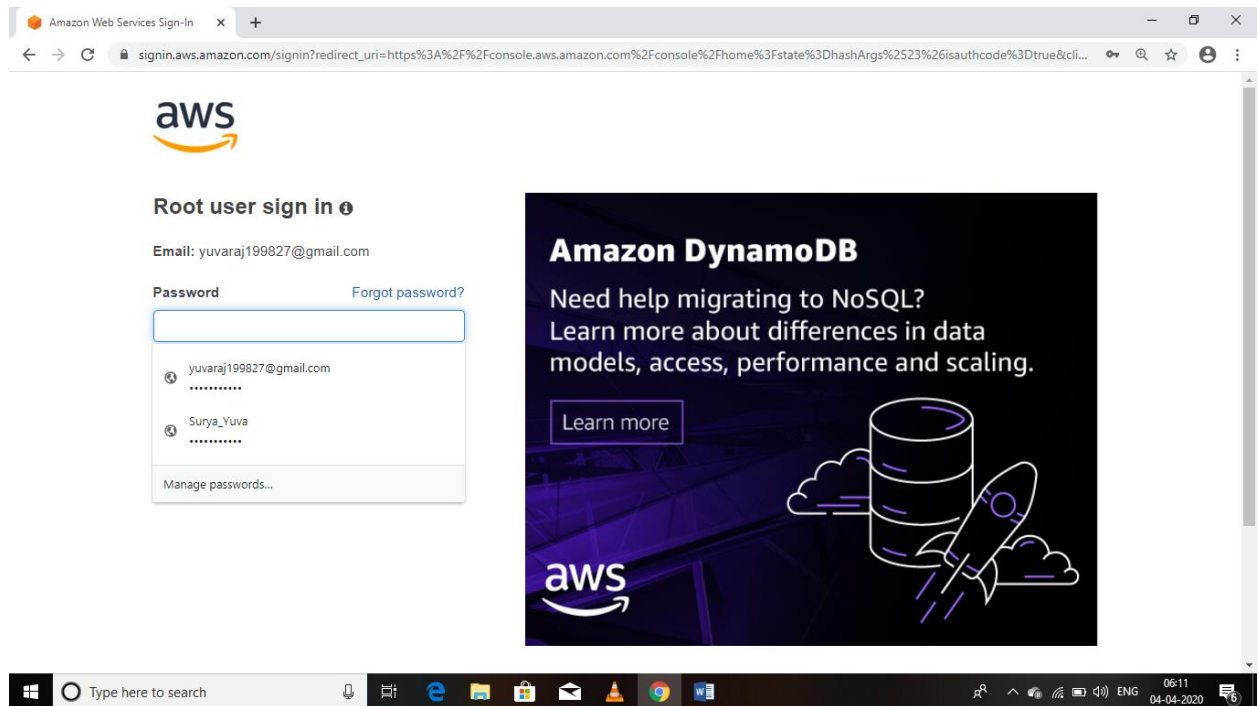
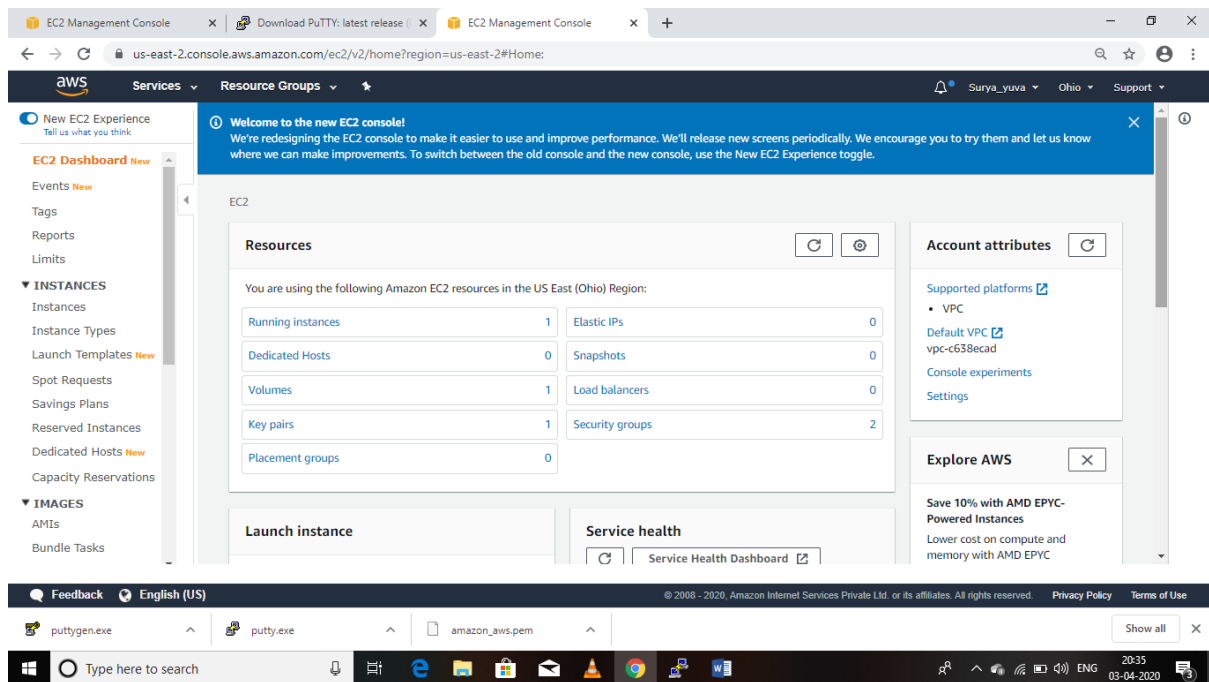


## AWS PROJECT:

### 1. AWS Login screen with username



### 2. EC2 Dashboard



### 3. S3 Dashboard

The screenshot shows the Amazon S3 Management Console in a web browser. The left sidebar contains navigation options: Buckets, Batch operations, Access analyzer for S3, Block public access (account settings), and Feature spotlight. The main content area displays a message about console updates and a section for 'Buckets (1)'. A table lists the bucket 'amazon-aws-face-detection' in the 'US East (Ohio) us-east-2' region, with 'Not Public' access and a creation date of '2020-04-04T03:52:33.000Z'. The bottom of the image shows a Windows taskbar with various application icons and a system clock indicating 21:05 on 03-04-2020.

### 4. Rekognition Dashboard

The screenshot displays the Amazon Rekognition console dashboard. The left sidebar lists various features and demos, including Custom Labels, Object and scene detection, Image moderation, Facial analysis, Celebrity recognition, Face comparison, Text in image, Video Demos, Video analysis, Metrics, and Additional Resources. The main content area features a large header with the text 'Amazon Rekognition' and 'Deep learning-based visual analysis service'. Below this, there are three columns of information: 'Easily Integrate Powerful Visual Analysis into Your App', 'Continuously Learning', and 'Integrated with AWS Services'. The bottom of the image shows a Windows taskbar with application icons and a system clock indicating 20:33 on 03-04-2020.

### 1. Choosing an AMI

Launch instance wizard | EC2 Ma x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

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

### Step 1: Choose an Amazon Machine Image (AMI)

Cancel and Exit


An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace, or you can select one of your own AMIs.

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

Quick Start


- My AMIs
- AWS Marketplace
- Community AMIs
- Free tier only

1 to 40 of 40 AMIs

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

Select

**Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type** - ami-01b01bbd08f24c7a8  
**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

Select

**Red Hat Enterprise Linux 8 (HVM), SSD Volume Type** - ami-0520e698dd500b1d1 (64-bit x86) / ami-0099847d600887c9f (64-bit Arm)  
**Free tier eligible**

Red Hat Enterprise Linux version 8 (HVM), EBS General Purpose (SSD) Volume Type  
Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

Select

## 2. Choosing an Instance Type

Launch instance wizard | EC2 Ma x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

Services Resource Groups

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 (GB) | 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<br><b>Free tier eligible</b> | 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          |
| <input type="checkbox"/>            | General purpose | t2.xlarge                             | 4     | 16           | EBS only              | -                       | Moderate            | Yes          |
| <input type="checkbox"/>            | General purpose | t2.2xlarge                            | 8     | 32           | EBS only              | -                       | Moderate            | Yes          |

Cancel Previous **Review and Launch** Next: Configure Instance Details

Feedback English (US)

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Type here to search

### 3. Adding Storage

Launch instance wizard | EC2 Ma x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

aws Services Resource Groups Surya\_yuva Ohio Support

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

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.

Cancel Previous Review and Launch Next: Add Tags

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Type here to search

### 4. Configuring Security Group

Launch instance wizard | EC2 Ma x +

us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#LaunchInstanceWizard:

aws Services Resource Groups Surya\_yuva Ohio Support

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. 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: launch-wizard-3

Description: launch-wizard-3 created 2020-04-04T06:22:08.030-07:00

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

Add Rule

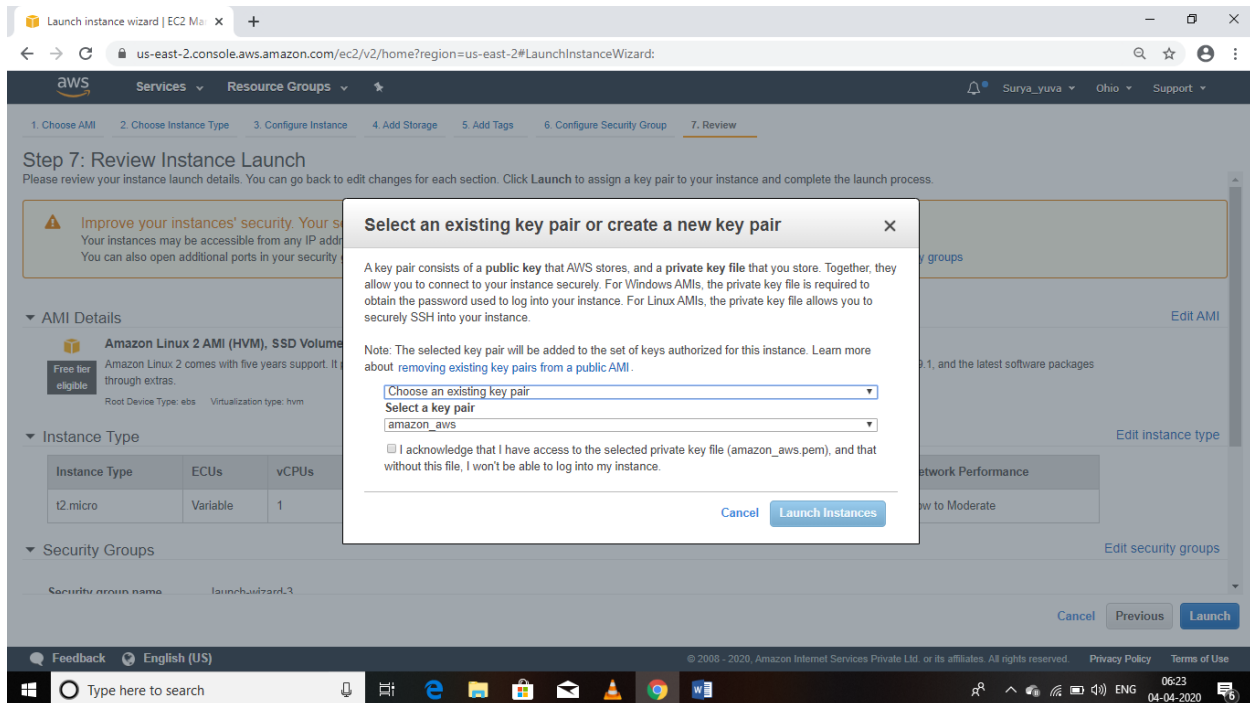
**Warning**  
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel Previous Review and Launch

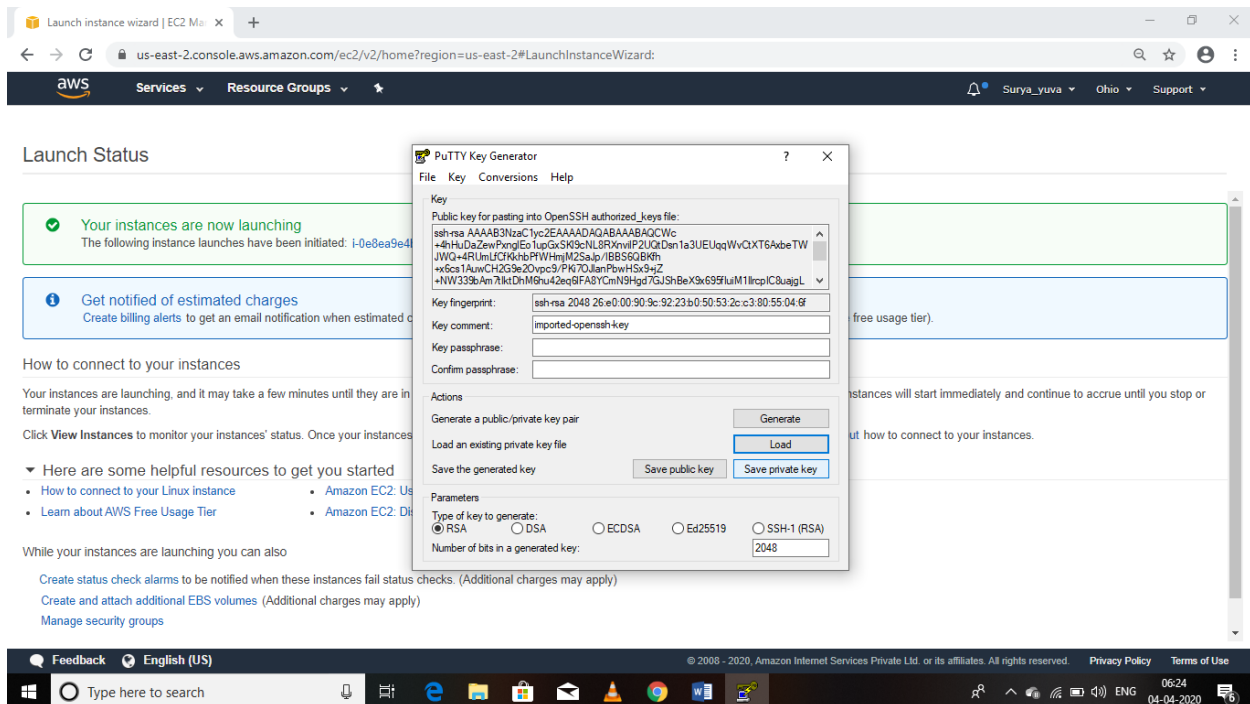
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Type here to search

## 5. Key Pair Download



## 6. PuTTYgen conversion from pem to ppk



**PuTTY Key Generator**

File Key Conversions Help

**Key**

Public key for pasting into OpenSSH authorized\_keys file:

```
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQGCWic+4hHuDzZewPmgEoTupGxSK9cNL8RxnvlP2UQdDan1a3UEUqqWvCXT6AxbTWJWQ+4RUmLFCXkbPFWHmJM2SaJp/BBSSQ8KKh+x6cs1AumCH2G9e20vpc9/PK70JianPbwHSx9qZ+NW339bAm7ktdhM8hu42eq8FA8YcmN9Hg7GJShBeX9k69F9luM1lrcpIC8uagL
```

Key fingerprint: ssh-rsa 2048 26:e0:00:90:9c:92:23:b0:50:53:2c:c3:80:55:04:6f

Key comment: Imported-openssh-key

Key passphrase:

Confirm passphrase:

**Actions**

Generate a public/private key pair **Generate**

Load an existing private key file **Load**

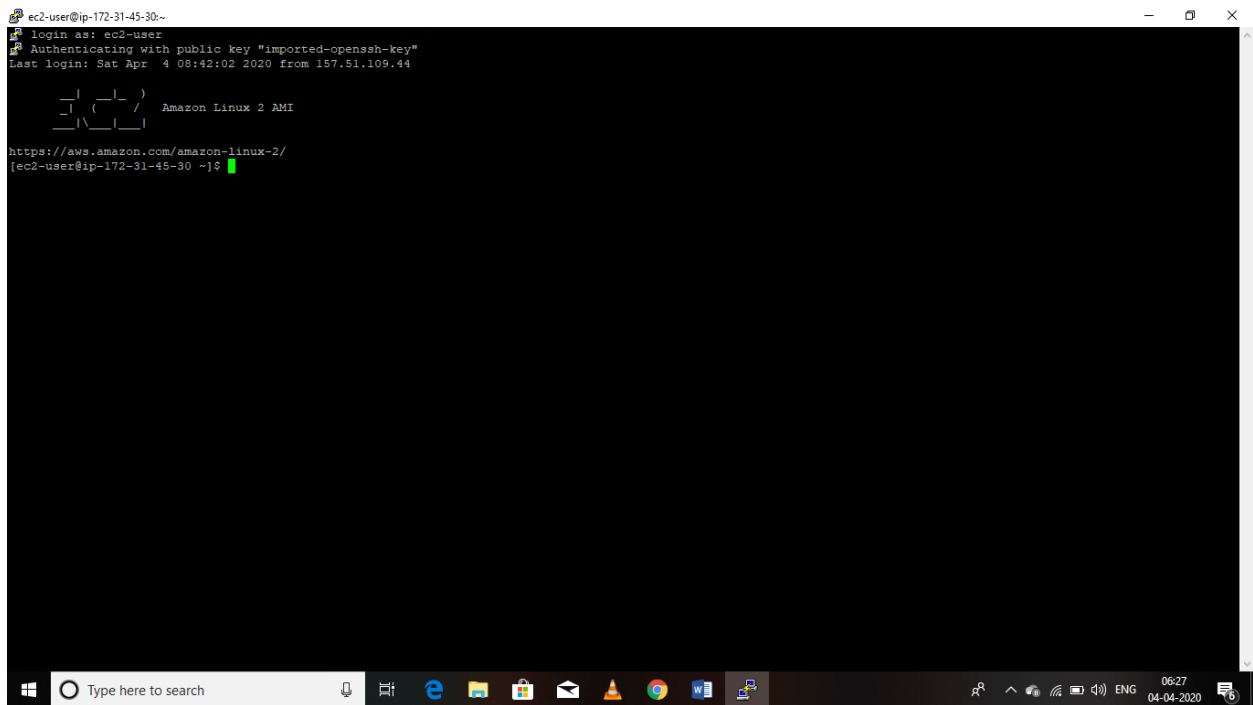
Save the generated key **Save public key** **Save private key**

**Parameters**

Type of key to generate: ☒ RSA ☐ DSA ☐ ECDSA ☐ Ed25519 ☐ SSH-1 (RSA)

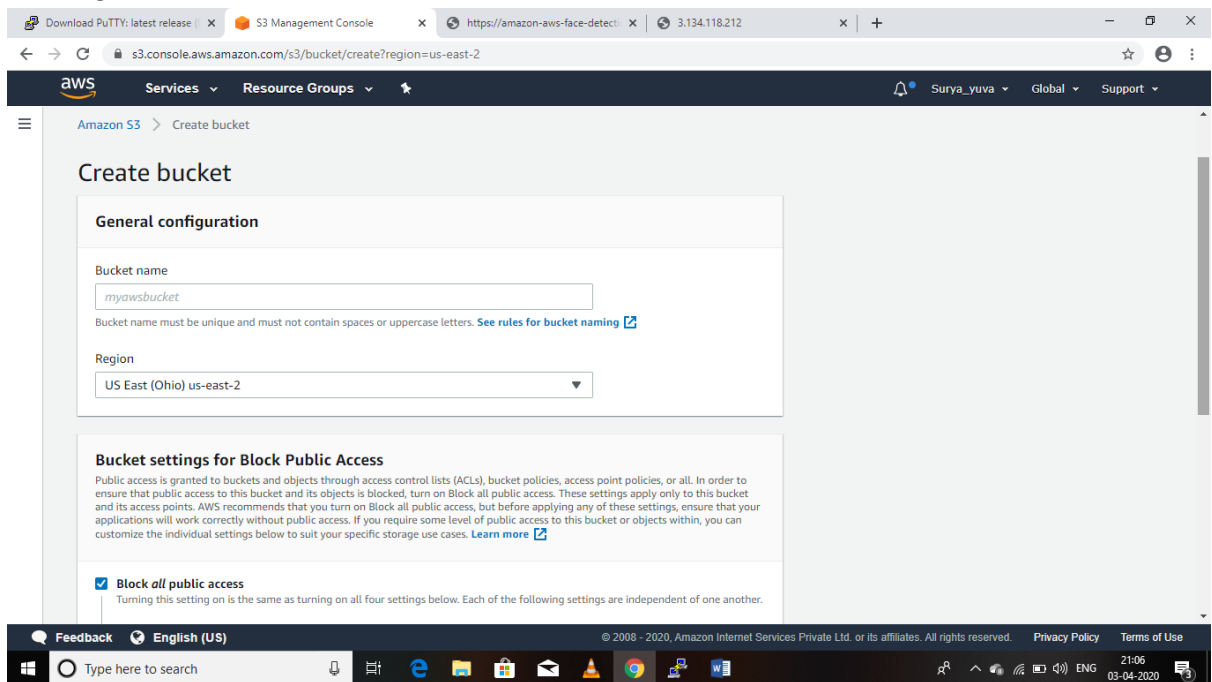
Number of bits in a generated key: 2048

## 7. Logged in EC2 black screen

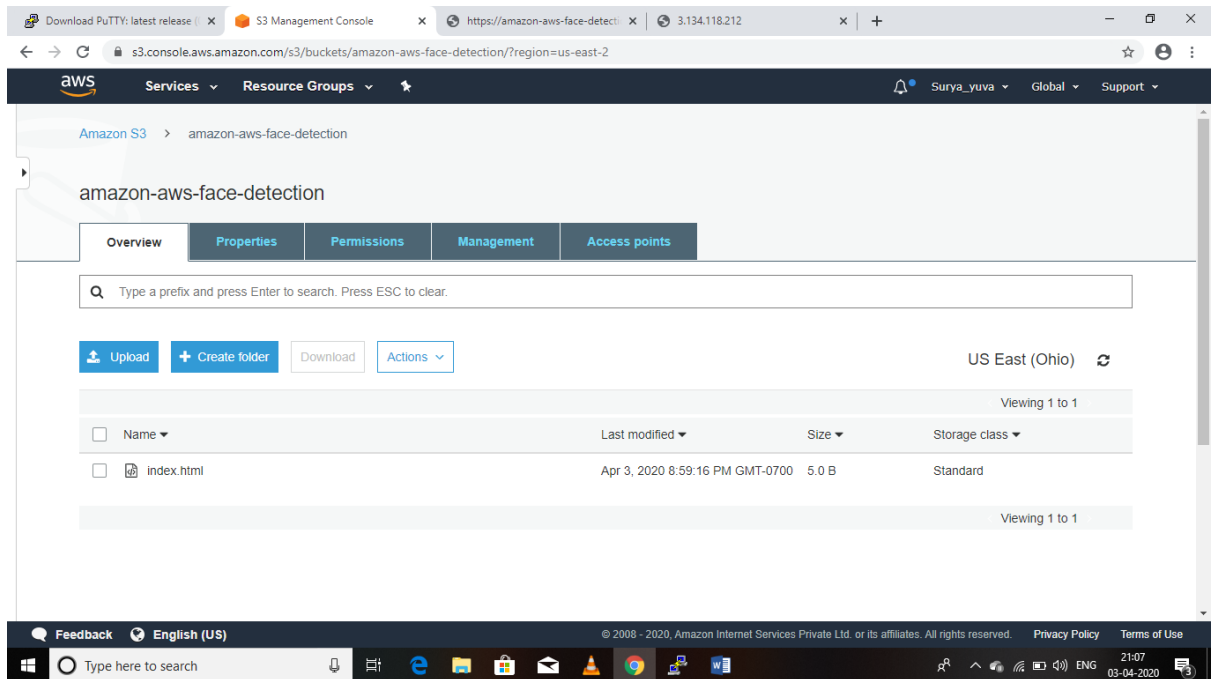


## Screenshots needed for S3

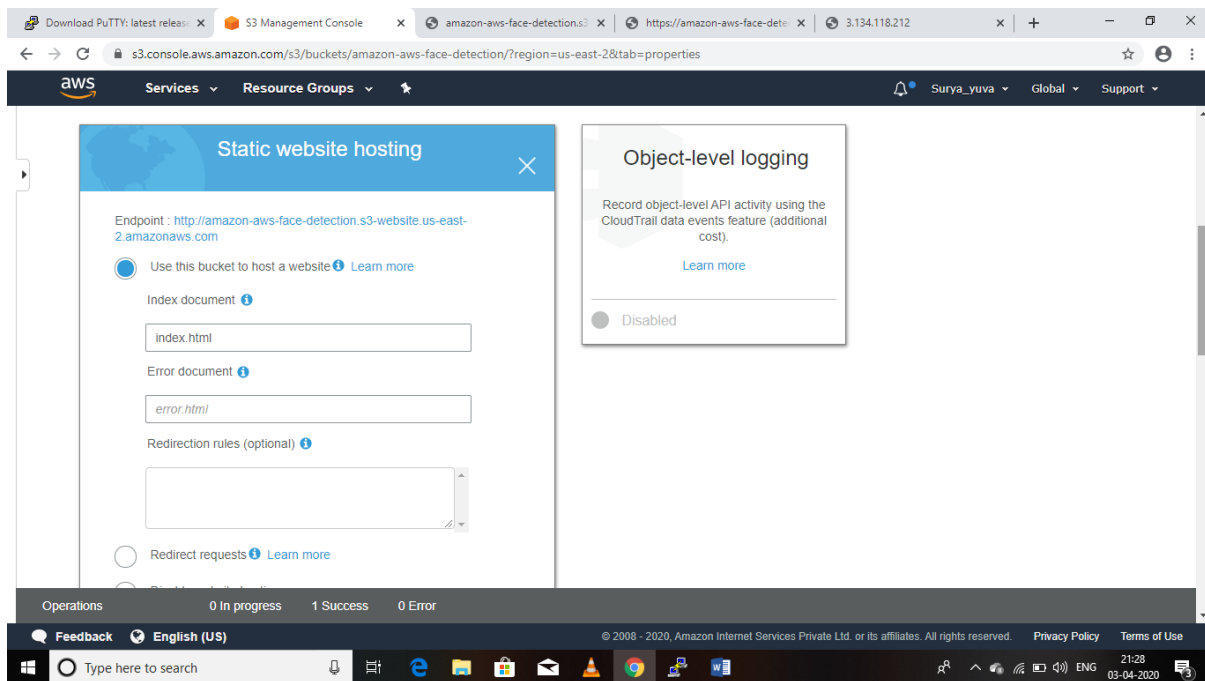
### 1. Creating a bucket



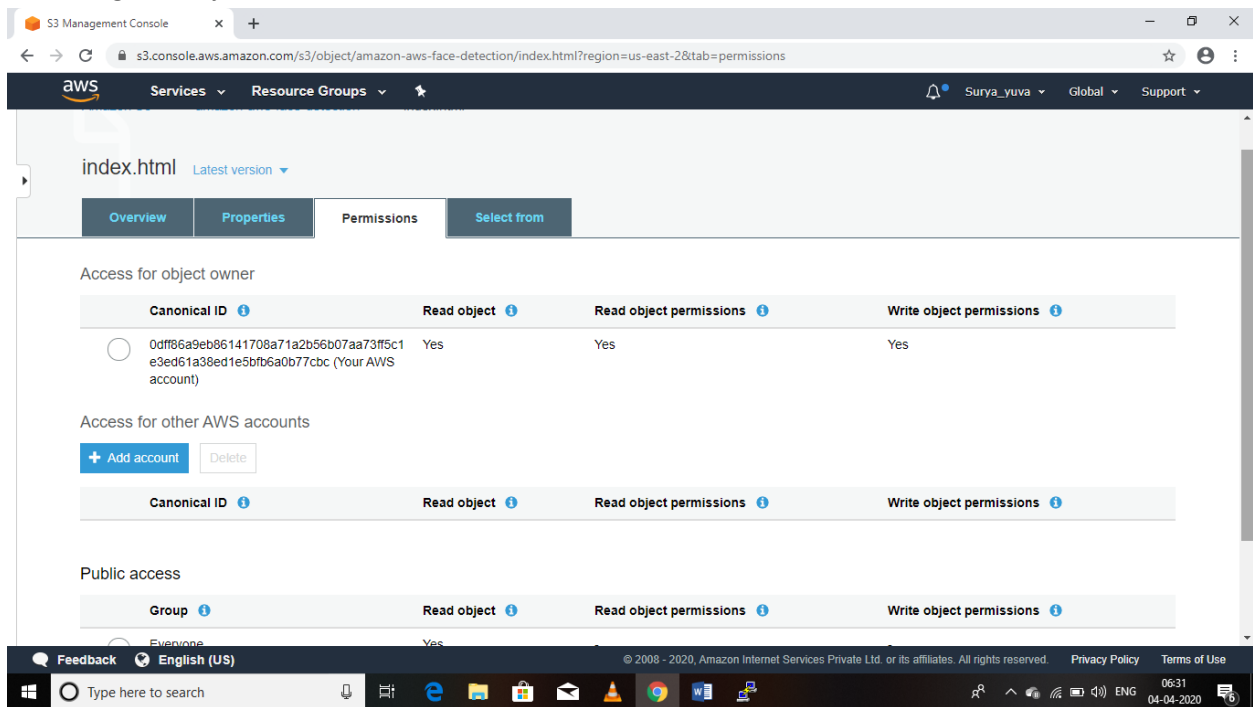
## 2. Uploading an Object



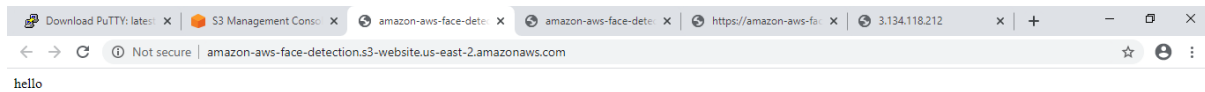
## 3. Enabling Static Website



#### 4. Making the Object Public



#### 5. Checking the S3 link on the browser



Screenshots needed for Rekognition



## 1. Face Detect

The screenshot shows the AWS Rekognition Console's 'Face Detect' page. The left sidebar contains a navigation menu with options like 'Custom Labels', 'Demos', 'Facial analysis', and 'Additional Resources'. The main area features a large image of a child in traditional Indian attire with a bounding box around their face. To the right, a list of detected attributes is shown with their confidence percentages:

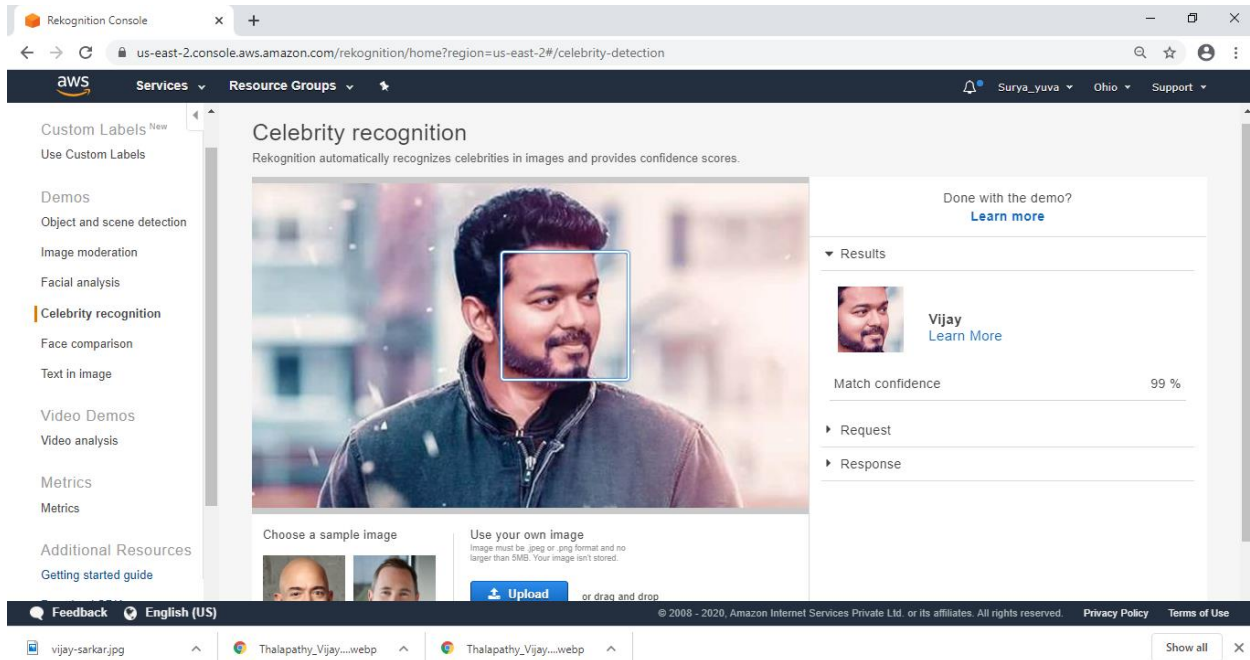
| Attribute           | Confidence       |
|---------------------|------------------|
| looks like a face   | 100 %            |
| appears to be male  | 56.6 %           |
| age range           | 4 - 14 years old |
| not smiling         | 94.5 %           |
| appears to be fear  | 82.9 %           |
| not wearing glasses | 95.2 %           |

Below the list are links for 'Show more', 'Request', and 'Response'. The bottom of the page shows the AWS footer with copyright information and a Windows taskbar at the very bottom.

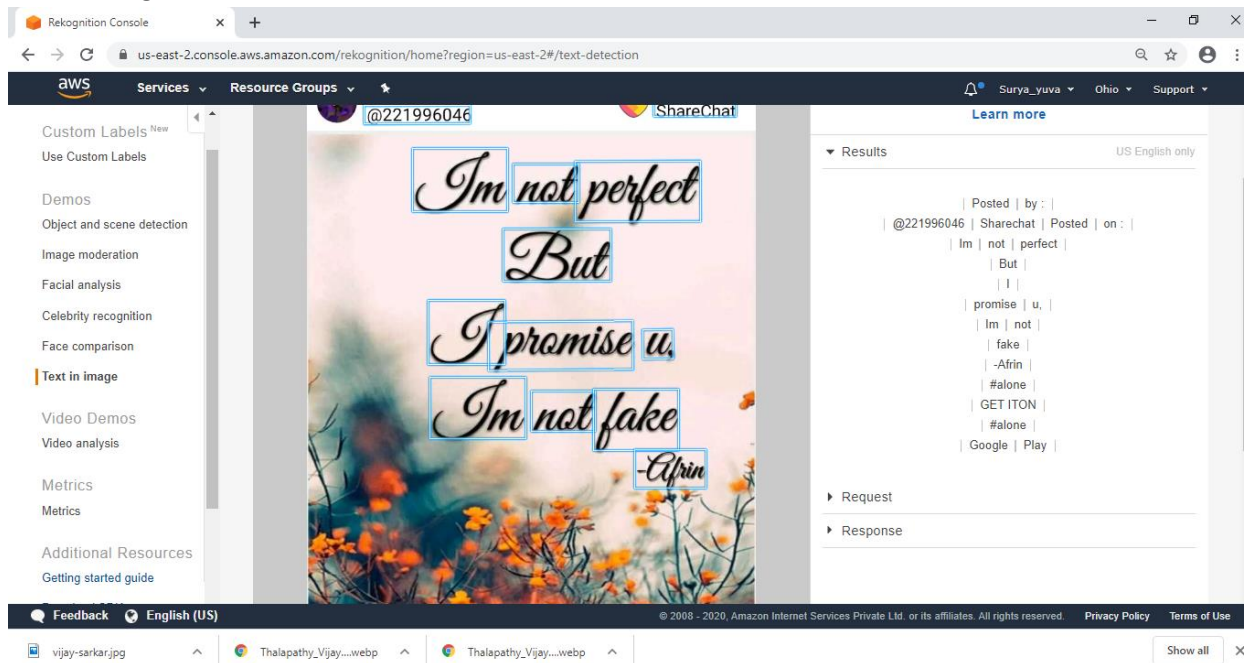
## 2. Face Compare

The screenshot displays the 'Face Compare' section of the AWS Rekognition Console. The main heading is 'Face comparison' with a subtext: 'Compare faces to see how closely they match based on a similarity percentage.' The interface is divided into two main columns. The left column, 'Reference face', shows a photo of a child in traditional Indian attire. The right column, 'Comparison faces', shows the same child in a different pose. Below these are sections for 'Choose a sample image' with thumbnail previews. On the far right, a 'Results' section shows two face images with a 'not equal' symbol between them, indicating a low similarity score. Below this are links for 'Request' and 'Response'. The bottom of the page includes the AWS footer and a Windows taskbar.

## 3. Celebrity Recognition



### 3. Text in Image



### 1.Installing aws-sdk

```
ec2-user@ip-172-31-45-30:/var/www/html/face
[ec2-user@ip-172-31-45-30 face]$ sudo yum install php
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 2.4 kB 00:00:00
Package php-5.4.16-46.amzn2.0.2.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-172-31-45-30 face]$ curl -s https://getcomposer.org/installer | php
All settings correct for using Composer
The installation directory "/var/www/html/face" is not writable
[ec2-user@ip-172-31-45-30 face]$ cd /var/www/html
[ec2-user@ip-172-31-45-30 html]$ sudo mkdir face
mkdir: cannot create directory 'face': File exists
[ec2-user@ip-172-31-45-30 html]$ cd face
[ec2-user@ip-172-31-45-30 face]$ sudo php -d memory_limit=-1 ~/composer.phar require aws/aws-sdk-php
Using version *2.8 for aws/aws-sdk-php
./composer.json has been updated
Loading composer repositories with package information
Updating dependencies (including require-dev)
Nothing to install or update
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.
Generating autoload files
[ec2-user@ip-172-31-45-30 face]$
```

## 2.Installing php

```
ec2-user@ip-172-31-45-30~
login as: ec2-user
Authenticating with public key "imported-openssh-key"
Last login: Sat Apr  4 06:23:42 2020 from 157.51.121.34

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

https://aws.amazon.com/amazon-linux-2/
1 package(s) needed for security, out of 7 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-45-30 ~]$ sudo yum install php
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 2.4 kB 00:00:00
Package php-5.4.16-46.amzn2.0.2.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-172-31-45-30 ~]$
```

## 3.index.php file code

```
ec2-user@ip-172-31-45-30:/var/www/html/face
sudo /bin/dmidecode /dev/sda c4w/var/swap.1 be=10 count=1024
sudo /sbin/mkswap /var/swap.1
sudo /sbin/swapoff /var/swap.1

sudo wget https://i.pinimg.com/originals/b9/7e/a3/b97ea33b5842c7894b804923c6c05580.jpg
sudo mv b97ea33b5842c7894b804923c6c05580.jpg sample.jpg

*/
error_reporting(0);

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

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

$bucket = 'amazon-aws-face-detection';
$keyname = 'sample1.jpg';

$s3 = S3Client::factory([
    'profiles' => '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 upload done... Here is the URL: " . $imageUrl;
    }
} catch (Exception $e) {
    echo $e->getMessage() . PHP_EOL;
}

"index.php" 55L, 1238C
55,1 Bot
```

#### 4. Upload success screenshot

```
ec2-user@ip-172-31-45-30:/var/www/html/face
[ec2-user@ip-172-31-45-30 face]$ sudo wget https://media-assets-03.thedrum.com/cache/images/thedrum-prod/s3-news-tmp-140656-eofwf--2x1--940.jpg
--2020-04-04 08:58:11-- https://media-assets-03.thedrum.com/cache/images/thedrum-prod/s3-news-tmp-140656-eofwf--2x1--940.jpg
Resolving media-assets-03.thedrum.com (media-assets-03.thedrum.com)... 13.226.142.25, 13.226.142.63, 13.226.142.86, ...
Connecting to media-assets-03.thedrum.com (media-assets-03.thedrum.com)|13.226.142.25|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 92174 (90K) [image/jpeg]
Saving to: 's3-news-tmp-140656-eofwf--2x1--940.jpg.1'

100%[=====>] 92,174 --.-K/s in 0.03s

2020-04-04 08:58:11 (2.58 MB/s) - 's3-news-tmp-140656-eofwf--2x1--940.jpg.1' saved [92174/92174]

[ec2-user@ip-172-31-45-30 face]$ ls
composer.json composer.lock index.php s3-news-tmp-140656-eofwf--2x1--940.jpg s3-news-tmp-140656-eofwf--2x1--940.jpg.1 sample1.jpg sample.jpg vendor
[ec2-user@ip-172-31-45-30 face]$ sudo mv s3-news-tmp-140656-eofwf--2x1--940.jpg sample1.jpg
[ec2-user@ip-172-31-45-30 face]$ sudo vim index.php
[ec2-user@ip-172-31-45-30 face]$ sudo php index.php
Image upload done... Here is the URL: https://amazon-aws-face-detection.s3.us-east-2.amazonaws.com/sample1.jpg[ec2-user@ip-172-31-45-30 face]$
```

### Screenshots needed for EC2 & Rekognition

#### 1. Face Detect success screenshot

```
ec2-user@ip-172-31-45-30:/var/www/html/face
[ec2-user@ip-172-31-45-30 face]$ sudo wget https://media-assets-03.thedrum.com/cache/images/thedrum-prod/s3-news-tmp-140656-eofwf--2x1--940.jpg
--2020-04-04 09:19:35-- https://media-assets-03.thedrum.com/cache/images/thedrum-prod/s3-news-tmp-140656-eofwf--2x1--940.jpg
Resolving media-assets-03.thedrum.com (media-assets-03.thedrum.com)... 99.86.57.125, 99.86.57.25, 99.86.57.82, ...
Connecting to media-assets-03.thedrum.com (media-assets-03.thedrum.com)|99.86.57.125|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 92174 (90K) [image/jpeg]
Saving to: 's3-news-tmp-140656-eofwf--2x1--940.jpg'

100%[=====] 92,174 --.-K/s in 0.03s

2020-04-04 09:19:35 (2.85 MB/s) - 's3-news-tmp-140656-eofwf--2x1--940.jpg' saved [92174/92174]

[ec2-user@ip-172-31-45-30 face]$ ls
composer.json  index.php          s3-news-tmp-140656-eofwf--2x1--940.jpg.1  sample1.jpg  s.jpg
composer.lock  s3-news-tmp-140656-eofwf--2x1--940.jpg  s3-news-tmp-140656-eofwf--2x1--940.jpg.2  sample.jpg  vendor
[ec2-user@ip-172-31-45-30 face]$ sudo mv s3-news-tmp-140656-eofwf--2x1--940.jpg s.jpg
[ec2-user@ip-172-31-45-30 face]$ sudo vim index.php
[ec2-user@ip-172-31-45-30 face]$ sudo php index.php
Image upload done... Here is the URL: https://amazon-aws-face-detection.s3.us-east-2.amazonaws.com/s.jpgTotally there are 5 faces[ec2-user@ip-172-31-45-30 face]$
```