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Task 1:

Explanation: Task 1 is effortless and straightforward, I need to launch an Amazon EC2 instance with termination protection and stop protection. Termination protection prevents users from accidentally terminating the EC2 instance and stop protection prevents them from accidentally stopping the EC2 instance. Also, in Task 1 I need to deploy a simple website.

The screenshot shows the AWS Management Console 'Launch an instance' page. The 'Name and tags' section has 'Web Server' entered. The 'Application and OS Images' section shows 'Amazon Linux 2023 AMI' selected. The 'Instance type' section shows 't2.micro' selected. The 'Summary' section on the right shows 'Number of instances: 1', 'Software Image (AMI): Amazon Linux 2023 AMI 2023.6.2...', 'Virtual server type (instance type): t2.micro', 'Firewall (security group): New security group', and 'Storage (volumes): 1 volume(s) - 8 GiB'. The 'Launch instance' button is visible.

Step 1-3.

The screenshot shows the AWS Management Console 'Launch an instance' page, showing the 'Key pair (login)' and 'Network settings' sections. The 'Key pair (login)' section has 'vockey' selected. The 'Network settings' section shows 'VPC - required' with 'vpc-0135ed704fcd3c23 (Lab VPC)' selected, 'Subnet' with 'subnet-0b08890774581f51' selected, and 'Auto-assign public IP' set to 'Enable'. The 'Firewall (security groups)' section shows 'Create security group' selected, with 'Web Server security group' entered. The 'Summary' section on the right is the same as the previous screenshot.

Step 4-5.

Launch an instance

Use default CPU options
Specify CPU options
The t2.micro instance type does not support configuring CPUs. To view instance types that support CPU options, see [Supported CPU options](#) in the EC2 User Guide.

Default active vCPUs: 1 Total vCPUs: 1

Metadata accessible: Enabled

Metadata IP6 endpoint: Select

Metadata version: V2 only (token required)

For V2 requests, you must include a session token in all instance metadata requests. Applications or agents that use V1 for instance metadata access will break.

Metadata response hop limit: 2

Allow tags in metadata: Select

User data - optional
Upload a file with your user data or enter it in the field.
[Choose file](#)

```
#!/bin/bash
dnf install -y httpd
systemctl enable httpd
systemctl start httpd
echo <html><h1>Hello from Your Web Servers</h1></html> > /var/www/html/index.html
```

Summary

Number of instances: 1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.6.2...[read more](#)
ami-0805c3a93e0654619

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

[Cancel](#) [Launch instance](#) [Preview code](#)

Step 7.

Instances (1/2)

Find Instance by attribute or tag (case-sensitive) All states

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4	Elastic IP	IPv6 IPs
Bastion Host	i-0dc90cb0dc2195c78	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1a	ec2-54-158-94-55.com...	54.158.94.55	-	-
Web Server	i-00730f23e4a46760d	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1a	ec2-54-210-158-7.com...	54.210.158.7	-	-

i-00730f23e4a46760d (Web Server)

Details Status and alarms Monitoring Security Networking Storage Tags

Instance summary

Instance ID: i-00730f23e4a46760d

IP v6 address: -

Hostname type: IP name: ip-10-0-1-10.ec2.internal

Answer private resource DNS name: -

Auto-assigned IP address: 54.210.158.7 [Public IP]

Public IPv4 address: 54.210.158.7 | [open address](#)

Instance state: Running

Private IP DNS name (IPv4 only): ip-10-0-1-10.ec2.internal

Instance type: t2.micro

VPC ID: vpc-0135ed704fcfd3c23 (Lab VPC)

Private IPv4 addresses: 10.0.1.10

Public IPv4 DNS: ec2-54-210-158-7.compute-1.amazonaws.com | [open address](#)

Elastic IP addresses: -

AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. [Learn more](#)

Step 8.

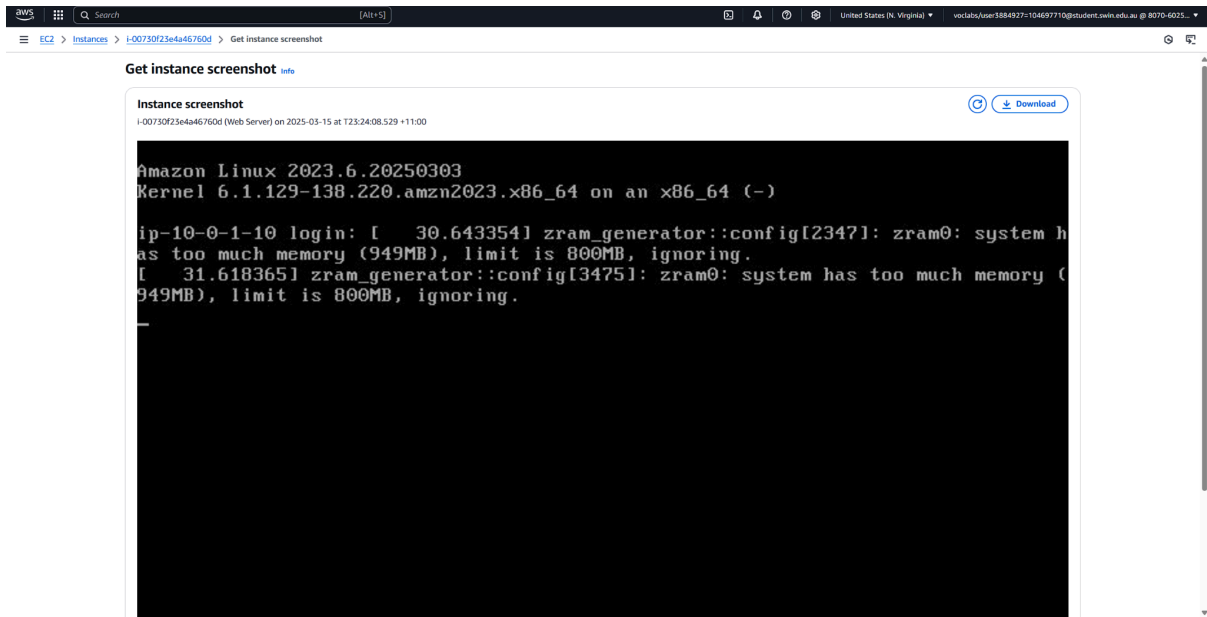
Task 2:

Explanation: Task 2 is where I will learn about monitoring my instance, it is an essential part of maintaining the reliability, availability, and performance of my Amazon EC2 instances and my AWS solutions.

The screenshot displays the AWS Management Console interface for the EC2 service. On the left, a navigation pane lists various AWS services, with 'EC2' selected. The main content area shows the 'Instances (1/2)' page. A table lists two instances: 'Bastion Host' and 'Web Server'. The 'Web Server' instance is highlighted, and its details are shown below. The 'Status and alarms' tab is active, displaying the instance's status as 'Running'. The 'Status checks' section indicates that both 'System status checks' and 'Instance status checks' have passed. The 'Alarms' section shows a message: 'Recently launched instances can take up to 5 minutes to display associated alarms.'

The screenshot displays the 'Get system log' page in the AWS Management Console. The page shows the system log output for the selected EC2 instance. The log output is displayed in a dark-themed terminal window. The log output includes information about the instance's boot process, including the kernel version (3.10.0-1160.el7.x86_64), the operating system (CentOS Linux 7), and the user (root). The log output is displayed in a dark-themed terminal window.

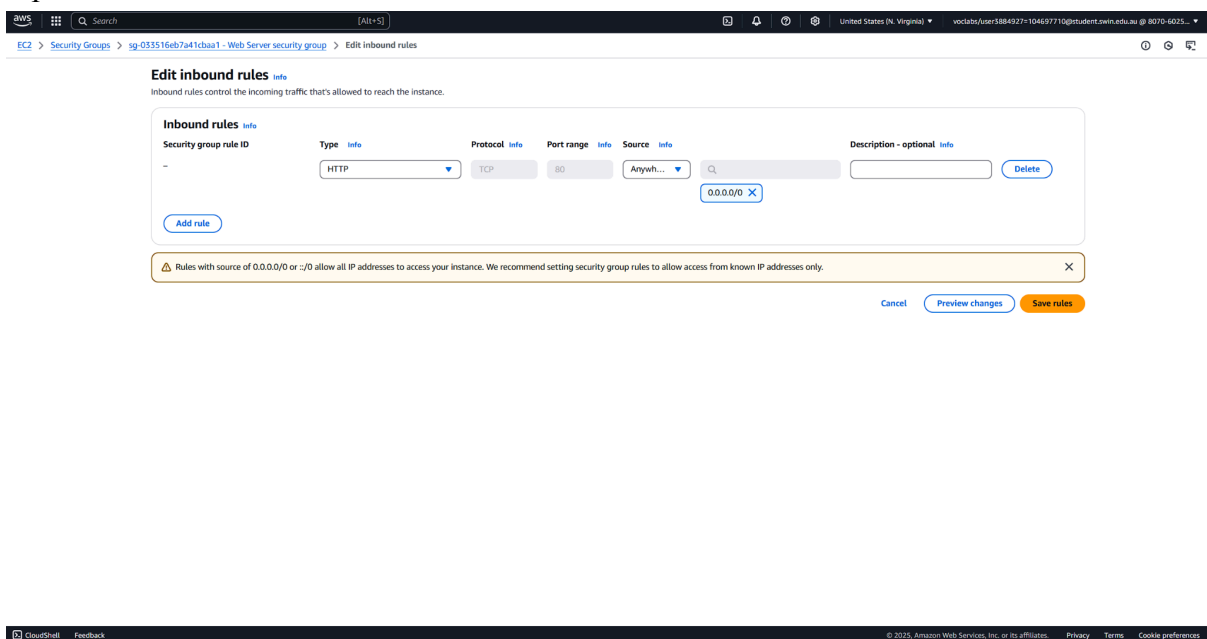
Task 2 System logs.

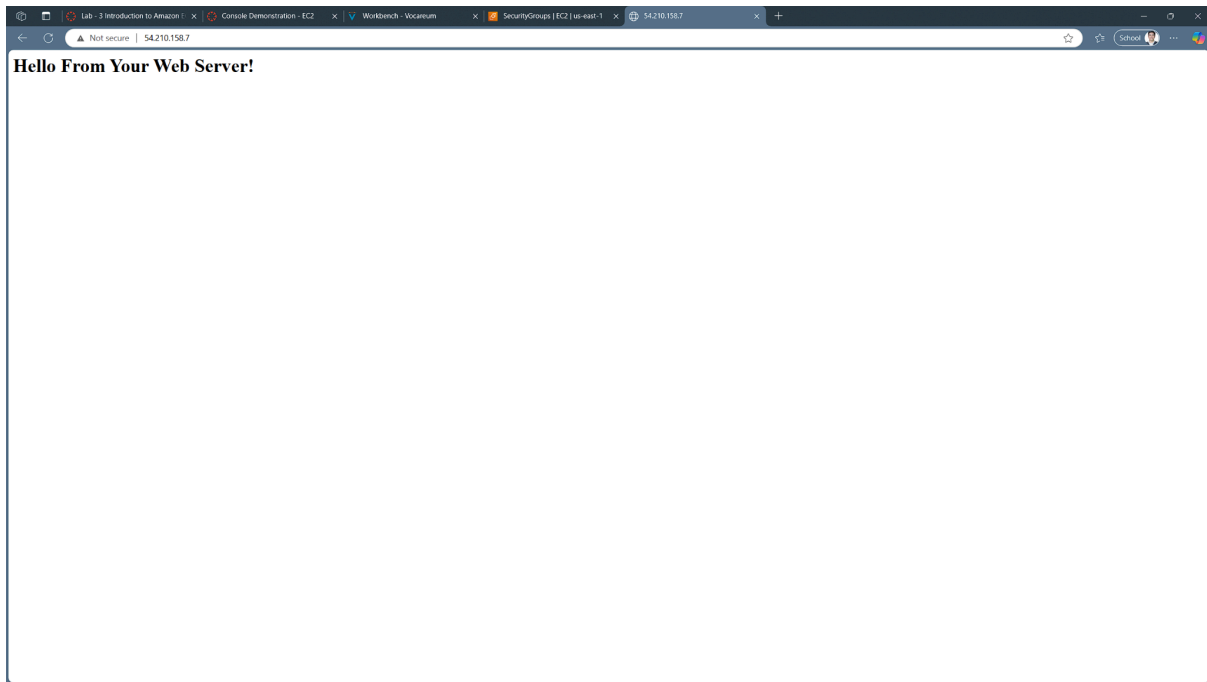


Task 2 Instance screenshot.

Task 3:

Explanation: Task 3 is just deploying a simple web page as I have mentioned in Task 1 explanations.

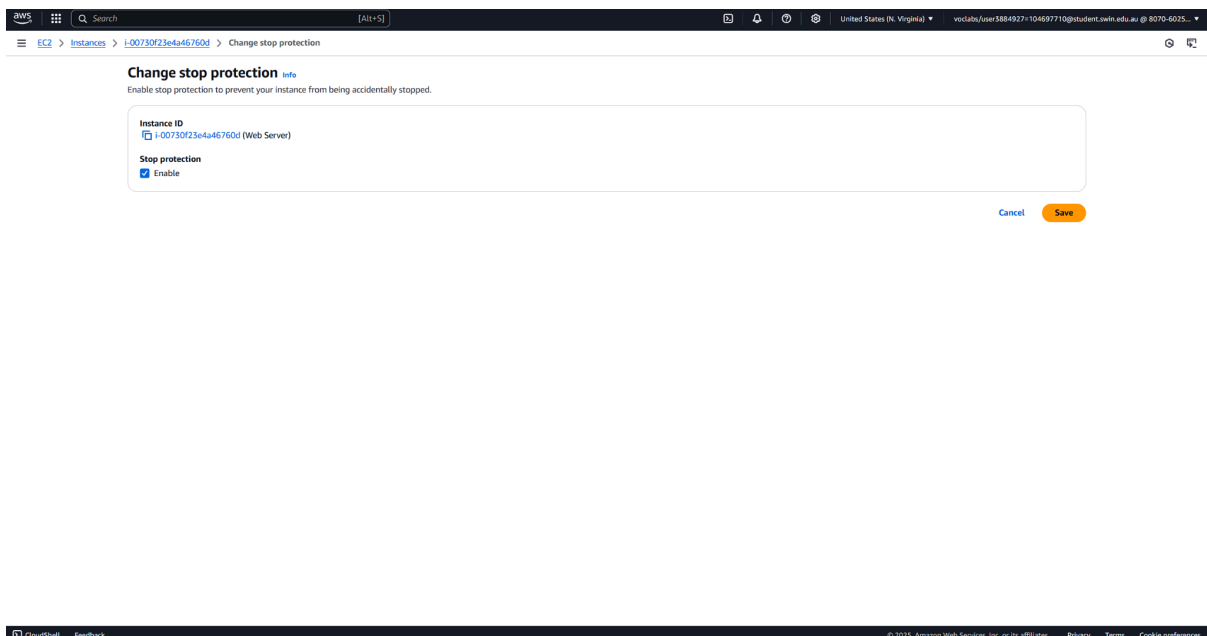




Task 3 Web confirm.

Task 4:

Explanation: Task 4 is where I get to know about changing instance types and size of a disk for different workloads.



Modify volume [info](#)
Modify the type, size, and performance of an EBS volume.

Volume details

Volume ID
[vol-051786cda5281d2c0](#)

Volume type [info](#)
General Purpose SSD (gp3)

Size (GiB) [info](#)
10
Min: 1 GiB, Max: 16384 GiB.

IOPS [info](#)
3000
Min: 3000 IOPS, Max: 16000 IOPS.

Throughput (MiB/s) [info](#)
125
Min: 125 MiB, Max: 1000 MiB, Baseline: 125 MiB/s.

[Cancel](#) [Modify](#)

Task 4 Modifying volum.

Task 6:

Explanation: Task 6 is just getting to know how to use “Stop Protection”.

Change stop protection [info](#)
Enable stop protection to prevent your instance from being accidentally stopped.

Instance ID
[i-00730f23e4a46760d](#) (Web Server)

Stop protection
☐ Enable

[Cancel](#) [Save](#)

Week 2 AWS Lab results:

01:09

▶ Start Lab

■ End Lab

ⓘ AWS Details

ⓘ Details

⌵

Submit

Submission Report

Grades

Total score	25/25
Task 1 - EC2 instance created correctly	5/5
Task 2 - get system log requested	5/5
Task 3 - security group updated	5/5
Task 4 - EC2 instance updated	5/5
Task 6 - Instance stopped on second try	5/5