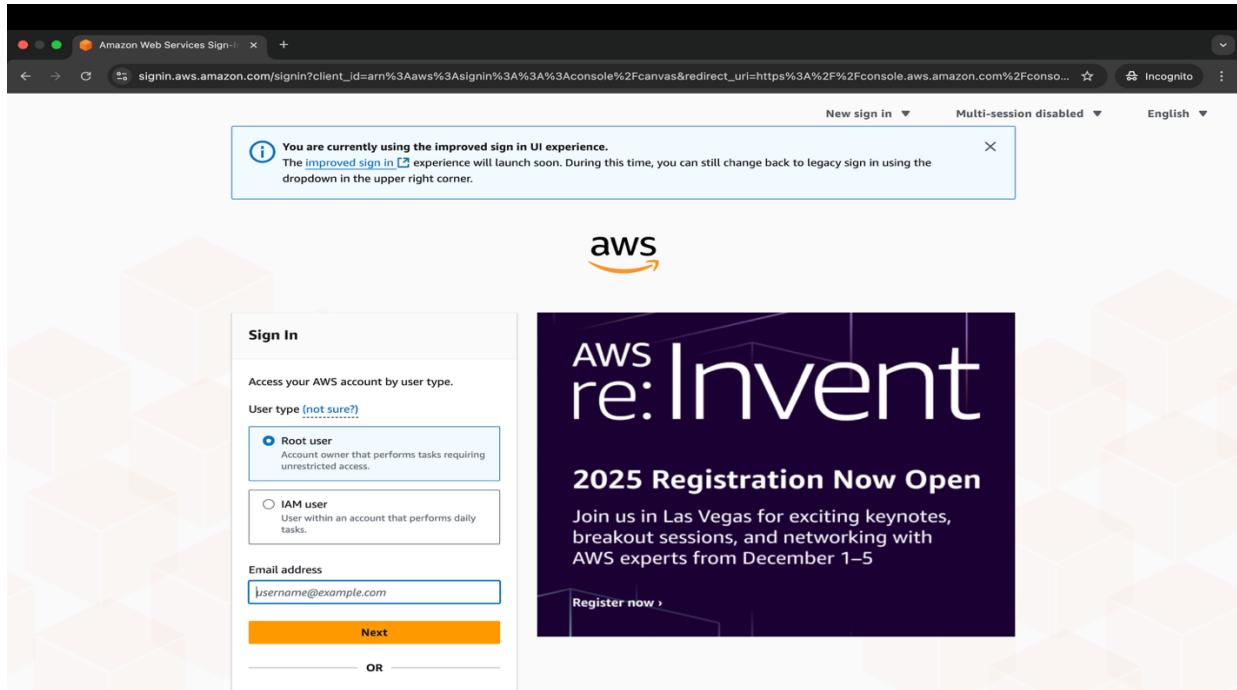


# Lab Activity 2: Creating an Instance

Steps to Create an EC2 Instance in AWS –

Step 1: Sign in to AWS Console

- Go to <https://console.aws.amazon.com/>
- Login with your AWS credentials.



Step 2: Open EC2 Dashboard

- From the AWS Management Console:
- Search for EC2 in the search bar.
- Click on EC2 to open the EC2 Dashboard.

# Lab Activity 2: Creating an Instance

The screenshot shows the EC2 homepage. On the left, a sidebar menu includes 'Instances' (selected), 'Compute', 'Images', 'Elastic Block Store', and 'Network & Security'. The main content area features a large heading 'Amazon Elastic Compute Cloud (EC2)' with the subtext 'Create, manage, and monitor virtual servers in the cloud.' Below this is a brief description of EC2's capabilities and a 'Launch a virtual server' section with 'Launch instance' and 'View dashboard' buttons. To the right, there's a 'Benefits and features' section with a sub-section 'EC2 offers ultimate scalability and control' listing features like highest level of control, widest variety of server size options, and global scalability. Another section 'Get started' provides links to walkthroughs and tutorials.

## Step 3: Launch Instance

- Click “Launch instance” button.
- This will open the “Launch an Instance” wizard.

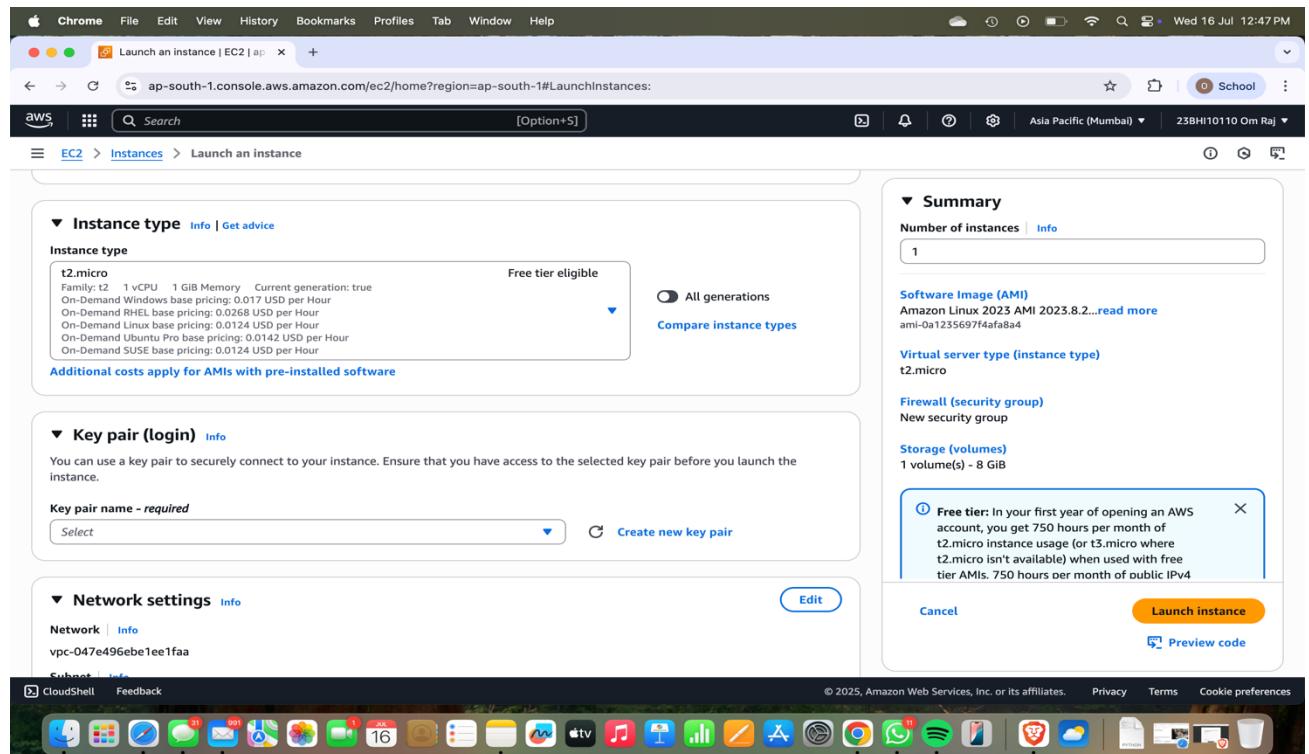
The screenshot shows the 'Launch an instance' wizard. The top navigation bar indicates the user is on the 'Instances' page under the 'EC2' category. The main form has a 'Name and tags' section where 'My web Server' is entered. Below it is an 'Application and OS Images (Amazon Machine Image)' section showing various AMI options like Amazon Linux, macOS, Ubuntu, Windows, Red Hat, SUSE Linux, and Debian. A 'Quick Start' section displays a grid of these AMIs. To the right, a 'Summary' panel shows 'Number of instances' set to 1, and a summary of selected options: 'Software Image (AMI)', 'Virtual server type (instance type)', 'Firewall (security group)', and 'Storage (volumes)'. A note about the 'Free tier' is displayed. At the bottom are 'Cancel', 'Launch instance', and 'Preview code' buttons.

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# Lab Activity 2: Creating an Instance

## Step 4: Name and Tags

- Name your instance, e.g., MyEC2Instance.
- (Optional) Add tags like Environment = Dev.



## Step 5: Choose AMI (Amazon Machine Image)

- Select an OS for your instance (e.g., Amazon Linux 2, Ubuntu, Windows, etc.)
- Free-tier eligible users often choose Amazon Linux 2 AMI.

# Lab Activity 2: Creating an Instance

The screenshot shows the AWS EC2 'Launch an instance' page. At the top, there's a search bar with 'Search [Option+S]' and a summary section showing 1 instance. Below that is a 'Software Image (AMI)' section for Amazon Linux 2023.8.2, with a note about the free tier. The main area has sections for 'Name and tags', 'Application and OS Images (Amazon Machine Image)', and 'Quick Start'. Under 'Quick Start', there are icons for various AMIs: Amazon Linux, macOS, Ubuntu, Windows, Red Hat, SUSE Linux, and Debian. A 'Browse more AMIs' button is also present. At the bottom, there are 'Cancel', 'Launch instance', and 'Preview code' buttons.

## Step 6: Choose Instance Type

- Choose an instance type (e.g., t2.micro for free tier).
- It defines CPU, memory, etc.

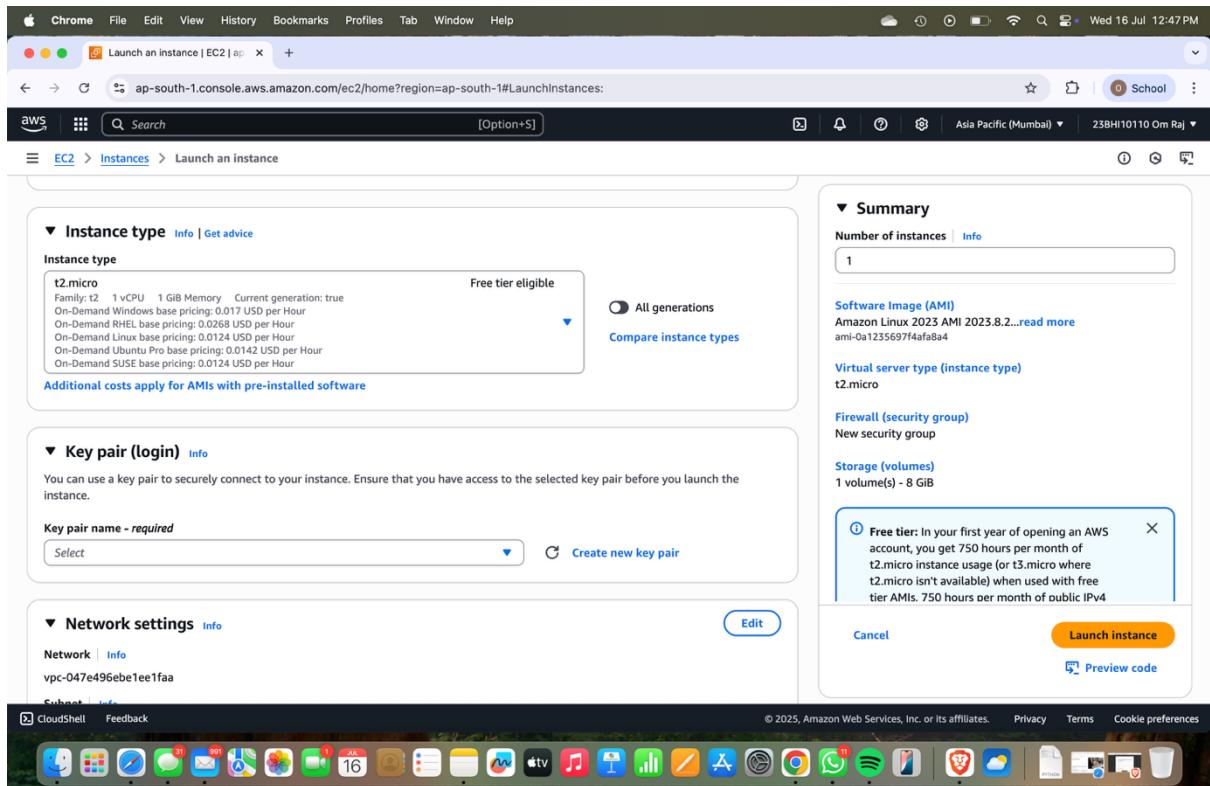
This screenshot shows the 'Instance type' step in the launch wizard. It lists the 't2.micro' instance type, which is marked as 'Free tier eligible'. Other options like 'All generations' and 'Compare instance types' are available. Below this, there are sections for 'Key pair (login)', 'Network settings', and 'Storage (volumes)'. The right side of the screen shows the same summary and configuration options as the previous screenshot, including the 'Launch instance' button.

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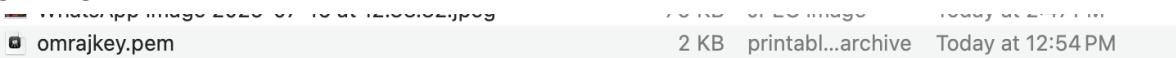
# Lab Activity 2: Creating an Instance

## Step 7: Key Pair (Login)

- Create a new key pair or select an existing one.
- Download and keep your .pem file safely – you'll need it to SSH into your instance.



## DOWNLOAD FILE



## Step 8: Network Settings

- Set up VPC and subnet (leave default if unsure).
- Allow SSH (port 22) for Linux or RDP (port 3389) for Windows.
- Optionally allow HTTP (port 80) if hosting a web server.

## Step 9: Configure Storage

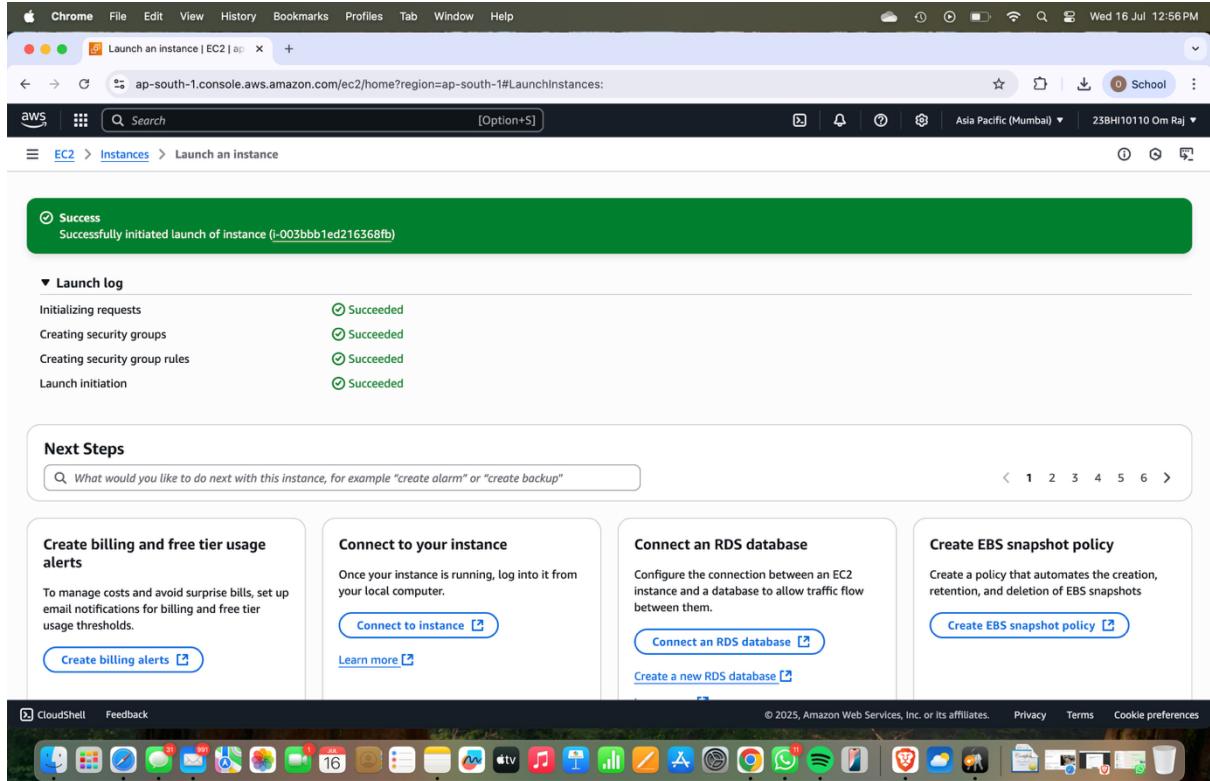
- Set the volume size (default is 8 GiB).
- You can increase this if needed.

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# Lab Activity 2: Creating an Instance

## Step 10: Review and Launch

- Review your configuration.
- Click “Launch Instance”.



## Step 11: View Instance

- Click on “View instances”.
- You’ll be taken to the EC2 Instances dashboard.
- Wait until Instance State shows running.

## Step 12: Connect to Your Instance

- Select your instance → Click “Connect”.
- Choose your method (e.g., SSH for Linux, EC2 Instance Connect, or RDP for Windows).

# Lab Activity 2: Creating an Instance

The screenshot shows the AWS EC2 Instances page. On the left, there's a sidebar with navigation links for EC2 services like Dashboard, Instances, Images, Elastic Block Store, and Network & Security. The main content area displays a table of instances. One instance is listed: "My web Server" (Instance ID: i-003bbb1ed216368fb), which is "Running" and has an "t2.micro" instance type. It is located in the "ap-south-1b" availability zone. Below the table, a detailed view for the instance "i-003bbb1ed216368fb (My web Server)" is shown. The "Details" tab is selected, displaying information such as the Public IPv4 address (35.154.13.72), Private IPv4 address (172.31.10.232), and Public DNS (ec2-35-154-13-72.ap-south-1.compute.amazonaws.com). The status bar at the bottom indicates the browser is running on a Mac OS system.

For SSH: IN terminals ( FOR MACOS)

- chmod 400 my-key.pemssh -i my-key.pem ec2-user@<your-public-ip>

To stop click on

1. Go to EC2
2. Resources
3. Status
4. STOP / TERMINATE

# Lab Activity 2: Creating an Instance

The screenshot shows the AWS EC2 Instances page. On the left, a sidebar menu is open under the 'EC2' heading, showing options like Dashboard, EC2 Global View, Events, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Capacity Reservations, Images, AMIs, AMI Catalog, Elastic Block Store, Volumes, Snapshots, Lifecycle Manager, and Network & Security. The main content area displays a table titled 'Instances (1) Info'. The table has one row for an instance named 'My web Server' with the ID 'i-003bbb1ed216368fb'. The instance is listed as 'Stopped'. The table includes columns for Name, Instance ID, Instance state, Instance type, Status check, Alarm status, Availability Zone, and Public IP. A search bar at the top of the table allows filtering by attribute or tag. Buttons for 'Connect', 'Instance state', 'Actions', and 'Launch instances' are available at the top right of the table. Below the table, a section titled 'Select an instance' is visible. The browser's address bar shows 'ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#instances:' and the title bar says 'Instances | EC2 | ap-south-1'. The status bar at the bottom indicates 'Wed 16 Jul 12:58 PM'.

This screenshot is identical to the one above, but the 'Name' field in the search bar is now checked. The table shows the same instance details: 'My web Server' (i-003bbb1ed216368fb) is still stopped. The rest of the interface, including the sidebar, table headers, and footer, remains the same.

STOP !!!

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