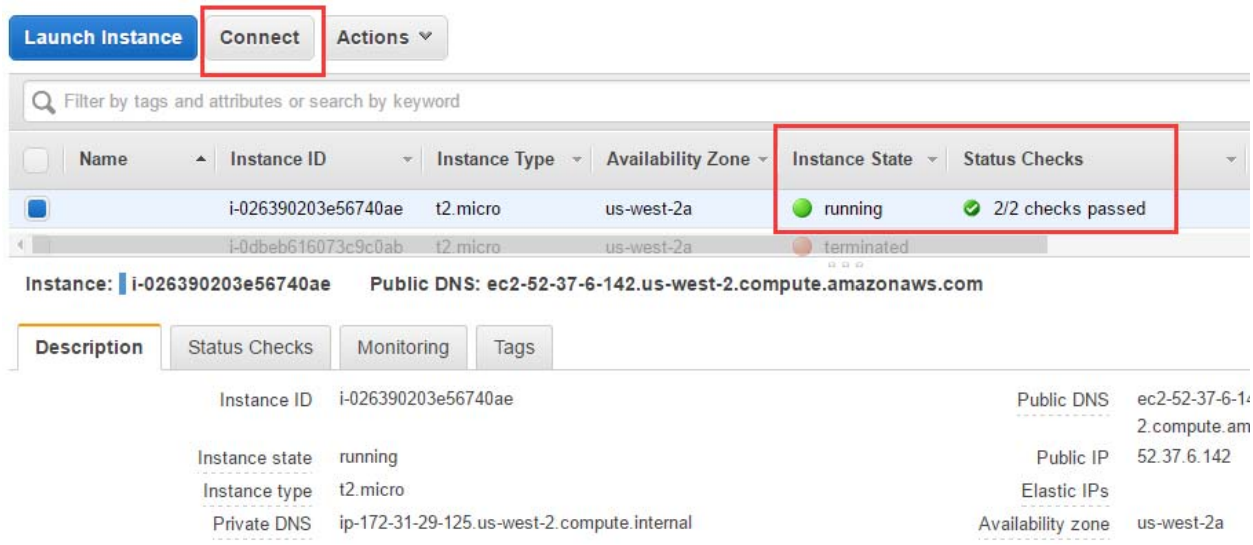
(17) Select the key pair you just created. Click “Launch Instances”.



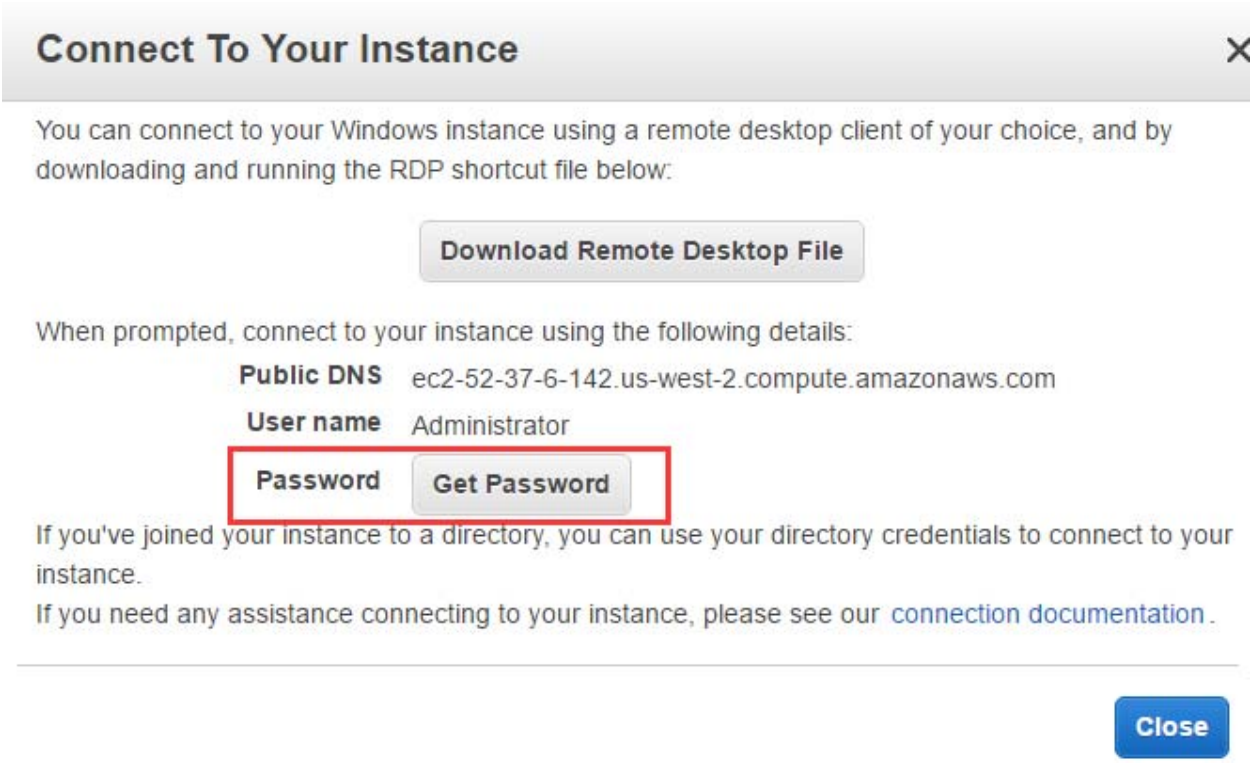
(18) Click "View Instances".



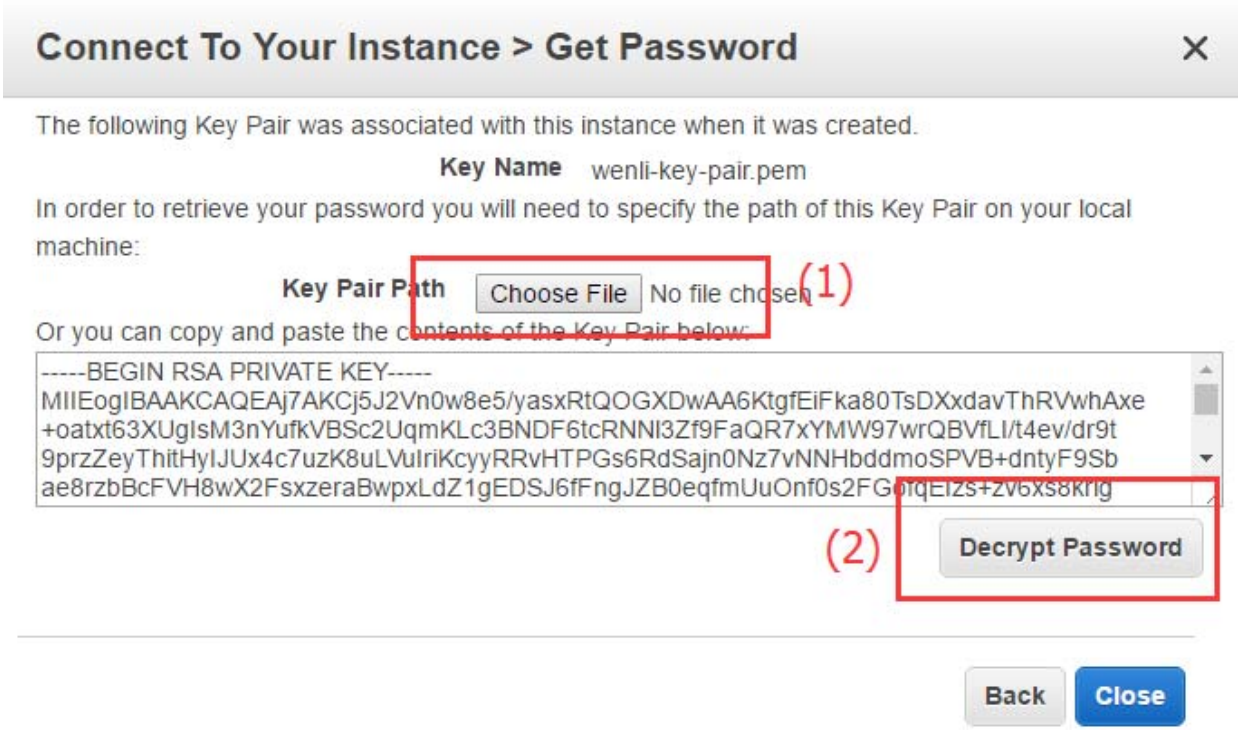
(19) Wait about 3-5 minutes until "Instance State" is "running" and "Status Checks" is "2/2 checks passed". Then click "Connect".



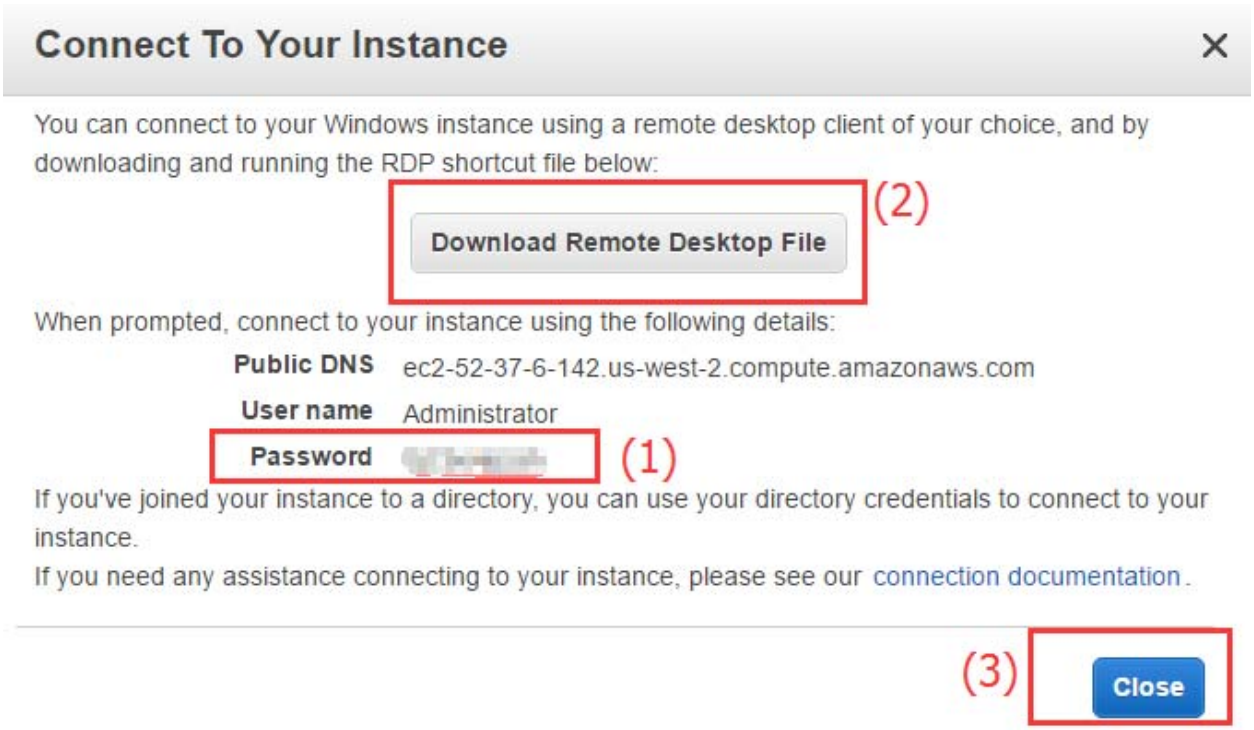
(20) Click "Get Password".



(21) Click "Choose File". Choose *yourName-key-pair.pem* you just created. Then click "Decrypt Password".

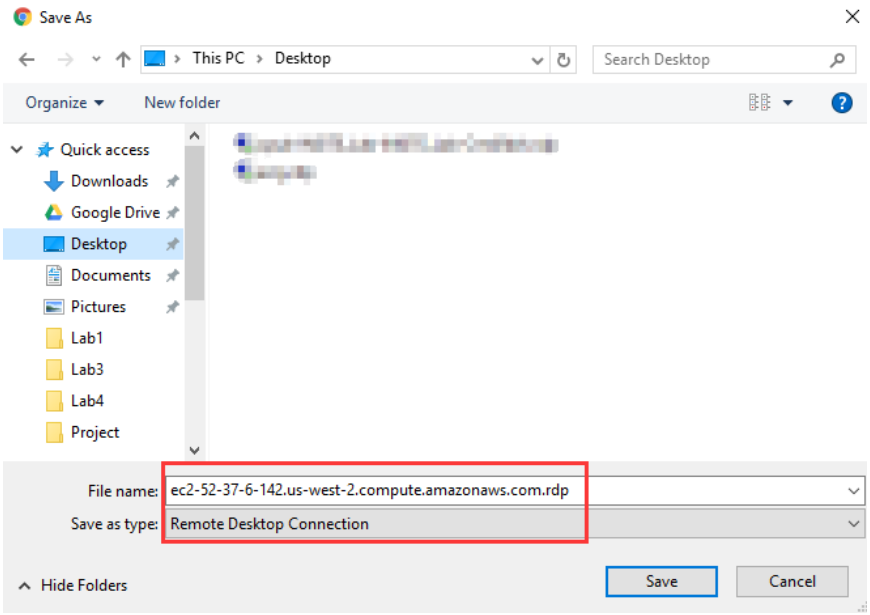


Copy your password for later use. Then click “Download Remote Desktop File”.

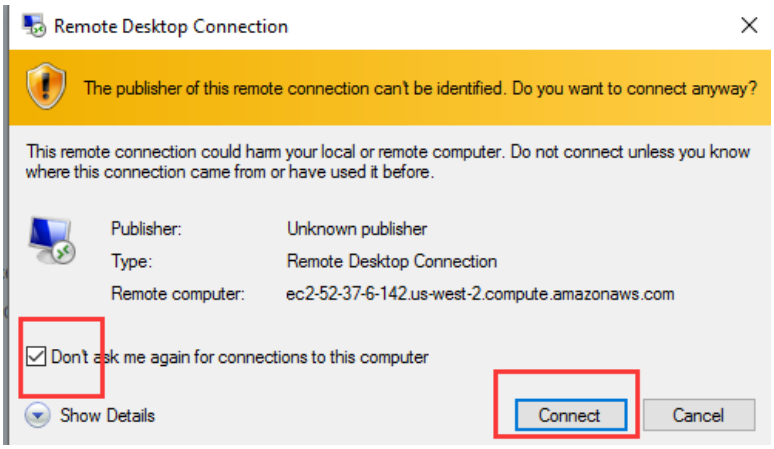


(22) Save your rdp file on your desktop.

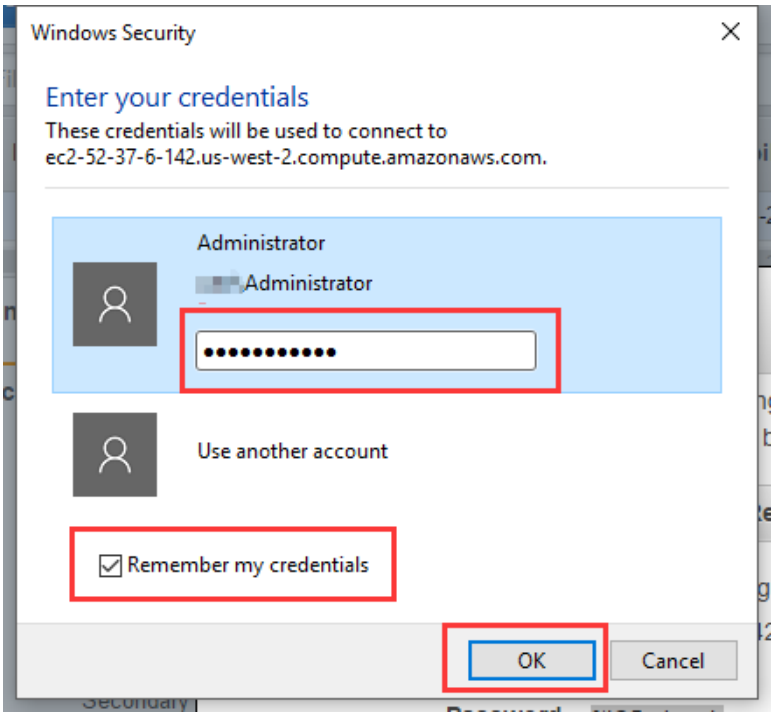
What are rdp files? Read: https://en.wikipedia.org/wiki/Remote_Desktop_Protocol

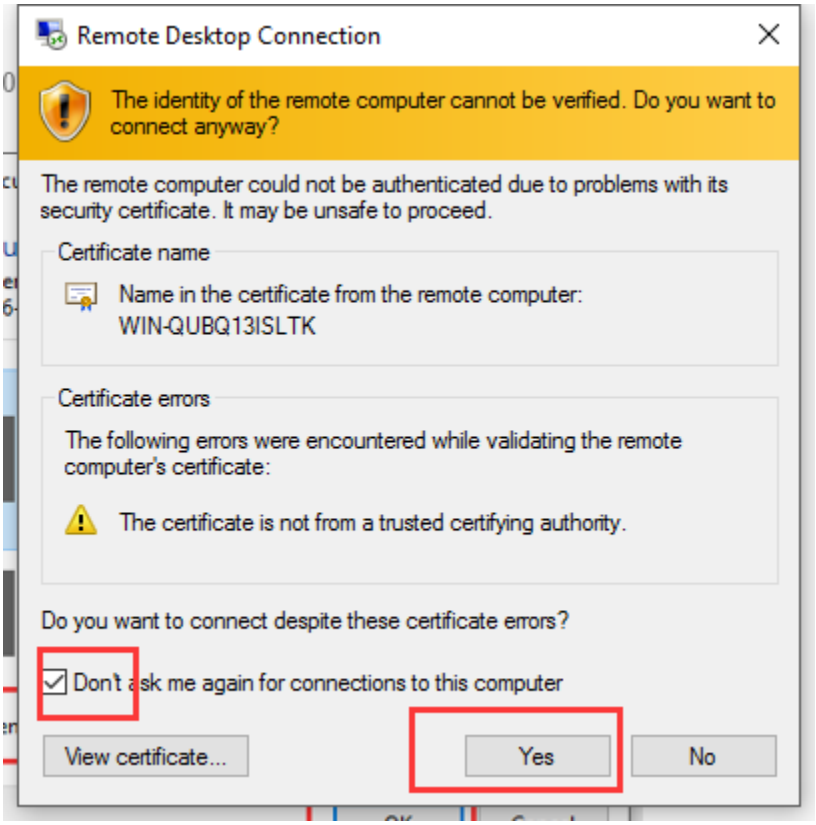


(23) Double click the rdp file. Then click “Connect”.

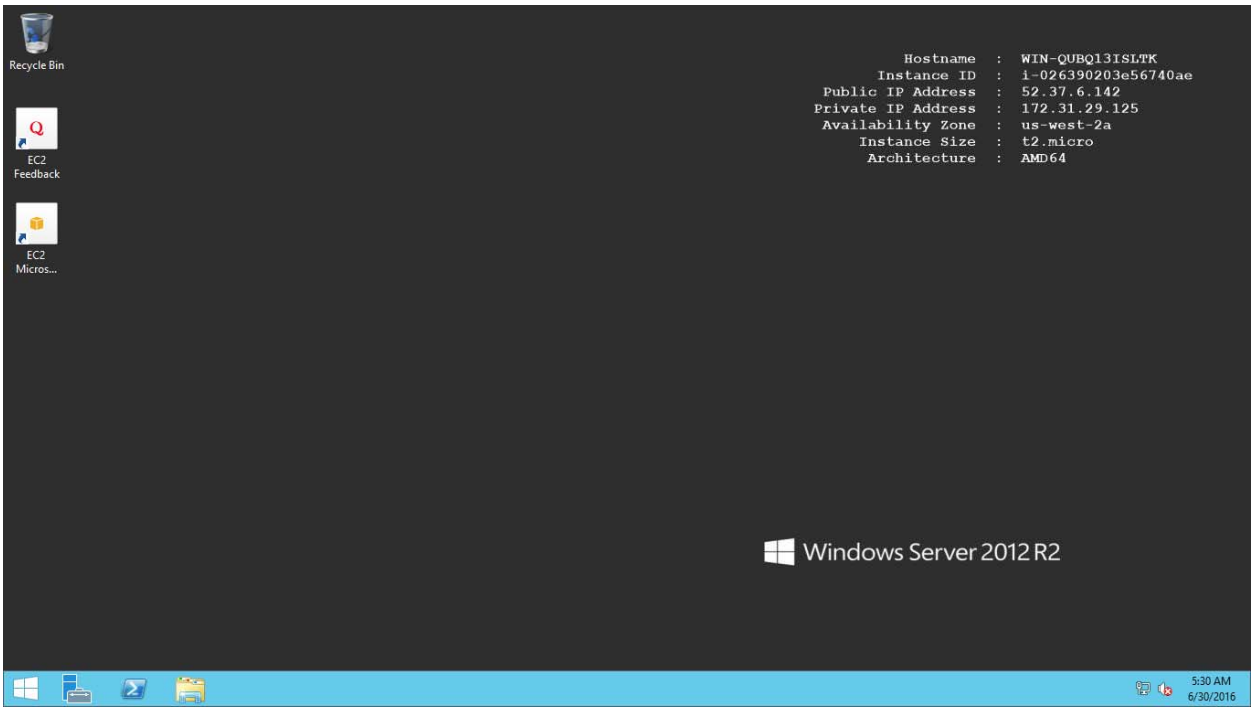


(24) Paste your password. Click “OK”. Then Click “Yes”.





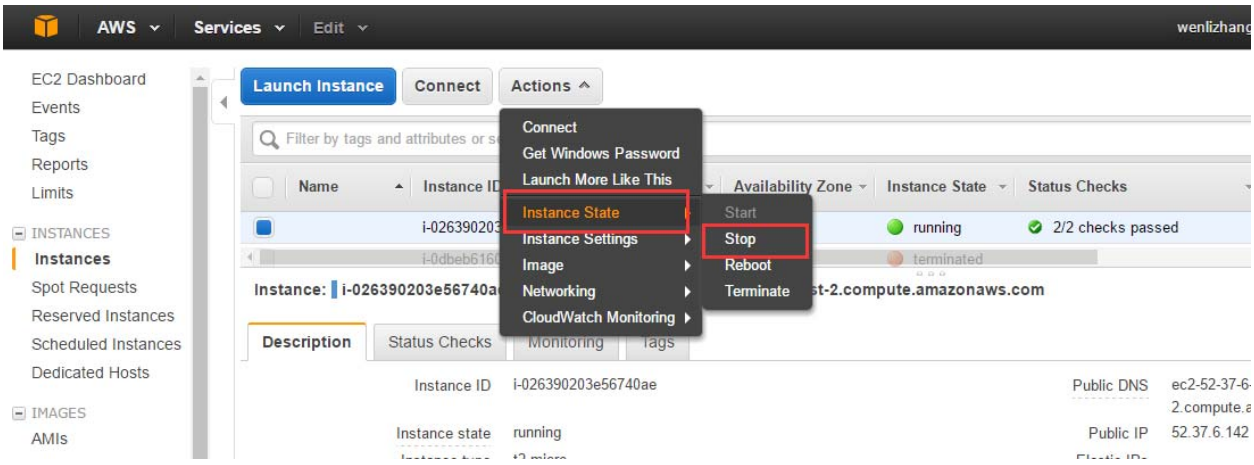
(25) You have your own cloud computing server now. What is the public IP Address of your server?



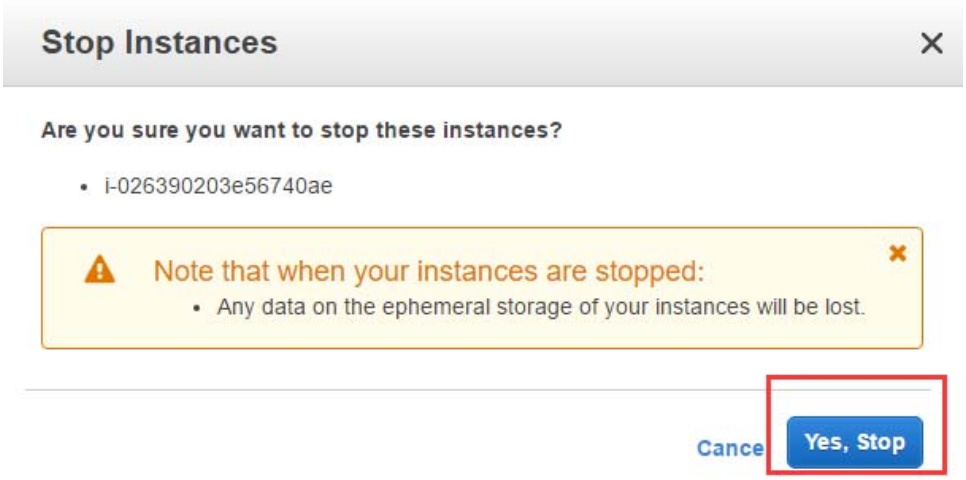
Deliverables

Take a screen shot of your AWS sever desktop and paste it on a word file **yourNetID_L3.docx**, submit in TurnItIn.

(26) **Important**: You can close your sever now (You can reconnect to your sever later by using your rdp file again). Go back to your AWS EC2 Dashboard. Click "Actions"→ "Instance State" → "Stop".



(27) Click "Yes, Stop". Note that when your instances are stopped: Any data on the ephemeral storage of your instances will be lost.



(28) If you want to use your cloud service next time. Do not forget to "Start" your server first.