

3.)

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 notification about console updates and a 'Buckets (2)' section. This section includes a search bar, a table of buckets, and buttons for 'Copy ARN', 'Empty', 'Delete', and 'Create bucket'.

	Name	Region	Access	Bucket created
<input type="radio"/>	aws-webinar-codmithra	US East (Ohio) us-east-2	Objects can be public	2020-04-05T08:39:05.000Z
<input type="radio"/>	aws-project-khushboo	US East (Ohio) us-east-2	Objects can be public	2020-04-04T06:22:54.000Z

4.)

The screenshot shows the Amazon Rekognition console home page. The left sidebar lists various features: Custom Labels, Demos, Image moderation, Facial analysis, Celebrity recognition, Face comparison, Text in image, Video Demos, and Metrics. The main content area features a large header with the text 'Amazon Rekognition' and 'Deep learning-based visual analysis service'. Below this are buttons for 'Try Demo' and 'Download SDKs'. The bottom section highlights three key capabilities: 'Easily Integrate Powerful Visual Analysis into Your App', 'Continuously Learning', and 'Integrated with AWS Services'.

5.)

**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.

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

**Quick Start** |< > 1 to 40 of 40 AMIs

**My AMIs**

**AWS Marketplace**

**Community AMIs**

☐ Free tier only ①

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

**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

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

**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

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6.)

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

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Instance Details](#)

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7.)

Launch instance wizard | EC2 M...

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

ServicesResource Groups

khushboopal176OhioSupport

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

### Step 4: Add Storage

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

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

Add New Volume

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

CancelPreviousReview and LaunchNext: Add Tags

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8.)

Launch instance wizard | EC2 M...

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

ServicesResource Groups

khushboopal176OhioSupport

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

### Step 6: Configure Security Group

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

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

Security group name: launch-wizard-7  
Description: launch-wizard-7 created 2020-04-05T17:15:54.287+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

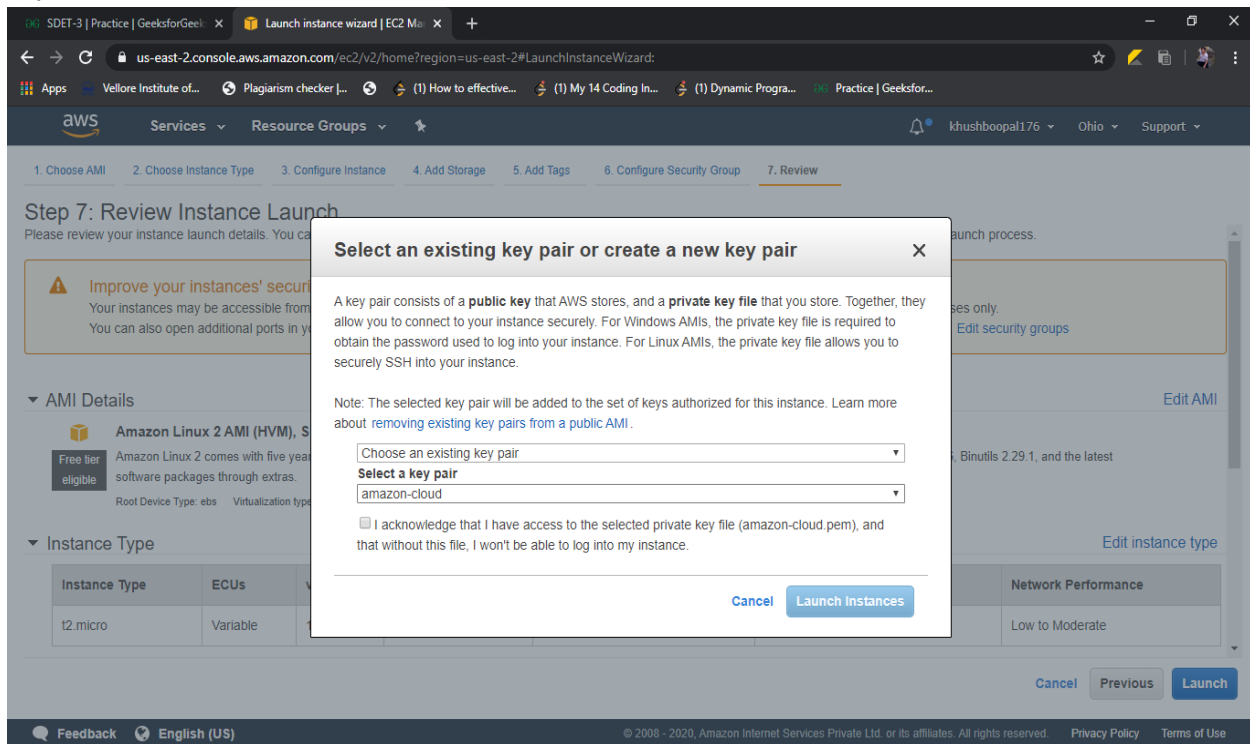
Warning

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.

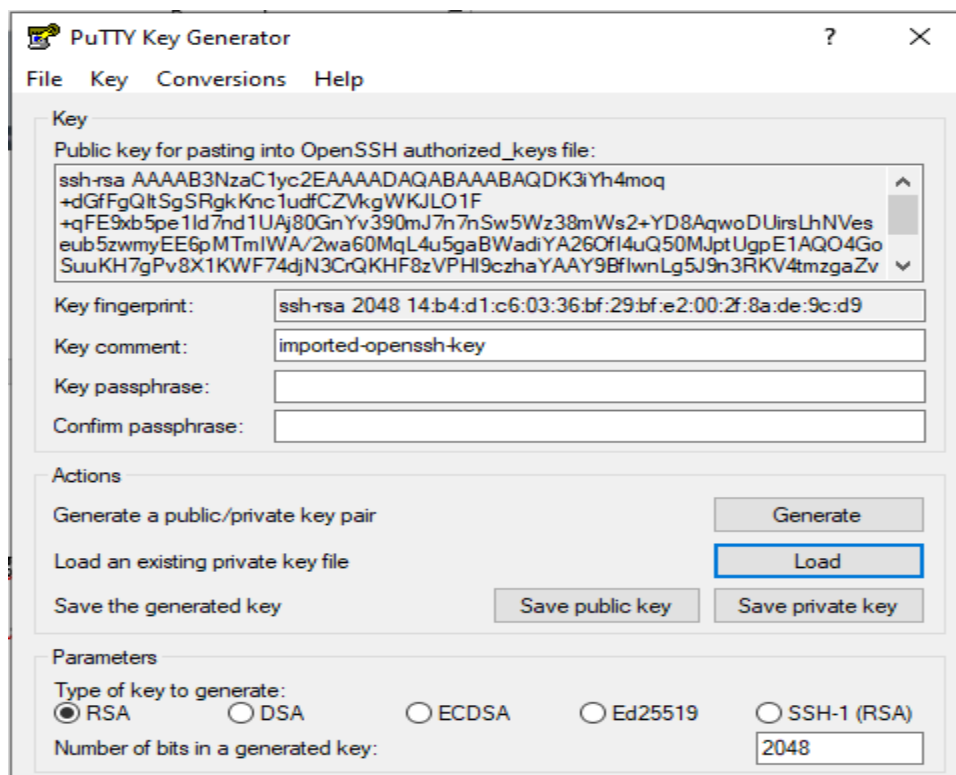
CancelPreviousReview and Launch

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9.)

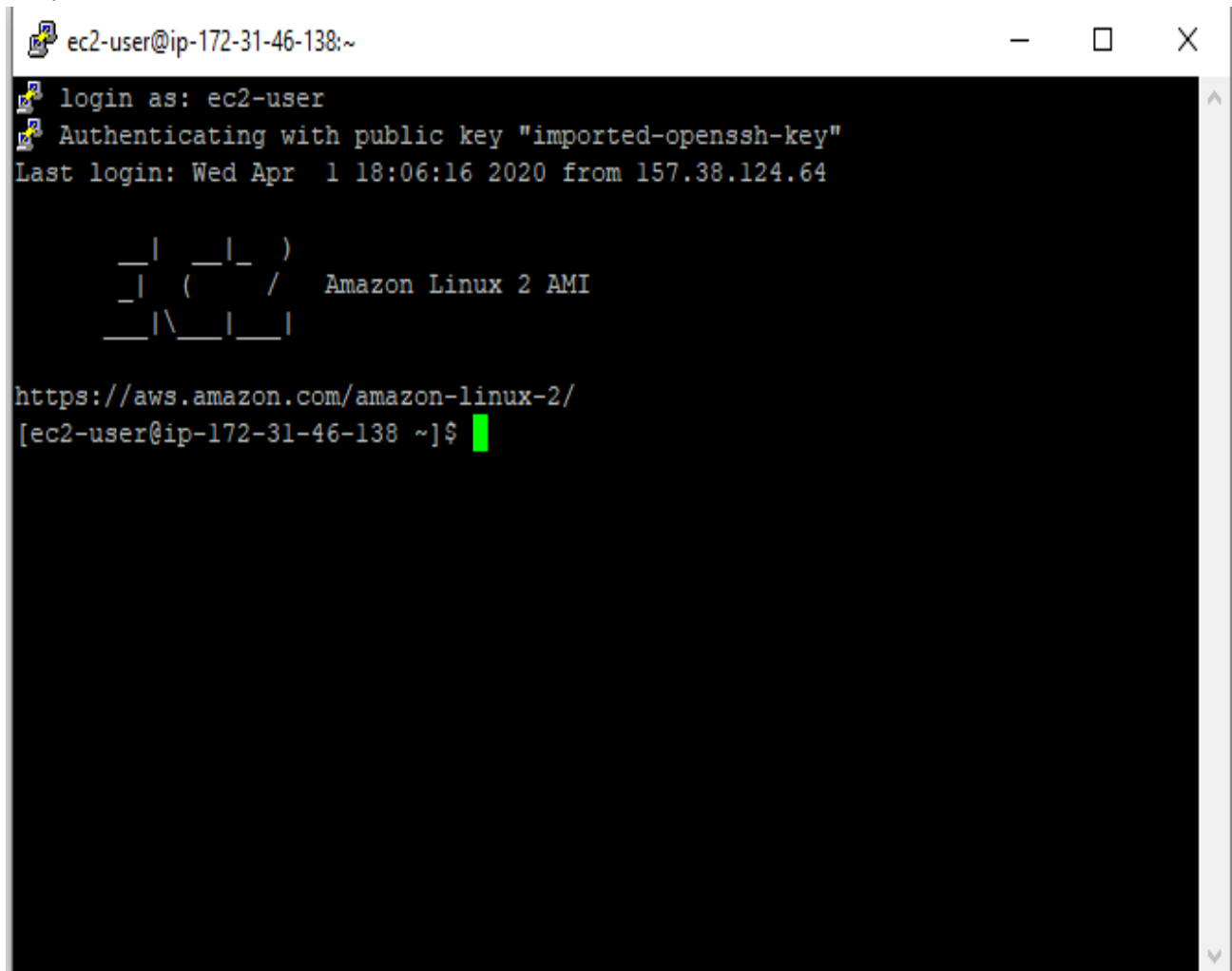


10.)



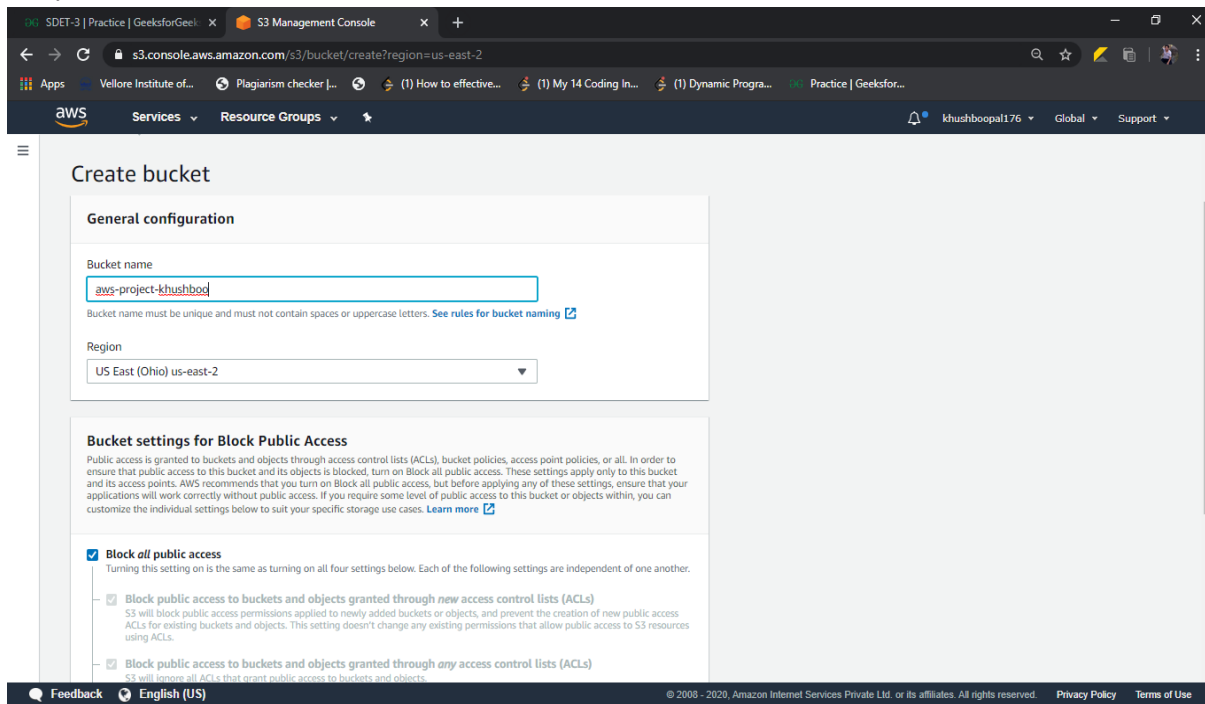
Converting amazon-cloud.pem to amazon-cloud.ppk

11.)

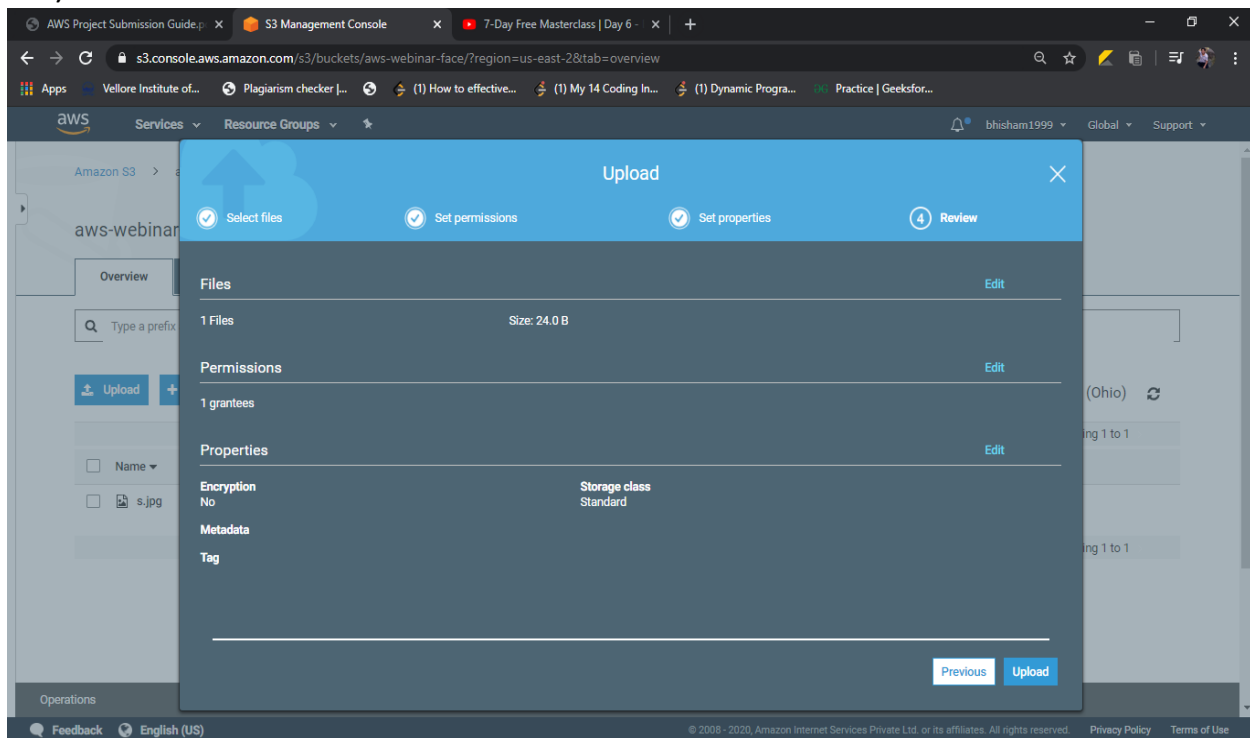


```
ec2-user@ip-172-31-46-138:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
Last login: Wed Apr  1 18:06:16 2020 from 157.38.124.64  
  
  _|  _|_ )  
 _| (  /   Amazon Linux 2 AMI  
__|\_|_|_|  
  
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-46-138 ~]$
```

12.)



13.)



14.)

The screenshot shows the AWS S3 Management Console for the bucket 'aws-project-khushboo'. The 'Properties' tab is selected, showing a grid of configuration options:

- Versioning:** Keep multiple versions of an object in the same bucket. Status: Disabled.
- Server access logging:** Set up access log records that provide details about access requests. Status: Disabled.
- Static website hosting:** Host a static website, which does not require server-side technologies. Status: **Bucket hosting** (selected).
- Object-level logging:** Record object-level API activity using the CloudTrail data events feature (additional cost). Status: Disabled.
- Default encryption:** Automatically encrypt objects when stored in Amazon S3.

15.)

The screenshot shows the AWS S3 Management Console for the bucket 'aws-project-khushboo', with the 'Permissions' tab selected. It displays various access settings:

- Access for bucket owner:** A table showing permissions for the canonical ID '6f165a41221c8ca49f74acb06e2a5f09f098012009f135116e72743a9a51173b (Your AWS account)'. Permissions for List objects, Write objects, and Read bucket permissions are all set to 'Yes'.
- Access for other AWS accounts:** A section with an 'Add account' button and a table for managing permissions for other AWS accounts.
- Public access:** A section with a 'Group' dropdown set to 'Everyone'. The permissions for List objects, Write objects, and Read bucket permissions are all set to '-' (no access).
- S3 log delivery group:** A section with a 'Group' dropdown set to 'Log Delivery'. The permissions for List objects, Write objects, and Read bucket permissions are all set to '-' (no access).

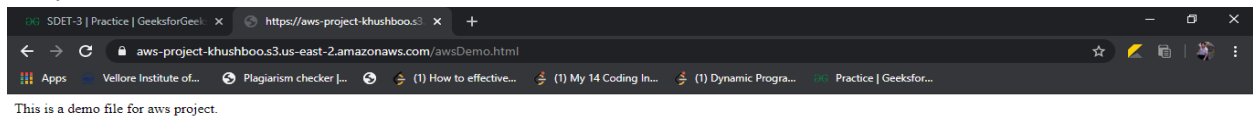
A modal window titled 'Everyone' is open, showing options to grant access to the objects and the bucket's ACL:

- Access to the objects:**
  - ☐ List objects
  - ☐ Write objects
- Access to this bucket's ACL:**
  - ☐ Read bucket permissions
  - ☐ Write bucket permissions

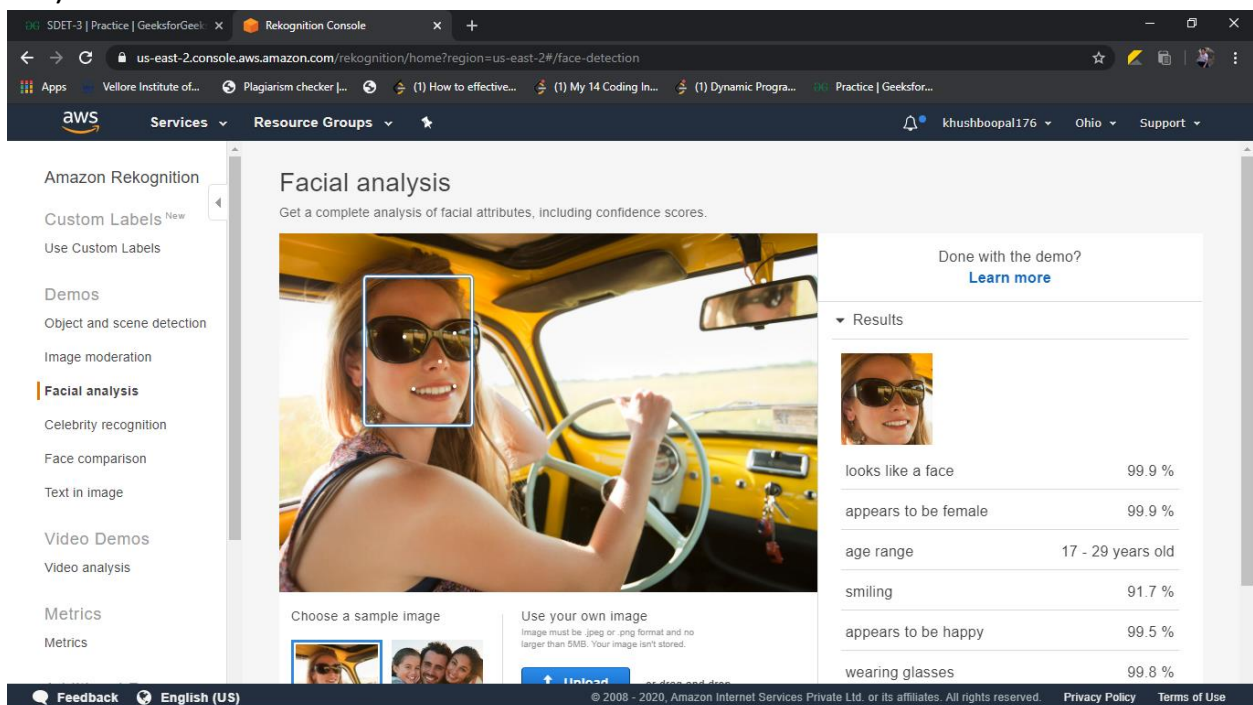
The modal has 'Cancel' and 'Save' buttons at the bottom.



16.)



17.)



18.)

The screenshot shows the Amazon Rekognition console in a web browser. The URL is `us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/face-comparison`. The left sidebar lists various services, with 'Face comparison' highlighted. The main content area is titled 'Face comparison' and includes a description: 'Compare faces to see how closely they match based on a similarity percentage.' It features two image upload sections: 'Reference face' and 'Comparison faces'. Below these are 'Choose a sample image' buttons. On the right, the 'Results' section shows a comparison of two faces with a similarity score of 99.8%, represented by a blue progress bar. A 'Done with the demo? Learn more' link is also present. The footer includes 'Feedback', 'English (US)', and copyright information for 2008-2020.

19.)

The screenshot shows the Amazon Rekognition console in a web browser. The URL is `us-east-2.console.aws.amazon.com/rekognition/home?region=us-east-2#/celebrity-detection`. The left sidebar lists various services, with 'Celebrity recognition' highlighted. The main content area is titled 'Celebrity recognition' and includes a description: 'Rekognition automatically recognizes celebrities in images and provides confidence scores.' It features a large image upload section with a 'Choose a sample image' button and a 'Use your own image' section with an 'Upload' button. On the right, the 'Results' section shows a recognition of 'Andy Jassy' with a 'Match confidence' of 100%. A 'Done with the demo? Learn more' link is also present. The footer includes 'Feedback', 'English (US)', and copyright information for 2008-2020.

20.)

The screenshot displays the Amazon Rekognition console interface. The top navigation bar includes the AWS logo, 'Services', 'Resource Groups', and user information. The left sidebar lists various Rekognition services, with 'Text in image' highlighted. The main content area features the title 'Text in image' and a description: 'Rekognition automatically detects and extracts text in your images. Learn More'. Below this is a large image of a green vintage car with the license plate 'J389 NLT'. To the right of the image, the detected text is displayed: 'J389 NLT'. Below the image, there are options to 'Choose a sample image' or 'Use your own image'. The right-hand panel shows a 'Results' section with the detected text 'J389 NLT' and a 'Request' section with the text 'J389 NLT'. The footer contains a 'Feedback' button, 'English (US)' language selection, and copyright information.

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

## Text in image

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



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

▼ Results US English only

| C |

| J389 | NLT |

► Request

► Response

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

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21.)

ec2-user@ip-172-31-18-152:~

login as: ec2-user

Authenticating with public key "imported-openssh-key"

Last login: Sun Apr 5 11:35:36 2020 from 157.39.13.126

```
  _ | _ | _ )  
  _ | ( _ | /  Amazon Linux 2 AMI  
  __| \__|__|
```

<https://aws.amazon.com/amazon-linux-2/>

[ec2-user@ip-172-31-18-152 ~]\$ sudo php -d memory\_limit=-1 ~/composer.phar require aws/aws-sdk-php

Using version ^3.134 for aws/aws-sdk-php

./composer.json has been created

Loading composer repositories with package information

Updating dependencies (including require-dev)

Package operations: 8 installs, 0 updates, 0 removals

- Installing symfony/polyfill-mbstring (v1.15.0): Loading from cache
- Installing mtdowling/jmespath.php (2.5.0): Loading from cache
- Installing guzzlehttp/promises (v1.3.1): Loading from cache
- Installing ralouphie/getallheaders (3.0.3): Loading from cache
- Installing psr/http-message (1.0.1): Loading from cache
- Installing guzzlehttp/psr7 (1.6.1): Loading from cache
- Installing guzzlehttp/guzzle (6.5.2): Loading from cache
- Installing aws/aws-sdk-php (3.134.3): Loading from cache

guzzlehttp/psr7 suggests installing zendframework/zend-httphandler (Emit PSR-7 responses)

guzzlehttp/guzzle suggests installing psr/log (Required for using the Log middleware)

guzzlehttp/guzzle suggests installing ext-intl (Required for Internationalized Domain Name (IDN) support)

aws/aws-sdk-php suggests installing doctrine/cache (To use the DoctrineCacheAdapter)

aws/aws-sdk-php suggests installing aws/aws-php-sns-message-validator (To validate incoming SNS notifications)

Writing lock file

Generating autoload files

1 package you are using is looking for funding.

Use the `composer fund` command to find out more!

[ec2-user@ip-172-31-18-152 ~]\$

22.)

ec2-user@ip-172-31-46-138:~

```
[ec2-user@ip-172-31-46-138 ~]$ sudo yum install php
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 2.4 kB 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
```

23.)

ec2-user@ip-172-31-18-152:/var/www/html/face

```
$bucket = 'aws-project-khushboo';
$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;
}
```

"index.php" 82L, 1869C

82,1

Bot

24.)

ec2-user@ip-172-31-46-138:/var/www/html/face

```
[ec2-user@ip-172-31-46-138 ~]$ cd /var/www/html
[ec2-user@ip-172-31-46-138 html]$ cd face
[ec2-user@ip-172-31-46-138 face]$ pwd
/var/www/html/face
[ec2-user@ip-172-31-46-138 face]$ ls
composer.json composer.lock index.php s.jpg vendor
[ec2-user@ip-172-31-46-138 face]$ sudo php index.php
Image upload done... Here is the URL: https://aws-webinar-face.s3.us-east-2.amaz
[ec2-user@ip-172-31-46-138 face]$
```

25.) Final Output: (Faces Recognized successfully)

ec2-user@ip-172-31-18-152:/var/www/html/face

```
[ec2-user@ip-172-31-18-152 ~]$ cd /var/www/html/face
[ec2-user@ip-172-31-18-152 face]$ sudo vim index.php
[ec2-user@ip-172-31-18-152 face]$ sudo php index.php
Image upload done... Here is the URL: https://aws-project-khushboo.s3.us-east-2.amazonaws.com/sample.jpgTotally there are 9 faces[ec2-user@ip-172-31-18-152 face]$
```