

AWS Login Page

The screenshot shows the AWS Sign In page. It features two user selection options: "Root user" (selected) and "IAM user". Below this is a field for "Root user email address" containing "divyamunot1999@gmail.com". A "Next" button is present, along with links for "New to AWS?" and "Create a new AWS account". To the right of the sign-in form is a promotional banner for "RE:INFORCE" with the text: "Two days and hundreds of sessions focused on cloud security, identity, and compliance." and a "Register Now" button.

EC2 Dashboard

The screenshot shows the EC2 Management Console dashboard. On the left, there's a sidebar with navigation links for "New EC2 Experience", "Events", "Tags", "Reports", "Limits", "INSTANCES" (with sub-links for Instances, Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, and Capacity Reservations), and "IMAGES" (with sub-links for AMIs and Bundle Tasks). The main content area displays a welcome message about the new EC2 console, followed by a summary of resources: Running Instances (1), Elastic IPs (0), Dedicated Hosts (0), Snapshots (0), Volumes (1), Load balancers (0), Key pairs (2), Security groups (5), and Placement groups (0). The right side includes sections for "Account attributes" (Supported platforms: VPC), "Explore AWS" (Optimize your EC2 cost and performance with Spot), and footer links for Feedback, English (US), Privacy Policy, and Terms of Use.

S3 Dashboard

Amazon S3

Buckets

Batch operations

Access analyzer for S3

Block public access (account settings)

Feature spotlight

Buckets (2)

Name	Region	Access	Bucket created
aws-webinar-divya	US East (Ohio) us-east-2	Objects can be public	2020-03-29T06:08:54.000Z
face-detection-dmunot	US East (Ohio) us-east-2	Objects can be public	2020-03-31T12:15:11.000Z

Rekognition Dashboard

Custom Labels

Use Custom Labels

Demos

Object and scene detection

Image moderation

Facial analysis

Celebrity recognition

Face comparison

Text in image

Video Demos

Video analysis

Metrics

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

Choosing an AMI

The screenshot shows the AWS Launch Instance Wizard Step 1: Choose an Amazon Machine Image (AMI) page. At the top, there's a navigation bar with tabs: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. Below the navigation bar, a search bar says "Search for an AMI by entering a search term e.g. "Windows"".

Quick Start

Category	AMI Name	Description	Select
My AMIs	Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-03b5297d565ef30a6 (64-bit x86) / ami-0292503f80fe49021 (64-bit Arm)	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.	<input checked="" type="radio"/> 64-bit (x86) <input type="radio"/> 64-bit (Arm)
AWS Marketplace	Amazon Linux AMI 2018.03.0 (HVM), SSD Volume Type - ami-0fa6cd5aeafbfb02afe	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.	<input checked="" type="radio"/> 64-bit (x86)
Community AMIs			
Free tier only			

The screenshot shows a Windows taskbar with several icons: Feedback, English (US), a search bar, Task View, File Explorer, Edge, File History, Netflix, and Google Chrome. The AWS Lambda icon is visible in the taskbar.

Choose Instance Type

The screenshot shows the AWS Launch Instance Wizard Step 2: Choose an Instance Type page. At the top, there's a navigation bar with tabs: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review. Below the navigation bar, there are filter options: "Filter by: All Instance types" and "Current generation".

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
General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes

Buttons at the bottom: Cancel, Previous, Review and Launch, Next: Configure Instance Details.

The screenshot shows a Windows taskbar with several icons: Feedback, English (US), a search bar, Task View, File Explorer, Edge, File History, Netflix, and Google Chrome. The AWS Lambda icon is visible in the taskbar.

Add Storage

The screenshot shows the AWS Launch Instance Wizard at Step 4: Add Storage. The URL is ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard. The page displays a table for adding storage volumes. A single volume is listed: Root, /dev/xvda, snap-0a65864f0ac2b05f1, 8 GiB, General Purpose SSD (gp2), IOPS 100 / 3000, Throughput N/A, Delete on Termination checked, and Encryption Not Encrypted.

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-0a65864f0ac2b05f1	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

Configure Security groups

The screenshot shows the AWS Launch Instance Wizard at Step 6: Configure Security Group. The URL is ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard. The page displays a table for configuring security group rules. One rule is listed: Type SSH, Protocol TCP, Port Range 22, Source Custom 0.0.0.0/0, Description e.g. SSH for Admin Desktop. A warning message states: "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."

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-1

Description: launch-wizard-1 created 2020-03-31T16:38:00.082+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

The screenshot shows the AWS Launch Instance Wizard at the Review and Launch step. The URL is ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard. The page displays a summary of the instance configuration, including AMI, Instance Type, Key Pair, Security Group, and VPC. It also shows the selected storage volume and the configured security group rule. At the bottom, there are buttons for Cancel, Previous, and Review and Launch.

Feedback English (US)

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Type here to search

Cancel Previous Review and Launch

Review

Step 7: Review Instance Launch

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-03b5297d665ef30a6

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

Instance Type Edit instance type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Security Groups Edit security groups

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

Cancel Previous Launch

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Type here to search 16:38 31-03-2020

New Key pair

Step 7: Review Instance Launch

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-03b5297d665ef30a6

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

Instance Type Edit instance type

Instance Type	ECUs
t2.micro	Variable

Security Groups Edit security groups

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

Select an existing key pair or create a new key pair

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Create a new key pair

Key pair name: aws-webinar-key

Download Key Pair

You have to download the **private key file** (*.pem file) before you can continue. **Store it in a secure and accessible location**. You will not be able to download the file again after it's created.

Cancel Launch Instances

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Type here to search 16:39 31-03-2020

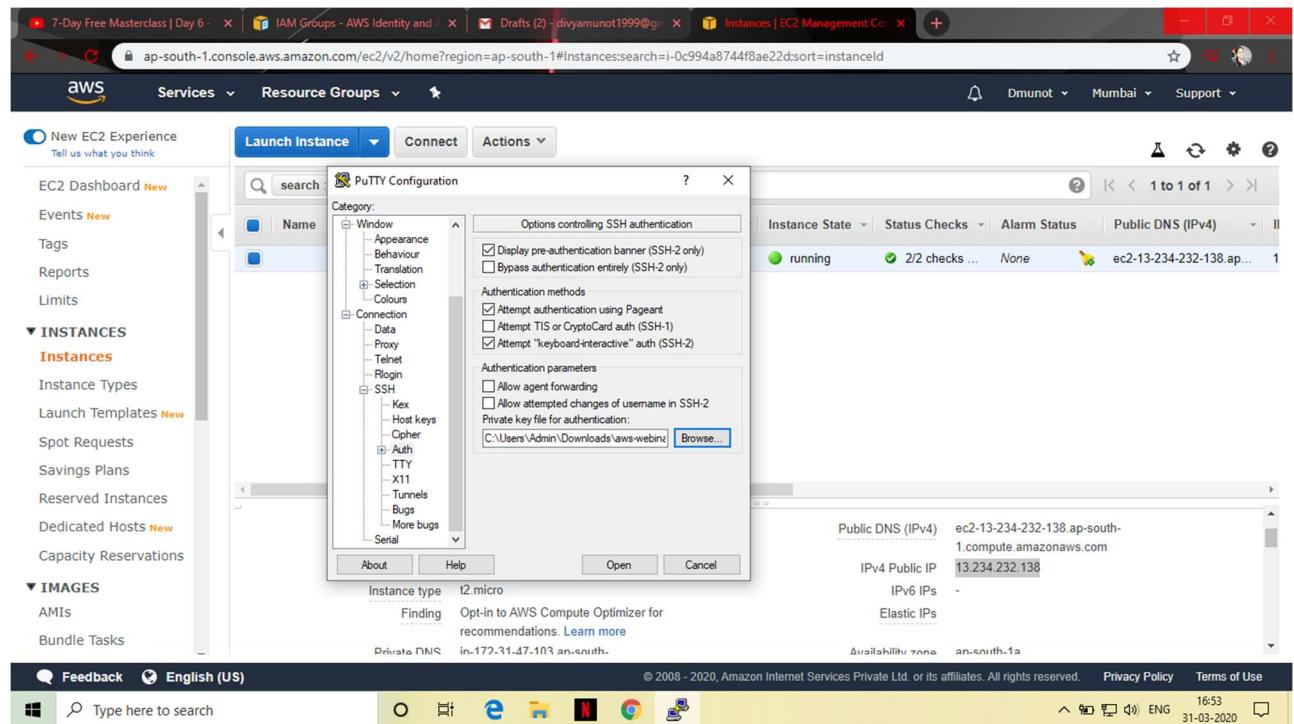
Instance created

The screenshot shows the AWS EC2 Management Console. On the left, the navigation pane is open with 'Instances' selected under 'Instances'. In the main content area, a table lists a single instance: 'i-0c994a8744f8ae22d' of type 't2.micro' running in 'ap-south-1a'. The Public DNS is listed as 'ec2-13-234-232-138.ap-south-1.compute.amazonaws.com'. Below the table, a detailed view for the instance shows its ID, state, and public IP.

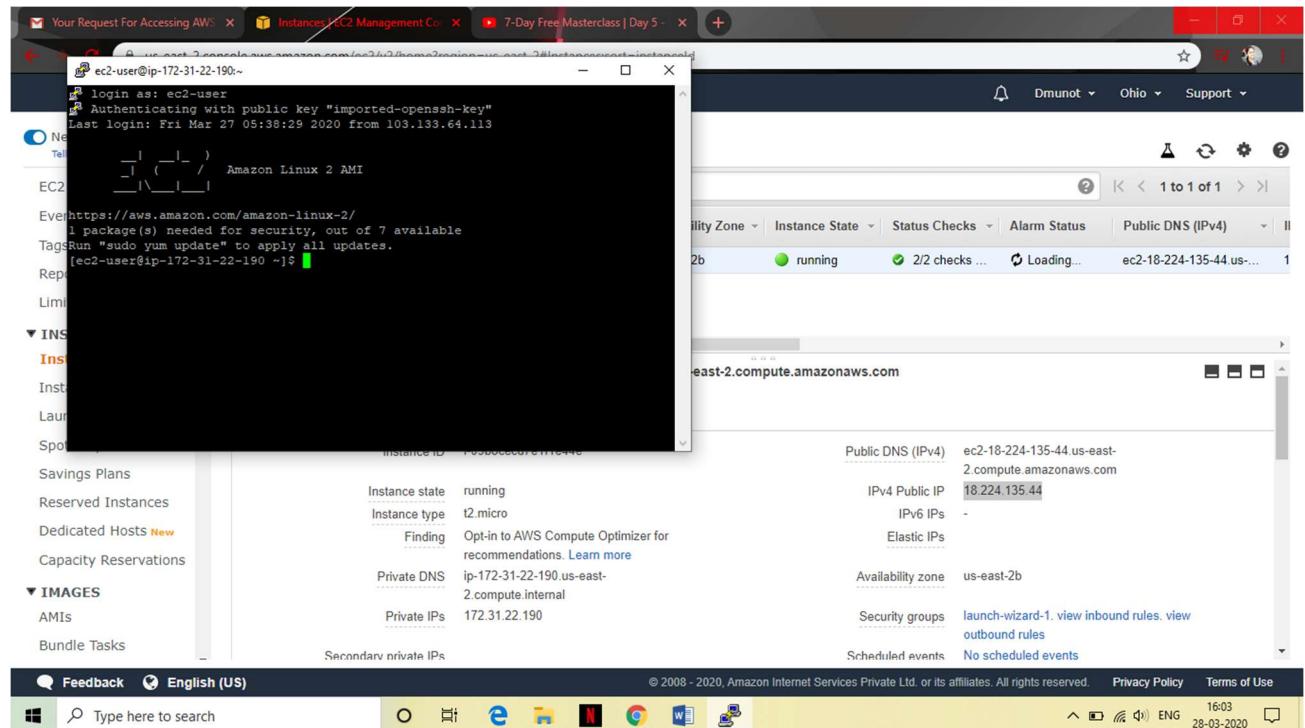
Convert .pem to .ppk using PuTTYgen

The screenshot shows a YouTube video player. The video is titled '7-Day Free Masterclass | Day 6 - Building a Face-Detection App on AWS Part - 3'. The video player interface includes a search bar, a command prompt window showing the command 'puttygen aws-webinar-key.pem -o private -o aws-webinar-key.ppk', and a 'PuTTYgen Notice' dialog box stating 'Successfully imported foreign key (OpenSSH SSH-2 private key (old PEM format)). To use this key with PuTTY, you need to use the "Save private key" command to save it in PuTTY's own format.' The video has 2,993 views and was streamed live on March 28, 2020. A sidebar on the right shows a live chat with users like Soumya Mishra and Divya Khyani.

PutTY configuration



EC2 Logged in blank screen



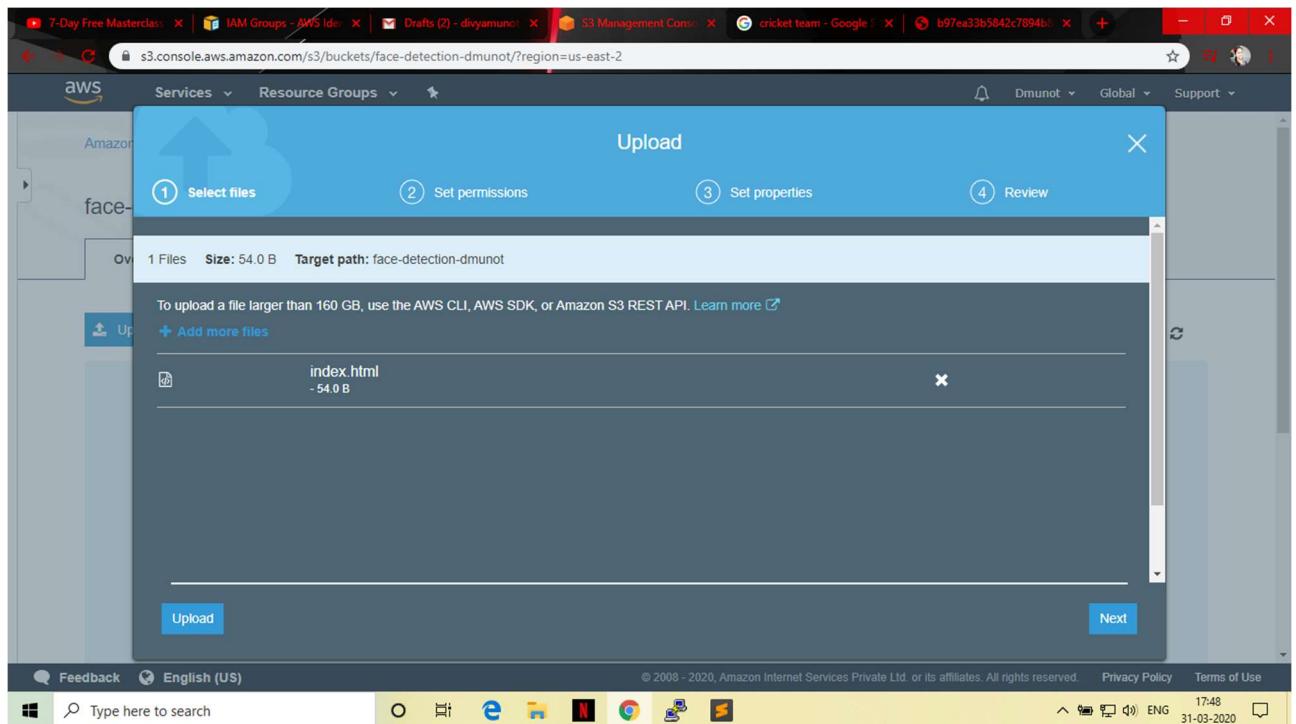
Create bucket

The screenshot shows the 'Create bucket' page in the AWS S3 Management Console. The 'General configuration' section is active, showing a 'Bucket name' field containing 'aws-webinar-divya'. Below it, a note states: 'Bucket name must be unique and must not contain spaces or uppercase letters.' A link 'See rules for bucket naming' is provided. The 'Region' dropdown is set to 'US East (Ohio) us-east-2'. The 'Bucket settings for Block Public Access' section contains a checked checkbox for 'Block all public access', with a note below stating: 'Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.' At the bottom of the page, there are standard browser navigation and search bars, along with copyright and legal links.

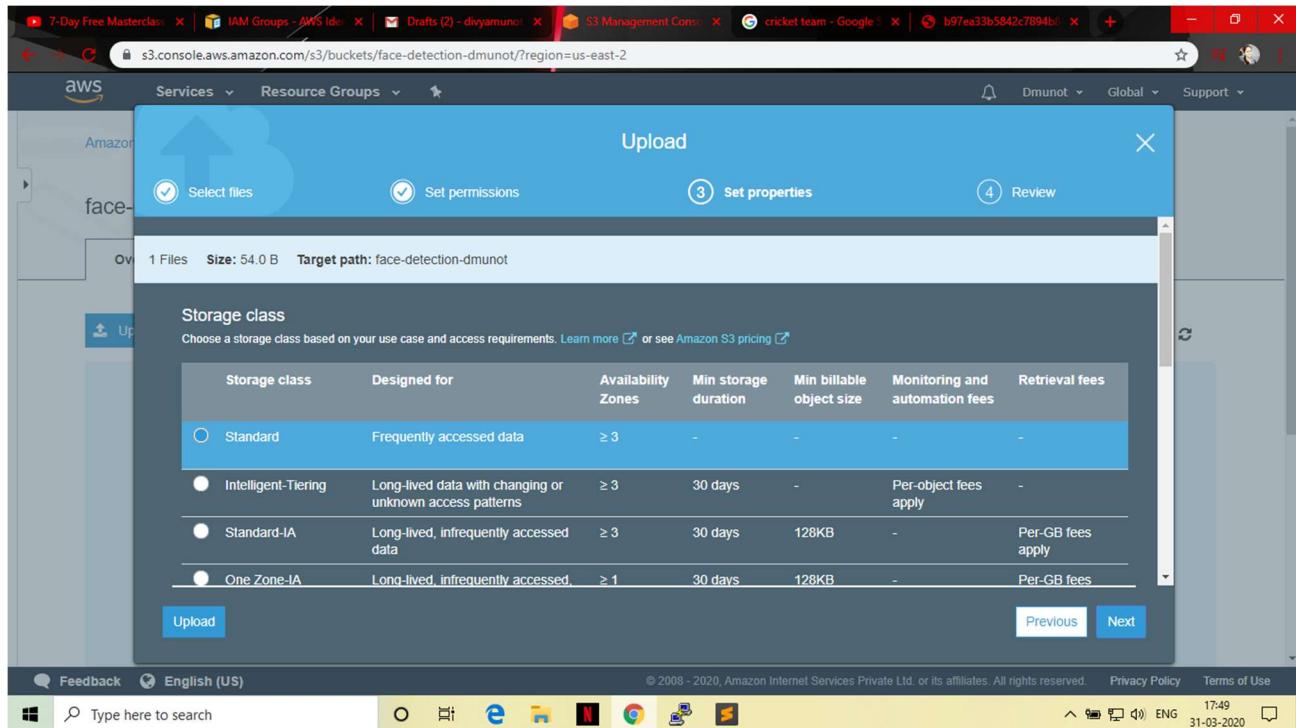
Bucket created

The screenshot shows the 'Buckets' page in the AWS S3 Management Console. A green success message at the top states: 'Successfully created bucket aws-webinar-divya. To upload files and folders, or to configure additional bucket settings such as Bucket Versioning, tags, and default encryption, choose Go to bucket details.' Below this, the 'Amazon S3' sidebar shows 'Buckets' selected. The main content area displays a table titled 'Buckets (1)'. The table has columns for 'Name', 'Region', 'Access', and 'Bucket created'. One row is shown, corresponding to the newly created bucket: 'aws-webinar-divya' (Region: US East (Ohio) us-east-2, Bucket created: 2020-03-29T06:08:54.000Z). At the bottom, there are standard browser navigation and search bars, along with copyright and legal links.

Uploading object



Selecting storage class



Object uploaded

The screenshot shows the AWS S3 console interface. At the top, there are several tabs: 'Services' (selected), 'Resource Groups', 'Global', and 'Support'. Below the tabs, the path 'Amazon S3 > face-detection-dmunot' is shown. The main area displays a table of objects in the bucket 'face-detection-dmunot'. The table has columns for Name, Last modified, Size, and Storage class. One object, 'index.html', is listed with the details: Last modified Mar 31, 2020 5:49:19 PM GMT+0530, Size 54.0 B, and Storage class Standard. At the bottom of the table, it says 'Viewing 1 to 1'. Below the table, there's an 'Operations' section showing 0 In progress, 1 Success, and 0 Error. The status bar at the bottom indicates the date as 31-03-2020 and the time as 17:49.

Give public access

The screenshot shows the AWS S3 console interface. At the top, there are several tabs: 'Services' (selected), 'Resource Groups', 'Global', and 'Support'. Below the tabs, the path 'Amazon S3 > face-detection-dmunot > Permissions' is shown. The main area displays the 'Block public access (bucket settings)' page. A green success message box says 'Public access settings updated successfully'. Below the message, there's a section titled 'Block all public access' with the setting 'Off'. Underneath, there are four sub-options: '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'. Each of these sub-options also has its setting set to 'Off'. At the bottom of the page, there's an 'Edit' button. Below the page, there's an 'Operations' section showing 0 In progress, 1 Success, and 0 Error. The status bar at the bottom indicates the date as 31-03-2020 and the time as 17:49.

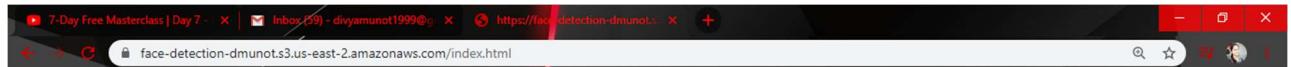
Static website hosting

The screenshot shows the AWS S3 Management Console static website hosting configuration page. The endpoint is set to <http://face-detection-dmunot.s3-website.us-east-2.amazonaws.com>. The 'Index document' is set to 'index.html' and the 'Error document' is set to 'error.html'. The 'Bucket hosting' checkbox is checked. On the right, there is a section titled 'Object-level logging' with a note about CloudTrail data events and a 'Disabled' status indicator.

Make object public

The screenshot shows the AWS S3 Management Console object properties page for 'index.html'. The 'Properties' tab is selected. Below the tabs, there is a 'Success' message. Underneath, there are buttons for 'Open', 'Download', 'Download as', 'Make public', and 'Copy path'. The 'Owner' is listed as 'ce1b1b778ea599e3a97afb4d9c8e1d474d2f587dcfd57aeef42466c2ad2559d88'. The 'Last modified' date is 'Mar 31, 2020 5:49:19 PM GMT+0530'. The 'Etag' value is 'd9a89f9c155e5cf2b814a686c0fe332e'. The 'Storage class' is 'Standard'. At the bottom, there is an 'Operations' summary: 0 In progress, 3 Success, 0 Error.

Checking link on S3 browser



Hello, this is Divya



Facial Analysis

A screenshot of the AWS Rekognition Console. The left sidebar shows navigation options like 'Custom Labels', 'Demos', 'Facial analysis' (which is selected), 'Celebrity recognition', 'Face comparison', 'Text in image', 'Video Demos', and 'Metrics'. The main content area is titled 'Facial analysis' and shows a photo of a man wearing sunglasses. Below the photo, there are sections for 'Choose a sample image' (with two sample images shown) and 'Use your own image' (with instructions and a 'Upload' button). On the right, there's a 'Results' section with a thumbnail of the analyzed face and a table of analysis results:

Attribute	Score (%)
looks like a face	99.9 %
appears to be male	99 %
age range	39 - 57 years old
not smiling	99.4 %
appears to be calm	98.7 %
wearing glasses	99.1 %

Celebrity Recognition

The screenshot shows the Amazon Rekognition console under the 'Celebrity recognition' section. A sample image of Narendra Modi is displayed with a blue bounding box around his face. The results panel on the right shows a thumbnail of Narendra Modi with the name 'Narendra Modi' and a 'Learn More' link. Below it, the 'Match confidence' is listed as 95%. The interface includes sections for 'Request' and 'Response'.

Face Comparison

The screenshot shows the Amazon Rekognition console under the 'Face comparison' section. A reference face (Virat Kohli) is compared against a group of comparison faces (the Indian cricket team). The results panel on the right shows a comparison between two individuals with a similarity score of 98%. Below it, another comparison is shown with a different result. The interface includes sections for 'Request' and 'Response'.

Text in image

The screenshot shows the 'Text in image' demo page within the Amazon Rekognition console. On the left, a sidebar lists various features like Custom Labels, Demos, and Metrics. The main area displays a hand holding a smartphone showing a Google search result for 'Cut through the noise'. The background of the demo image is yellow with abstract shapes. Below the demo image, there are sections for 'Choose a sample image' and 'Use your own image', both with 'Upload' buttons. To the right, a results panel shows the detected text: 'Google', 'Cut | through |', 'the | noise |', 'with | forced | bold | text |', and 'on | Google | ads |'. There are also 'Request' and 'Response' tabs.

Installing aws-sdk

```
ec2-user@ip-172-31-41-234:~$ curl -O https://aws.amazon.com/amazon-linux-2/
ec2-user@ip-172-31-41-234:~$ curl -O https://awscli.amazonaws.com/awscli-exe-linux-x86_64.zip
ec2-user@ip-172-31-41-234:~$ unzip awscli-exe-linux-x86_64.zip
ec2-user@ip-172-31-41-234:~$ ./aws/install
ec2-user@ip-172-31-41-234:~$ curl -s https://getcomposer.org/installer | php
ec2-user@ip-172-31-41-234:~$ php composer.phar require aws/aws-sdk-php
ec2-user@ip-172-31-41-234:~$ composer install
ec2-user@ip-172-31-41-234:~$ composer update
ec2-user@ip-172-31-41-234:~$ composer self-update
```

Installing php

The screenshot shows a Sublime Text interface with two tabs: 'index.php' and 'index.html'. The 'index.php' tab contains the following PHP code:

```
<?php
/*
Install php - sudo yum install php
curl -S https://getcomposer.org/installer
cd /var/www/html
sudo mkdir face
cd face
sudo php -d memory_limit=-1 ~/composer.phar
In case if you get memory error -
sudo /bin/dd if=/dev/zero of=/var/swap.1
sudo /sbin/mkswap /var/swap.1
sudo /sbin/swapon /var/swap.1
sudo wget https://i.pinimg.com/originals/
sudo mv b97ea33b5842c7894b804923c6c05580.
*/
error_reporting(0);

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

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

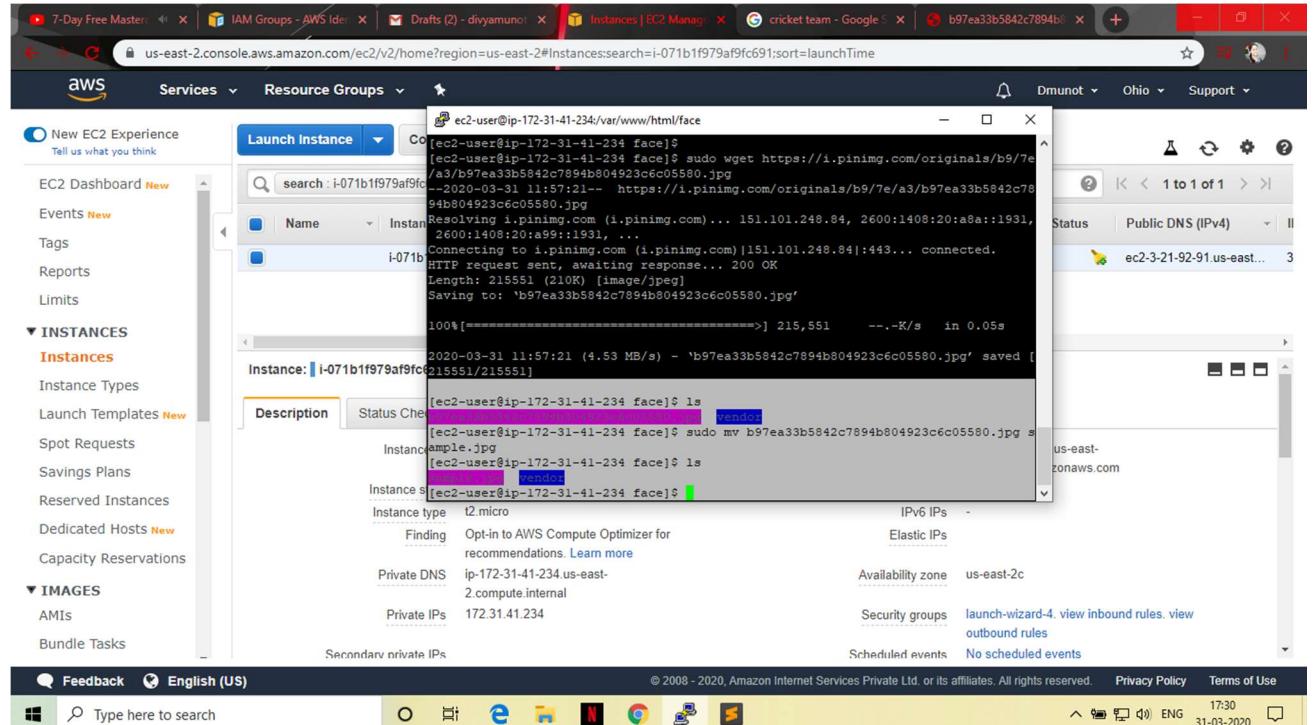
$bucket = 'face-detection-dmunot';
$keyname = 'sample.jpg';

```

A terminal window titled 'ec2-user@ip-172-31-41-234:' is open in the background, showing the output of the command 'sudo yum install php'. The terminal output includes:

```
[ec2-user@ip-172-31-41-234 ~]$ sudo yum install php
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Package php-5.4.16-46.amzn2.0.2.x86_64 already installed and latest version
Nothing to do
[ec2-user@ip-172-31-41-234 ~]$
```

Downloading image and renaming



Uploading index.php file code

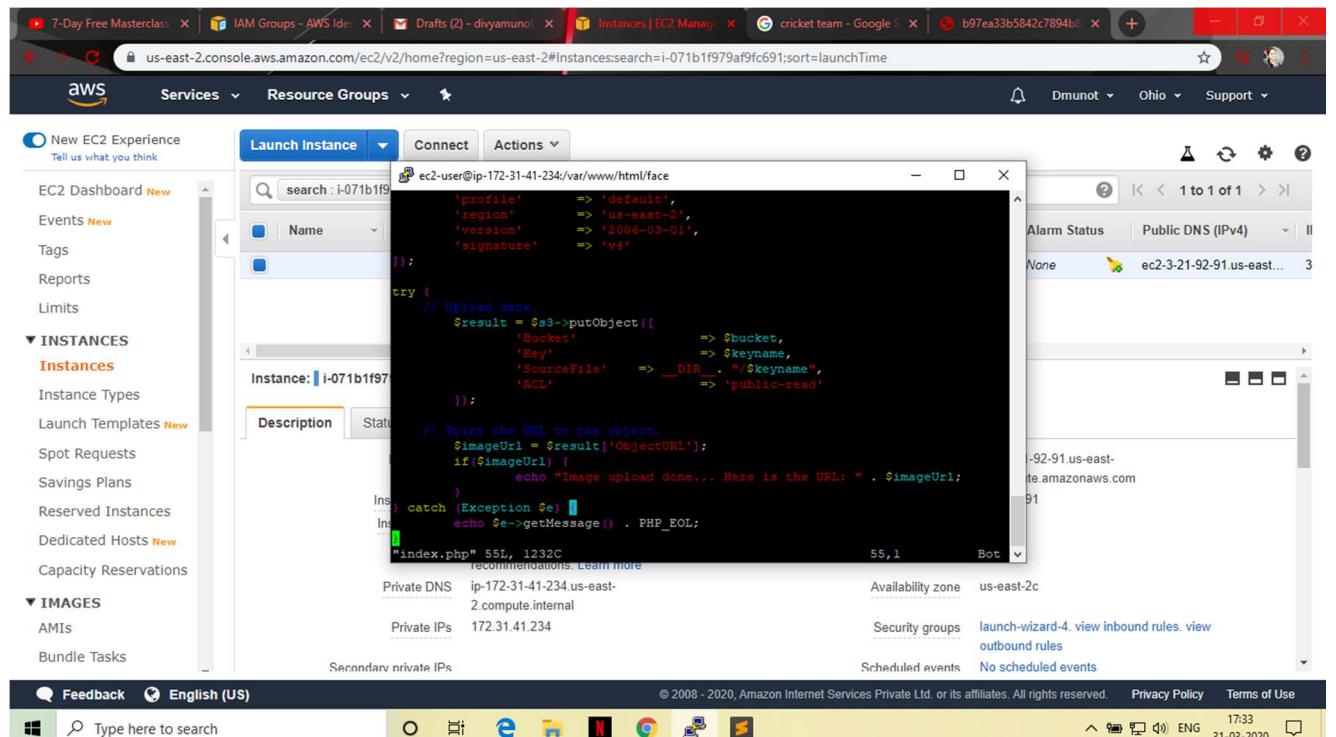


Image upload success

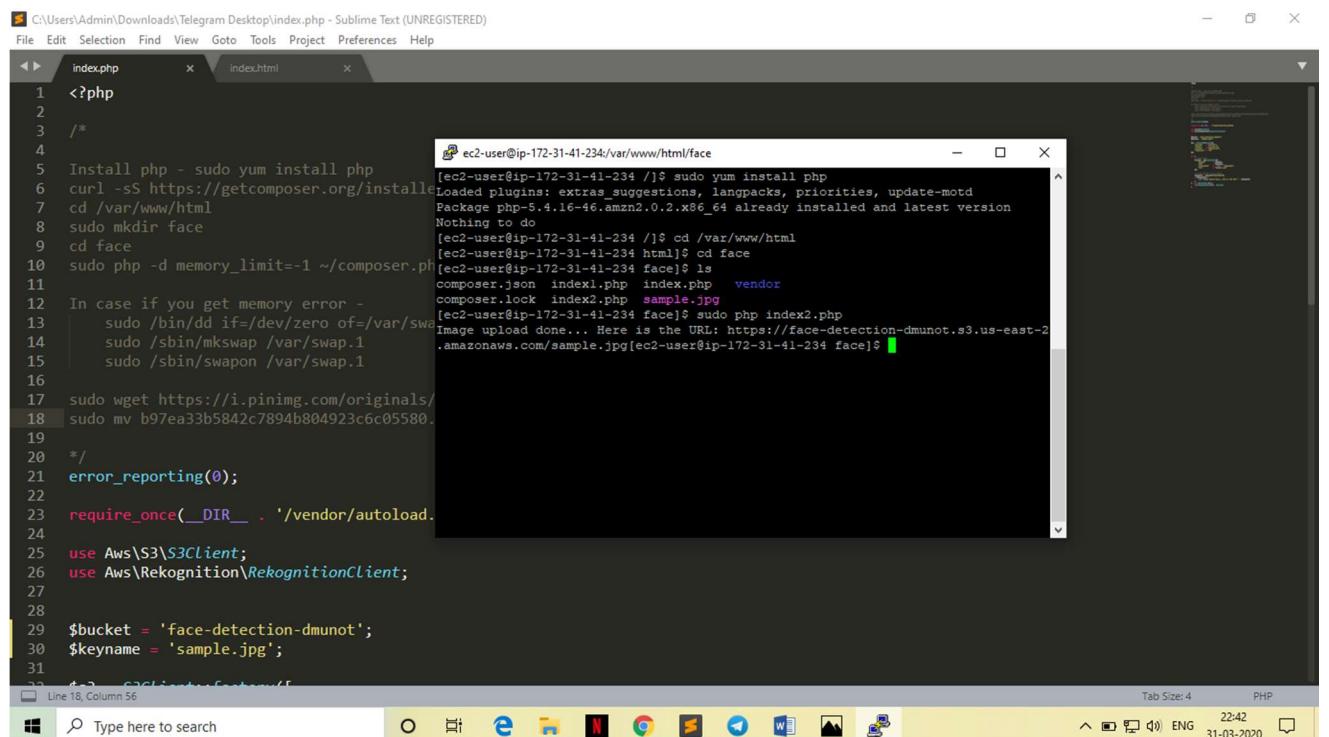


Image uploaded

Screenshot of the AWS S3 Management Console showing the contents of the 'face-detection-dmunot' bucket. The bucket contains two objects:

Name	Last modified	Size	Storage class
index.html	Mar 31, 2020 5:49:19 PM GMT+0530	54.0 B	Standard
sample.jpg	Mar 31, 2020 10:42:41 PM GMT+0530	210.5 KB	Standard

Face Detect Success

Screenshot of the AWS S3 Management Console showing the contents of the 'face-detection-dmunot' bucket. A terminal window is open on an EC2 instance, showing the upload process:

```
ec2-user@ip-172-31-41-234:~$ ls
b97ea33b5842c7894b804923c6c05580.jpg
ec2-user@ip-172-31-41-234:~$ composer.lock sample.jpg
composer.json index.php vendor
[ec2-user@ip-172-31-41-234 face]$ sudo mv b97ea33b5842c7894b804923c6c05580.jpg sample.jpg
[ec2-user@ip-172-31-41-234 face]$ sudo vim index.php
[ec2-user@ip-172-31-41-234 face]$ sudo chmod +x index.php
[ec2-user@ip-172-31-41-234 face]$ curl -F "file=@sample.jpg" https://face-detection-dmunot.s3.us-east-2.amazonaws.com/
Image upload done.. Here is the URL: https://face-detection-dmunot.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 9 faces[ec2-user@ip-172-31-41-234 face]$
```