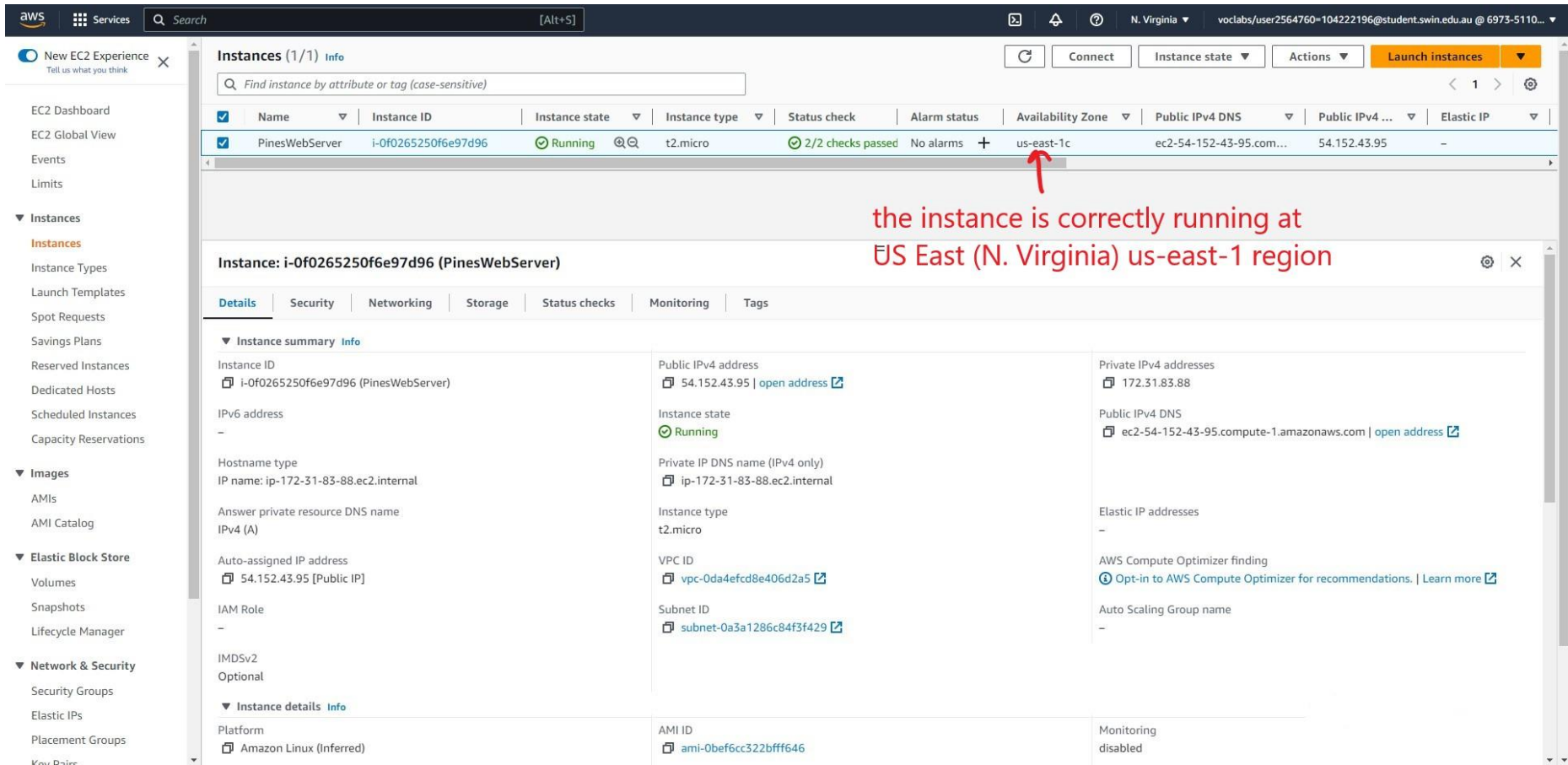


Ta Quang Tung – 104222196

COS20019 – Cloud Computing Architecture – Assignment 1a

## Task 1 - Launch your own Linux EC2 instance



The screenshot displays the AWS Management Console interface for EC2 instances. The top navigation bar shows the AWS logo, 'Services', a search bar, and the user's profile. The left sidebar contains navigation links for 'New EC2 Experience', 'EC2 Dashboard', 'EC2 Global View', 'Events', 'Limits', 'Instances', 'Instance Types', 'Launch Templates', 'Spot Requests', 'Savings Plans', 'Reserved Instances', 'Dedicated Hosts', 'Scheduled Instances', 'Capacity Reservations', 'Images', 'AMIs', 'AMI Catalog', 'Elastic Block Store', 'Volumes', 'Snapshots', 'Lifecycle Manager', 'Network & Security', 'Security Groups', 'Elastic IPs', 'Placement Groups', and 'Key Pairs'.

The main content area shows the 'Instances (1/1) Info' page. A table lists the instance 'PinesWebServer' with the following details:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
PinesWebServer	i-0f0265250f6e97d96	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	ec2-54-152-43-95.com...	54.152.43.95	-

A red arrow points to the 'us-east-1c' entry in the 'Availability Zone' column. Below the table, the 'Instance: i-0f0265250f6e97d96 (PinesWebServer)' details are shown, including the 'Instance summary' and 'Instance details' sections.

**Instance summary:**

- Instance ID: i-0f0265250f6e97d96 (PinesWebServer)
- IPv6 address: -
- Hostname type: IP name: ip-172-31-83-88.ec2.internal
- Answer private resource DNS name: IPv4 (A)
- Auto-assigned IP address: 54.152.43.95 [Public IP]
- IAM Role: -
- IMDSv2: Optional
- Private IP DNS name (IPv4 only): ip-172-31-83-88.ec2.internal
- Instance type: t2.micro
- VPC ID: vpc-0da4efcd8e406d2a5
- Subnet ID: subnet-0a3a1286c84f3f429
- Private IPv4 addresses: 172.31.83.88
- Public IPv4 DNS: ec2-54-152-43-95.compute-1.amazonaws.com
- Elastic IP addresses: -
- AWS Compute Optimizer finding: Opt-in to AWS Compute Optimizer for recommendations. | Learn more
- Auto Scaling Group name: -

**Instance details:**

- Platform: Amazon Linux (Inferred)
- AMI ID: ami-0bef6cc322bfff646
- Monitoring: disabled

the instance is correctly running at  
US East (N. Virginia) us-east-1 region

aws

Services

Search

[Alt+S]

N. Virginia

voclabs/user2564760=104222196@student.swin.edu.au @ 6973-5110...

New EC2 Experience

Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

VPCs

EC2 > Instances > i-0f0265250f6e97d96

Instance summary for i-0f0265250f6e97d96 (PinesWebServer) Info

Updated less than a minute ago

Refresh

Connect

Instance state

Actions

Instance ID

i-0f0265250f6e97d96 (PinesWebServer)

Public IPv4 address

54.152.43.95 | open address

Private IPv4 addresses

172.31.83.88

IPv6 address

-

Instance state

Running

Public IPv4 DNS

ec2-54-152-43-95.compute-1.amazonaws.com | open address

Hostname type

IP name: ip-172-31-83-88.ec2.internal

Private IP DNS name (IPv4 only)

ip-172-31-83-88.ec2.internal

Elastic IP addresses

-

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

54.152.43.95 [Public IP]

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | Learn more

IAM Role

-

Subnet ID

subnet-0a3a1286c84f3f429

IMDSv2

Optional

VPC ID

vpc-0da4efcd8e406d2a5

Auto Scaling Group name

-

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

Instance details Info

Platform

Amazon Linux (Inferred)

Platform details

Linux/UNIX

Stop protection

Disabled

Instance auto-recovery

Default

AMI Launch index

-

AMI ID

ami-0bef6cc322bfff646

AMI name

amzn2-ami-kernel-5.10-hvm-2.0.20230515.0-x86\_64-gp2

Launch time

Sat Jun 03 2023 21:48:53 GMT+0700 (Indochina Time) (14 minutes)

Lifecycle

normal

Key pair assigned at launch

-

Monitoring

disabled

Termination protection

Disabled

AMI location

amazon/amzn2-ami-kernel-5.10-hvm-2.0.20230515.0-x86\_64-gp2

Stop-hibernate behavior

disabled

State transition reason

-

the instance type is correctly set to t2.micro

the correct AMI is used

aws

Services

Search

[Alt+S]

N. Virginia

voclabs/user2564760=104222196@student.swin.edu.au @ 6973-5110...

EC2 > Instances > i-0f0265250f6e97d96 > Edit user data

Edit user data

Info

Instance ID

i-0f0265250f6e97d96 (PinesWebServer)

Current user data

User data currently associated with this instance

```
#!/bin/bash
yum update -y
amazon-linux-extras install -y lamp-mariadb10.2-php7.2 php7.2
service httpd start
yum install -y httpd mariadb-server php-mbstring php-xml
systemctl start httpd
systemctl enable httpd
usermod -a -G apache ec2-user
chown -R ec2-user:apache /var/www
chmod 2775 /var/www
find /var/www -type d -exec sudo chmod 2775 {} \;
find /var/www -type f -exec sudo chmod 0664 {} \;
echo "<?php echo '<h2>Welcome to COS20019. Installed PHP version: ' . phpversion() . '</h2>';
?>" > /var/www/html/phpinfo.php
```

the user data script  
to set up the  
Apache server

Copy user data

To edit your instance's user data you first need to stop your instance.

Cancel

Save

aws

Services

Search

[Alt+S]

N. Virginia

voclabs/user2564760=104222196@student.swin.edu.au @ 6973-5110...

New EC2 Experience

Tell us what you think

EC2 Dashboard

EC2 Global View

Events

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Scheduled Instances

Capacity Reservations

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Security Groups

Elastic IPs

Placement Groups

Key Pairs

EC2 > Security Groups > sg-0e1f116a763f82a3e - WebServer-SG

sg-0e1f116a763f82a3e - WebServer-SG

Actions

Details

Security group name  
WebServer-SG

Security group ID  
sg-0e1f116a763f82a3e

Description  
Security group for Web Server

VPC ID  
vpc-0da4efcd8e406d2a5

Owner  
697351102859

Inbound rules count  
3 Permission entries

Outbound rules count  
1 Permission entry

Inbound rules

Outbound rules

Tags

Inbound rules (3)

Filter security group rules

Manage tags

Edit inbound rules

< 1 >

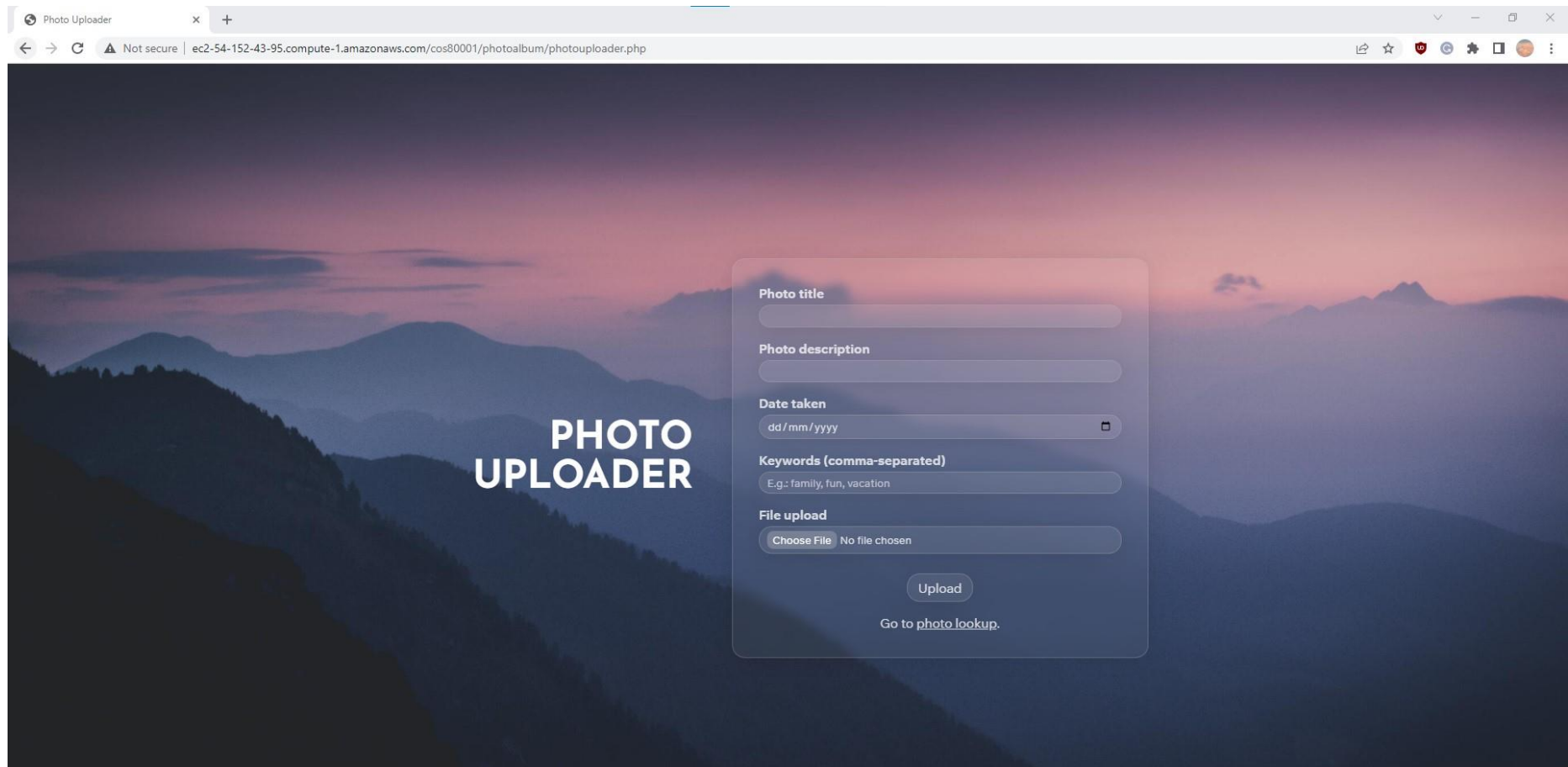
	Name	Security group rule...	IP version	Type	Protocol	Port range	Source	Description
<input type="checkbox"/>	-	sgr-03e9b522794397...	IPv4	SSH	TCP	22	0.0.0.0/0	-
<input type="checkbox"/>	-	sgr-0e8de89452ebafd35	IPv4	HTTPS	TCP	443	0.0.0.0/0	-
<input type="checkbox"/>	-	sgr-0d8678346ed48e...	IPv4	HTTP	TCP	80	0.0.0.0/0	-

the security group is correctly allowing only SSH, HTTP, HTTPS traffic from all sources

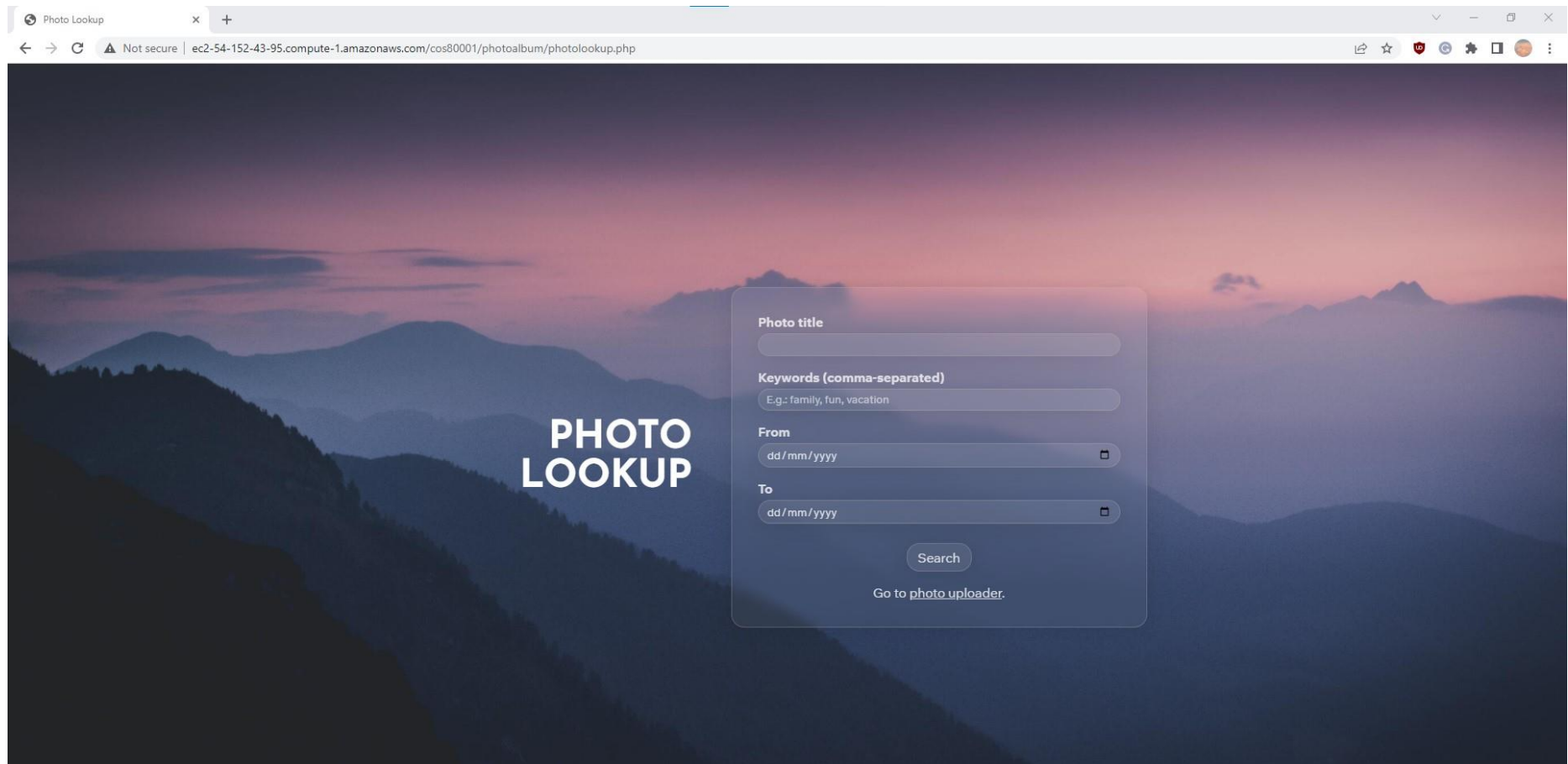
## Task 2 - Create a PHP website (Photo Album)

/var/www/html/cos80001/photoalbum/					
Name	Size	Changed	Rights	Owner	
..		25/05/2023 11:39:05 am	rw-rwsr-x	ec2-user	
background.jpg	112 KB	25/05/2023 11:11:40 am	rw-rw-r--	ec2-user	
photolookup.php	2 KB	25/05/2023 11:42:20 am	rw-rw-r--	ec2-user	
photouploader.php	3 KB	25/05/2023 11:42:16 am	rw-rw-r--	ec2-user	
styles.css	4 KB	25/05/2023 11:05:28 am	rw-rw-r--	ec2-user	

the directory structure on the ec2 instance



The photo uploader page correctly shows.



The photo lookup page correctly shows.