

FACE DETECTION APP

using

AWS

WEBINAR Organized by

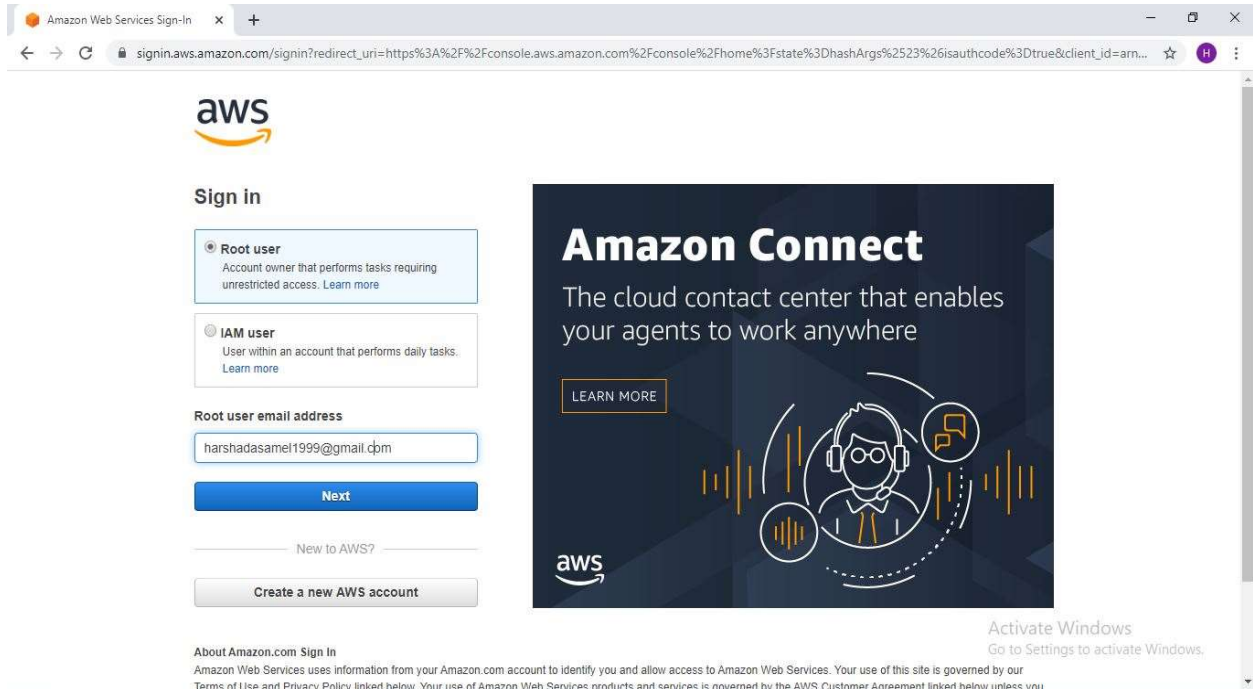
ETHNUS Consultancy Services Pvt. Ltd.

NAME: Harshada S. Samel

COLLEGE NAME: Datta Meghe College of Engineering, Airoli

DASHBOARDS

AWS Login screen with username



The screenshot shows the AWS Sign-in page in a web browser. The browser's address bar displays the URL: `signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3Fstate%3DhashArgs%2523%26isauthcode%3Dtrue&client_id=arn...`. The page features the AWS logo at the top left. Below it, the 'Sign in' section offers two options: 'Root user' (Account owner that performs tasks requiring unrestricted access. [Learn more](#)) and 'IAM user' (User within an account that performs daily tasks. [Learn more](#)). A text input field for 'Root user email address' contains the email `harshadasamei1999@gmail.com`. A blue 'Next' button is positioned below the input field. To the right of the sign-in options is a large promotional banner for 'Amazon Connect' with the text 'The cloud contact center that enables your agents to work anywhere' and a 'LEARN MORE' button. At the bottom left, there is a link for 'New to AWS?' and a button to 'Create a new AWS account'. At the bottom right, there is a 'Activate Windows' watermark with the text 'Go to Settings to activate Windows.' and a small 'About Amazon.com Sign In' section with a disclaimer.

Amazon Web Services Sign-In

signin.aws.amazon.com/signin?redirect_uri=https%3A%2F%2Fconsole.aws.amazon.com%2Fconsole%2Fhome%3Fstate%3DhashArgs%2523%26isauthcode%3Dtrue&client_id=arn...

aws

Sign in

Root user
Account owner that performs tasks requiring unrestricted access. [Learn more](#)

IAM user
User within an account that performs daily tasks. [Learn more](#)

Root user email address
harshadasamei1999@gmail.com

Next

[New to AWS?](#)

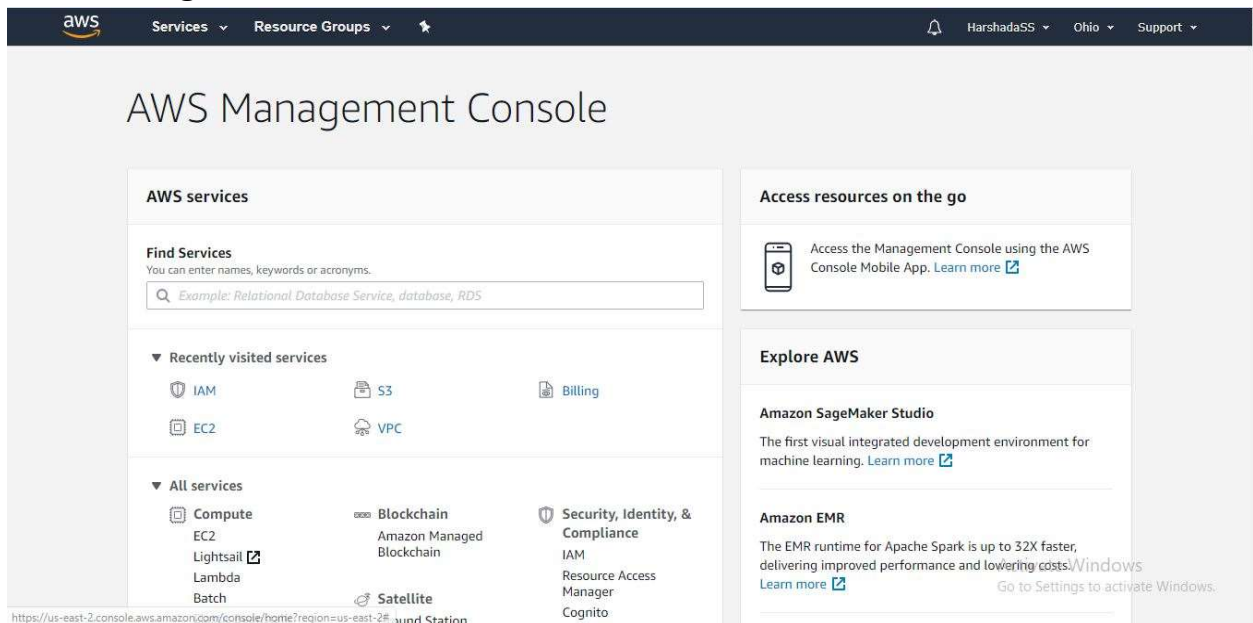
[Create a new AWS account](#)

Amazon Connect
The cloud contact center that enables your agents to work anywhere
[LEARN MORE](#)

Activate Windows
Go to Settings to activate Windows.

About Amazon.com Sign In
Amazon Web Services uses information from your Amazon.com account to identify you and allow access to Amazon Web Services. Your use of this site is governed by our [Terms of Use and Privacy Policy linked below](#). Your use of Amazon Web Services products and services is governed by the [AWS Customer Agreement linked below](#) unless you

AWS Management Console Dashboard



The screenshot shows the AWS Management Console Dashboard. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and a user profile 'HarshadaSS' with a location 'Ohio' and a 'Support' link. The main content area is titled 'AWS Management Console'. It features a 'Find Services' search bar with the example text 'Example: Relational Database Service, database, RDS'. Below the search bar, there are sections for 'Recently visited services' (IAM, S3, Billing, EC2, VPC) and 'All services' (Compute, Blockchain, Security, Identity, & Compliance, IAM, Resource Access Manager, Cognito, Amazon Managed Blockchain, Satellite). On the right side, there are sections for 'Access resources on the go' (Access the Management Console using the AWS Console Mobile App. [Learn more](#)) and 'Explore AWS' (Amazon SageMaker Studio, Amazon EMR). At the bottom right, there is a 'Go to Settings to activate Windows.' watermark.

aws Services Resource Groups

HarshadaSS Ohio Support

AWS Management Console

AWS services

Find Services
You can enter names, keywords or acronyms.
Example: Relational Database Service, database, RDS

Recently visited services

- IAM
- S3
- Billing
- EC2
- VPC

All services

- Compute
 - EC2
 - Lightsail
 - Lambda
 - Batch
- Blockchain
 - Amazon Managed Blockchain
 - Satellite
- Security, Identity, & Compliance
 - IAM
 - Resource Access Manager
 - Cognito

Access resources on the go

Access the Management Console using the AWS Console Mobile App. [Learn more](#)

Explore AWS

Amazon SageMaker Studio
The first visual integrated development environment for machine learning. [Learn more](#)

Amazon EMR
The EMR runtime for Apache Spark is up to 32X faster, delivering improved performance and lowering costs. [Learn more](#)

Go to Settings to activate Windows.

<https://us-east-2.console.aws.amazon.com/console/home?region=us-east-2#fundStation>

EC2 Dashboard

The screenshot shows the AWS EC2 Dashboard. At the top, there's a navigation bar with 'aws', 'Services', 'Resource Groups', and user information. A blue banner at the top right says 'Welcome to the new EC2 console!'. On the left, a sidebar lists navigation options like 'EC2 Dashboard', 'Events', 'Tags', 'Reports', 'Limits', 'INSTANCES', 'IMAGES', etc. The main content area is titled 'EC2' and shows 'Resources' for the 'US East (Ohio) Region'. It lists various resource types and their counts: Running instances (1), Elastic IPs (0), Dedicated Hosts (0), Snapshots (0), Volumes (1), Load balancers (0), Key pairs (2), Security groups (3), and Placement groups (0). On the right, there's a section for 'Account attributes' including 'Supported platforms', 'Default VPC', and 'Console experiments'. At the bottom, there's a 'Launch instance' button and a footer with 'Feedback', 'English (US)', and copyright information.

Resources

You are using the following Amazon EC2 resources in the US East (Ohio) Region:

Resource Type	Count
Running instances	1
Elastic IPs	0
Dedicated Hosts	0
Snapshots	0
Volumes	1
Load balancers	0
Key pairs	2
Security groups	3
Placement groups	0

Account attributes

- Supported platforms
- Default VPC
- Console experiments
- Settings

Launch instance

S3 Dashboard

The screenshot shows the AWS S3 Dashboard. At the top, there's a navigation bar with 'aws', 'Services', 'Resource Groups', and user information. A blue banner at the top right says 'We're gradually updating the design of the Amazon S3 console...'. On the left, a sidebar lists navigation options like 'Amazon S3', 'Buckets', 'Batch operations', 'Access analyzer for S3', 'Block public access', and 'Feature spotlight'. The main content area is titled 'Amazon S3' and shows 'Buckets (1)'. It includes a search bar, a table with bucket details, and buttons for 'Copy ARN', 'Empty', 'Delete', and 'Create bucket'. The table has columns for Name, Region, Access, and Bucket created. The footer contains 'Feedback', 'English (US)', and copyright information.

Buckets (1)

Name	Region	Access	Bucket created
awsharshada	US East (Ohio) us-east-2	Not Public	2020-03-28T15:12:20.000Z

Rekognition Dashboard

aws

Services

Resource Groups

HarshadaSSOhioSupport

Amazon Rekognition

Custom Labels^{New}

Use Custom Labels

Demos

Object and scene detection

Image moderation

Facial analysis

Celebrity recognition

Face comparison

Text in image

Video Demos

Video analysis

Metrics

Metrics


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

FeedbackEnglish (US)

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Successfully choosing Instance Type (t3 micro)

Adding Storage

aws

Services

Resource Groups

HarshadaSSOhioSupport

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

Go to Settings to activate Windows.

Feedback

English (US)

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Successfully Storage added (8 GB)

Configuring Security Group

aws

Services

Resource Groups

HarshadaSSOhioSupport

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:

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.

Cancel

Previous

Review and Launch

Go to Settings to activate Windows.

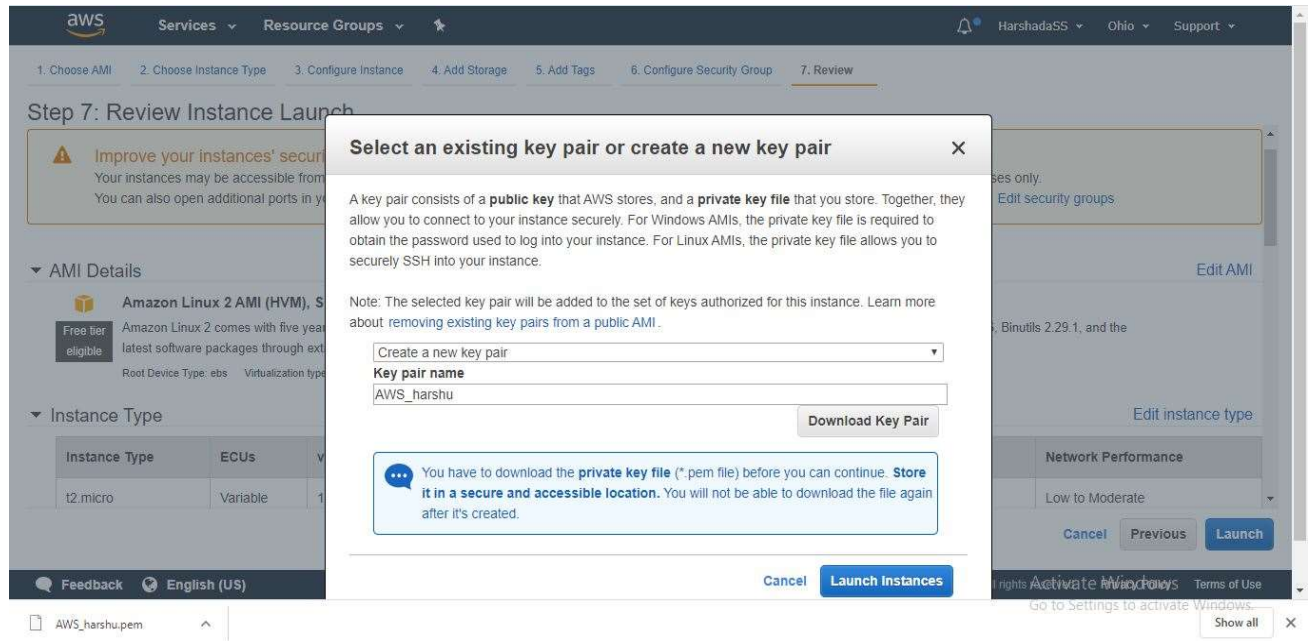
Feedback

English (US)

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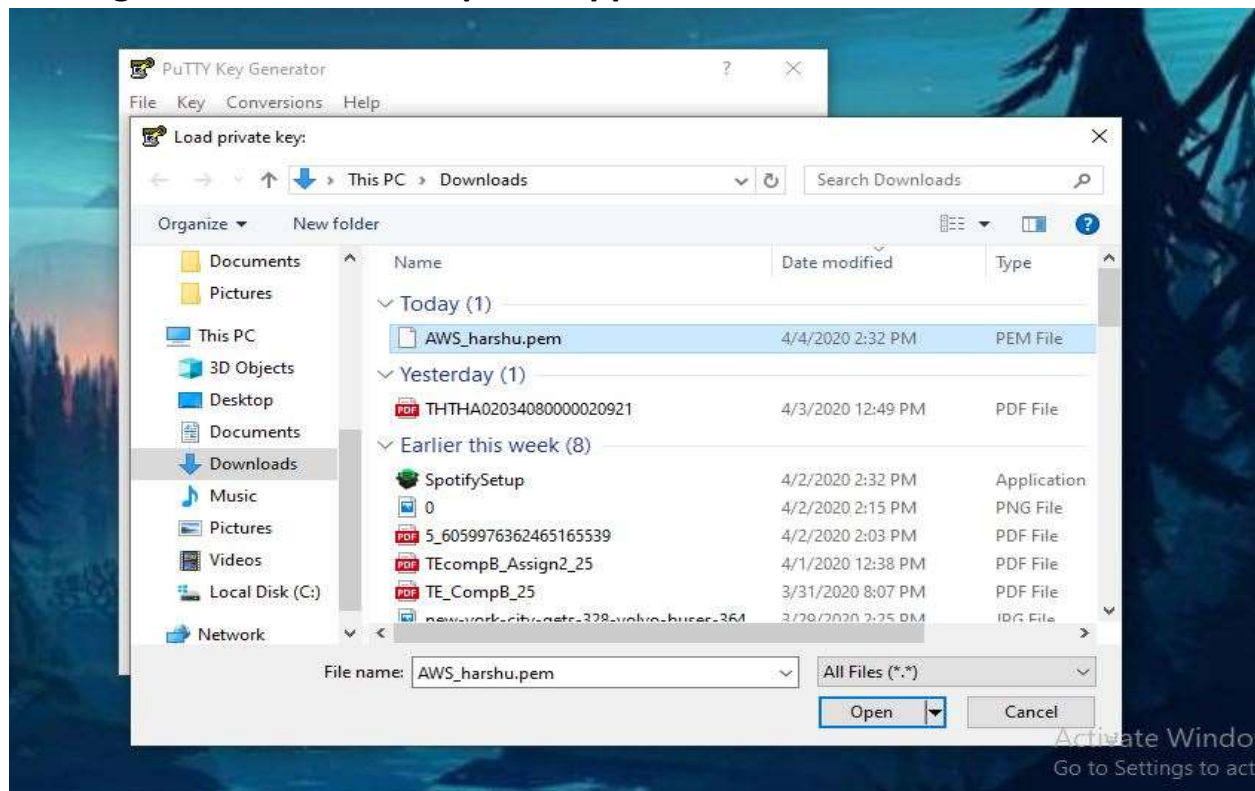
Successfully configured Security Group

Key Pair Download

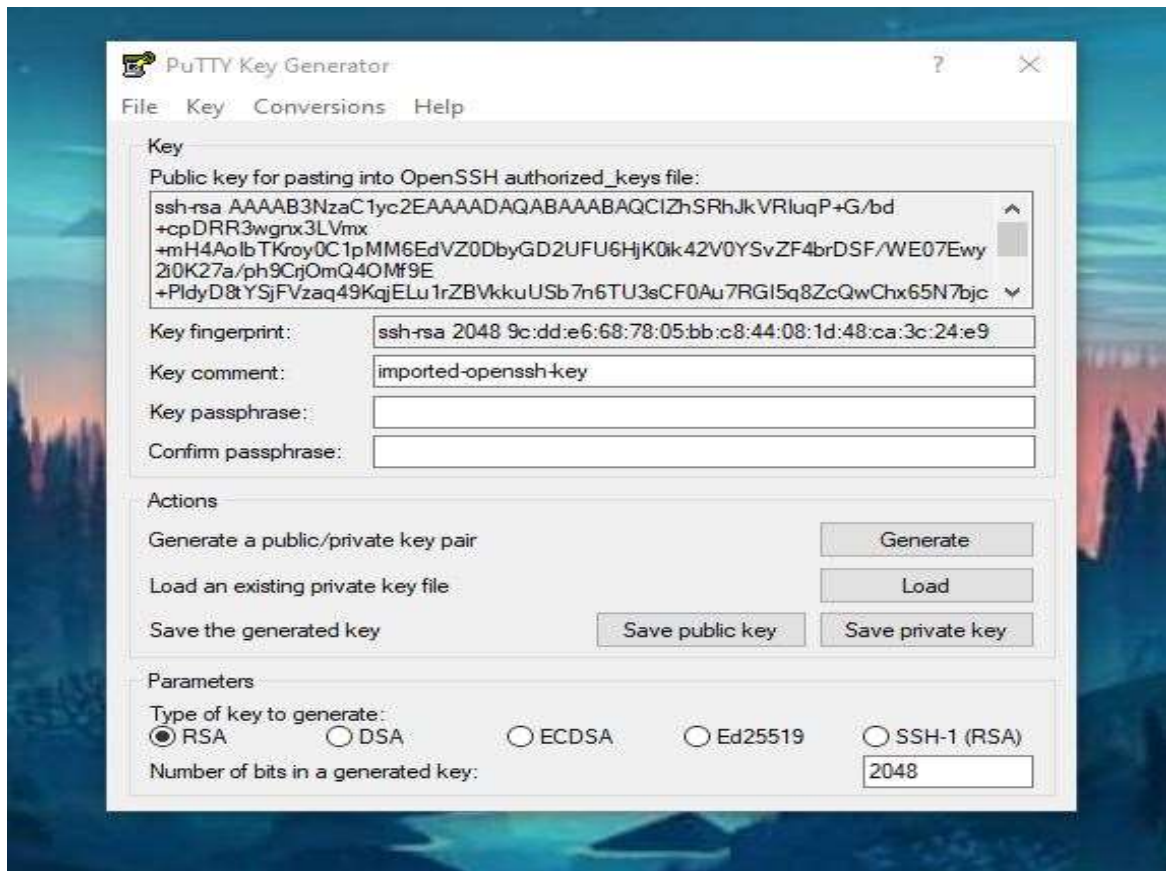


Successfully downloaded the Key Pair (AWS_harshu.pem)

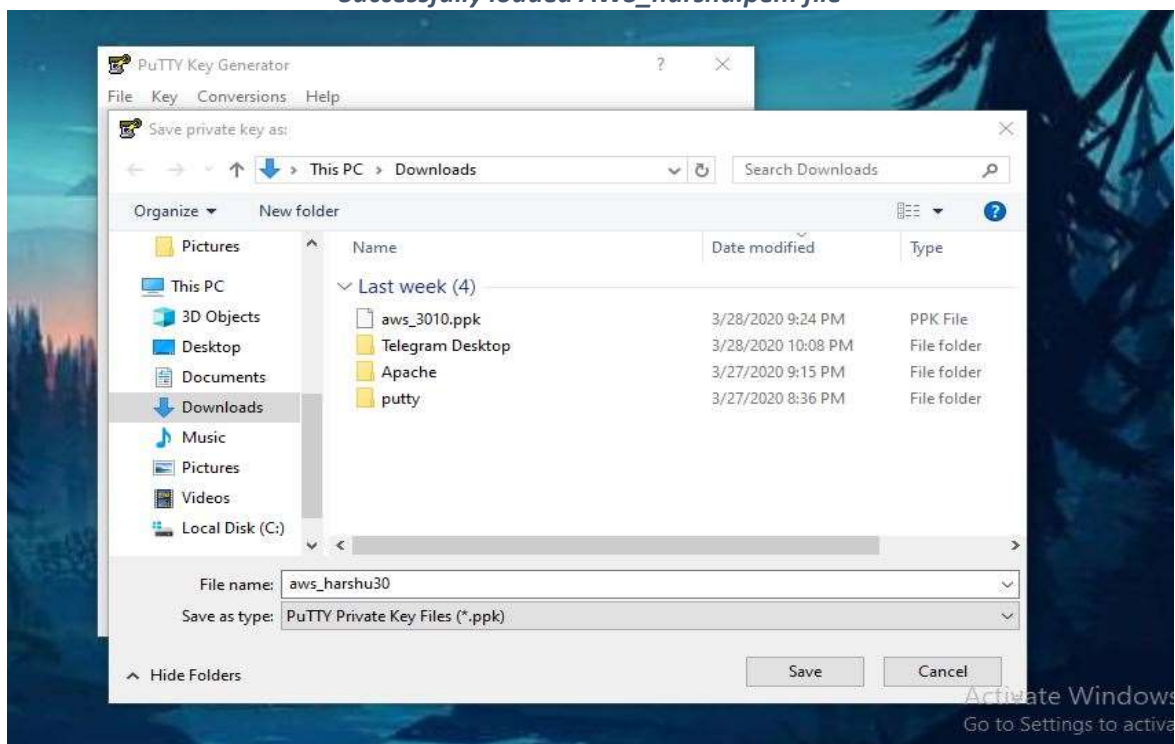
PuTTYgen conversion from pem to ppk



Loading AWS_harshu.pem to convert it into .ppk file



Successfully loaded AWS_harshu.pem file



Successfully converted .pem file to .ppk file (Saved private key as aws_harshu30.ppk)

Logged in EC2 black screen



```
ec2-user@ip-172-31-36-27:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
Last login: Sat Apr  4 14:55:48 2020 from 1.38.232.1  
  
  _ | _ | _ )  
  _ | ( _ /  Amazon Linux 2 AMI  
  _ | \ _ | _ |  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-36-27 ~]$
```

Successfully logged in EC2 black screen (login as: ec2-user)

S3 (SIMPLE STORAGE SERVICES)

Creating a bucket

The screenshot shows the 'Create bucket' page in the AWS console. The 'General configuration' section has 'Bucket name' set to 'myawsharshada' and 'Region' set to 'US East (Ohio) us-east-2'. The 'Bucket settings for Block Public Access' section has 'Block all public access' checked. A green success message at the top states: 'Successfully created bucket myawsharshada. To upload files and folders, or to configure additional bucket settings such as Bucket Versioning, tags, and default encryption, choose Go to bucket details.'

Amazon S3 > Create bucket

Create bucket

General configuration

Bucket name
myawsharshada
Bucket name must be unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

Region
US East (Ohio) us-east-2

Bucket settings for Block Public Access

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

☒ **Block all public access**
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

Activate Windows
Go to Settings to activate Windows.

The screenshot shows the 'Buckets' page in the AWS console. A green success message at the top states: 'Successfully created bucket myawsharshada. To upload files and folders, or to configure additional bucket settings such as Bucket Versioning, tags, and default encryption, choose Go to bucket details.' The table below lists two buckets: 'awsharshada' and 'myawsharshada'. The 'myawsharshada' bucket is highlighted.

Amazon S3

Buckets (2) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Find bucket by name

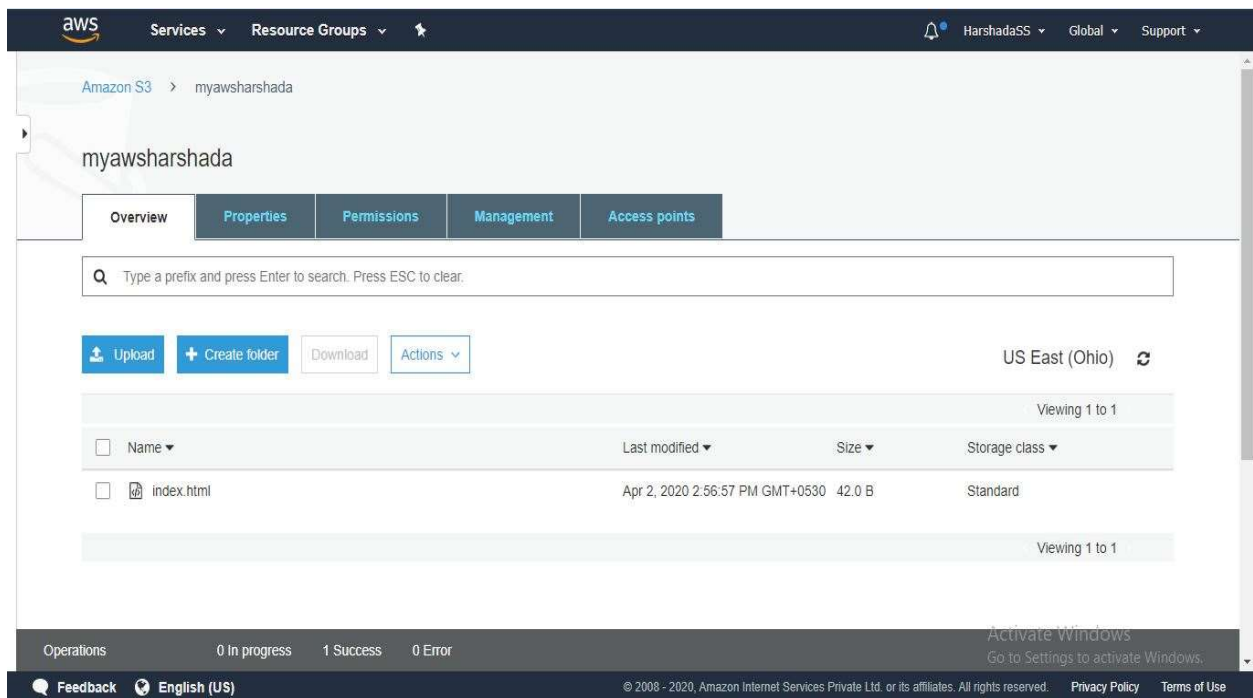
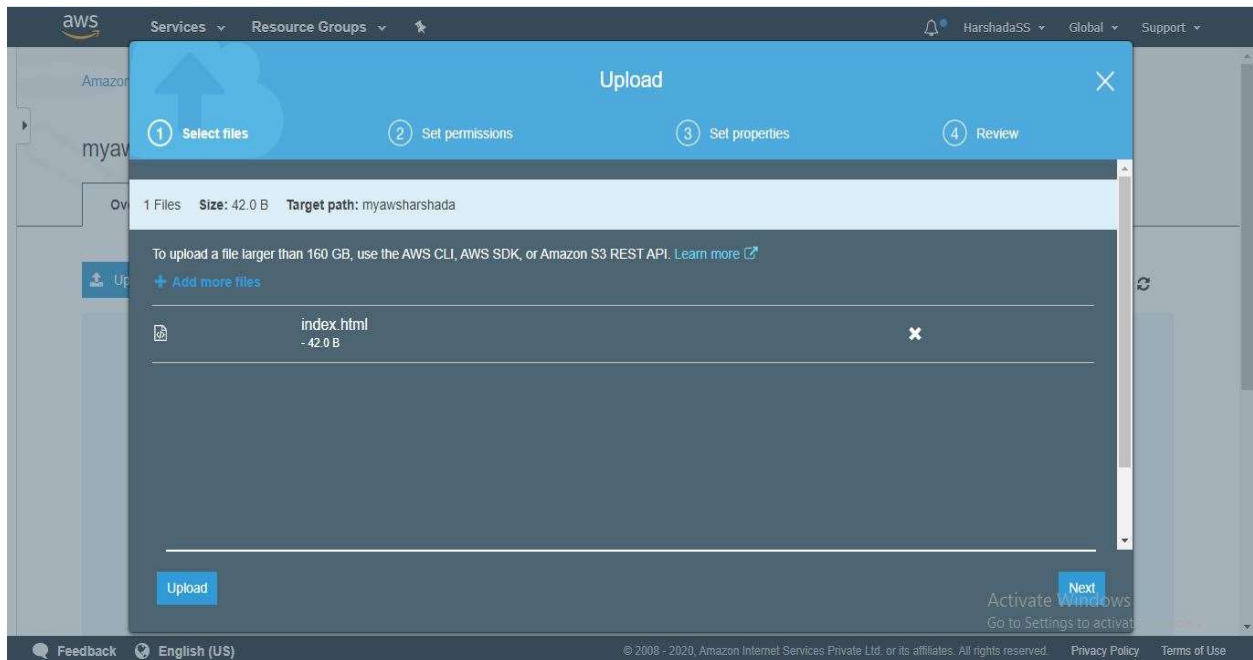
	Name	Region	Access	Bucket created
<input type="radio"/>	awsharshada	US East (Ohio) us-east-2	Objects can be public	2020-03-28T15:12:20.000Z
<input checked="" type="radio"/>	myawsharshada	US East (Ohio) us-east-2	Not Public	2020-04-02T09:16:18.000Z

Activate Windows
Go to Settings to activate Windows.

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Successfully created bucket (myawsharshada)

Uploading an Object



Successfully Uploaded File (index.html)

Enabling Static Website

The screenshot shows the 'Static website hosting' configuration page in the AWS Management Console. The page is titled 'Static website hosting' and includes a close button (X). The endpoint is set to 'http://awsharshada.s3-website.us-east-2.amazonaws.com'. The 'Use this bucket to host a website' option is selected. The index document is 'index.html' and the error document is 'error.html'. There are no redirection rules. The 'Bucket hosting' option is selected, and the 'Object-level logging' option is disabled. The 'Save' button is visible at the bottom right of the configuration panel.

Endpoint : <http://awsharshada.s3-website.us-east-2.amazonaws.com>

☒ Use this bucket to host a website [Learn more](#)

Index document [?](#)

Error document [?](#)

Redirection rules (optional) [?](#)

☐ Redirect requests [Learn more](#)

☐ Disable website hosting

☒ Bucket hosting

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

Object-level logging

Record object-level API activity using the CloudTrail data events feature (additional cost).

[Learn more](#)

☐ Disabled

Activate Windows
Go to Settings to activate Windows.

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The screenshot shows the 'Public access settings' page in the AWS Management Console. A green notification bar at the top states 'Public access settings updated successfully'. The 'Block all public access' toggle is turned off. Below it, four individual settings are listed, all of which are turned off: 'Block public access to buckets and objects granted through new access control lists (ACLs)', 'Block public access to buckets and objects granted through any access control lists (ACLs)', 'Block public access to buckets and objects granted through new public bucket or access point policies', and 'Block public and cross-account access to buckets and objects through any public bucket or access point policies'. An 'Edit' button is visible in the top right corner of the settings panel.

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

Public access settings updated successfully

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

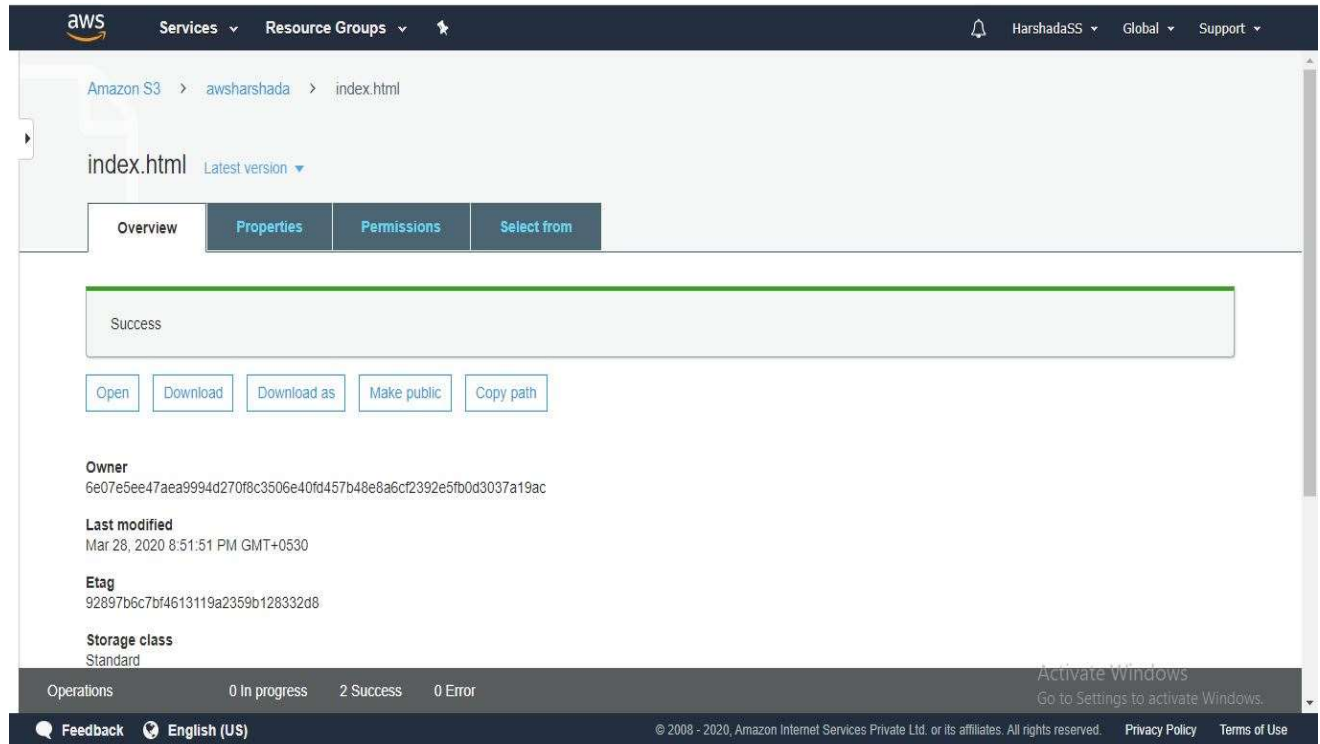
[Edit](#)

Activate Windows
Go to Settings to activate Windows.

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Successfully enabled Static Website (bucket name: awsharshada)

Making the Object Public



The screenshot shows the AWS S3 console interface. The breadcrumb navigation indicates the path: Amazon S3 > awsharshada > index.html. The 'index.html' object is selected, and the 'Latest version' is shown. The 'Properties' tab is active, displaying a success message: 'Success'. Below the message, there are buttons for 'Open', 'Download', 'Download as', 'Make public', and 'Copy path'. The 'Make public' button is highlighted. The object's metadata is displayed below the buttons: Owner (6e07e5ee47aea9994d270f8c3506e40fd457b48e8a6cf2392e5fb0d3037a19ac), Last modified (Mar 28, 2020 8:51:51 PM GMT+0530), Etag (92897b6c7bf4613119a2359b128332d8), and Storage class (Standard). The bottom status bar shows 'Operations: 0 In progress, 2 Success, 0 Error'. The footer includes 'Feedback', 'English (US)', and copyright information.

Successfully made the Object Public

Checking the S3 link on the browser

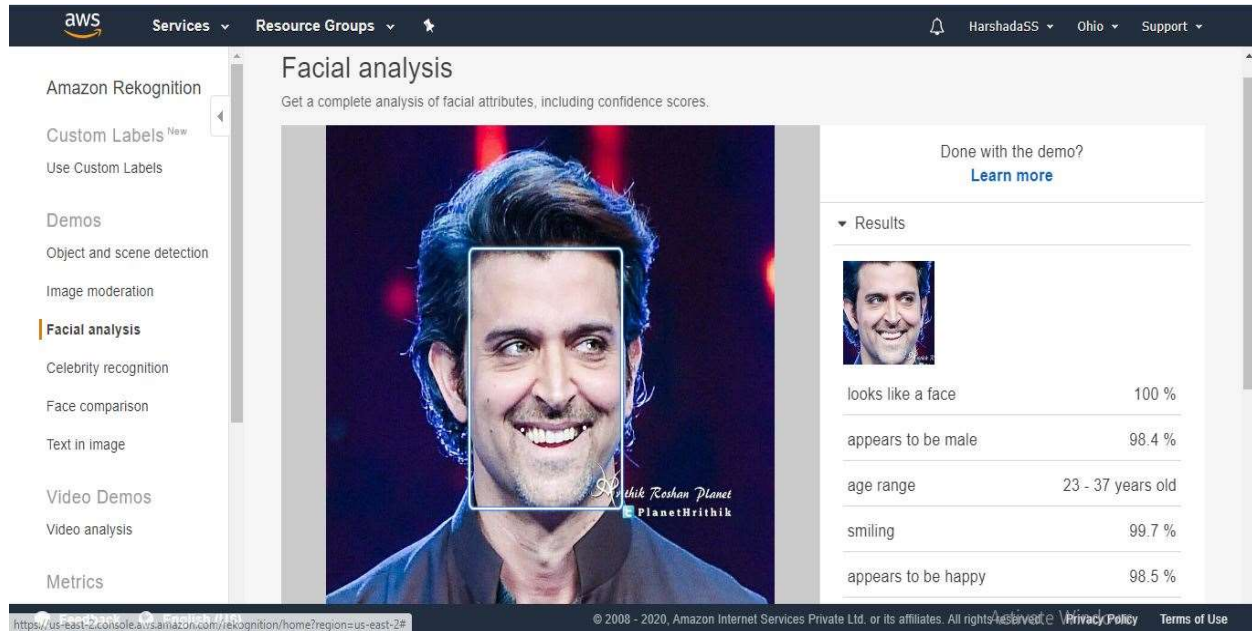


The screenshot shows a web browser window with the address bar displaying the URL: awsharshada.s3-website.us-east-2.amazonaws.com. The page content displays the text: 'Hello Folks!!! My name is Harshada Samei.'

Successfully checked S3 link on the browser

REKOGNITION

Face Detect



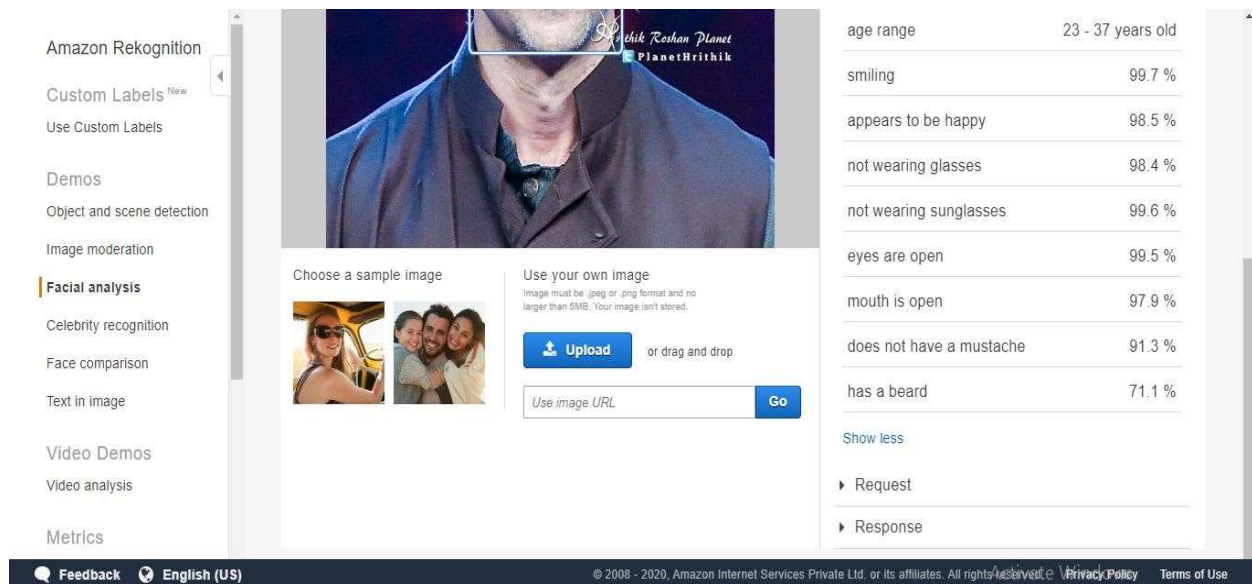
Facial analysis
Get a complete analysis of facial attributes, including confidence scores.

Done with the demo?
[Learn more](#)

Results

looks like a face	100 %
appears to be male	98.4 %
age range	23 - 37 years old
smiling	99.7 %
appears to be happy	98.5 %

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Facial analysis

Choose a sample image

Use your own image
Image must be .jpeg or .png format and no larger than 5MB. Your image isn't stored.

[Upload](#) or drag and drop

[Go](#)

age range	23 - 37 years old
smiling	99.7 %
appears to be happy	98.5 %
not wearing glasses	98.4 %
not wearing sunglasses	99.6 %
eyes are open	99.5 %
mouth is open	97.9 %
does not have a mustache	91.3 %
has a beard	71.1 %

[Show less](#)

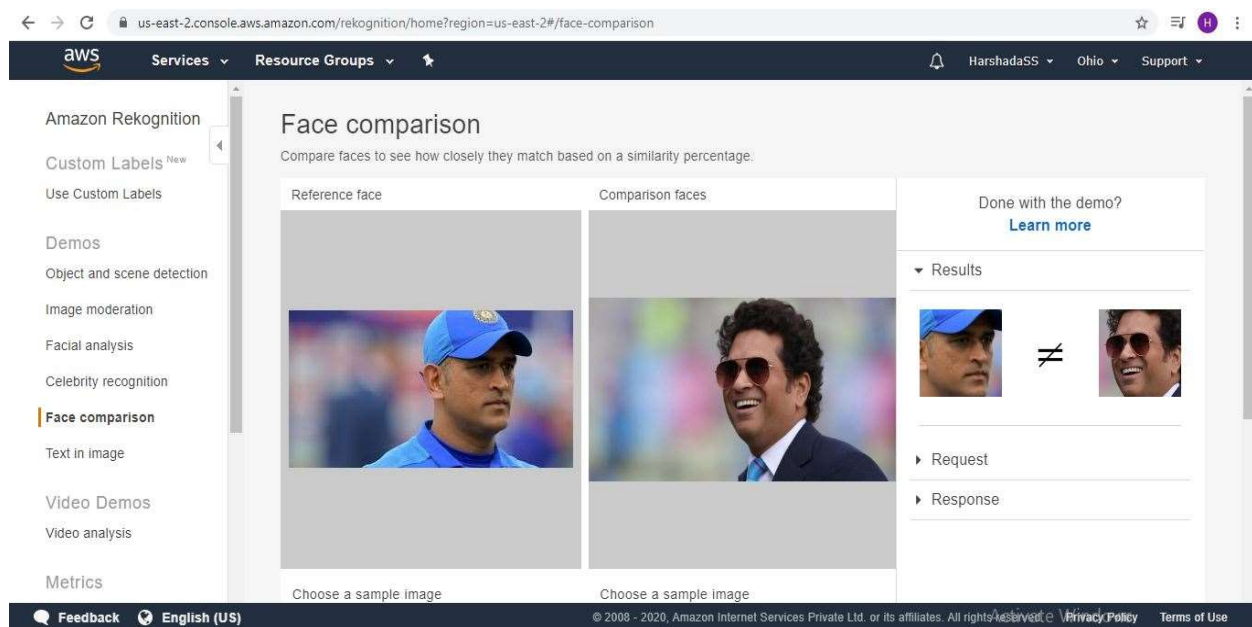
► Request

► Response

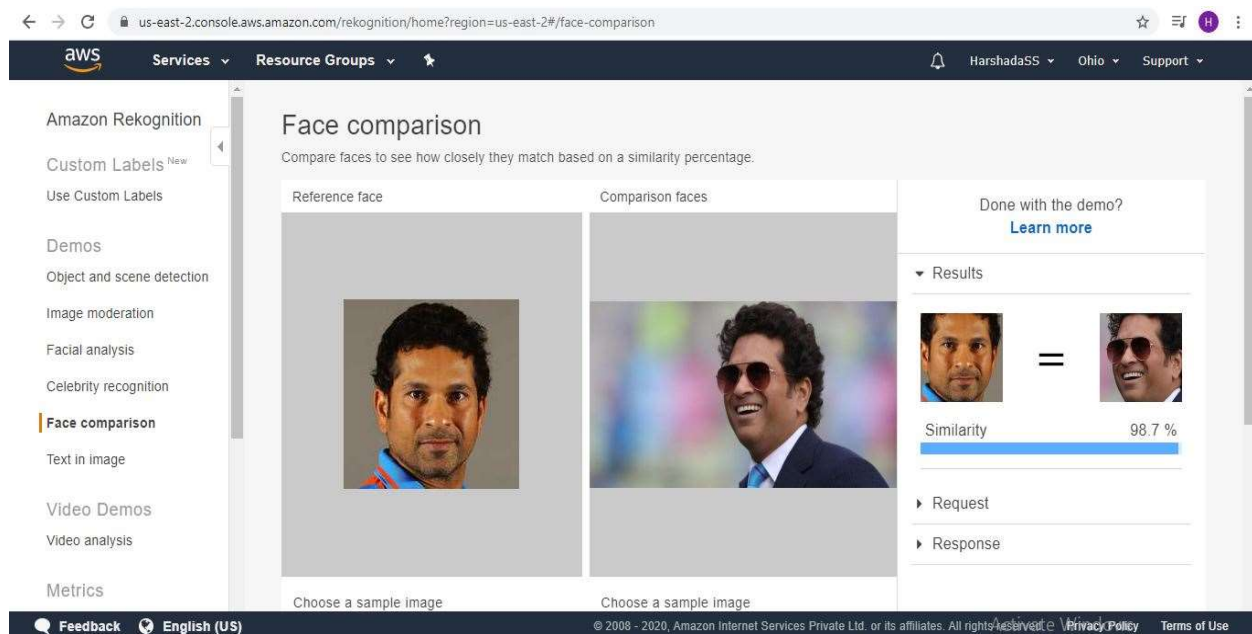
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Successful Face Detection

Face Compare



Successfully detected dissimilarity of faces



Successfully detected Similar Faces

Celebrity Recognition

The screenshot shows the AWS Rekognition console for the 'Celebrity recognition' service. The left sidebar contains a navigation menu with options like 'Amazon Rekognition', 'Custom Labels', 'Demos', and 'Celebrity recognition' (which is highlighted). The main content area features a large image of Hrithik Roshan with a blue bounding box around his face. To the right, the 'Results' section displays 'Hrithik Roshan' with a 'Match confidence' of 100%. Below this, there are sections for 'Request' and 'Response'. The top of the page shows the AWS logo, 'Services', 'Resource Groups', and user information 'HarshadaSS' and 'Ohio'.

us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/celebrity-detection

aws Services Resource Groups

HarshadaSS Ohio Support

Amazon Rekognition

Custom Labels New

Use Custom Labels

Demos

Object and scene detection

Image moderation

Facial analysis

Celebrity recognition

Face comparison

Text in image

Video Demos

Video analysis

Metrics

Feedback English (US)


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Celebrity recognition

Rekognition automatically recognizes celebrities in images and provides confidence scores.

Done with the demo? [Learn more](#)

▼ Results

 **Hrithik Roshan** [Learn More](#)

Match confidence 100 %

► Request

► Response

Successful Celebrity Recognition

Text in Image Detection

The screenshot shows the AWS Rekognition console for the 'Text in image' service. The left sidebar contains a navigation menu with options like 'Amazon Rekognition', 'Custom Labels', 'Demos', and 'Text in image' (which is highlighted). The main content area features a large image of a city street with a bus. To the right, the 'Results' section displays detected text: 'M15 | SOUTH | FERRY |', 'c1 8 |', '1289 | MTA | Black |', and '-651 |'. Below this, there are sections for 'Request' and 'Response'. The top of the page shows the AWS logo, 'Services', 'Resource Groups', and user information 'HarshadaSS' and 'Ohio'.

us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/text-detection

aws Services Resource Groups

HarshadaSS Ohio Support

Amazon Rekognition

Custom Labels New

Use Custom Labels

Demos

Object and scene detection

Image moderation

Facial analysis

Celebrity recognition

Face comparison

Text in image

Video Demos

Video analysis

Metrics

Feedback English (US)

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Text in image

Rekognition automatically detects and extracts text in your images. [Learn More](#)

Done with the demo? [Learn more](#)

▼ Results US English only

M15 | SOUTH | FERRY |

c1 8 |

1289 | MTA | Black |

-651 |

► Request

► Response

Choose a sample image

Use your own image

Image must be .jpeg or .png format and no larger than 5MB. Your image can't exceed

Successfully detected Text in Image

EC2 & S3

Installing aws-sdk

```
ec2-user@ip-172-31-36-27:/var/www/html/face$
1073741824 bytes (1.1 GB) copied, 13.5107 s, 79.5 MB/s
[ec2-user@ip-172-31-36-27 face]$ sudo /sbin/mkswap /var/swap.1
mkswap: /var/swap.1: insecure permissions 0644, 0600 suggested.
Setting up swapspace version 1, size = 1024 MiB (1073737728 bytes)
no label, UUID=66d691c7-721f-4fbb-bb4f-4b523c8c58f8
[ec2-user@ip-172-31-36-27 face]$ sudo /sbin/swapon /var/swap.1
swapon: /var/swap.1: insecure permissions 0644, 0600 suggested.
[ec2-user@ip-172-31-36-27 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 created
Loading composer repositories with package information
Updating dependencies (including require-dev)
Package operations: 3 installs, 0 updates, 0 removals
  - Installing symfony/event-dispatcher (v2.8.52): Loading from cache
  - Installing guzzle/guzzle (v3.9.3): Downloading (100%)
  - Installing aws/aws-sdk-php (2.8.31): Downloading (100%)
symfony/event-dispatcher suggests installing symfony/dependency-injection
symfony/event-dispatcher suggests installing symfony/http-kernel
guzzle/guzzle suggests installing guzzlehttp/guzzle (Guzzle 5 has moved to a new package name. The package you have installed, Guzzle 3, is deprecated.)
aws/aws-sdk-php suggests installing doctrine/cache (Adds support for caching of credentials and responses)
aws/aws-sdk-php suggests installing ext-apc (Allows service description opcode caching, request and response caching, and credentials caching)
aws/aws-sdk-php suggests installing monolog/monolog (Adds support for logging HTTP requests and responses)
aws/aws-sdk-php suggests installing symfony/yaml (Eases the ability to write manifests for creating jobs in AWS Import/Export)
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.
Writing lock file
Generating autoload files
```

Successfully installed aws-sdk

Installing php

```

ec2-user@ip-172-31-36-27:~$
Last login: Sat Apr  4 14:55:48 2020 from 1.38.232.1

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

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-36-27 ~]$ sudo yum install php
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core                                     | 2.4 kB  00:00:00
Resolving Dependencies
--> Running transaction check
----> Package php.x86_64 0:7.2.28-1.amzn2 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

Package Arch Version Repository Size
-----
Installing:
php x86_64 7.2.28-1.amzn2 amzn2extra-php7.2 2.9 M

Transaction Summary
-----
Install 1 Package

Total download size: 2.9 M
Installed size: 9.1 M
Is this ok [y/d/N]: y
Downloading packages:
php-7.2.28-1.amzn2.x86_64.rpm                | 2.9 MB  00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : php-7.2.28-1.amzn2.x86_64 1/1
  Verifying : php-7.2.28-1.amzn2.x86_64 1/1

Installed:
php.x86_64 0:7.2.28-1.amzn2

Complete!
[ec2-user@ip-172-31-36-27 ~]$

```

Successfully installed php

index.php file code (old)

```
ec2-user@ip-172-31-36-27:/var/www/html/face
# echo $(cat /dev/urandom | tr -dc 'a-z0-9' | fold -w 40 | head -n 1 | xargs echo)
# echo $(cat /dev/urandom | tr -dc 'a-z0-9' | fold -w 40 | head -n 1 | xargs echo)
# echo $(cat /dev/urandom | tr -dc 'a-z0-9' | fold -w 40 | head -n 1 | xargs echo)

# echo wget https://pbs.twimg.com/media/DeydY4sW4AAZyF0.jpg
# echo mv DeydY4sW4AAZyF0.jpg sample.jpg

}

error_reporting(0);

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

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

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

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

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

    // Return 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;
}

-- INSERT --
```

successfully inserted index.php (EC2 & S3)

Upload success screenshot

```
ec2-user@ip-172-31-36-27:/var/www/html/face
1073741824 bytes (1.1 GB) copied, 13.5107 s, 79.5 MB/s
[ec2-user@ip-172-31-36-27 face]$ sudo /sbin/mkswap /var/swap.1
mkswap: /var/swap.1: insecure permissions 0644, 0600 suggested.
Setting up swapspace version 1, size = 1024 MiB (1073737728 bytes)
no label, UUID=66d691c7-721f-4fbb-bb4f-4b523c8c58f8
[ec2-user@ip-172-31-36-27 face]$ sudo /sbin/swapon /var/swap.1
swapon: /var/swap.1: insecure permissions 0644, 0600 suggested.
[ec2-user@ip-172-31-36-27 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 created
Loading composer repositories with package information
Updating dependencies (including require-dev)
Package operations: 3 installs, 0 updates, 0 removals
  - Installing symfony/event-dispatcher (v2.8.52): Loading from cache
  - Installing guzzle/guzzle (v3.9.3): Downloading (100%)
  - Installing aws/aws-sdk-php (2.8.31): Downloading (100%)
symfony/event-dispatcher suggests installing symfony/dependency-injection
symfony/event-dispatcher suggests installing symfony/http-kernel
guzzle/guzzle suggests installing guzzlehttp/guzzle (Guzzle 5 has moved to a new package name. The package you have installed, Guzzle 3, is deprecated.)
aws/aws-sdk-php suggests installing doctrine/cache (Adds support for caching of credentials and responses)
aws/aws-sdk-php suggests installing ext-apc (Allows service description opcode caching, request and response caching, and credentials caching)
aws/aws-sdk-php suggests installing monolog/monolog (Adds support for logging HTTP requests and responses)
aws/aws-sdk-php suggests installing symfony/yaml (Eases the ability to write manifests for creating jobs in AWS Import/Export)
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.
Waiting to lock file
Generating autoload files
[ec2-user@ip-172-31-36-27 face]$ sudo wget https://pbs.twimg.com/media/DeydY4sW4AAZyF0.jpg
--2020-04-04 15:00:31-- https://pbs.twimg.com/media/DeydY4sW4AAZyF0.jpg
Resolving pbs.twimg.com (pbs.twimg.com)... 72.21.91.70, 2606:2800:220:13d:2176:94a:948:149e
Connecting to pbs.twimg.com (pbs.twimg.com)|72.21.91.70|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 107500 (105K) [image/jpeg]
Saving to: 'DeydY4sW4AAZyF0.jpg'

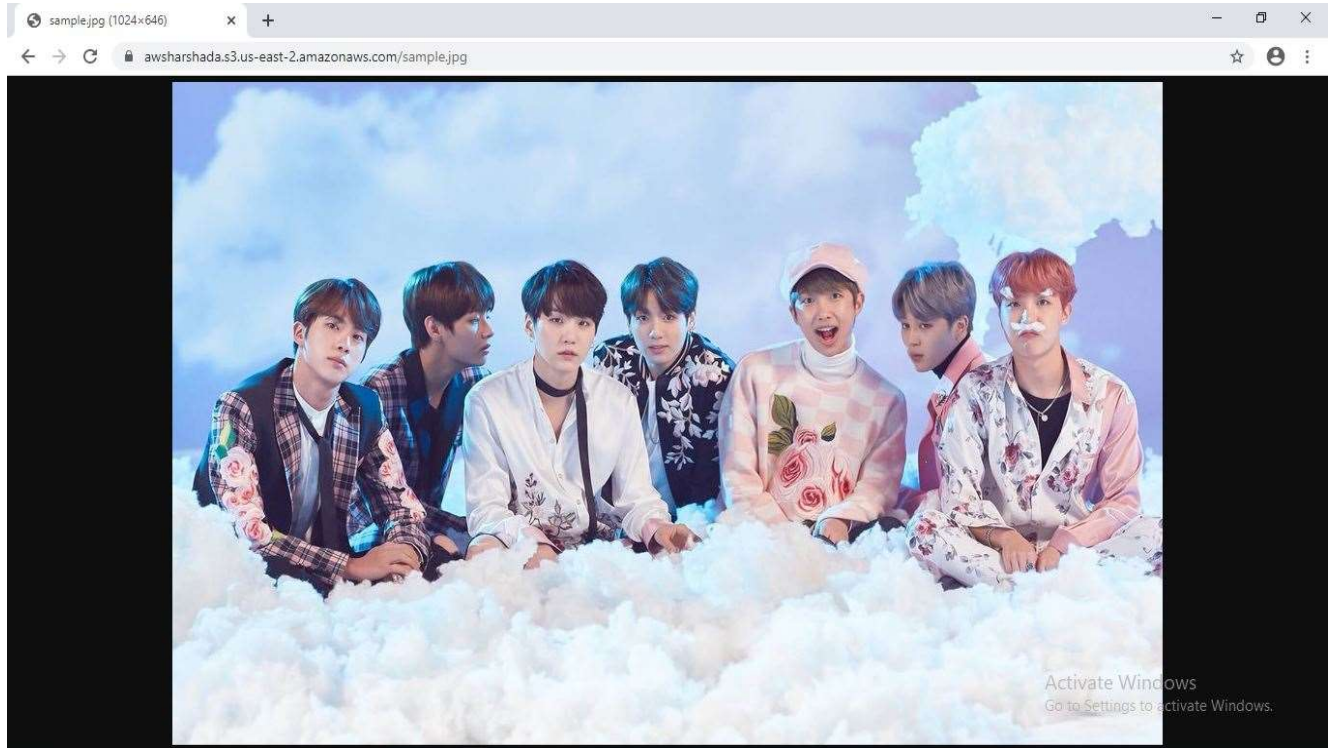
100%[=====] 107,500 --.-K/s in 0.02s

2020-04-04 15:00:31 (6.04 MB/s) - 'DeydY4sW4AAZyF0.jpg' saved [107500/107500]

[ec2-user@ip-172-31-36-27 face]$ sudo mv DeydY4sW4AAZyF0.jpg sample.jpg
[ec2-user@ip-172-31-36-27 face]$ ls
composer.json composer.lock sample.jpg vendor
[ec2-user@ip-172-31-36-27 face]$ sudo vim index.php
[ec2-user@ip-172-31-36-27 face]$ sudo php index.php
Image upload done... Here is the URL: https://awsharshada.s3.us-east-2.amazonaws.com/sample.jpg[ec2-user@ip-172-31-36-27 face]$
```

Successfully uploaded sample.jpg image in the bucket (awsharshada)

Sample.jpg image URL check



sample.jpg image that is being uploaded

EC2 & REKOGNITION

index.php file code(new)

```
ec2-user@ip-172-31-36-27:/var/www/html/face
```

```
</php>
<?php
//
install.php - sudo yum install php
sudo -H https://getcomposer.org/installer | php
cd /var/www/html
sudo mkdir face
cd face
sudo php -d memory_limit=-1 -fcomposer.phar require aws/aws-sdk-php
//
to test if you get memory error -
sudo ./bin/php -r "define('MVC_PATH', __DIR__ . '/src'); require './src/autoload.php';"
sudo ./bin/composer req aws/aws-s3
sudo ./bin/composer req aws/sqs
//
sudo wget https://aws.s3.amazonaws.com/media/fetchdataWAAadyf0.jpg
sudo mv fetchdataWAAadyf0.jpg sample.jpg
//
However if you are getting any class NOT found errors, follow these steps
//
sudo yum remove php*
sudo yum remove httpd*
sudo yum clean all
sudo yum upgrade -y
sudo amazon-linux-extras install php7.2
sudo yum install php-json php-gmp php-mb php-session
sudo yum install RpmFusion
//
// $zone_reporting(0);
require_once(__DIR__ . '/vendor/autoload.php');
use Aws\S3\S3Client;
use Aws\Rekognition\RekognitionClient;
$bucket = 'awshashade';
$keyname = 'sample.jpg';
$s3 = new S3Client([
    'region' => 'us-east-2',
-- INSERT --
```

Activate Windows
Go to Settings to activate Windows.

4,1 Top

```

ec2-user@ip-172-31-36-27:/var/www/html/face
$keyname = 'sample.jpg';

$s3 = new S3Client([
    '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-write'
    ]);

    // Print the URL to the object.
    $imageUrl = $result['ObjectURL'];
    if ($imageUrl) {
        echo "Image upload done... Here is the URL: " . $imageUrl;

        $rekognition = new RekognitionClient([
            'region'      => 'us-east-2',
            'version'     => 'latest',
        ]);

        $result = $rekognition->detectFaces([
            'Attributes' => ['DEFAULT'],
            'Image'       => [
                'S3Object' => [
                    'Bucket' => $bucket,
                    'Name'   => $keyname,
                    'Key'    => $keyname,
                ],
            ],
        ]);

        echo "Totally there are " . count($result["FaceDetails"]) . " faces";
    }
} catch (Exception $e) {
    echo $e->getMessage() . PHP_EOL;
}

-- INSERT --

```

Successfully inserted index.php (EC2 & Rekognition)

Face Detect success screenshot

```
ec2-user@ip-172-31-36-27:/var/www/html/face$  
Running transaction check  
Running transaction test  
Transaction test succeeded.  
Running transaction  
Installing : httpd filesystem-2.4.41-1.amzn2.0.1.noarch 1/4  
Installing : httpd tools-2.4.41-1.amzn2.0.1.x86_64 2/4  
Installing : mod_http2-1.15.3-2.amzn2.x86_64 3/4  
Installing : httpd-2.4.41-1.amzn2.0.1.x86_64 4/4  
Verifying : httpd tools-2.4.41-1.amzn2.0.1.x86_64 1/4  
Verifying : mod_http2-1.15.3-2.amzn2.x86_64 2/4  
Verifying : httpd-2.4.41-1.amzn2.0.1.x86_64 3/4  
Verifying : httpd filesystem-2.4.41-1.amzn2.0.1.noarch 4/4  
  
Installed:  
httpd.x86_64 0:2.4.41-1.amzn2.0.1  
  
Dependency Installed:  
httpd filesystem.noarch 0:2.4.41-1.amzn2.0.1 httpd tools.x86_64 0:2.4.41-1.amzn2.0.1 mod_http2.x86_64 0:1.15.3-2.amzn2  
  
Complete!  
[ec2-user@ip-172-31-36-27 face]$ 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 updated  
Loading composer repositories with package information  
Updating dependencies (including require-dev)  
Package operations: 7 installs, 1 update, 0 removals  
- Installing symfony/polyfill-mbstring (v1.15.0): Downloading (100%)  
- Installing mtdowling/jmespath.php (2.5.0): Downloading (100%)  
- Installing guzzlehttp/promises (v1.3.1): Downloading (100%)  
- Installing ralouphie/getallheaders (3.0.3): Downloading (100%)  
- Installing psr/http-message (1.0.1): Downloading (100%)  
- Installing guzzlehttp/psr7 (1.6.1): Downloading (100%)  
- Installing guzzlehttp/guzzle (6.5.2): Downloading (100%)  
- Updating aws/aws-sdk-php (2.8.31 => 3.134.3): Downloading (100%)  
guzzlehttp/psr7 suggests installing zendframework/zend-httpdierrunner (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)  
Package guzzle/guzzle is abandoned, you should avoid using it. Use guzzlehttp/guzzle instead.  
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-172-31-36-27 face]$ sudo php index.php  
Image upload done... Here is the URL: https://awsharshada.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 7 faces[ec2-user@ip-172-31-36-27 face]$
```

Successful face detection count (i.e. 7)

```
ec2-user@ip-172-31-36-27:/var/www/html/face$  
[ec2-user@ip-172-31-36-27 face]$ sudo php index.php  
Image upload done... Here is the URL: https://awsharshada.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 7 faces[ec2-user@ip-172-31-36-27 face]$
```

Clear version (please refer above mentioned sample.jpg image)