# Create and set up an AWS account and a Virtual Machine

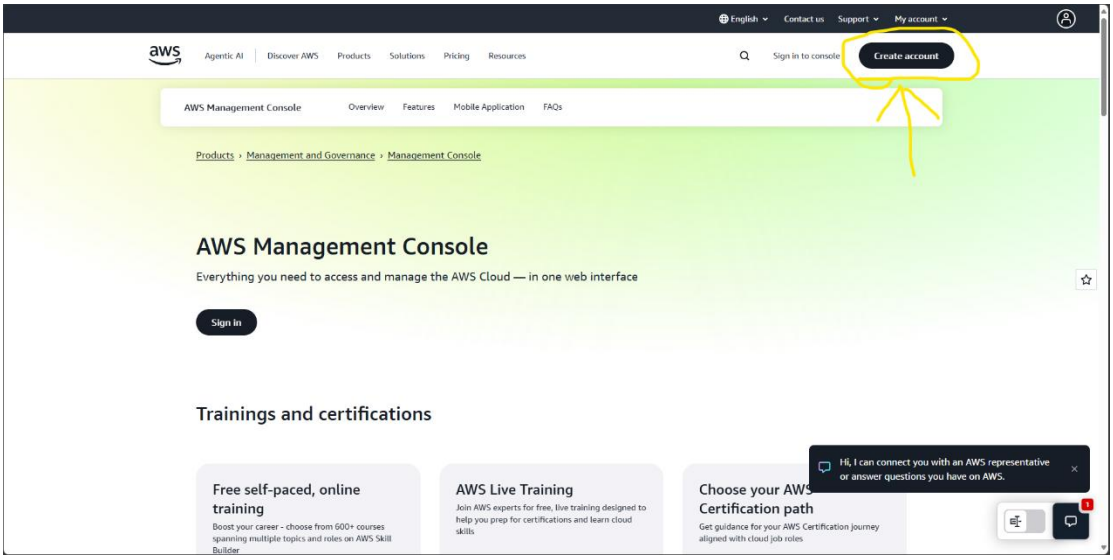
This tutorial will help you set up your AWS account and create a lightweight virtual machine. You will not need anything extra to set this up.

**NOTE:** *As of July 2025, AWS changed its 12-month free tier to 6 months with up to $200 in credits. The account will auto-close in 6 months or when all credits are used up. You can change to a paid plan anytime.*

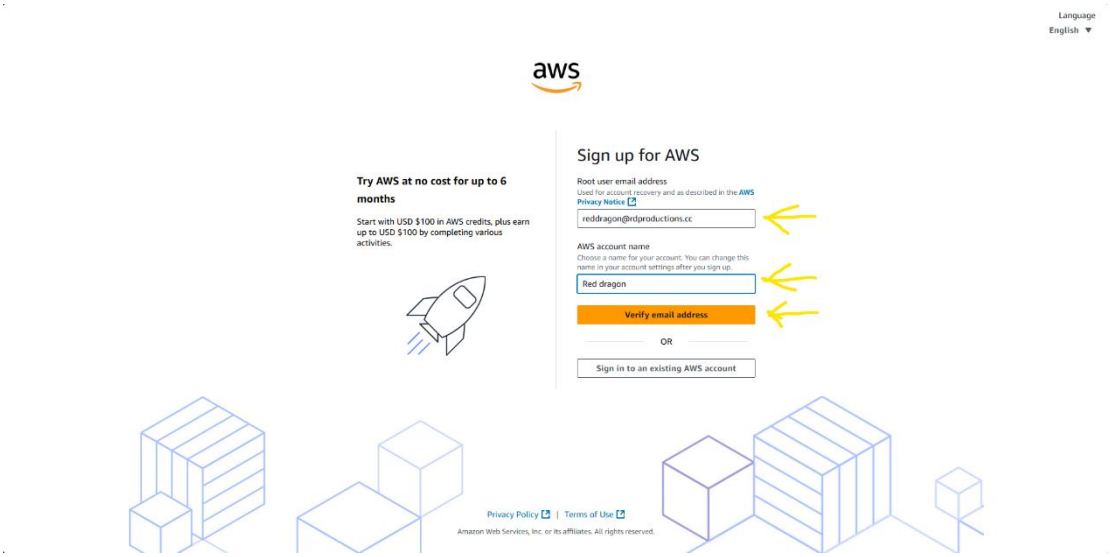
All you will need is:

1. An email address to create an AWS account.
2. A debit or credit card to put on file (**NOTE:** *They will not charge you if you do not exceed any limits of free services or create something that is out of the scope of the free tier.*)

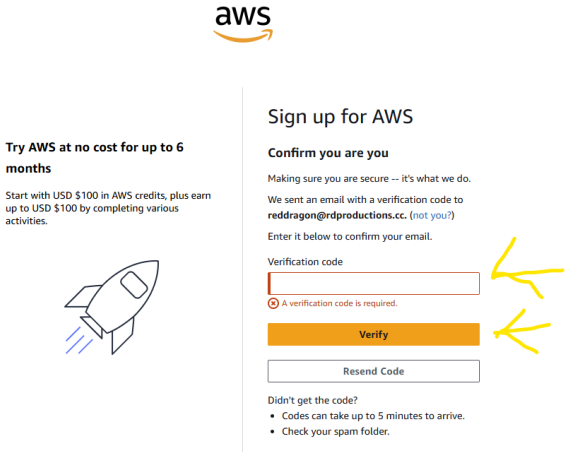
1. Go to AWS Management Console (https://aws.amazon.com/console/) and click on Create account.



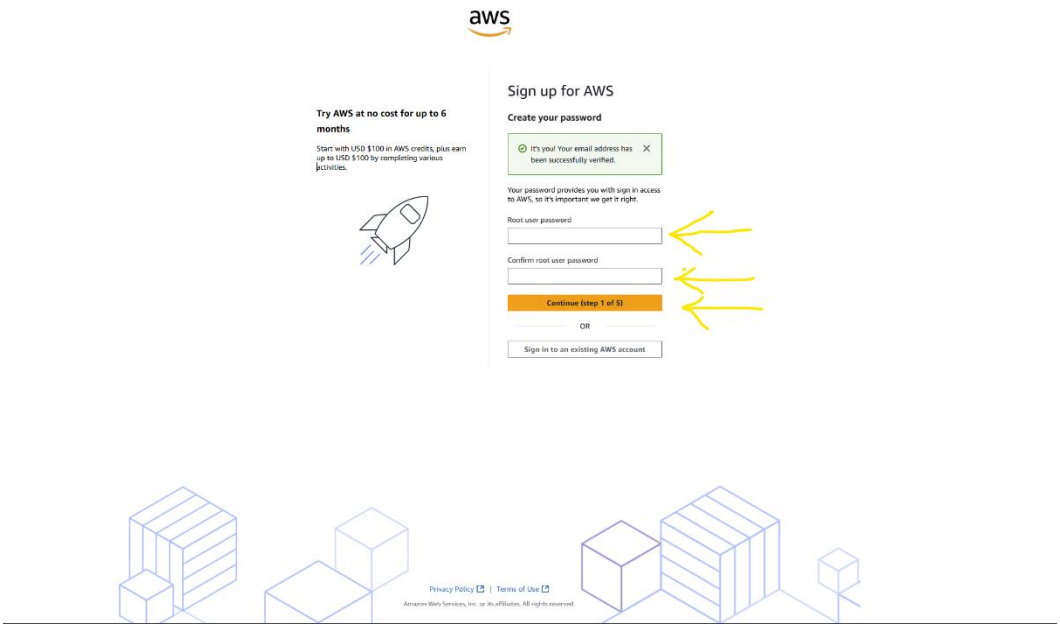
2. Enter the email you want to use for the account, as well as an AWS account name. You can put whatever you want for the name. Click Verify email address.



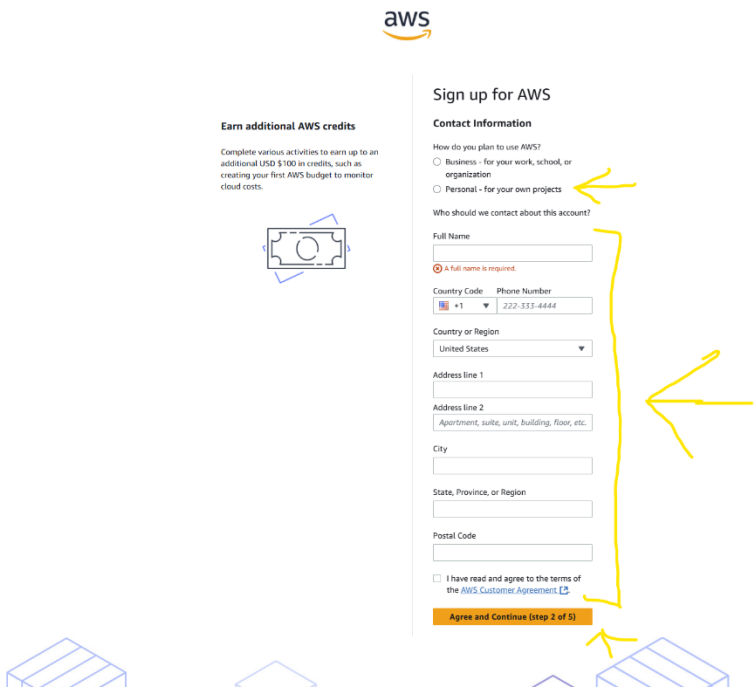

3. They will send a confirmation email to the email you registered back in step 2. Check your email for a verification code and enter it here.



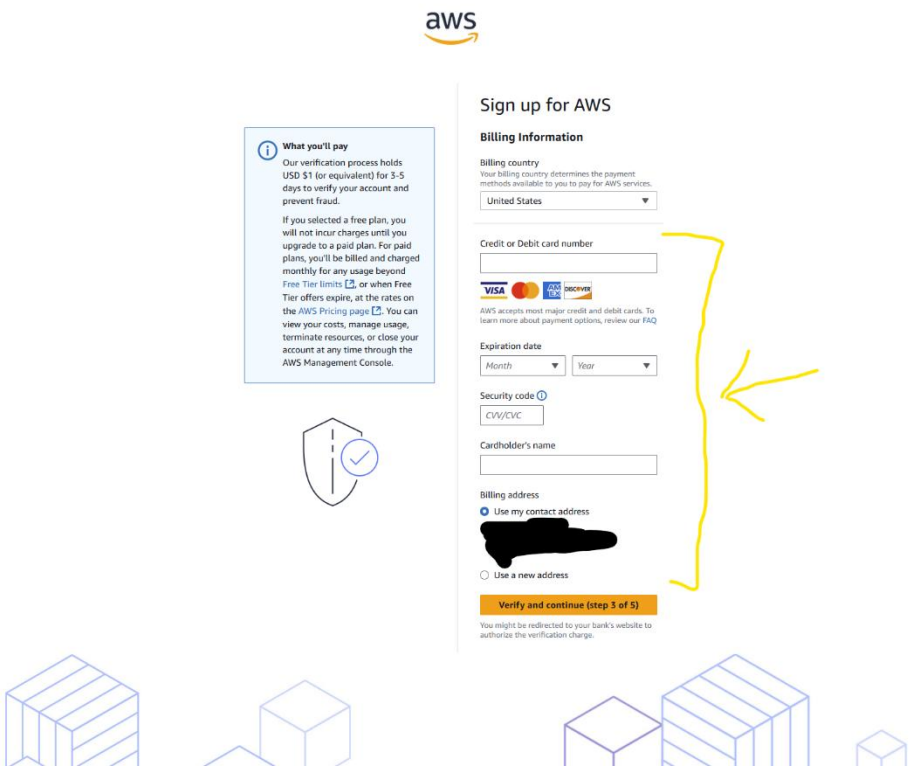
4. Once verification has been accepted, you will be prompted to create a password. Once you have made a password, click continue.



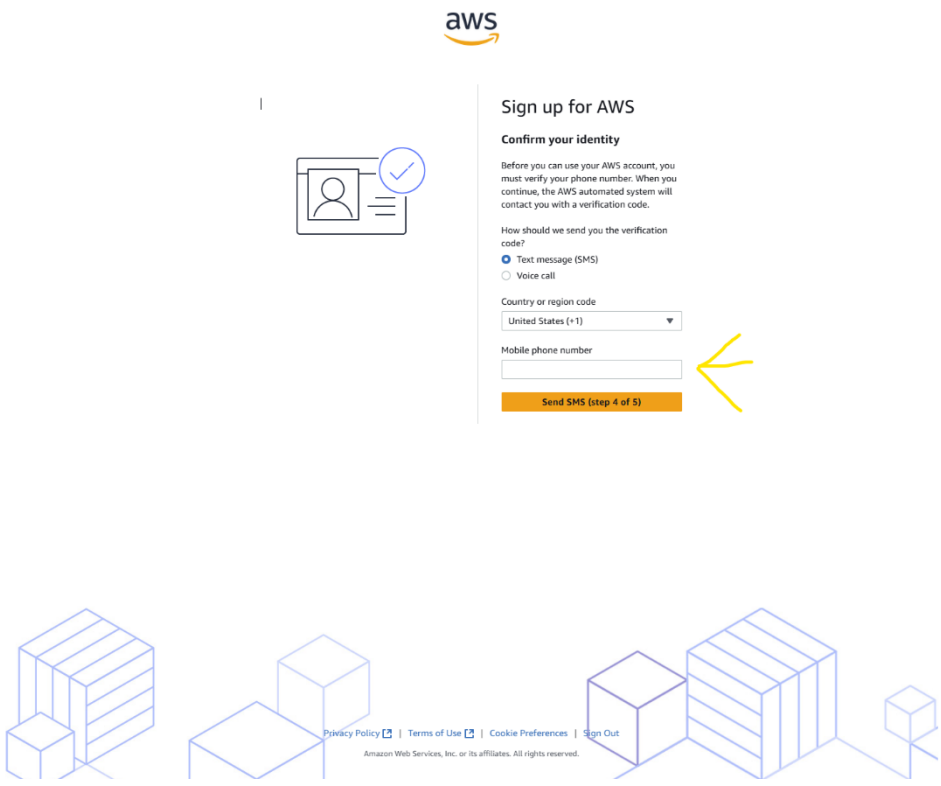

5. AWS will ask you to choose between the free plan and the paid plan. For now, select the free option and continue.
6. Choose the personal option and fill out the info below. Check the box that says you agree to the terms and click continue.



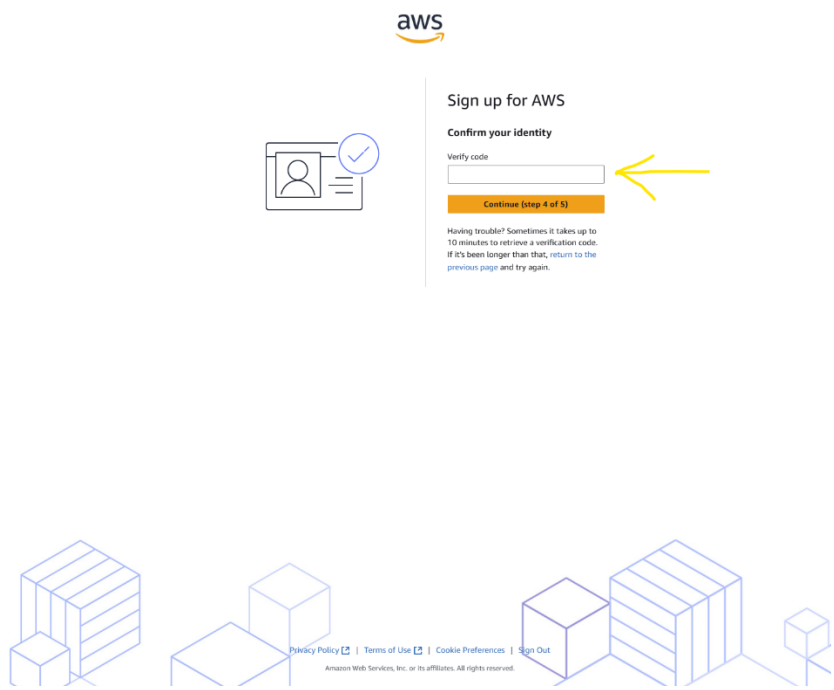
7. This is the part where they will ask you for your card information. If you selected the free tier option, they will not charge your card. Fill out the info and click verify and continue.




8. Enter your mobile phone number and click on send SMS.

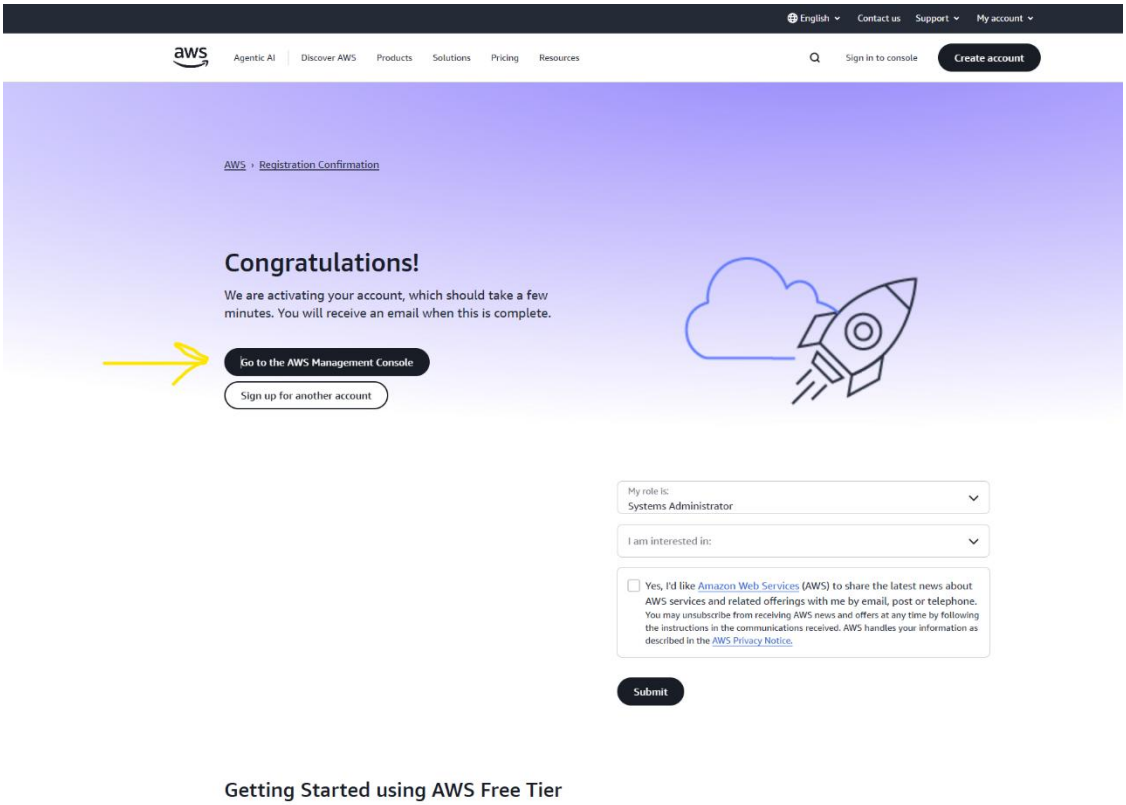


9. Enter the code you received in SMS here.




10. In this step, they may ask you to select a support plan. Choose the basic support plan and click complete sign up.

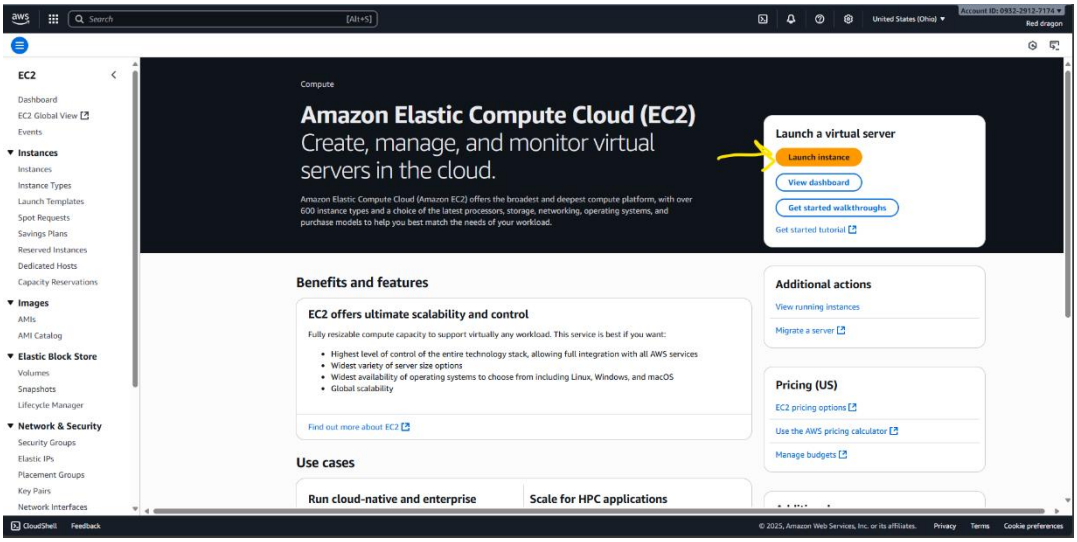
11. You should arrive on a page that says Congratulations. Underneath that, you should see a button that says, “Go to the AWS Management Console”. Click on that button.



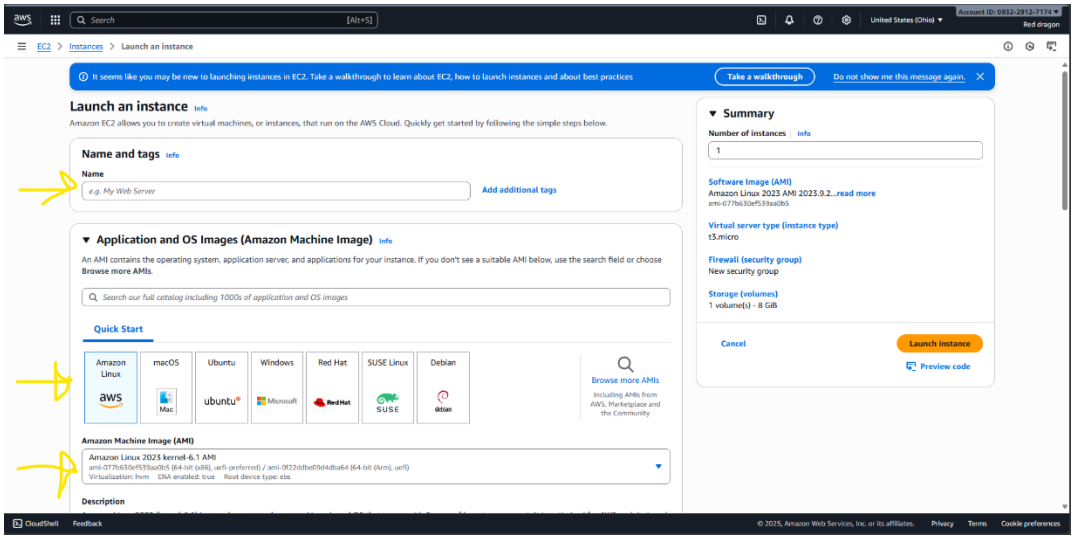

**At this point, your AWS account has been created, and it is ready to go. Things may look a little different going forward between my pictures and your screen going forward. Let's dive into making our virtual machine.**

1. On the AWS dashboard, you should see services on the left side in a widget. Click on EC2.

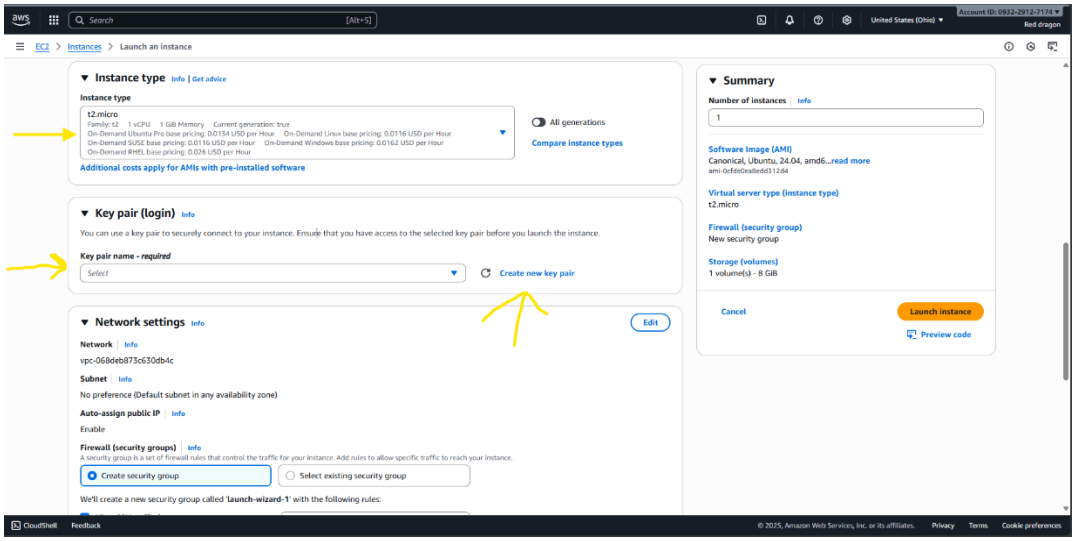
2. When the EC2 dashboard loads, you should see a yellow button called launch instance. Click on that.




3. Give your Virtual Machine a name, select your OS of choice, and pick your Amazon Machine Image of choice as well. I'm using Ubuntu and selecting Ubuntu Server 24.04 LTS.

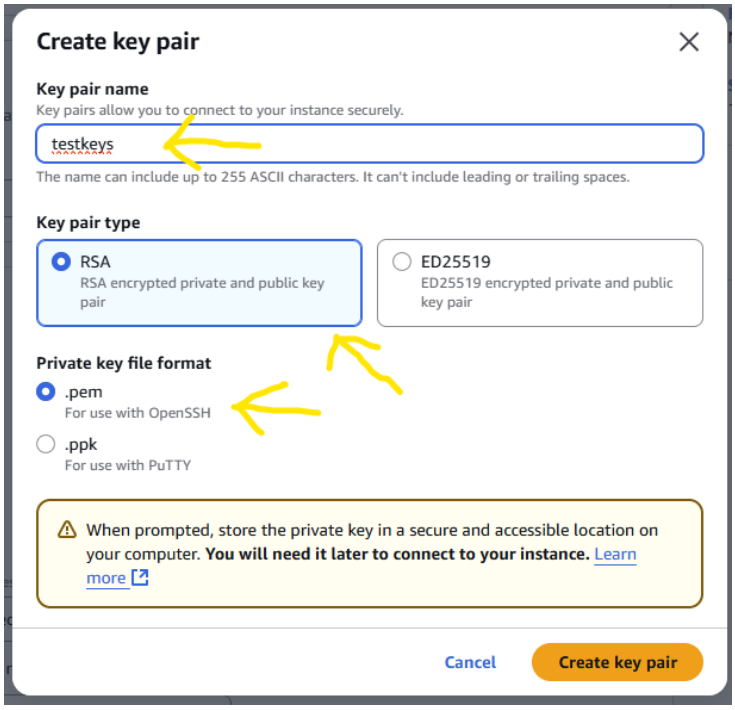


4. Scroll down a little bit and you'll see the options below. Select your Instance Type and click on the button that says Create new key pair.




**NOTE:** *Depending on the instance type you select. You can potentially burn through all your credits in a very short amount of time. My suggestion is that if you're running a Linux VM, keep the instance as small as possible for whatever you plan on running. It'll keep costs low, and your trial should last the entire 6 months. Select with caution.*

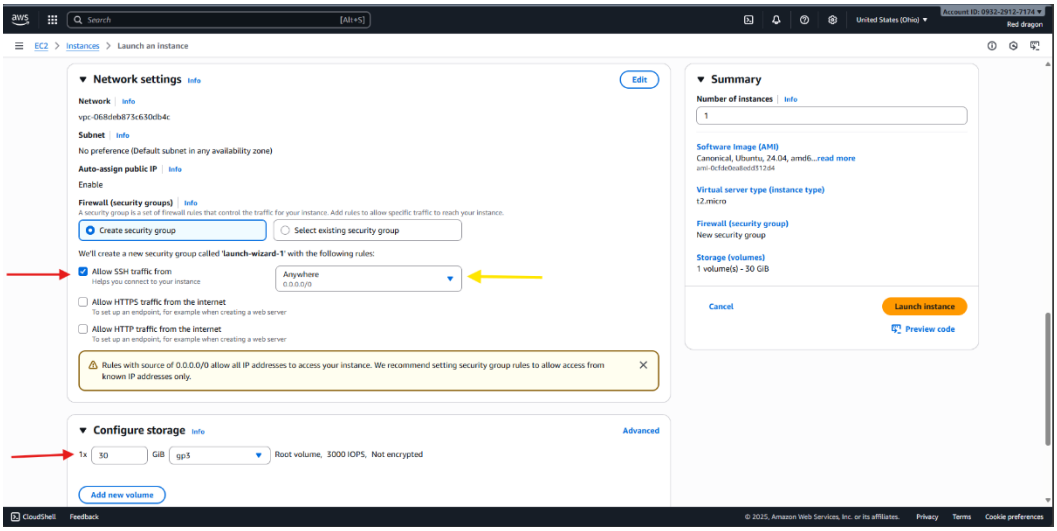
5. Give your key pair a name, select your key pair type, and private key file format. Then click create key pair when finished.



**NOTE:** *When it comes to Key pair type, both will do the job in this case. RSA is more widely accepted, but ED25519 is more secure. For the sake of this tutorial, I'm using RSA because this VM will not be active for super long. When it comes to the private key file format, this comes down to how you will remote into the machine. I'm using the .pem format because I use terminal and SSH. The .ppk file is if you're going to use PuTTY to access it.*

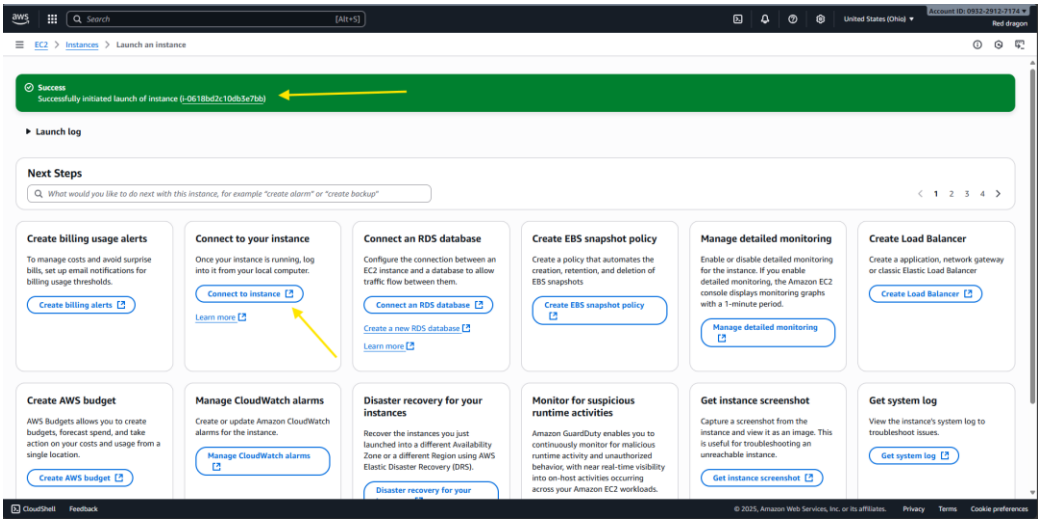
6. The file will be downloaded to your computer. Make note of where it downloaded to on your computer. You'll need this later.

7. On network settings, you will leave most of the options default except for the allow SSH traffic. Make sure you check the box to allow SSH traffic. On storage, set how much storage you want your virtual machine to have. After this, click launch instance, and it will spin up your VM.



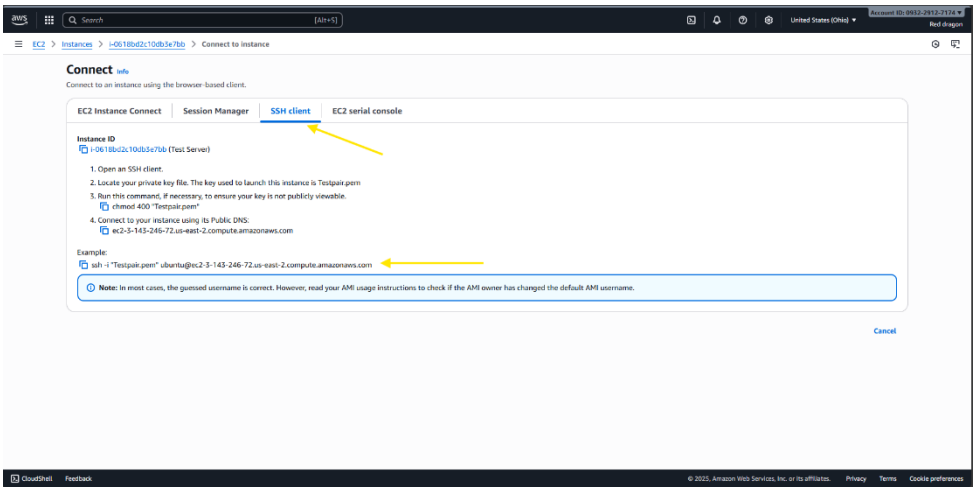

**NOTE:** *When it comes to SSH allow options, there are three options. Anywhere, My IP, and Custom. I do not allow SSH from anywhere. I changed it to only allow from my public IP. Leaving SSH wide open is asking for trouble. As for the storage option, most Linux setups can get away with very little storage. If you're using Windows or Mac as a VM, I'd suggest allocating more storage.*

8. If done correctly, you should see a page like below. You can click on either the name of your instance, and it'll take you to the dashboard where you can retrieve other important information, or you can click on Connect to instance, and it'll



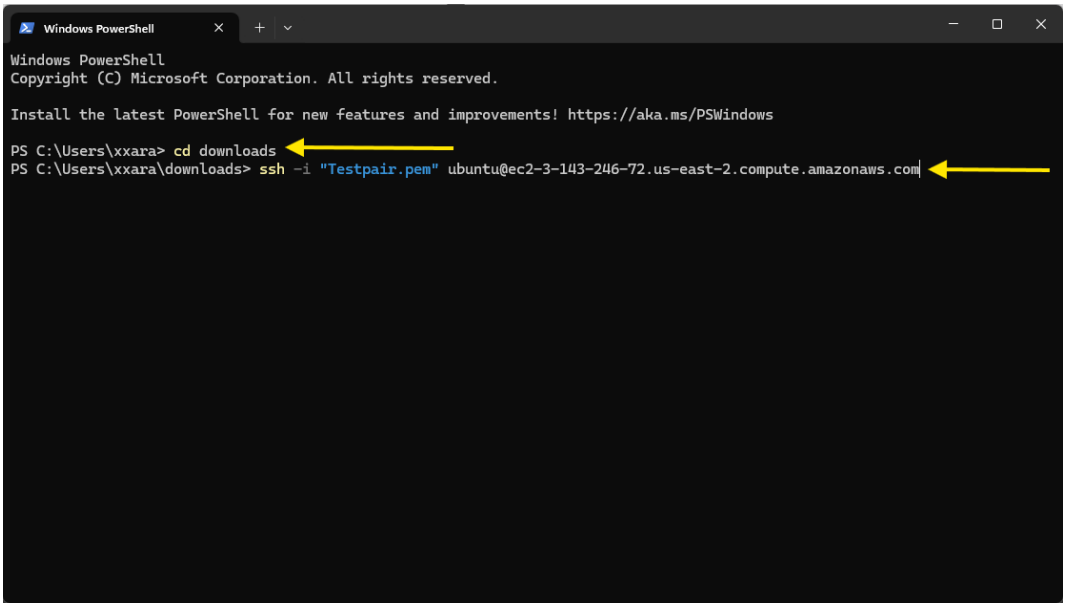

9. Click on your instance name, and it'll show you the dashboard. Most of the stuff here is informational. The biggest thing I use on the dashboard is the security tab. This is where you'll configure port rules for both inbound and outbound connections. You'll also see connect to instance as well. Click on that.

10. On this page, click SSH and make note of the example they give to connect. Copy that and open a terminal on the pc where you downloaded the SSH keys.




**NOTE:** *If you set up a Windows VM, the instructions may show RDP instead of SSH, and the page may be a little different. The concept is the same.*

11. Open a terminal and go to the directory where your SSH keys have been downloaded. From there, enter the example command from the Connect to instance instructions and hit enter. It will ask you if you want to continue connecting. Type yes and hit enter. It should connect to your VM.




**NOTE:** *This instruction is only if you're using SSH to connect to the terminal. If you're using Putty, the instructions will vary a little bit. If you set up a Windows VM, use the RDP instructions on the connect to instance page.*

**At this point, you are ready to go. There are a few notes I want to mention:**

1. Shutdown your instance whenever you're not using it. It'll keep you from incurring unnecessary costs and burning credits.
2. If you set up a Linux VM and need to open a port to access a service that you installed. On the left side of the page, under network and security, click on security groups. Click on one of the security groups and click on inbound rules. Click on edit inbound rules and click on add rule. They do have templates, but you can manually set your own port that you need open. Set the source to "My IP". It'll be a security risk otherwise.
3. Do not lose your key pair file. You will not be able to connect to your instance without it.
4. If you decide to keep AWS long term, make sure you switch from the free tier to the paid tier. Most small Linux VMs usually do not incur high charges.