

Face-Detection AWS App

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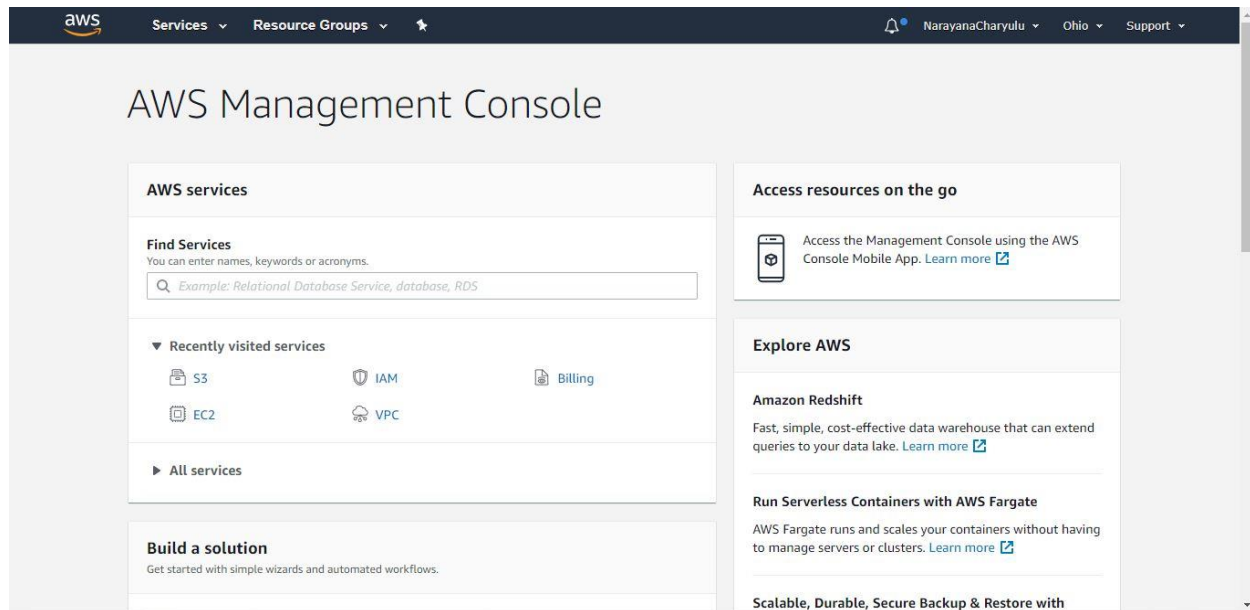
RegNO : 17BEE0191

Contact : 9003351619

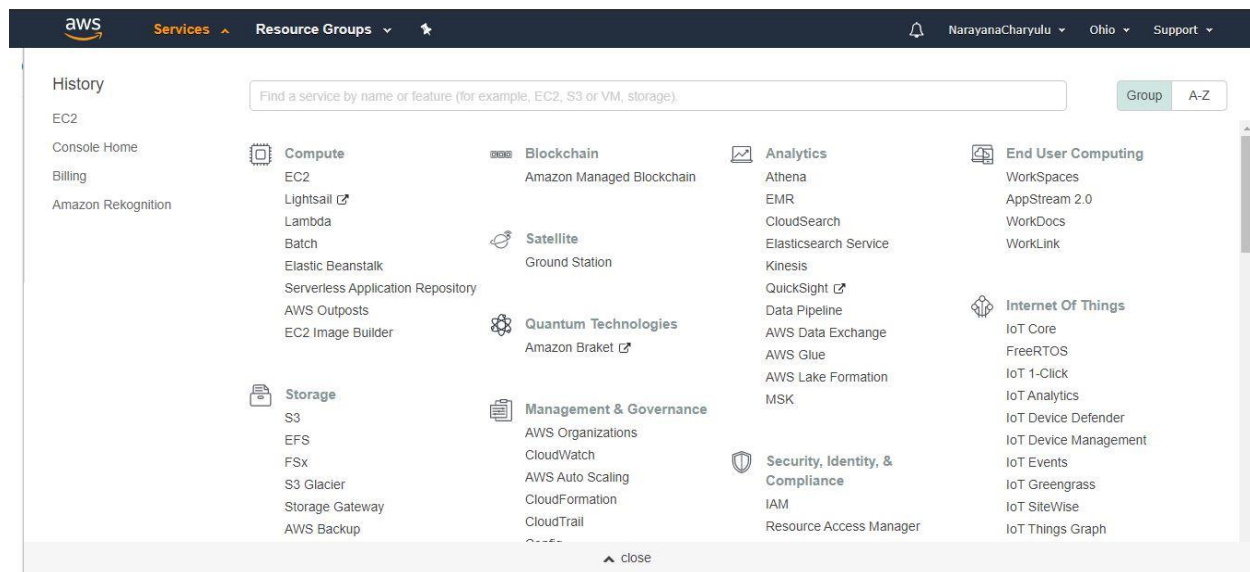
College : Vellore Institute Of Technology

Screenshots needed for Dashboards:

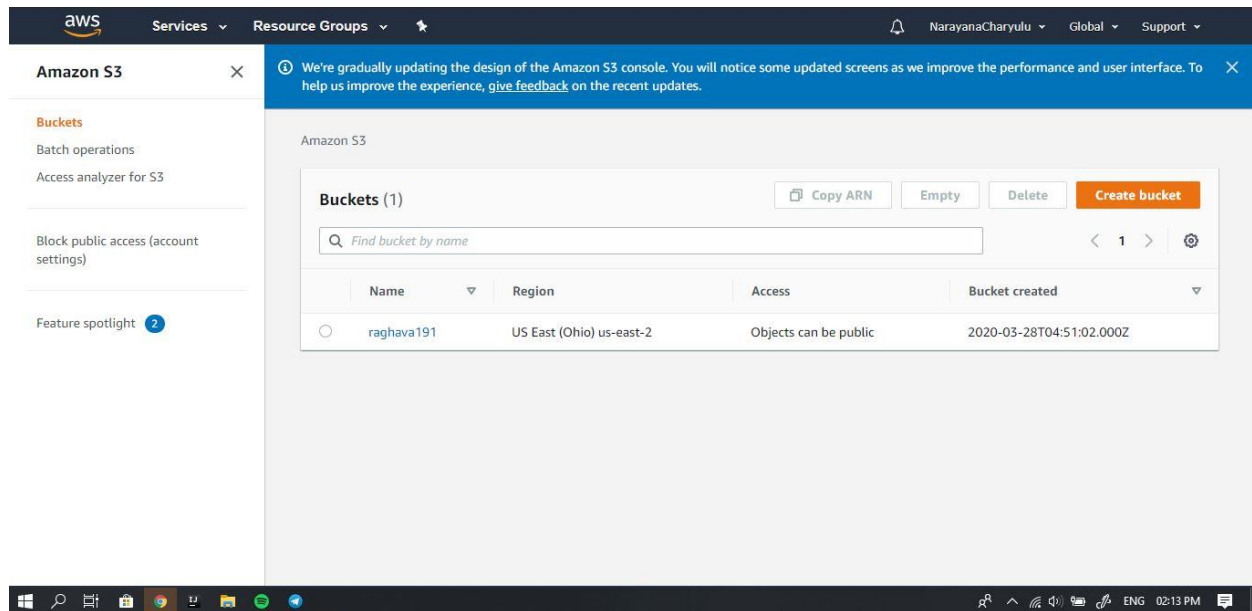
1. AWS Login screen with username



2. EC2 Dashboard



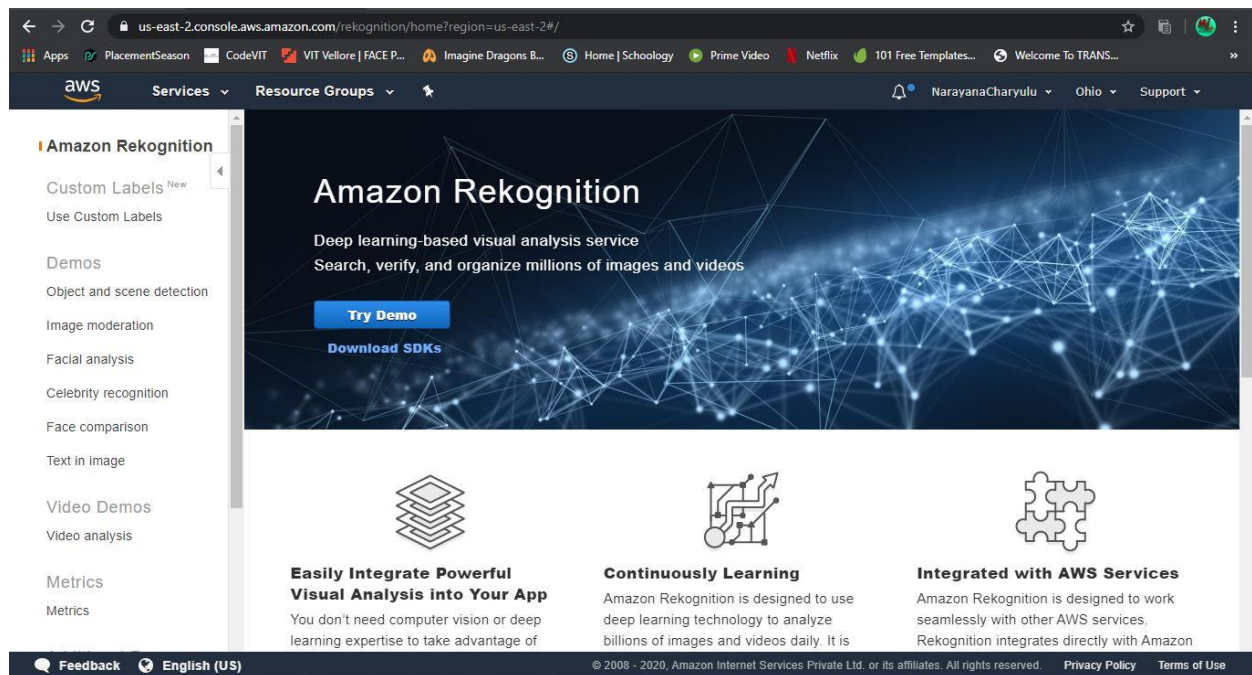
3. S3 Dashboard



The screenshot shows the Amazon S3 console interface. At the top, there's a navigation bar with the AWS logo, 'Services', 'Resource Groups', and user information. A blue banner at the top right contains a message about the console update. The left sidebar lists navigation options: Buckets, Batch operations, Access analyzer for S3, Block public access (account settings), and Feature spotlight. The main content area is titled 'Amazon S3' and displays a 'Buckets (1)' section. It includes a search bar, a table with one bucket named 'raghava191' in the 'US East (Ohio) us-east-2' region, and buttons for 'Copy ARN', 'Empty', 'Delete', and 'Create bucket'.

Name	Region	Access	Bucket created
raghava191	US East (Ohio) us-east-2	Objects can be public	2020-03-28T04:51:02.000Z

4. Rekognition Dashboard



The screenshot shows the Amazon Rekognition dashboard. The top navigation bar is similar to the S3 console. The left sidebar lists navigation options: Custom Labels, Demos, Object and scene detection, Image moderation, Facial analysis, Celebrity recognition, Face comparison, Text in image, Video Demos, Metrics, and Feedback. The main content area features a large hero section with the title 'Amazon Rekognition' and a description: 'Deep learning-based visual analysis service. Search, verify, and organize millions of images and videos.' Below this are buttons for 'Try Demo' and 'Download SDKs'. The bottom section highlights three key features: 'Easily Integrate Powerful Visual Analysis into Your App', 'Continuously Learning', and 'Integrated with AWS Services'.

Amazon Rekognition
Deep learning-based visual analysis service
Search, verify, and organize millions of images and videos

Try Demo
Download SDKs

Easily Integrate Powerful Visual Analysis into Your App
You don't need computer vision or deep learning expertise to take advantage of

Continuously Learning
Amazon Rekognition is designed to use deep learning technology to analyze billions of images and videos daily. It is

Integrated with AWS Services
Amazon Rekognition is designed to work seamlessly with other AWS services. Rekognition integrates directly with Amazon

Screenshots needed for EC2

1. Choosing an AMI

The screenshot shows the 'Step 1: Choose an Amazon Machine Image (AMI)' page in the AWS Management Console. The page has a dark header with the AWS logo, navigation tabs (Services, Resource Groups), and user information (NarayanaCharyulu, Ohio, Support). Below the header is a progress bar with steps: 1. Choose AMI (active), 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. The main content area is titled 'Step 1: Choose an Amazon Machine Image (AMI)' and includes a search bar. Below the search bar is a 'Quick Start' section with a sidebar for 'My AMIs', 'AWS Marketplace', and 'Community AMIs'. The main list shows two AMIs: 'Amazon Linux 2 AMI (HVM), SSD Volume Type' and 'Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type'. Each AMI entry includes a description, root device type, virtualization type, and a 'Select' button. The footer contains a feedback link, language selector (English (US)), and copyright information.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Cancel and Exit

Search for an AMI by entering a search term e.g. "Windows"

Quick Start

My AMIs

AWS Marketplace

Community AMIs

Free tier only

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0e01ce4ee18447327 (64-bit x86) / ami-03201f374ab66a26e (64-bit Arm)

Amazon Linux Free tier eligible

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

64-bit (x86) 64-bit (Arm)

Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type - ami-01b01bdd08f24c7a8

Amazon Linux Free tier eligible

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

64-bit (x86)

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2. Choosing an Instance Type

The screenshot shows the 'Step 2: Choose an Instance Type' page in the AWS Management Console. The page has a dark header with the AWS logo, navigation tabs (Services, Resource Groups), and user information (NarayanaCharyulu, Ohio, Support). Below the header is a progress bar with steps: 1. Choose AMI, 2. Choose Instance Type (active), 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. The main content area is titled 'Step 2: Choose an Instance Type' and includes a filter section with 'All instance types', 'Current generation', and 'Show/Hide Columns'. Below the filter section is a table of instance types. The table has columns: Family, Type, vCPUs, Memory (GiB), Instance Storage (GiB), EBS-Optimized Available, Network Performance, and IPv6 Support. The 't2.micro' instance type is selected. The footer contains a feedback link, language selector (English (US)), and copyright information.

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GiB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes

Cancel Previous Review and Launch Next: Configure Instance Details

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3. Adding Storage

aws

Services

Resource Groups

NarayanaCharyulu

Ohio

Support

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput (MB/s) ⓘ	Delete on Termination ⓘ	Encryption ⓘ
Root	/dev/xvda	snap-0f54692056aaa4c20	8	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypt

Add New Volume

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

CancelPreviousReview and LaunchNext: Add Tags

FeedbackEnglish (US)

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4. Configuring Security Group

aws

Services

Resource Groups

NarayanaCharyulu

Ohio

Support

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Add Tags6. Configure Security Group7. Review

Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group: ☒ Create a new security group ☐ Select an existing security group

Security group name:

Description:

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Add Rule

Warning

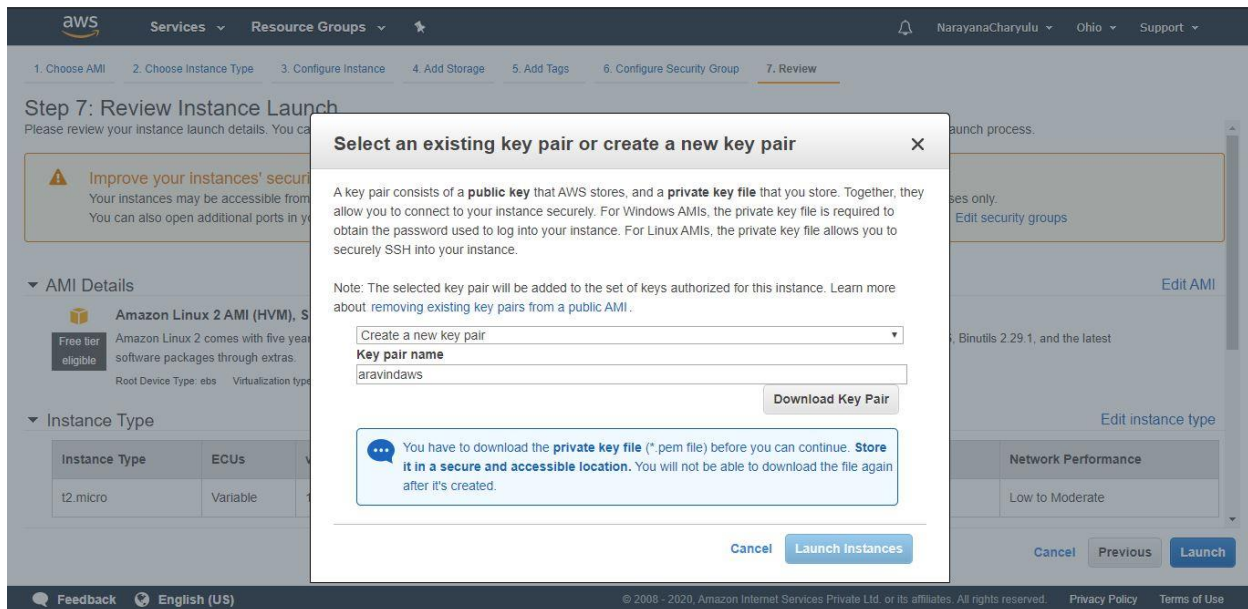
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

CancelPreviousReview and Launch

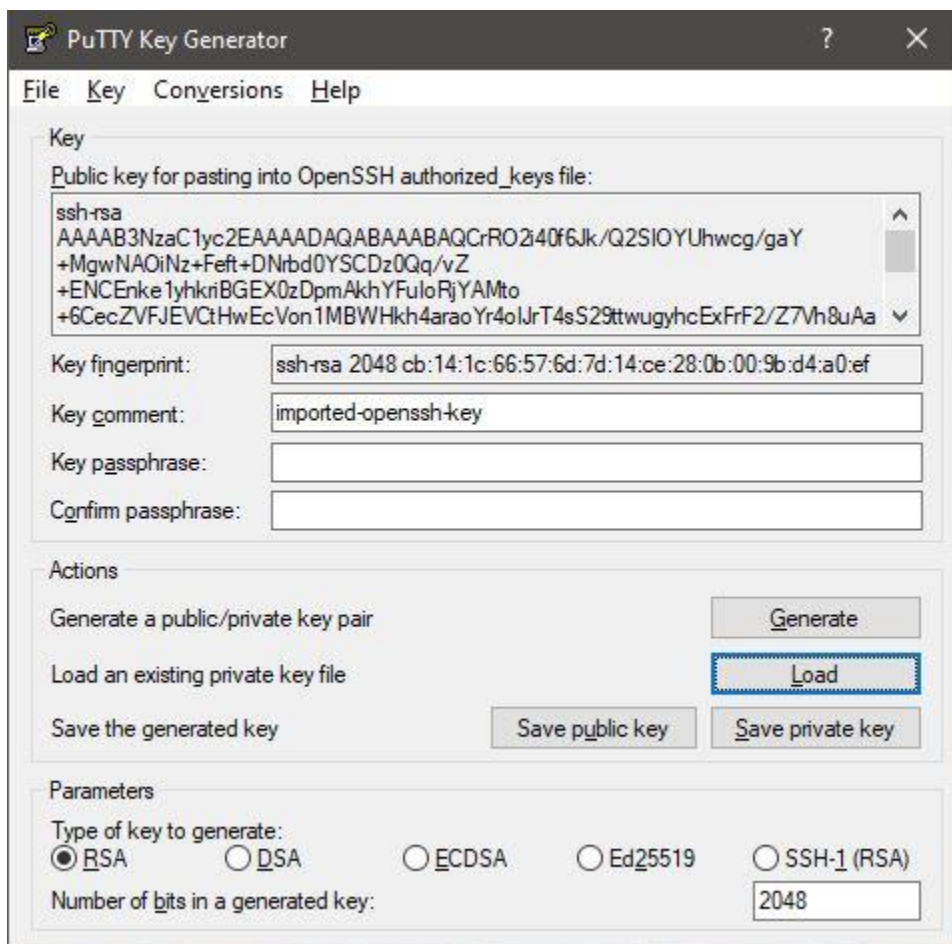
FeedbackEnglish (US)

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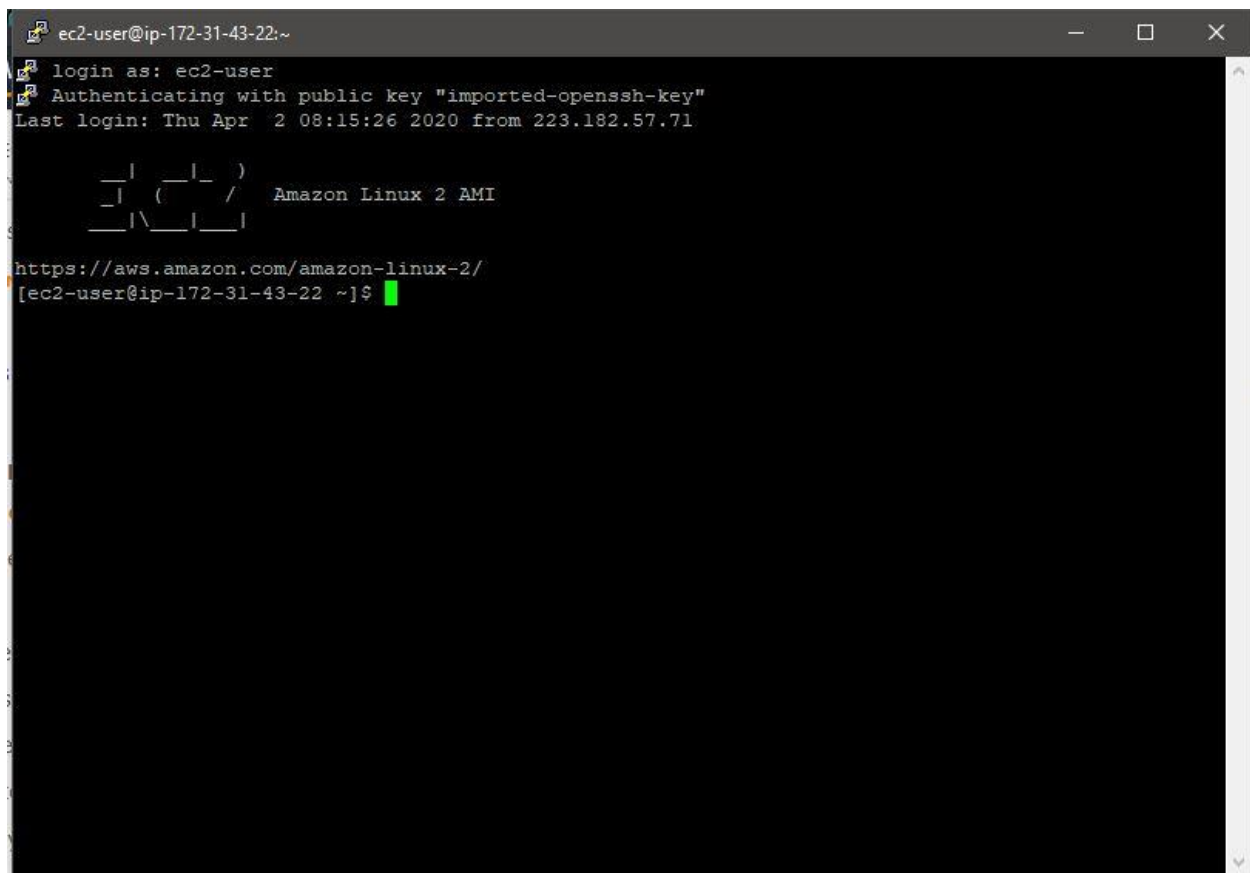
5. Key Pair Download



6. PuTTYgen conversion from pem to ppk



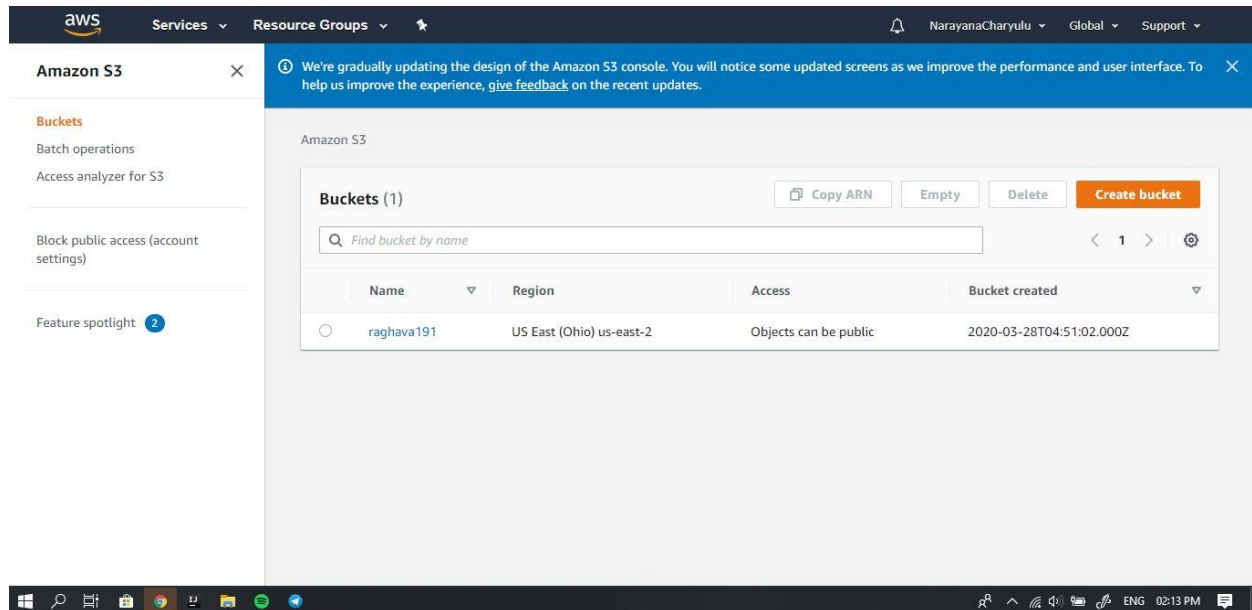
7. Logged in EC2 black screen

A terminal window titled 'ec2-user@ip-172-31-43-22:~' with standard window controls. It shows the login process for 'ec2-user' using a public key. The terminal displays the Amazon Linux 2 logo and a URL to the Amazon Linux 2 documentation. The prompt is '[ec2-user@ip-172-31-43-22 ~]\$' with a green cursor.

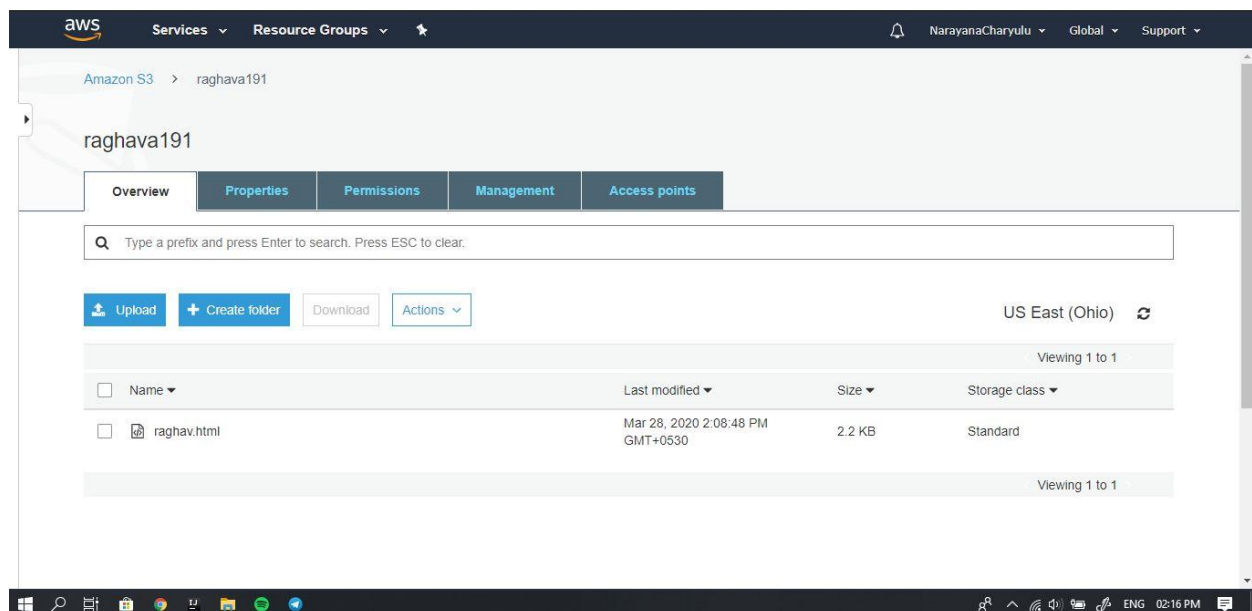
```
ec2-user@ip-172-31-43-22:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
Last login: Thu Apr  2 08:15:26 2020 from 223.182.57.71  
  
  _ | _ | _ )  
  _ | ( _ /   Amazon Linux 2 AMI  
  __| \__| __|  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-43-22 ~]$
```

Screenshots needed for S3

1. Creating a bucket



2. Uploading an Object



3. Enabling Static Website

The screenshot displays the AWS Management Console interface for configuring static website hosting on an Amazon S3 bucket named 'raghava191'.

Static website hosting configuration panel:

- Endpoint:** `http://raghava191.s3-website-us-east-2.amazonaws.com`
- Use this bucket to host a website:** ☒ (Learn more)
- Index document:** `raghav.html`
- Error document:** `error.html`
- Redirection rules (optional):** (Empty text area)
- Redirect requests:** ☐ (Learn more)
- Disable website hosting:** ☐
- Bucket hosting:** ☒ (Selected)
- Buttons:** Cancel, Save

Object-level logging panel:

- Object-level logging:** Record object-level API activity using the CloudTrail data events feature (additional cost). (Learn more)
- Status:** Disabled

Amazon S3 console overview for bucket 'raghava191':

- Tabs:** Overview (selected), Properties, Permissions, Management, Access points
- Versioning:** Keep multiple versions of an object in the same bucket. (Learn more) - Disabled
- Server access logging:** Set up access log records that provide details about access requests. (Learn more) - Disabled
- Static website hosting:** Host a static website, which does not require server-side technologies. (Learn more) - ☒ Bucket hosting
- Object-level logging:** Record object-level API activity using the CloudTrail data events feature (additional cost). - Disabled
- Default encryption:** Automatically encrypt objects when they are uploaded. - Disabled

4. Making the Object Public

The screenshot displays the AWS Management Console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information 'NarayanaCharyulu'. The main content area is titled 'Block public access (bucket settings)' and contains a paragraph explaining public access settings. Below this, a list of settings is shown, all set to 'Off':

- Block all public access: Off
- Block public access to buckets and objects granted through *new* access control lists (ACLs): Off
- Block public access to buckets and objects granted through *any* access control lists (ACLs): Off
- Block public access to buckets and objects granted through *new* public bucket or access point policies: Off
- Block public and cross-account access to buckets and objects through *any* public bucket or access point policies: Off

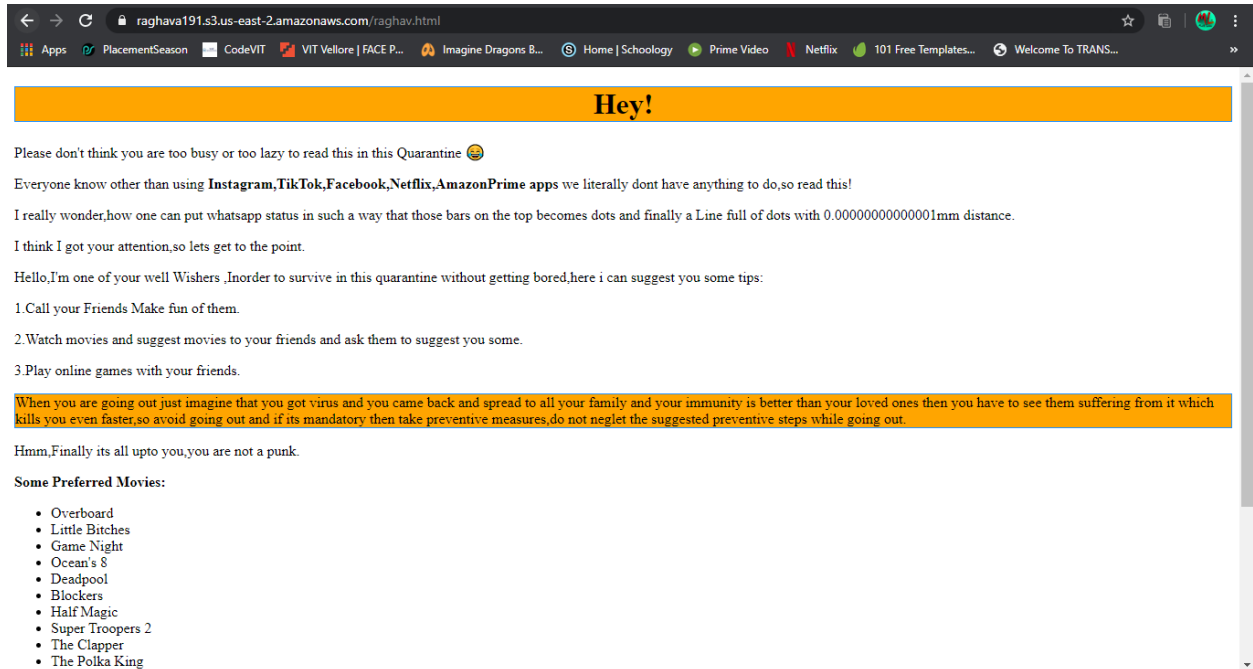
An 'Edit' button is located to the right of the settings list. Below the settings, a taskbar shows various application icons and the system clock at 02:20 PM. The bottom section of the screenshot shows the 'Properties' tab for an S3 object named 'raghav.html'. It includes buttons for 'Open', 'Download', 'Download as', 'Make public', and 'Copy path'. The object's metadata is listed below:

- Owner:** 8e2a54eda09c755dfa12b14b9342e6a6e7fe13f2643709d1f96a2142eb1543b
- Last modified:** Mar 28, 2020 2:08:48 PM GMT+0530
- Etag:** f8f3fabda3d9462ca64c9b13ee4df935
- Storage class:** Standard
- Server-side encryption:** None
- Size:** 2.2 KB

The footer of the console shows a 'Feedback' button, 'English (US)' language selection, and copyright information: '© 2008 - 2020, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.' with links to 'Privacy Policy' and 'Terms of Use'.

5. Checking the S3 link on the browser

url: <https://raghava191.s3.us-east-2.amazonaws.com/raghav.html>



Screenshots needed for Rekognition

1. Face Detect

The screenshot displays the AWS Rekognition console interface. The left sidebar contains a navigation menu with options like Amazon Rekognition, Custom Labels, Demos, and Metrics. The main content area is titled "Facial analysis" and includes a description: "Get a complete analysis of facial attributes, including confidence scores." A large image of a woman's face is shown with a bounding box. Below the image, there are options to "Choose a sample image" or "Use your own image" with an "Upload" button. On the right, a "Results" section lists attributes and their confidence scores:

Attribute	Confidence Score
looks like a face	100 %
appears to be female	99.7 %
age range	22 - 34 years old
smiling	99.7 %
appears to be happy	97.3 %
not wearing glasses	99.1 %

2. Face Compare

The screenshot displays the AWS Rekognition console interface for the "Face comparison" demo. The left sidebar is the same as the first screenshot. The main content area is titled "Face comparison" and includes a description: "Compare faces to see how closely they match based on a similarity percentage." It shows a "Reference face" and "Comparison faces" section. Below these, there are options to "Choose a sample image" or "Choose a sample image". On the right, a "Results" section shows two comparisons with similarity percentages:

Comparison	Similarity
Reference face vs. Comparison face 1	99.3 %
Reference face vs. Comparison face 2	Not shown

3. Celebrity Recognition

The screenshot shows the AWS Rekognition console with the 'Celebrity recognition' demo selected. The interface includes a sidebar with navigation options like 'Amazon Rekognition', 'Custom Labels', 'Demos', and 'Metrics'. The main content area displays the 'Celebrity recognition' title and a description: 'Rekognition automatically recognizes celebrities in images and provides confidence scores.' A central image shows a man with a mustache and sunglasses, identified as 'Ravi Teja' with a 'Match confidence' of '100 %'. Below the image, there are options to 'Choose a sample image' or 'Use your own image' with an 'Upload' button. The right sidebar contains a 'Results' section with a 'Request' and 'Response' tab. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating '02:58 PM'.

4. Text in Image

The screenshot shows the AWS Rekognition console with the 'Text in image' demo selected. The interface includes a sidebar with navigation options like 'Amazon Rekognition', 'Custom Labels', 'Demos', and 'Metrics'. The main content area displays the 'Text in image' title and a description: 'Rekognition automatically detects and extracts text in your images. Learn More'. A central image shows a green background with a large red 'ML' logo and the text 'Musik Lover' below it. The right sidebar contains a 'Results' section with a 'Request' and 'Response' tab. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating '02:58 PM'.

Screenshots needed for EC2 & S3

1. Installing aws-sdk

```
ec2-user@ip-172-31-43-22:~  
[ec2-user@ip-172-31-43-22 ~]$ sudo php -d memory_limit=-1 ~/composer.phar require  
aws/aws-sdk-php  
Using version ^3.134 for aws/aws-sdk-php  
./composer.json has been created  
Loading composer repositories with package information  
Updating dependencies (including require-dev)  
Package operations: 8 installs, 0 updates, 0 removals  
  - Installing symfony/polyfill-mbstring (v1.15.0): Loading from cache  
  - Installing mtdowling/jmespath.php (2.5.0): Loading from cache  
  - Installing guzzlehttp/promises (v1.3.1): Loading from cache  
  - Installing ralouphie/getallheaders (3.0.3): Loading from cache  
  - Installing psr/http-message (1.0.1): Loading from cache  
  - Installing guzzlehttp/psr7 (1.6.1): Loading from cache  
  - Installing guzzlehttp/guzzle (6.5.2): Loading from cache  
  - Installing aws/aws-sdk-php (3.134.1): Loading from cache  
guzzlehttp/psr7 suggests installing zendframework/zend-httphandler (Emit PSR  
-7 responses)  
guzzlehttp/guzzle suggests installing psr/log (Required for using the Log middlewa  
re)  
guzzlehttp/guzzle suggests installing ext-intl (Required for Internationalized Dom  
ain Name (IDN) support)  
aws/aws-sdk-php suggests installing doctrine/cache (To use the DoctrineCacheAdapte  
r)  
aws/aws-sdk-php suggests installing aws/aws-php-sns-message-validator (To validate  
incoming SNS notifications)  
Writing lock file  
Generating autoload files  
1 package you are using is looking for funding.  
Use the `composer fund` command to find out more!  
[ec2-user@ip-172-31-43-22 ~]$
```



```
ec2-user@ip-172-31-43-22:/var/www/html/face
```

```
is case if you get memory error --
sudo /bin/dd if=/dev/zero of=/var/swap1 bs=1M count=1024
sudo /sbin/mkswap /var/swap1
sudo /sbin/swapon /var/swap1

sudo wget https://i.pinimg.com/originals/8d/bf/ea/8d8e951c78949b0e6d3cd0eb88d.jpg
sudo mv 8d7e951c84432c78949b0e6d3cd0eb88d.jpg sample.jpg
}

error_reporting(0);

require_once(__DIR__ . '/vendor/autoload.php');

use Aws\S3\S3Client;
use Aws\Rekognition\RekognitionClient;

$bucket = 'raghavai81';
$keyname = 'sample.jpg';

$s3 = S3Client::factory([
    'profile'      => 'default',
    'region'       => 'us-east-2',
    'version'      => '2006-03-01',
    'signature'    => 'v4'
]);

try {
    // Upload data
    $result = $s3->putObject([
        'Bucket'     => $bucket,
        'Key'         => $keyname,
        'SourceFile' => __DIR__ . "/" . $keyname,
        'ACL'         => 'public-read'
    ]);

    // Print the URL to the object.
    $imageUrl = $result['ObjectURL'];
    if ($imageUrl) {
        echo "Image uploaded done... Here is the URL: " . $imageUrl;
    }
} catch (Exception $e) {
    echo $e->getMessage() . PHP_EOL;
}

-- INSERT --
```

```
55,2 Bot
```

4. Upload success screenshot

```
ec2-user@ip-172-31-43-22:/var/www/html/face
- Installing guzzlehttp/psr7 (1.6.1): Loading from cache
- Installing guzzlehttp/guzzle (6.5.2): Loading from cache
- Installing aws/aws-sdk-php (3.134.1): Loading from cache
guzzlehttp/psr7 suggests installing zendframework/zend-httphandler (Emit PSR-7 responses)
guzzlehttp/guzzle suggests installing psr/log (Required for using the Log middleware)
guzzlehttp/guzzle suggests installing ext-intl (Required for Internationalized Domain Name (IDN) support)
aws/aws-sdk-php suggests installing doctrine/cache (To use the DoctrineCacheAdapter)
aws/aws-sdk-php suggests installing aws/aws-php-sns-message-validator (To validate incoming SNS notifications)
Writing lock file
Generating autoload files
1 package you are using is looking for funding.
Use the 'composer fund' command to find out more!
[ec2-user@ip-172-31-43-22 face]$ sudo wget https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c6c05580.jpg
--2020-04-02 07:00:26-- https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c6c05580.jpg
Resolving i.pinimg.com (i.pinimg.com)... 184.87.223.209, 2600:1408:20:a8c:1931, 2600:1408:20:a8d:1931, ...
Connecting to i.pinimg.com (i.pinimg.com)|184.87.223.209|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 215551 (210K) [image/jpeg]
Saving to: 'b97ea33b5842c7894b804923c6c05580.jpg'

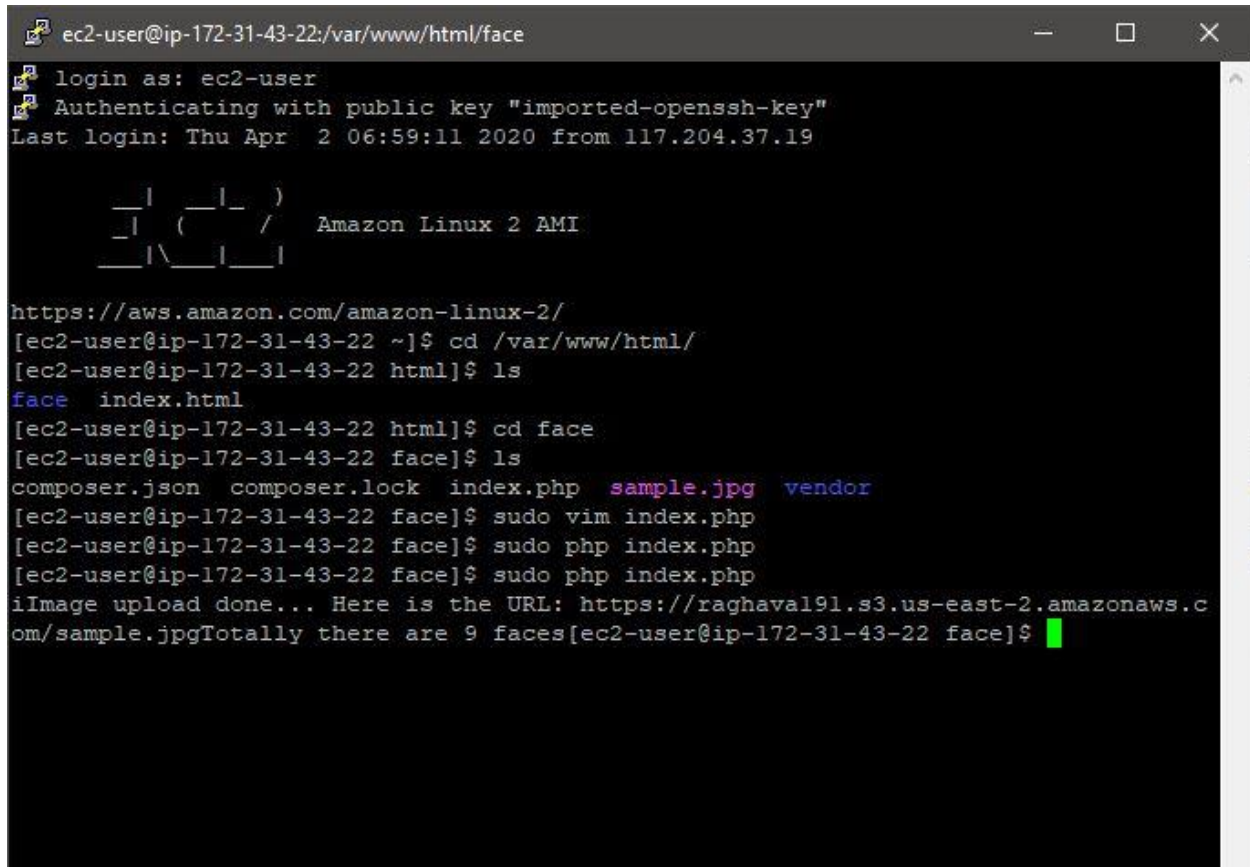
100%[=====] 215,551 --.-K/s in 0.03s

2020-04-02 07:00:26 (7.10 MB/s) - 'b97ea33b5842c7894b804923c6c05580.jpg' saved [215551/215551]

[ec2-user@ip-172-31-43-22 face]$ sudo mv b97ea33b5842c7894b804923c6c05580.jpg sample.jpg
[ec2-user@ip-172-31-43-22 face]$ ls
composer.json  composer.lock  sample.jpg  vendor
[ec2-user@ip-172-31-43-22 face]$ sudo vim index.php
[ec2-user@ip-172-31-43-22 face]$ sudo php index.php
Cannot read credentials from /root/.aws/credentials
[ec2-user@ip-172-31-43-22 face]$ ls
composer.json  composer.lock  index.php  sample.jpg  vendor
[ec2-user@ip-172-31-43-22 face]$ sudo rm -r index.php
[ec2-user@ip-172-31-43-22 face]$ sudo vim index.php
[ec2-user@ip-172-31-43-22 face]$ sudo php index.php
Image upload done... Here is the URL: https://raghaval91.s3.us-east-2.amazonaws.com/sample.jpg[ec2-user@ip-172-31-43-22 face]$
```

Screenshots needed for EC2 & Rekognition

1. Face Detect success screenshot



```
ec2-user@ip-172-31-43-22:/var/www/html/face
login as: ec2-user
Authenticating with public key "imported-openssh-key"
Last login: Thu Apr  2 06:59:11 2020 from 117.204.37.19

  _ | _ | _ |
  _ | ( _ | /   Amazon Linux 2 AMI
  _ | \ _ | _ |

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-43-22 ~]$ cd /var/www/html/
[ec2-user@ip-172-31-43-22 html]$ ls
face  index.html
[ec2-user@ip-172-31-43-22 html]$ cd face
[ec2-user@ip-172-31-43-22 face]$ ls
composer.json  composer.lock  index.php  sample.jpg  vendor
[ec2-user@ip-172-31-43-22 face]$ sudo vim index.php
[ec2-user@ip-172-31-43-22 face]$ sudo php index.php
[ec2-user@ip-172-31-43-22 face]$ sudo php index.php
iImage upload done... Here is the URL: https://raghaval91.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 9 faces[ec2-user@ip-172-31-43-22 face]$
```

Thank you.