

1. Backend: DynamoDB, API Gateway, Lambda function, SNS

The screenshot shows the AWS Management Console for the 'ImageUploads' table in DynamoDB. The left sidebar contains navigation links for 'DynamoDB' and 'DAX'. The main content area displays the 'ImageUploads' table details. A notification banner at the top states: 'Protect your DynamoDB table from accidental writes and deletes. When you turn on point-in-time recovery (PITR), DynamoDB backs up your table data automatically so that you can restore to any given second in the preceding 1 to 35 days. Additional charges apply. [Learn more](#)'. Below this, the 'General information' section shows the following details:

Partition key	Sort key	Capacity mode	Table status
email (String)	-	On-demand	Active

Additional information shown includes:

- Alarms: No active alarms
- Point-in-time recovery (PITR): Off
- Item count: 0
- Average item size: 0 bytes
- Resource-based policy: Not active
- Table size: 0 bytes
- Amazon Resource Name (ARN): `arn:aws:dynamodb:us-east-1:103619411293:table/imageUploads`

The screenshot shows the AWS Management Console for the 'uploadImageToS3' resource in API Gateway. The left sidebar contains navigation links for 'API Gateway' and 'APIs'. The main content area displays the 'uploadImageToS3' resource details. A green notification banner at the top states: 'Successfully enabled CORS'. Below this, the 'Resources' section shows the 'POST' method execution flow. The flow diagram illustrates the sequence of events: Client → Method request → Integration request → Lambda integration → Integration response (Proxy integration) → Method response → Client. The 'Method request settings' section shows the following details:

Authorization	API key required
NONE	False

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Lambda > Functions > backend-image-uploader

Successfully updated the function backend-image-uploader.

API Gateway + Add destination + Add trigger

Function URL Info

Code Test Monitor Configuration Aliases Versions

Code source info Upload from

EXPLORER

- BACKEND-IMAGE-UPLOADER
 - index.mjs
- DEPLOY [UNDEPLOYED CHANGES]
 - You have undeployed changes.
 - Deploy (D)
 - Test (T)

```
1 import { DynamoDBClient, PutItemCommand } from "@aws-sdk/client-dynamodb";
2 import { PutObjectCommand, S3Client } from "@aws-sdk/client-s3";
3 import { PublishCommand, SNSClient } from "@aws-sdk/client-sns";
4 import { getSignedUrl } from "@aws-sdk/s3-request-presigner";
5
6 const REGION = "us-east-1";
7 const s3 = new S3Client({ region: REGION });
8 const sns = new SNSClient({ region: REGION });
9 const dynamoDB = new DynamoDBClient({ region: REGION });
10
11 const SNS_TOPIC_ARN = "arn:aws:sns:us-east-1:103619411293:image-uploader-updates";
12 const DYNAMODB_TABLE_NAME = "ImageUploads";
13 const BUCKET_NAME = "saurab.ghimire.cloud.computing.image-uploader";
14 export const handler = async (event) => {
15   try {
16     const { filename, contentType, email } = JSON.parse(event.body);
```

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Amazon SNS > Topics > image-uploader-updates

Amazon SNS

- Dashboard
- Topics
- Subscriptions
- Mobile
 - Push notifications
 - Text messaging (SMS)

New Feature
Amazon SNS now supports High Throughput FIFO topics. [Learn more](#)

image-uploader-updates Edit Delete Publish message

Details

Name image-uploader-updates	Display name -
ARN arn:aws:sns:us-east-1:103619411293:image-uploader-updates	Topic owner 103619411293
Type Standard	

< Subscriptions Access policy Data protection policy Delivery policy (HTTP/S) Delivery status logging Encryption Tag >

Subscriptions (1) Edit Delete Request confirmation Confirm subscription Create subscription

Search

ID	Endpoint	Status	Protocol
8f5f0260-ba30-4c4f-b217-bededc...	sourrab@gmail.com	Confirmed	EMAIL

2. Frontend: S3 for React, CloudFront, S3 for images

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Amazon S3 > Buckets > saurab.ghimire.cloud.computing.workshop3.frontend

Amazon S3

General purpose buckets

Directory buckets

Table buckets

Access Grants

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

Storage Lens

Dashboards

Storage Lens groups

AWS Organizations settings

Feature spotlight 11

AWS Marketplace for S3

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Info

ObjectsMetadataPropertiesPermissionsMetricsManagementAccess Points

Objects (8)

Copy S3 URICopy URILDownloadOpenDeleteActionsCreate folderUpload

Find objects by prefix

Name	Type	Last modified	Size	Storage class
asset-manifest.json	json	April 16, 2025, 11:50:28 (UTC-05:00)	517.0 B	Standard
favicon.ico	ico	April 16, 2025, 11:50:28 (UTC-05:00)	3.8 KB	Standard
index.html	html	April 16, 2025, 11:50:28 (UTC-05:00)	644.0 B	Standard
logo192.png	png	April 16, 2025, 11:50:28 (UTC-05:00)	5.2 KB	Standard
logo512.png	png	April 16, 2025, 11:50:29 (UTC-05:00)	9.4 KB	Standard
manifest.json	json	April 16, 2025, 11:50:29 (UTC-05:00)	492.0 B	Standard
robots.txt	txt	April 16, 2025, 11:50:29 (UTC-05:00)	67.0 B	Standard

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Global

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CloudFront > Distributions > E36UQVQK0FDBC

CloudFront

Distributions

Policies

Functions

Static IPs

VPC origins

What's new

Telemetry

Monitoring

Alarms

Logs

Reports & analytics

Cache statistics

Popular objects

Top referrers

Usage

Viewers

Security

Origin access

E36UQVQK0FDBC

View metrics

GeneralSecurityOriginsBehaviorsError pagesInvalidationsTagsLogging

Details

Distribution domain name

d2fno43fyi8dlz.cloudfront.net

ARN

arn:aws:cloudfront:103619411293:distribution/E36UQVQK0FDBC

Last modified

April 16, 2025 at 3:51:19 PM UTC

Settings

Description

-

Price class

Use all edge locations (best performance)

Supported HTTP versions

HTTP/2, HTTP/1.1, HTTP/1.0

Alternate domain names

-

Standard logging

Off

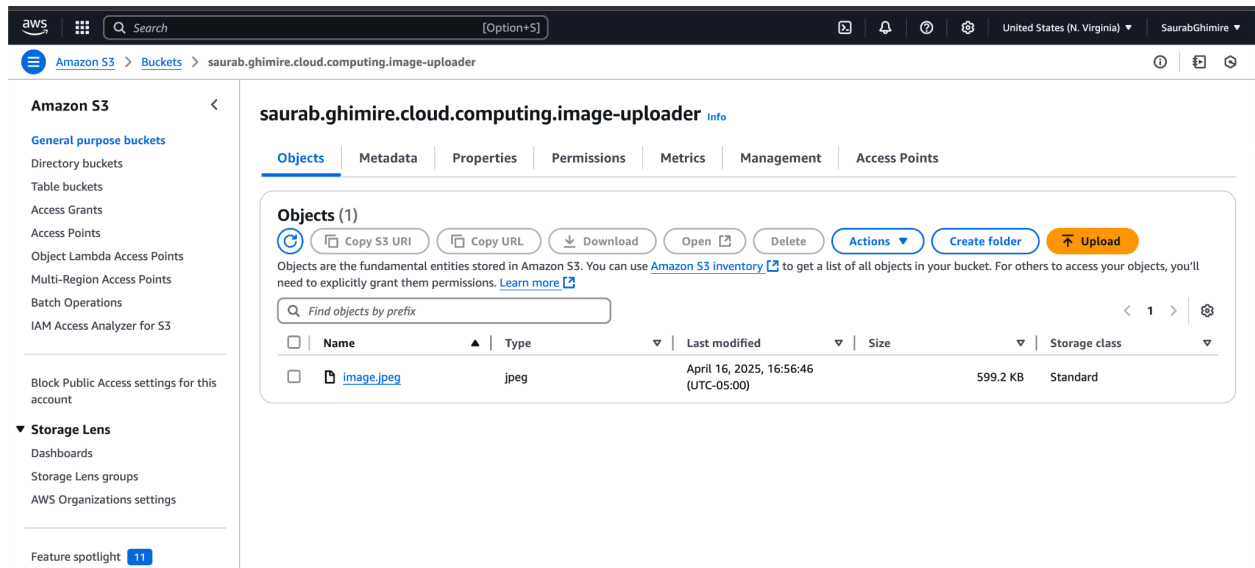
Cookie logging

Off

Default root object

index.html

Continuous deployment



3. Deployed website: Show the live website with working image upload functionality.

