

ETHNUS CODEMITHRA

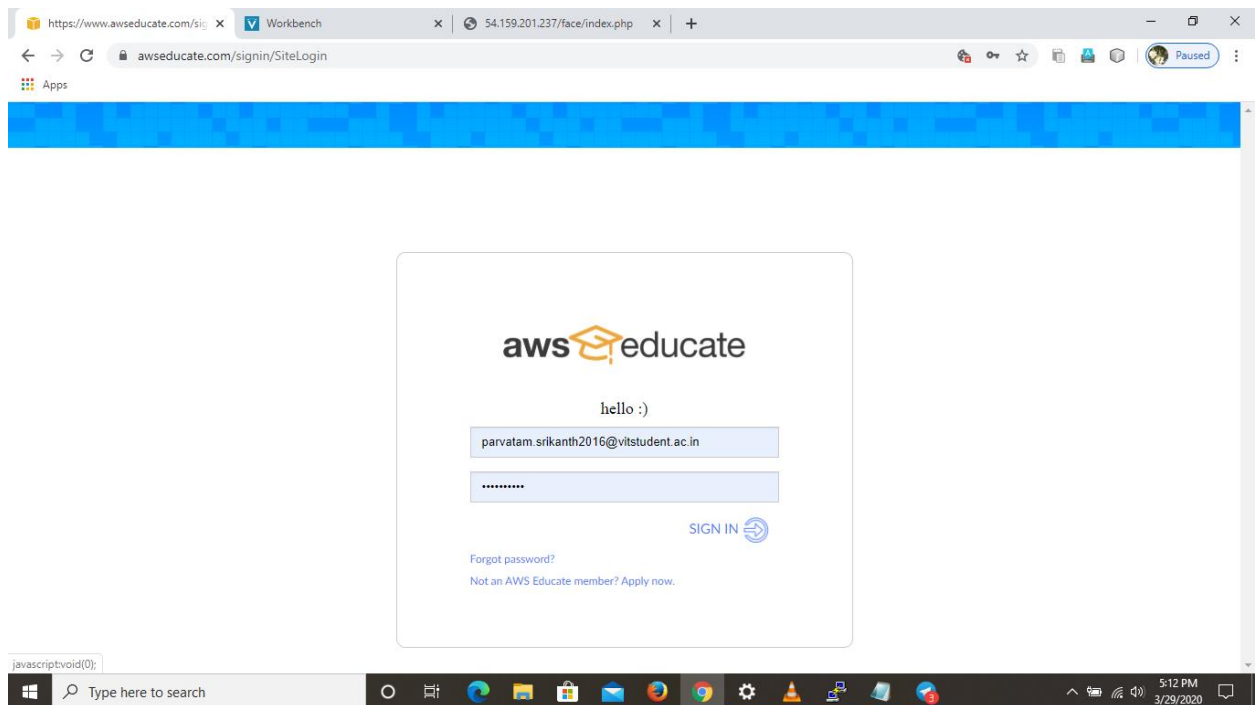
AWS PROJECT ON FACE DETECTION

DIVYA. A
VIT, Vellore

I've used my aws educate account last year for my cloud computing project. So, I'm using a friend's account for this project.

Dashboards

1. AWS Login screen with username



2. EC2 Dashboard

The screenshot shows the AWS Management Console for the EC2 service. The top navigation bar includes the AWS logo, Services, Resource Groups, and a user profile. A blue banner at the top reads: "Welcome to the new EC2 console! We're redesigning the EC2 console to make it easier to use and improve performance. We'll release new screens periodically. We encourage you to try them and let us know where we can make improvements. To switch between the old console and the new console, use the New EC2 Experience toggle." Below this, the "Resources" section displays a table of EC2 resources in the US East (N. Virginia) Region:

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

On the right, the "Account attributes" section shows supported platforms (VPC, Default VPC, Console experiments, Settings). Below that, the "Explore AWS" section promotes saving with AMD EPYC-Powered EC2 instances. The bottom of the console shows a Windows taskbar with various application icons and a system clock indicating 5:14 PM on 3/29/2020.

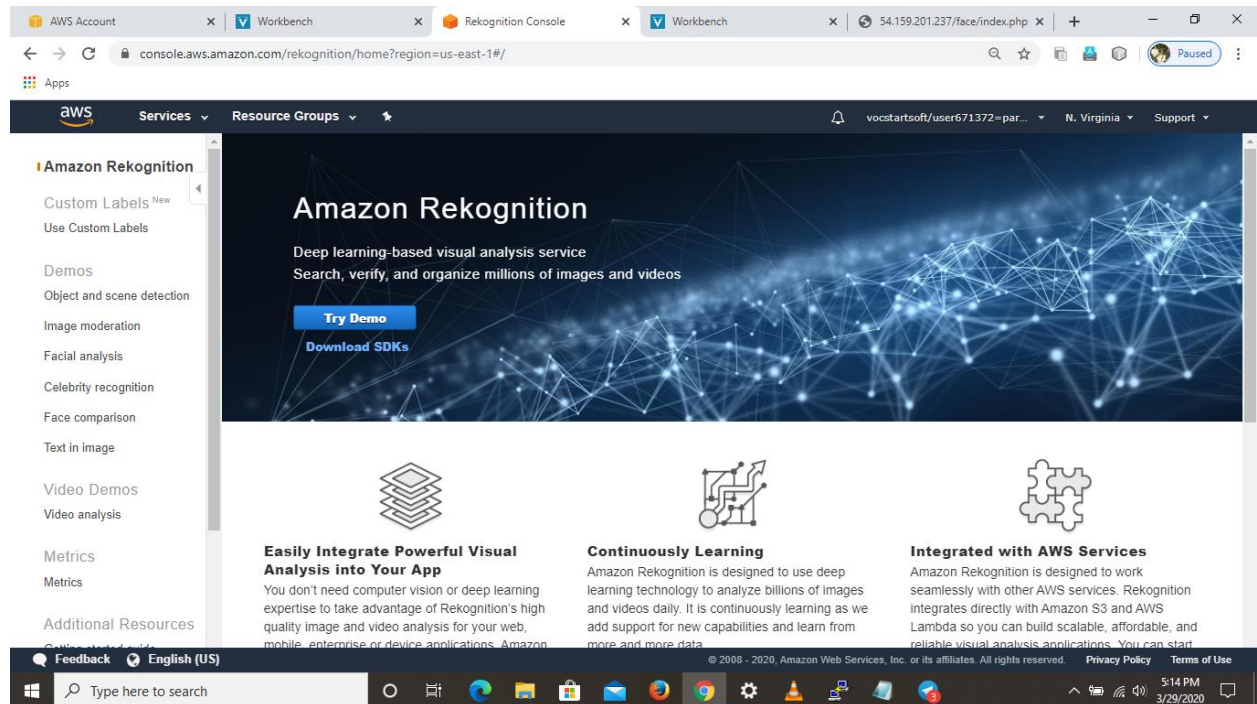
3. S3 Dashboard

The screenshot shows the AWS Management Console for the S3 service. The top navigation bar includes the AWS logo, Services, Resource Groups, and a user profile. A blue banner at the top reads: "We're gradually updating the design of the Amazon S3 console. You will notice some updated screens as we improve the performance and user interface. To help us improve the experience, give feedback on the recent updates." Below this, the "Buckets (1)" section displays a table of S3 buckets in the US East (N. Virginia) us-east-1 Region:

Name	Region	Access	Bucket created
aws-divya-facedetection	US East (N. Virginia) us-east-1	Objects can be public	2020-03-28T16:39:20.000Z

The bottom of the console shows a Windows taskbar with various application icons and a system clock indicating 5:14 PM on 3/29/2020.

4. Rekognition Dashboard



EC2

1. Choosing an AMI

AWS Account x Workbench x Launch instance wizard | EC2 | x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

Apps

aws Services Resource Groups vocistartsoft/user671372-parv... N. Virginia Support

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

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-0fc61db8544a617ed (64-bit x86) / ami-0f90a34c9df77efb (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-09a5b0b7edf08643d

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)

Red Hat Enterprise Linux 8 (HVM), SSD Volume Type - ami-0c322300a1dd5dc79 (64-bit x86) / ami-03587fa4048e9eb92 (64-bit ARM)

Red Hat

Red Hat Enterprise Linux version 8 (HVM), EBS General Purpose (SSD) Volume Type

64-bit (x86)

Feedback English (US)

Type here to search

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5:15 PM 3/29/2020

2. Choosing an Instance Type

AWS Account x Workbench x Launch instance wizard | EC2 | x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

Apps

aws Services Resource Groups vocistartsoft/user671372-parv... N. Virginia Support

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 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
<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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3. Adding Storage

AWS Account x Workbench x Launch instance wizard | EC2 | x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

Apps

aws 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 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-0e27a39c6e2f9f079	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

4. Configuring Security Group

AWS Account x Workbench x Launch instance wizard | EC2 | x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/ec2/v2/home?region=us-east-1#LaunchInstanceWizard:

Apps

aws 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 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-2

Description: launch-wizard-2 created 2020-03-29T17:15:55.901+05:30

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.

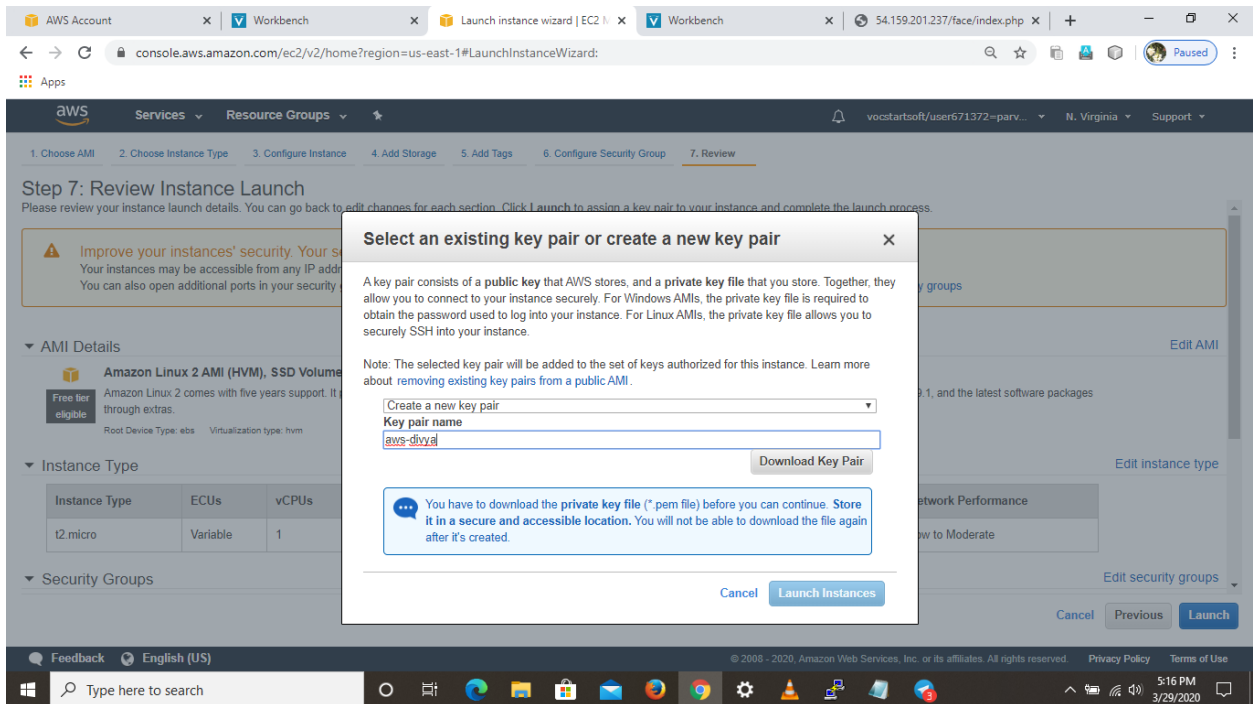
Cancel Previous Review and Launch

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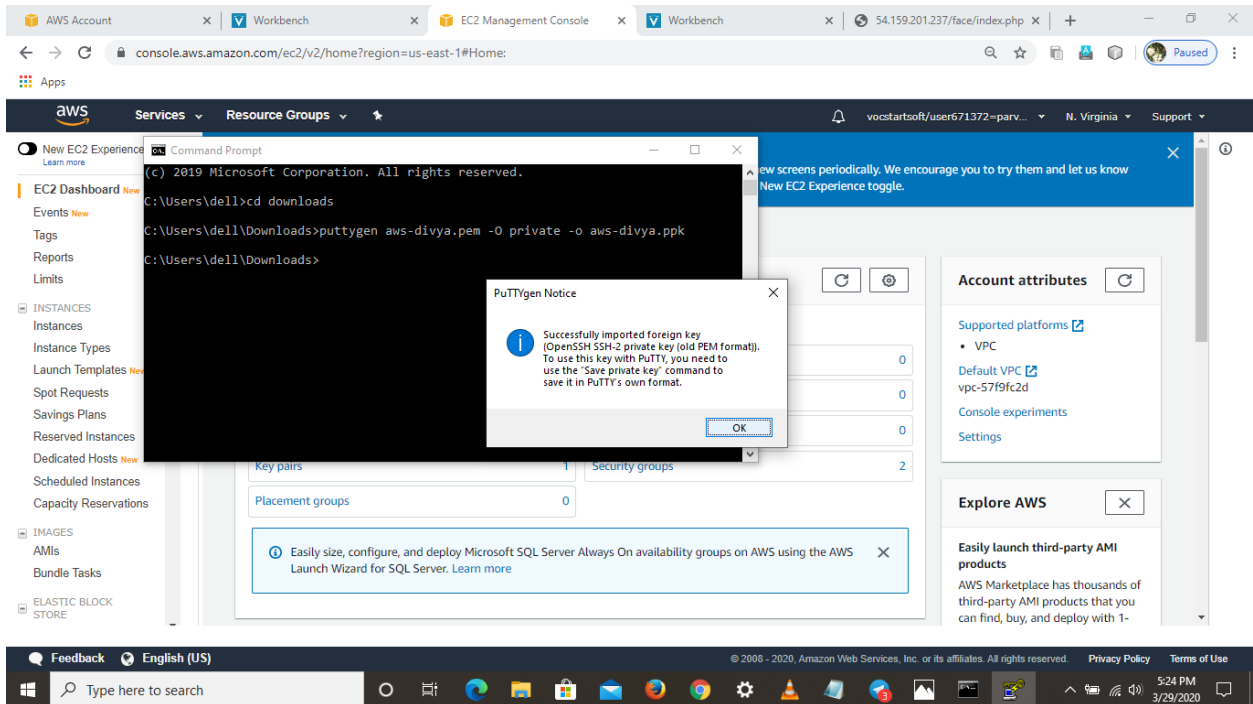
Type here to search

5:16 PM 3/29/2020

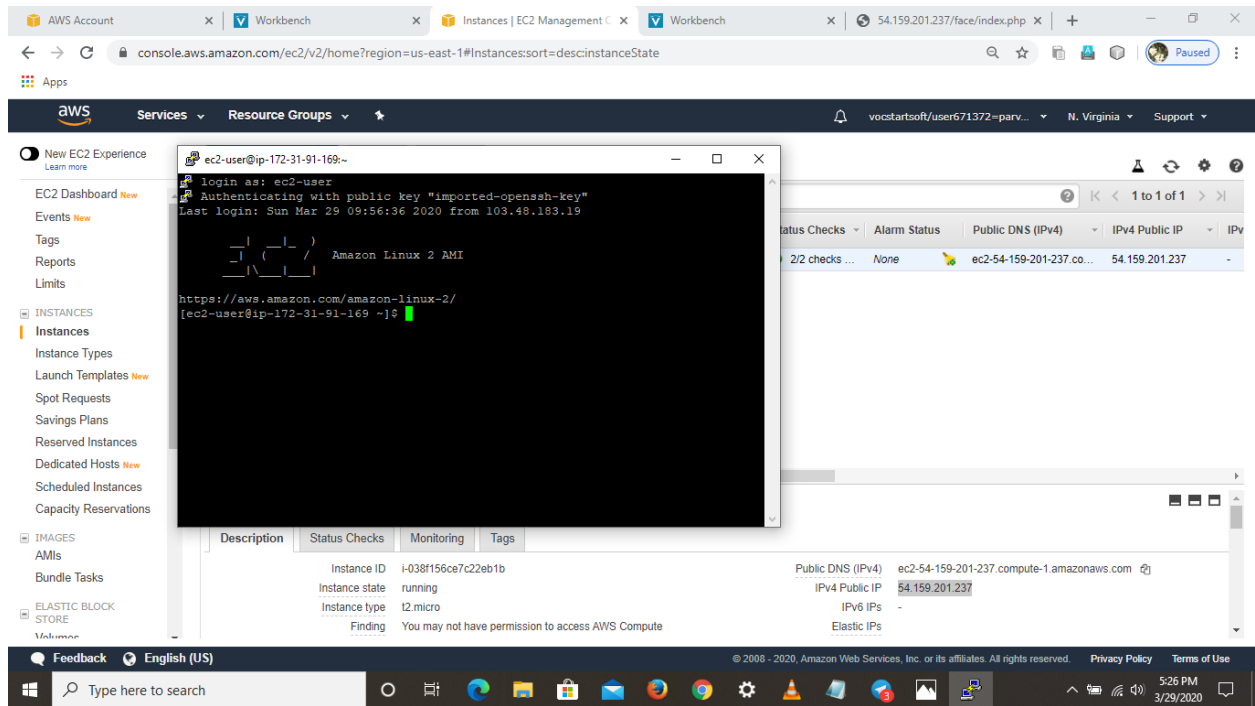
5. Key Pair Download



6. PuTTYgen conversion from pem to ppk

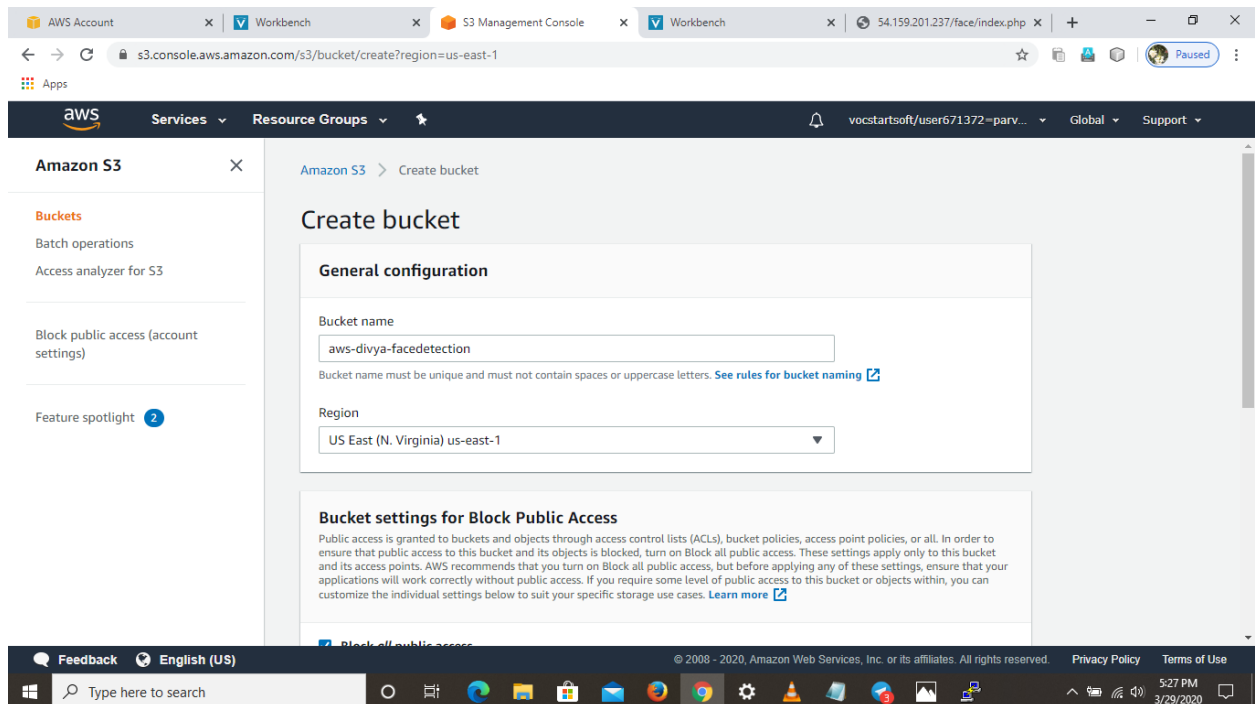


7. Logged in EC2 black screen

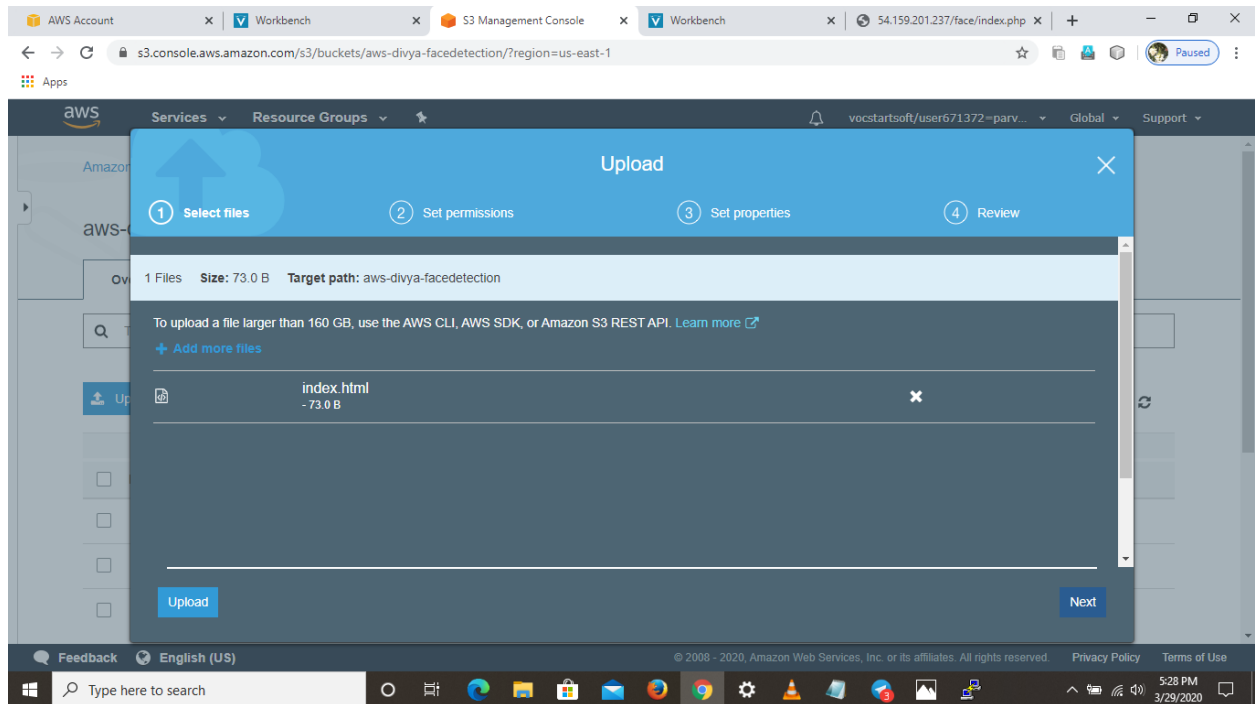


S3

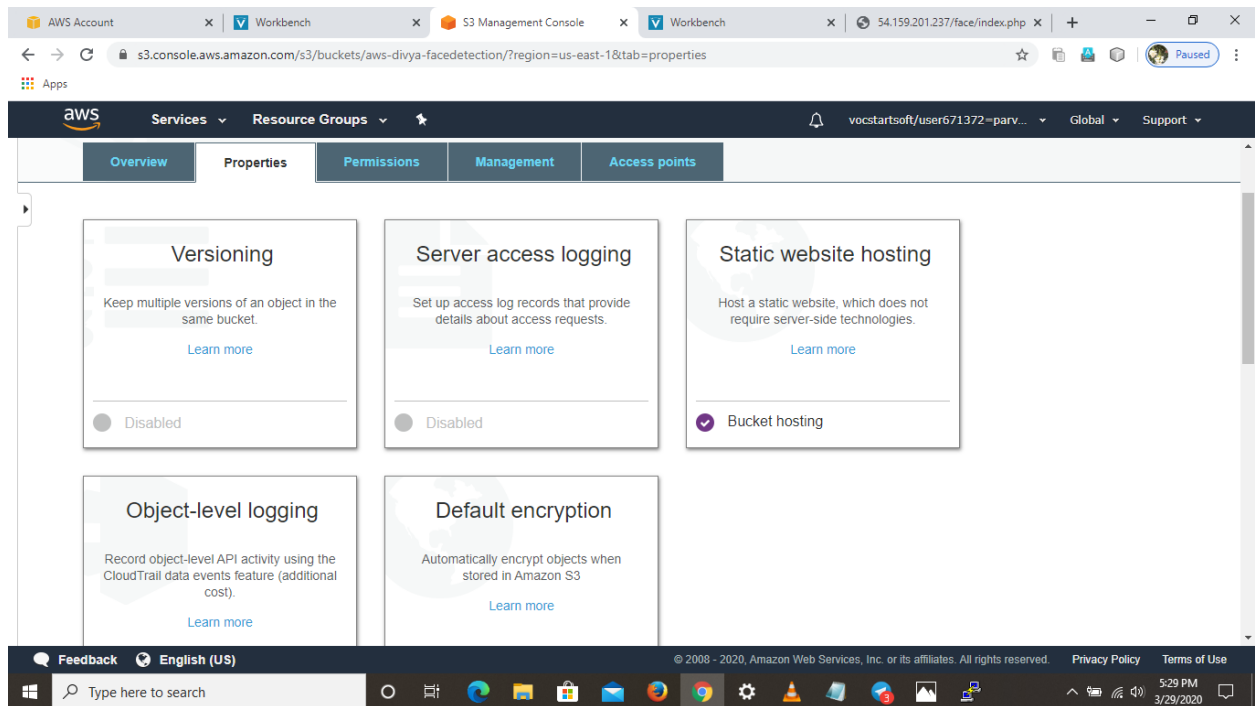
1. Creating a bucket



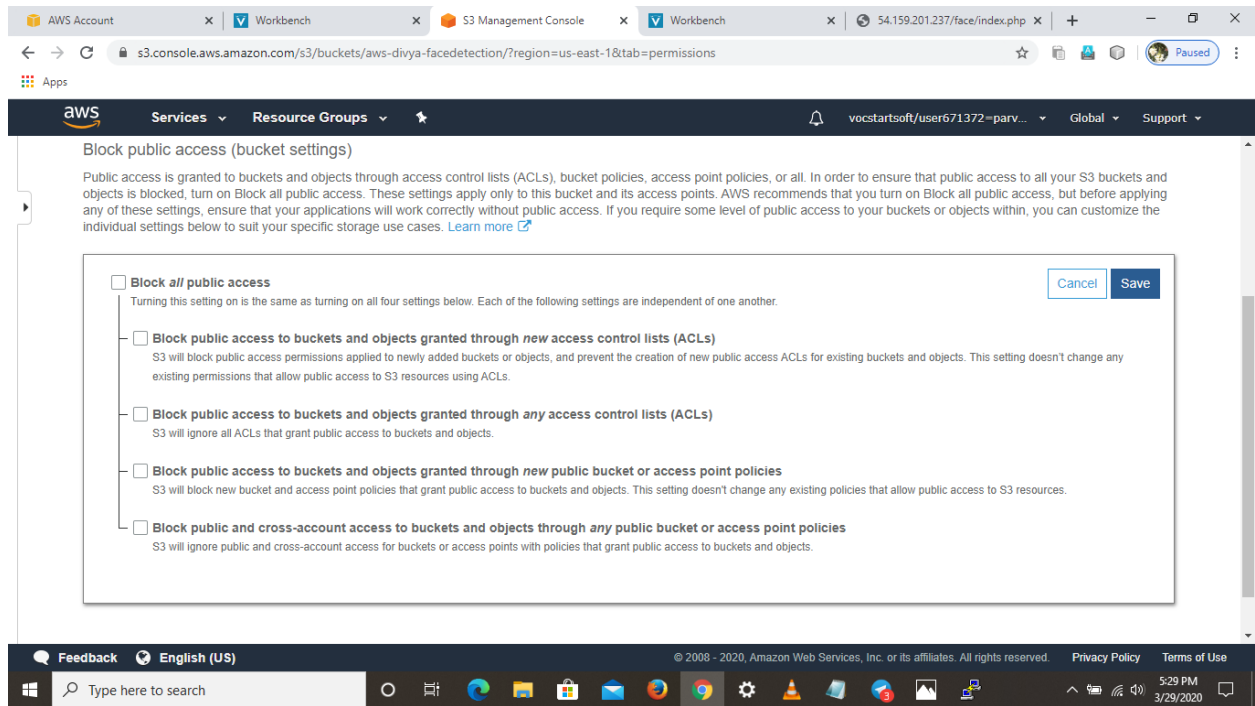
2. Uploading an Object



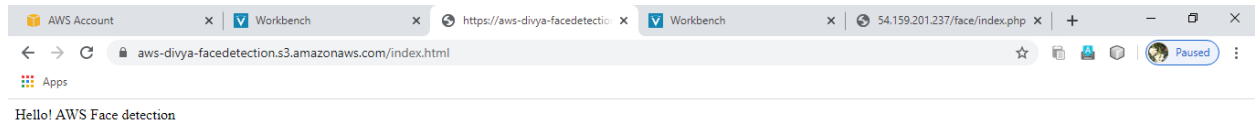
3. Enabling Static Website



4. Making the Object Public



5. Checking the S3 link on the browser



Recognition

1. Face Detect

Browser tabs: AWS Account, Workbench, Rekognition Console, Workbench, 54.159.201.237/face/index.php

URL: console.aws.amazon.com/rekognition/home?region=us-east-1#/face-detection

Services | Resource Groups | vocstartsoft/user671372-par... | N. Virginia | 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
Metrics

Additional Resources

Facial analysis

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



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.

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

▼ Results

looks like a face	99.9 %
appears to be female	99.9 %
age range	17 - 29 years old
smiling	91.7 %
appears to be happy	99.5 %
wearing glasses	99.8 %

[Show more](#)

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2. Face Compare

Browser tabs: AWS Account, Workbench, Rekognition Console, Workbench, 54.159.201.237/face/index.php

URL: console.aws.amazon.com/rekognition/home?region=us-east-1#/face-comparison

Services | Resource Groups | vocstartsoft/user671372-par... | N. Virginia | Support

Amazon Rekognition

Custom Labels New
Use Custom Labels

Demos
Object and scene detection
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Facial analysis
Celebrity recognition
Face comparison
Text in image

Video Demos
Video analysis


Metrics
Metrics

Additional Resources


Face comparison

Compare faces to see how closely they match based on a similarity percentage.

Reference face



Comparison faces









Choose a sample image

Choose a sample image

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

▼ Results

	=	
Similarity		99.8 %
	≠	
	≠	

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3. Celebrity Recognition

AWS Account x Workbench x Rekognition Console x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/rekognition/home?region=us-east-1#/celebrity-detection

Apps

aws Services Resource Groups

vocstartsoft/user671372-par... N. Virginia 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

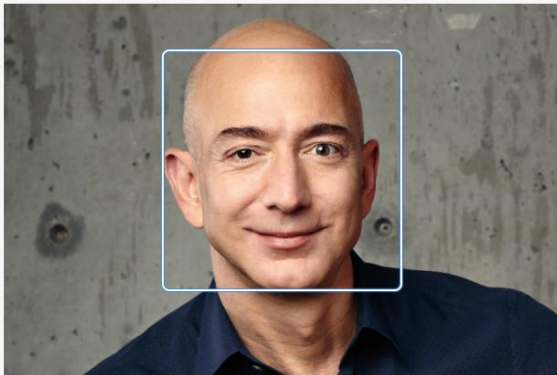
- Video analysis

Metrics

Additional Resources

Celebrity recognition

Rekognition automatically recognizes celebrities in images and provides confidence scores.




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.

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

▼ Results



Jeff Bezos
[Learn More](#)

Match confidence 100 %

► Request

► Response

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4. Text in Image

AWS Account x Workbench x Rekognition Console x Workbench x 54.159.201.237/face/index.php x + -

console.aws.amazon.com/rekognition/home?region=us-east-1#/text-detection

Apps

aws Services Resource Groups

vocstartsoft/user671372-par... N. Virginia 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

Additional Resources

Text in image

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



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.

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

▼ Results US English only

| IT'S |
| MONDAY |
| but | keep |
| Smiling |

► Request

► Response

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EC2 & S3

1. Installing aws-sdk

The screenshot shows the AWS S3 console for the bucket 'aws-divya-facedetection' in the 'us-east-1' region. A terminal window is open on the EC2 instance 'ec2-user@ip-172-31-91-169:/var/www/html/face'. The terminal output shows the installation of Composer (version 1.10.1) and the successful installation of the 'aws/aws-sdk-php' package (version 2.8) using Composer. The package guzzle/guzzle is abandoned, and the package guzzlehttp/guzzle is installed instead. The terminal also shows the installation of the 'aws/aws-sdk-php' package using the 'require' command.

```
login as: ec2-user
Authenticating with public key "imported-openssh-key"
Last login: Sat Mar 28 19:09:25 2020 from 103.48.183.17

[ec2-user@ip-172-31-91-169 ~]$ curl -s https://getcomposer.org/installer | php
All settings correct for using Composer
Downloading...

Composer (version 1.10.1) successfully installed to: /home/ec2-user/composer.phar
Use it: php composer.phar

[ec2-user@ip-172-31-91-169 ~]$ cd /var/www/html
[ec2-user@ip-172-31-91-169 html]$ sudo mkdir face
mkdir: cannot create directory 'face': File exists
[ec2-user@ip-172-31-91-169 html]$ cd face
[ec2-user@ip-172-31-91-169 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-172-31-91-169 face]$
[ec2-user@ip-172-31-91-169 face]$
[ec2-user@ip-172-31-91-169 face]$
```

2. Installing php

The screenshot shows the AWS EC2 console for the instance 'i-038f156ce7c22eb1b' in the 'us-east-1' region. The instance is a 't2.micro' type. A terminal window is open on the EC2 instance 'ec2-user@ip-172-31-91-169:~'. The terminal output shows the installation of PHP (version 5.4.16-46.amzn2.0.2) and the successful installation of the 'aws/aws-sdk-php' package (version 2.8) using Composer. The package guzzle/guzzle is abandoned, and the package guzzlehttp/guzzle is installed instead. The terminal also shows the installation of the 'aws/aws-sdk-php' package using the 'require' command.

```
Installing : php-5.4.16-46.amzn2.0.2.x86_64 4/4
Verifying : php-5.4.16-46.amzn2.0.2.x86_64 1/4
Verifying : libzip010-compat-0.10.1-9.amzn2.0.5.x86_64 2/4
Verifying : php-cli-5.4.16-46.amzn2.0.2.x86_64 3/4
Verifying : php-common-5.4.16-46.amzn2.0.2.x86_64 4/4

Installed:
php.x86_64 0:5.4.16-46.amzn2.0.2

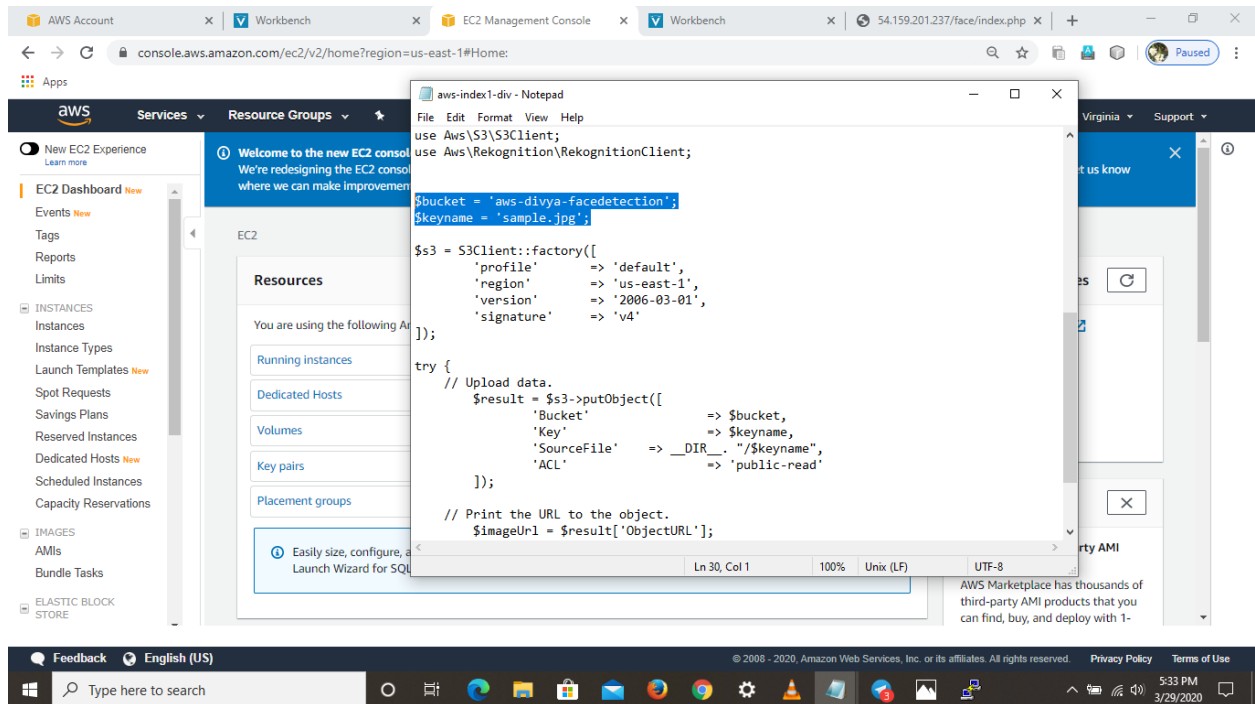
Dependency Installed:
libzip010-compat.x86_64 0:0.10.1-9.amzn2.0.5
php-cli.x86_64 0:5.4.16-46.amzn2.0.2
php-common.x86_64 0:5.4.16-46.amzn2.0.2

Complete!
[ec2-user@ip-172-31-91-169 ~]$ curl -s https://getcomposer.org/installer | php
All settings correct for using Composer
Downloading...

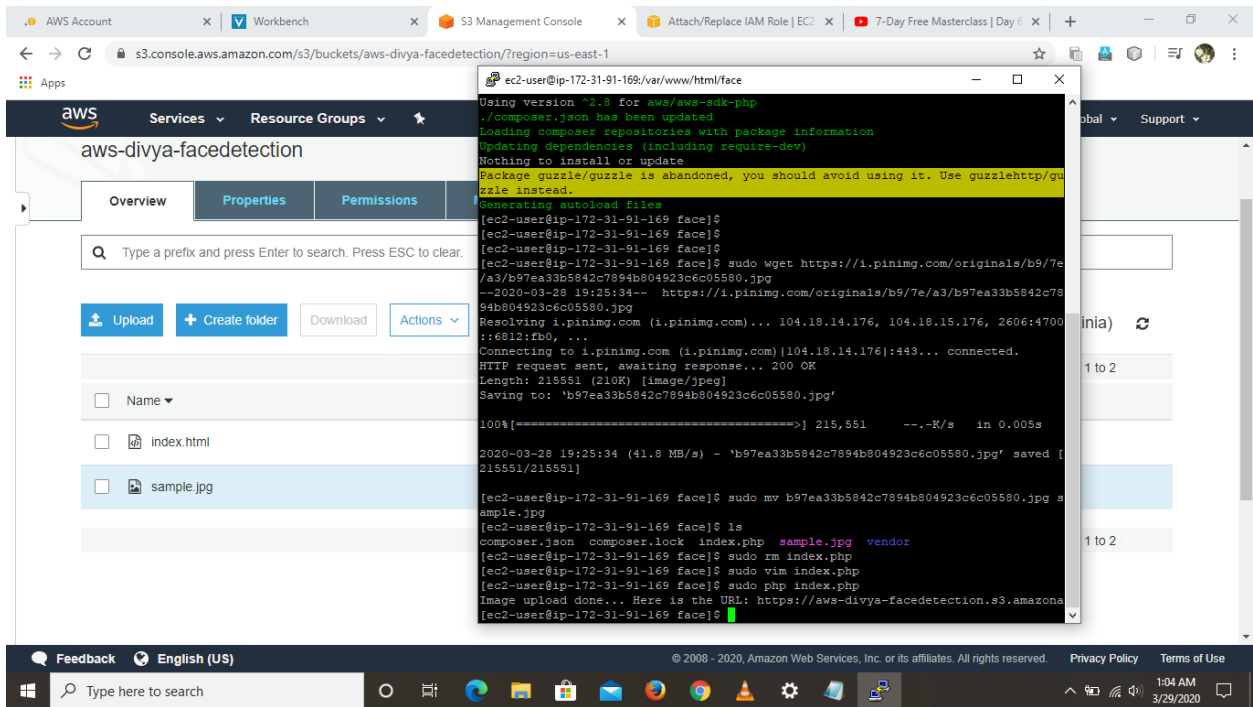
Composer (version 1.10.1) successfully installed to: /home/ec2-user/composer.phar
Use it: php composer.phar

[ec2-user@ip-172-31-91-169 ~]$
```

3. index.php file code



4. Upload success screenshot



EC2 & Rekognition

1. Face Detect success screenshot

