

Task 1: Host a Static Website using Amazon S3

us-west-2.console.aws.amazon.com/s3/bucket/create?region=us-west-2&bucketType=general

Amazon S3 Buckets Create bucket

Create bucket info

Buckets are containers for data stored in S3.

General configuration

AWS Region
US West (Oregon) us-west-2

Bucket type info

☒ **General purpose**
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

☐ **Directory**
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name info
static-website-machine-test
Bucket names must be 3 to 63 characters and unique within the global namespace. Bucket names must also begin and end with a letter or number. Valid characters are a-z, 0-9, periods (.), and hyphens (-). [Learn More](#)

Copy settings from existing bucket - optional
Only the bucket settings in the following configuration are copied.
[Choose bucket](#)
Format: s3://bucket/prefix

Object Ownership info

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

☒ **ACLs disabled (recommended)**
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

☐ **ACLs enabled**
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership
Bucket owner enforced

us-west-2.console.aws.amazon.com/s3/upload/static-website-machine-test?region=us-west-2&bucketType=general

Amazon S3 Buckets static-website-machine-test Upload

Upload info

Add the files and folders you want to upload to S3. To upload a file larger than 190GB, use the AWS CLI, AWS SDKs or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose [Add files](#) or [Add folder](#).

Files and folders (6 total, 3.2 MB)

All files and folders in this table will be uploaded.

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	bg.jpg	mashkoor/	image/jpeg	1.9 MB
<input type="checkbox"/>	boy.jpeg	mashkoor/	image/jpeg	380.4 KB
<input type="checkbox"/>	fileOrganizer.png	mashkoor/	image/png	408.4 KB
<input type="checkbox"/>	grocery.png	mashkoor/	image/png	410.3 KB
<input type="checkbox"/>	index.html	mashkoor/	text/html	18.1 KB
<input type="checkbox"/>	proj1.png	mashkoor/	image/png	106.8 KB

Destination info

Destination
[s3://static-website-machine-test](#)

Destination details
Bucket settings that impact new objects stored in the specified destination.

Permissions
Grant public access and access to other AWS accounts.

Properties
Specify storage class, encryption settings, tags, and more.

[Cancel](#) [Upload](#)

static-website-machine-test [info](#)

[Objects](#) [Metadata](#) [Properties](#) [Permissions](#) [Metrics](#) [Management](#) [Access Points](#)

Objects (6) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	bg.jpg	jpg	April 17, 2025, 15:52:56 (UTC+05:30)	1.9 MB	Standard
<input type="checkbox"/>	boy.jpg	jpeg	April 17, 2025, 15:52:56 (UTC+05:30)	300.4 KB	Standard
<input type="checkbox"/>	fileOrganizer.png	png	April 17, 2025, 15:52:56 (UTC+05:30)	408.4 KB	Standard
<input type="checkbox"/>	grocery.png	png	April 17, 2025, 15:52:56 (UTC+05:30)	410.3 KB	Standard
<input type="checkbox"/>	index.html	html	April 17, 2025, 15:52:57 (UTC+05:30)	18.1 KB	Standard
<input type="checkbox"/>	proj1.png	png	April 17, 2025, 15:53:00 (UTC+05:30)	106.8 KB	Standard

Edit Block public access (bucket settings) [info](#)

Block public access (bucket settings)

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](#)

- ☐ **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.
- ☐ **Block public access to buckets and objects granted through new access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
 - ☐ **Block public access to buckets and objects granted through any access control lists (ACLs)**
S3 will ignore all ACLs that grant public access to buckets and objects.
 - ☐ **Block public access to buckets and objects granted through new public bucket or access point policies**
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
 - ☐ **Block public and cross-account access to buckets and objects through any public bucket or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

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

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

[Edit](#) [Delete](#)

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::static-website-machine-test/*"
    }
  ]
}
```

[Copy](#)

Edit static website hosting [Info](#)

Static website hosting

Use this bucket to host a website or redirect requests. [Learn more](#)

Static website hosting

- ☐ Disable
- ☒ Enable

Hosting type

- ☒ Host a static website

Use the bucket endpoint as the web address. [Learn more](#)

- ☐ Redirect requests for an object

Redirect requests to another bucket or domain. [Learn more](#)

For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see [Using Amazon S3 Block Public Access](#)

Index document

Specify the home or default page of the website.

index.html

Error document - optional

This is returned when an error occurs.

error.html

Redirection rules - optional

Redirection rules, written in JSON, automatically redirect webpage requests for specific content. [Learn more](#)

Static website hosting [Edit](#)

Use this bucket to host a website or redirect requests. [Learn more](#)

- We recommend using [AWS Amplify Hosting](#) for static website hosting

Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. Learn more about [Amplify Hosting](#) or [View your existing Amplify apps](#)

[Create Amplify app](#)

S3 static website hosting

Enabled

Hosting type

Bucket hosting

Bucket website endpoint

When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)

<http://static-website-machine-test.s3-website-us-west-2.amazonaws.com>

Create distribution

Origin

Origin domain

Choose an AWS origin, or enter your origin's domain name. [Learn more](#)

static-website-machine-test.s3-website-us-west-2.amazonaws.com

Enter a valid DNS domain name, such as an S3 bucket, HTTP server, or VPC origin ID.

Protocol [Info](#)

- ☒ HTTP only

☐ HTTPS only

☐ Match viewer

HTTP port

Enter your origin's HTTP port. The default is port 80.

80

Origin path - optional

Enter a URL path to append to the origin domain name for origin requests.

Enter the origin path

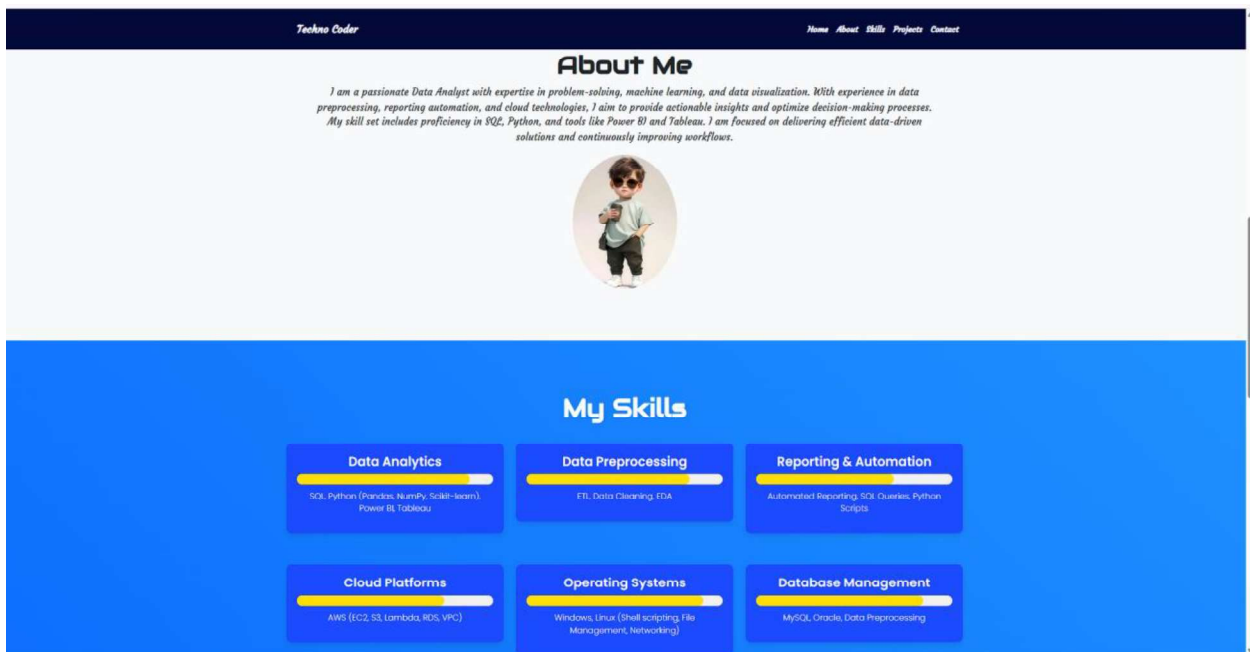
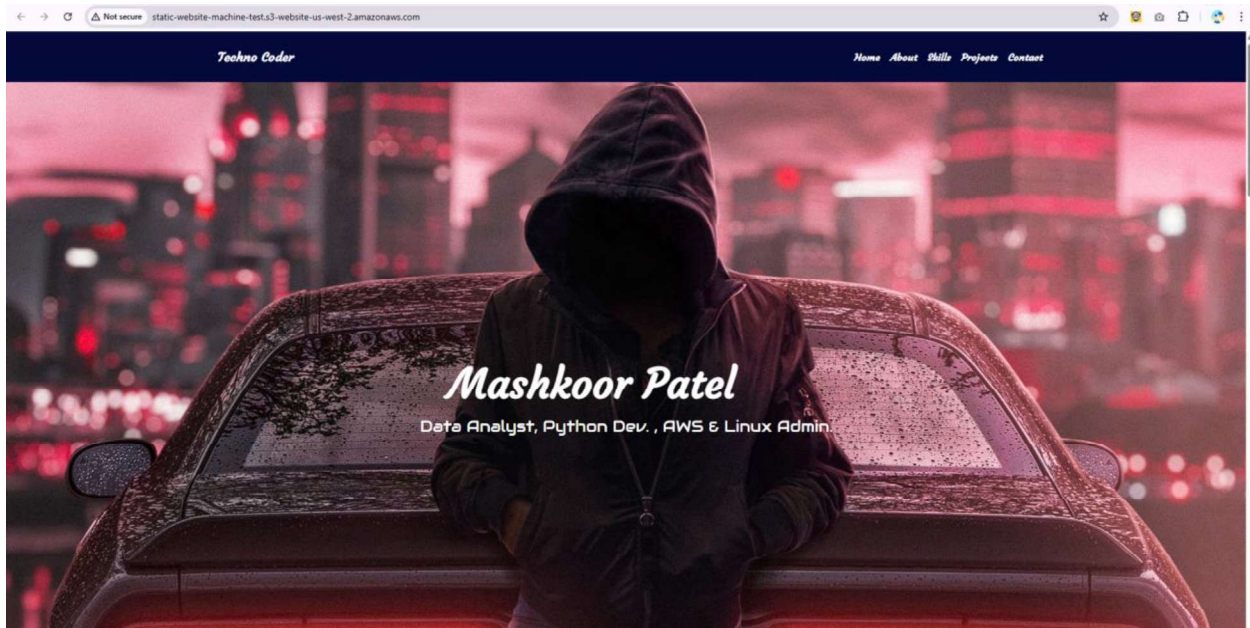
Name

Enter a name for this origin.

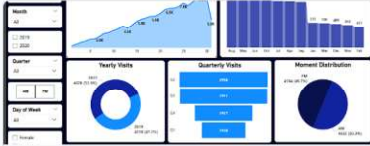
static-website-machine-test.s3-website-us-west-2.amazonaws.com

Add custom header - optional

CloudFront includes this header in all requests that it sends to your origin.



My Projects



Patient Insights & Service Optimization Dashboard

Problem: Hospitals face challenges analyzing patient data, leading to inefficiencies.
Action: Used Power BI to analyze data from 1,000 patients across 5 hospitals.
Result: Improved care, reduced costs, and optimized operations.



File Organizer Software

Problem: Managing and organizing a large number of files manually can be time-consuming and lead to cluttered directories.
Action: Built a file organizer software using Python with Tkinter for GUI and OS library for file management, providing an intuitive way to sort and organize files.
Result: Simplified file organization, saved time, and boosted productivity with an easy-to-use interface.



Grocery Billing Software

Problem: Manual grocery billing leads to errors and inefficiencies.
Action: Developed a Python-based grocery billing software to automate calculations and inventory management.
Result: Streamlined the billing process, reduced errors, and improved overall efficiency.

Contact Me

[Send Message](#)

The screenshot shows the AWS CloudFront console for distribution **E34U8M13J6URGK**. The left sidebar contains navigation links for CloudFront, Distributions, Policies, Functions, Static IPs, VPC origins, What's new, Telemetry, Reports & analytics, Security, Key management, and Savings Bundle. The main content area has tabs for General, Security, Origins, Behaviors, Error pages, Invalidations, Tags, and Logging. The **General** tab is active, showing the following details:

- Distribution domain name:** dspv49unui4lt.cloudfront.net
- ARN:** arn:aws:cloudfront::235494808577:distribution/E34U8M13J6URGK
- Last modified:** April 17, 2025 at 10:52:22 AM UTC

The **Settings** section includes:

- Description:** Use all edge locations (best performance)
- 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:** -

At the bottom, the **Continuous deployment** section features a **Create staging distribution** button.

Website link.

Before:

<http://static-website-machine-test.s3-website-us-west-2.amazonaws.com/>

After:

dspv49unui4lt.cloudfront.net

Task 2: Launch an EC2 Instance and Host a Web Application

BWS [Alt+S] United States (Oregon) technocoder

EC2 > Instances

Instances (1/1)

Last updated less than a minute ago

[Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

Name	Instance ID	Instance state	Instance type	Status check	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
Task2-web-app...	i-08cc48606f34e26a	Running	t2.micro	2/2 checks passed	us-west-2a	ec2-54-212-250-93.us-...	54.212.250.93	-

i-08cc48606f34e26a (Task2-web-app-instance)

- Details** | Status and alarms | Monitoring | Security | Networking | Storage | Tags

▼ Instance summary

Instance ID

i-08cc48606f34e26a

IPv6 address

-

Hostname type

IP name: ip-172-31-20-173.us-west-2.compute.internal

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

54.212.250.93 [Public IP]

IAM Role

-

IMDv2

Required

Operator

-

Public IPv4 address

54.212.250.93 | open address

Instance state

Running

Private IP DNS name (IPv4 only)

ip-172-31-20-173.us-west-2.compute.internal

Instance type

t2.micro

VPC ID

vpc-04987b2876d869754

Subnet ID

subnet-0ca5a7abb9137adfd

Instance ARN

arn:aws:ec2:us-west-2:235494808577:instance/i-08cc48606f34e26a

Private IPv4 addresses

172.31.20.173

Public IPv4 DNS

ec2-54-212-250-93.us-west-2.compute.amazonaws.com | open address

Elastic IP addresses

-

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | Learn more

Auto Scaling Group name

-

Managed

false

```
C:\Users\Mashkoor>cd Downloads  
  
C:\Users\Mashkoor\Downloads>ssh -i "task2-instacee-key.pem" ec2-user@ec2-54-212-250-93.us-west-2.compute.amazonaws.com  
The authenticity of host 'ec2-54-212-250-93.us-west-2.compute.amazonaws.com (54.212.250.93)' can't be established.  
ED25519 key fingerprint is SHA256:Ky/nh/7cSDWM/uqNLUoBdTLIHojKeLg3+QaynPKv5c.  
This key is not known by any other names.  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added 'ec2-54-212-250-93.us-west-2.compute.amazonaws.com' (ED25519) to the list of known hosts.  
  
#_      Amazon Linux 2023  
~\_     #####  
###\   #####  
###\   ###|  
###\   \#/  ____ https://aws.amazon.com/linux/amazon-linux-2023  
    \   V__'  '->  
      _/_/  
     _/_/  
    _/_/  
   _/_/  
  _/_/  
 _/_/  
/_/
```

```
ec2-user@ip-172-31-20-173:~$ sudo yum update -y
sudo yum install httpd -y
sudo systemctl start httpd
sudo systemctl enable httpd
Amazon Linux 2023 Kernel Livepatch repository 131 kB/s | 15 kB 00:00
=====
WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.7.20250414:
  Run the following command to upgrade to 2023.7.20250414:

    dnf upgrade --releasever=2023.7.20250414

Release notes:
  https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.7.20250414.html
=====
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:00:02 ago on Thu Apr 17 11:12:17 2025.
Dependencies resolved.
=====
Package Architecture Version Repository Size
-----
Installing:
httpd x86_64 2.4.62-1.amzn2023 amazonlinux 48 k
Installing dependencies:
apr x86_64 1.7.5-1.amzn2023.0.4 amazonlinux 129 k
apr-util x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 98 k
generic-logos-httpd noarch 18.0.0-12.amzn2023.0.3 amazonlinux 19 k
httpd-core x86_64 2.4.62-1.amzn2023 amazonlinux 1.4 M
httpd-filesystem noarch 2.4.62-1.amzn2023 amazonlinux 14 k
httpd-tools x86_64 2.4.62-1.amzn2023 amazonlinux 81 k
libbrotli x86_64 1.0.9-4.amzn2023.0.2 amazonlinux 315 k
mailcap noarch 2.1.49-3.amzn2023.0.3 amazonlinux 33 k
Installing weak dependencies:
apr-util-openssl x86_64 1.6.3-1.amzn2023.0.1 amazonlinux 17 k
mod_http2 x86_64 2.0.27-1.amzn2023.0.3 amazonlinux 166 k
mod_lua x86_64 2.4.62-1.amzn2023 amazonlinux 61 k
Transaction Summary
=====
Install 12 Packages

Total download size: 2.3 M
Installed size: 6.9 M
Downloading Packages:
(1/12): apr-util-openssl-1.6.3-1.amzn2023.0.1.x86_64.rpm 321 kB/s | 17 kB 00:00
(2/12): apr-1.7.5-1.amzn2023.0.4.x86_64.rpm 2.1 MB/s | 129 kB 00:00
(3/12): apr-util-1.6.3-1.amzn2023.0.1.x86_64.rpm 1.3 MB/s | 98 kB 00:00
```



```
ec2-user@ip-172-31-20-173:~$ sudo systemctl start httpd
[ec2-user@ip-172-31-20-173 ~]$ sudo systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; preset: disabled)
   Drop-In: /usr/lib/systemd/system/httpd.service.d
            └─php-fpm.conf
   Active: active (running) since Thu 2025-04-17 12:19:53 UTC; 43s ago
     Docs: man:httpd.service(8)
  Main PID: 32407 (httpd)
    Status: "Total requests: 0; Idle/Busy workers 100/0;Requests/sec: 0; Bytes served/sec: 0 B/sec"
     Tasks: 177 (Limit: 1111)
    Memory: 13.0M
       CPU: 64ms
    CGroup: /system.slice/httpd.service
            └─32407 /usr/sbin/httpd -DFOREGROUND
              └─32408 /usr/sbin/httpd -DFOREGROUND
                └─32409 /usr/sbin/httpd -DFOREGROUND
                  └─32410 /usr/sbin/httpd -DFOREGROUND
                    └─32411 /usr/sbin/httpd -DFOREGROUND

Apr 17 12:19:53 ip-172-31-20-173.us-west-2.compute.internal systemd[1]: Starting httpd.service - The Apache HTTP Server...
Apr 17 12:19:53 ip-172-31-20-173.us-west-2.compute.internal systemd[1]: Started httpd.service - The Apache HTTP Server.
Apr 17 12:19:53 ip-172-31-20-173.us-west-2.compute.internal httpd[32407]: Server configured, listening on: port 80
[ec2-user@ip-172-31-20-173 ~]$ sudo vi /var/www/html/index.php
```

```
$ _SESSION['todos'] = [];
header("Location: /");
exit;
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>My TODO List</title>
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <!-- Bootstrap 5 CDN -->
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body class="bg-light">

  <div class="container mt-5">
    <div class="card shadow">
      <div class="card-header bg-primary text-white">
        <h3 class="mb-0"> My TODO List</h3>
      </div>
      <div class="card-body">

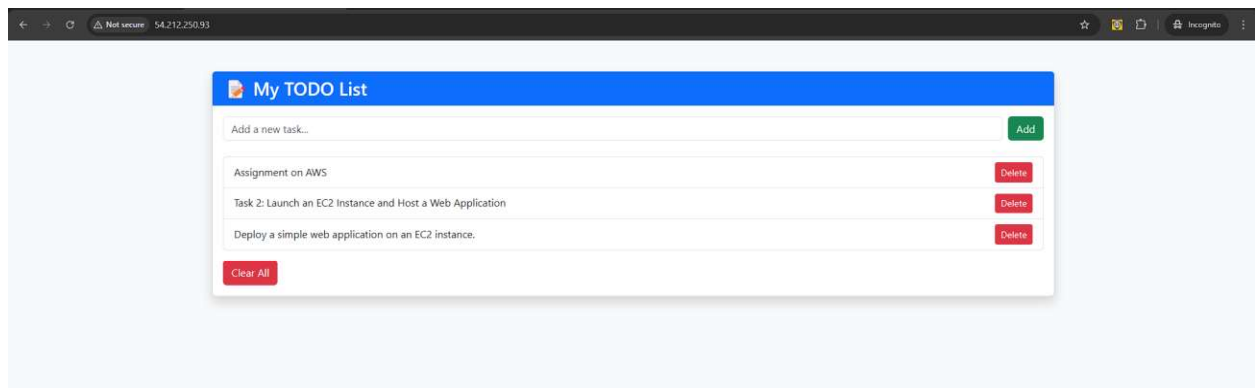
        <form method="POST" class="d-flex mb-4">
          <input type="text" name="task" class="form-control me-2" placeholder="Add a new task..." required>
          <button type="submit" class="btn btn-success">Add</button>
        </form>

        <?php if (!empty($_SESSION['todos'])): ?>
          <ul class="list-group mb-3">
            <?php foreach ($_SESSION['todos'] as $index => $task): ?>
              <li class="list-group-item d-flex justify-content-between align-items-center">
                <?=$task ?>
                <a href="?delete=?=$index ?>" class="btn btn-sm btn-danger">Delete</a>
              </li>
            <?php endforeach; ?>
            <a href="?clear=1" class="btn btn-danger">Clear All</a>
          <?php else: ?>
            <p class="text-muted">No tasks yet. Add something above! 🙌</p>
          <?php endif; ?>

      </div>
    </div>
  </div>

  <!-- Bootstrap JS -->
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>

:wq
```



Link:

<http://54.212.250.93/>

Task 3: Build an Appointment Booking System using AWS SES

Instances (1/2) [info](#)

Last updated 4 minutes ago [Connect](#) [Instance state ▾](#) [Actions ▾](#) [Launch Instances ▾](#)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP	IPv6 IPs	Monitor
Task3-Appoint...	i-0298f56ae30816d9b	Running	t2.micro	2/2 checks passc	View alarms +	us-west-2a	ec2-34-220-101-200.us...	34.220.101.200	-	-	disabled
Task2-web-ap...	i-0bc48606f34e26a	Running	t2.micro	2/2 checks passc	View alarms +	us-west-2a	ec2-54-212-250-95.us...	54.212.250.93	-	-	disabled

i-0298f56ae30816d9b (Task3-Appointment-Booking-System-instance)

- [Details](#)
- [Status and alarms](#)
- [Monitoring](#)
- [Security](#)
- [Networking](#)
- [Storage](#)
- [Tags](#)

▼ Instance summary [info](#)

Instance ID
i-0298f56ae30816d9b

IPv6 address
-

Hostname type
IP name: ip-172-31-27-43.us-west-2.compute.internal

Answer private resource DNS name
IPv4 (A)
[ip-172-31-27-43.us-west-2.compute.amazonaws.com](#)

Auto-assigned IP address
[34.220.101.200 \[Public IP\]](#)

IAM Role
-

IMDSv2
Required

Public IPv4 address
[34.220.101.200 | open address](#)

Instance state
Running

Private IP DNS name (IPv4 only)
[ip-172-31-27-43.us-west-2.compute.internal](#)

Instance type
t2.micro

VPC ID
[vpc-04987b3876d869754](#)

Subnet ID
[subnet-0ca6a7abb9137adfe](#)

Instance ARN
[arn:aws:ec2:us-west-2:235494808577:instance/i-0298f56ae30816d9b](#)

Private IPv4 addresses
[172.31.27.42](#)

Public IPv4 DNS
[ec2-34-220-101-200.us-west-2.compute.amazonaws.com | open address](#)

Elastic IP addresses
-

AWS Compute Optimizer finding
[Opt-in to AWS Compute Optimizer for recommendations. | Learn more](#)

Auto Scaling Group name
-

Managed
false

```
Administrator: C:\WINDOWS\ X + v
Microsoft Windows [Version 10.0.26100.3775]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Mashkoor>cd Downloads

C:\Users\Mashkoor\Downloads>ssh -i "task2-instance-key.pem" ec2-user@ec2-34-220-101-200.us-west-2.compute.amazonaws.com
The authenticity of host 'ec2-34-220-101-200.us-west-2.compute.amazonaws.com (34.220.101.200)' can't be established.
ED25519 key fingerprint is SHA256:SPmaQlYUehkhucRUyCVgInB0a3Pshcg0IoUSPm8kfs.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-34-220-101-200.us-west-2.compute.amazonaws.com' (ED25519) to the list of known hosts.
```

```
#
#####      Amazon Linux 2023
#### \##### 
#####  \###|
#####   \|#|
#####    V#|-> https://aws.amazon.com/linux/amazon-linux-2023
          /|\
         / | \
        /  |  \
       /___|__\
            |
           /_/\
          /____\
```

```
[ec2-user@ip-172-31-27-42 ~]$ sudo dnf update -y
sudo dnf module enable nodejs:20 -y
sudo dnf install nodejs -y
sudo dnf install git -y
Amazon Linux 2023 Kernel Livepatch repository                138 kB/s | 15 kB     00:00
=====
WARNING:
A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.7.20250414:
Run the following command to upgrade to 2023.7.20250414:

dnf upgrade --releasever=2023.7.20250414

Release notes:
https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.7.20250414.html
=====
Dependencies resolved.
Nothing to do.
Complete!
Last metadata expiration check: 0:00:01 ago on Thu Apr 17 16:28:03 2025.
Error: Problems in request:
missing groups or modules: nodejs:20
Last metadata expiration check: 0:00:01 ago on Thu Apr 17 16:28:03 2025.
Dependencies resolved.
=====
```

Package	Architecture	Version	Repository	Size
Installing:				
nodejs	x86_64	1:18.20.6-1.amzn2023.0.2	amazonlinux	13 M

```
Administrator: C:\WINDOWS\ X + v
(5/8): perl-Git-2.47.1-1.amzn2023.0.2.noarch.rpm 1.4 MB/s | 42 kB 00:00
(6/8): perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64.rpm 1.2 MB/s | 36 kB 00:00
(7/8): git-core-2.47.1-1.amzn2023.0.2.x86_64.rpm 29 MB/s | 4.7 MB 00:00
(8/8): perl-lib-0.65-477.amzn2023.0.6.x86_64.rpm 309 kB/s | 15 kB 00:00
-----
Total 38 MB/s | 7.7 MB 00:00
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing : 1/1
  Installing : git-core-2.47.1-1.amzn2023.0.2.x86_64 1/8
  Installing : git-core-doc-2.47.1-1.amzn2023.0.2.noarch 2/8
  Installing : perl-lib-0.65-477.amzn2023.0.6.x86_64 3/8
  Installing : perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 4/8
  Installing : perl-File-Find-1.37-477.amzn2023.0.6.noarch 5/8
  Installing : perl-Error-1:0.17029-5.amzn2023.0.2.noarch 6/8
  Installing : perl-Git-2.47.1-1.amzn2023.0.2.noarch 7/8
  Installing : git-2.47.1-1.amzn2023.0.2.x86_64 8/8
Running scriptlet: git-2.47.1-1.amzn2023.0.2.x86_64 8/8
Verifying : git-2.47.1-1.amzn2023.0.2.x86_64 1/8
Verifying : git-core-2.47.1-1.amzn2023.0.2.x86_64 2/8
Verifying : git-core-doc-2.47.1-1.amzn2023.0.2.noarch 3/8
Verifying : perl-Error-1:0.17029-5.amzn2023.0.2.noarch 4/8
Verifying : perl-File-Find-1.37-477.amzn2023.0.6.noarch 5/8
Verifying : perl-Git-2.47.1-1.amzn2023.0.2.noarch 6/8
Verifying : perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 7/8
Verifying : perl-lib-0.65-477.amzn2023.0.6.x86_64 8/8
=====
WARNING:
  A newer release of "Amazon Linux" is available.

Available Versions:

Version 2023.7.20250414:
  Run the following command to upgrade to 2023.7.20250414:

    dnf upgrade --releasever=2023.7.20250414

Release notes:
  https://docs.aws.amazon.com/linux/al2023/release-notes/relnotes-2023.7.20250414.html
=====

Installed:
  git-2.47.1-1.amzn2023.0.2.x86_64 git-core-2.47.1-1.amzn2023.0.2.x86_64
  git-core-doc-2.47.1-1.amzn2023.0.2.noarch perl-Error-1:0.17029-5.amzn2023.0.2.noarch
  perl-File-Find-1.37-477.amzn2023.0.6.noarch perl-Git-2.47.1-1.amzn2023.0.2.noarch
  perl-TermReadKey-2.38-9.amzn2023.0.2.x86_64 perl-lib-0.65-477.amzn2023.0.6.x86_64

Complete!
[ec2-user@ip-172-31-27-42 ~]$ client_loop: send disconnect: Connection reset
```

us-east-1.console.aws.amazon.com/iam/home?region=us-west-2#/roles/details/task3-sns-ec2-role?section=permissions

task3-sns-ec2-role [Delete](#)

Allows EC2 instances to call AWS SNS service.

Summary [Edit](#)

Creation date
April 17, 2025, 23:28 (UTC+05:30)

ARN
[arn:aws:iam::235494808577:role/task3-sns-ec2-role](#)

Instance profile ARN
[arn:aws:iam::235494808577:instance-profile/task3-sns-ec2-role](#)

Last activity
27 minutes ago

Maximum session duration
1 hour

Permissions [Trust relationships](#) [Tags](#) [Last Accessed](#) [Revoke sessions](#)

Permissions policies (1) [info](#) [Simulate](#) [Remove](#) [Add permissions](#)

You can attach up to 10 managed policies.

Filter by Type
All types

Policy name	Type	Attached entities
AmazonSNSFullAccess	AWS managed	1

Permissions boundary (not set)

Generate policy based on CloudTrail events

us-west-2.console.aws.amazon.com/ec2/home?region=us-west-2#ModifyIAMRoleInstanceID=i-0298f56ae30816d9b

EC2 [Instances](#) [i-0298f56ae30816d9b](#) [Modify IAM role](#)

Modify IAM role [info](#)

Attach an IAM role to your instance.

Instance ID
[i-0298f56ae30816d9b](#) (Task3-Appointment-Booking-System-instance)

IAM role
Select an IAM role to attach to your instance or create a new role if you haven't created any. The role you select replaces any roles that are currently attached to your instance.

[task3-sns-ec2-role](#) [Create new IAM role](#)

[Cancel](#) [Update IAM role](#)

Amazon SNS [Topics](#) [task3-topic](#) [Subscription: c157d2c5-3e78-4187-8aa1-4c7223c32dd0](#) [Edit](#) [Delete](#)

Details

ARN
[arn:aws:sns:us-west-2:235494808577:task3-topic:c157d2c5-3e78-4187-8aa1-4c7223c32dd0](#)

Status
[Confirmed](#)

Endpoint
[mashkoor.technocoder@gmail.com](#)

Protocol
EMAIL

Topic
[task3-topic](#)

Subscription Principal
[arn:aws:iam::235494808577:root](#)

[Subscription filter policy](#) [Redrive policy \(dead-letter queue\)](#)

sns.us-west-2.amazonaws.com/confirmation.html?TopicArn=arn:aws:sns:us-west-2:235494808577:task3-topic&Token=2336412f37fb687f5d51e6e2425a8a5874



Simple Notification Service

Subscription confirmed!

You have successfully subscribed.

Your subscription's id is:

[arn:aws:sns:us-west-2:235494808577:task3-topic:c157d2c5-3e78-4187-8aa1-4c7223c32dd0](#)

If it was not your intention to subscribe, [click here to unsubscribe](#).


```
1 booking-app/  
2 |   server.js  
3 |   public/  
4 |     index.html  
5 |   .env  
6 |   appointments.db |  
7
```

```
[ec2-user@ip-172-31-27-42 ~]$ cd booking-app/  
[ec2-user@ip-172-31-27-42 booking-app]$ cat server.js  
const express = require('express');  
const bodyParser = require('body-parser');  
const sqlite3 = require('sqlite3').verbose();  
const AWS = require('aws-sdk');  
require('dotenv').config();  
  
const app = express();  
const port = 80;  
  
// Middleware  
app.use(bodyParser.urlencoded({ extended: true }));  
app.use(express.static('public'));  
  
// SQLite DB setup  
const db = new sqlite3.Database('appointments.db');  
db.run("CREATE TABLE IF NOT EXISTS bookings (name TEXT, email TEXT, service TEXT, datetime TEXT)");  
  
// AWS SNS setup  
AWS.config.update({ region: process.env.AWS_REGION });  
const sns = new AWS.SNS();  
  
app.post('/book', (req, res) => {  
  const { name, email, service, datetime } = req.body;  
  
  // Save booking data to SQLite  
  db.run("INSERT INTO bookings VALUES (?, ?, ?, ?)", [name, email, service, datetime], (err) => {  
    if (err) {  
      console.error("DB error:", err);  
      return res.send("Failed to save booking.");  
    }  
  
    // Send SNS email  
    const message = `Appointment Confirmation:  
Name: ${name}  
Email: ${email}  
Service: ${service}  
Date/Time: ${datetime}`;  
  
    const params = {  
      Message: message,  
      TopicArn: process.env.SNS_TOPIC_ARN  
    };  
  
    sns.publish(params, (err, data) => {  
      if (err) {  
        console.error("SNS error:", err);  
        res.send("Saved, but email failed.");  
      } else {  
        console.log("SNS sent:", data);  
        res.send("Booking successful! Check your email.");  
      }  
    });  
  });  
});  
  
app.listen(port, () => {  
  console.log(`Server running at http://localhost:${port}`);  
});  
  
[ec2-user@ip-172-31-27-42 booking-app]$ |
```



```
[ec2-user@ip-172-31-27-42 booking-app]$ cat .env
SNS_TOPIC_ARN=arn:aws:sns:us-west-2:235494808577:task3-topic
AWS_REGION=us-west-2

[ec2-user@ip-172-31-27-42 booking-app]$ ls
appointments.db  node_modules  package-lock.json  package.json  public  server.js
[ec2-user@ip-172-31-27-42 booking-app]$ |
```

```
[ec2-user@ip-172-31-27-42 booking-app]$ cat public/index.html
<!DOCTYPE html>
<html>
  <head>
    <title>Book Appointment</title>
  </head>
  <body>
    <h2>Book Appointment</h2>
    <form action="/book" method="POST">
      <input type="text" name="name" placeholder="Name" required><br>
      <input type="email" name="email" placeholder="Email" required><br>
      <input type="text" name="service" placeholder="Service" required><br>
      <input type="datetime-local" name="datetime" required><br>
      <button type="submit">Book Now</button>
    </form>
  </body>
</html>

[ec2-user@ip-172-31-27-42 booking-app]$ |
```

```
[ec2-user@ip-172-31-27-42 booking-app]$ sqlite3 appointments.db
SQLite version 3.40.0 2023-06-02 12:56:32
Enter ".help" for usage hints.
sqlite> SELECT * FROM bookings;
rocky|admin@gmail.com|hey testing|2025-04-17T23:01
rocky|kaifpatel200@gmail.com|aaaaaa|2025-04-18T23:29
rocky|mashkoor.technocoder@gmail.com|aaaaaa|2025-04-18T23:29
rocky|mashkoor.technocoder@gmail.com|aaaaaa|2025-04-18T23:29
rocky|kaifpatel200@gmail.com|success bro|2025-04-17T23:35
aa|test@gmail.com|aaaaaaaaaaaaa|2025-05-10T00:05
sqlite> |
```

```
[ec2-user@ip-172-31-27-42 booking-app]$ sudo node server.js
Server running at http://localhost:80
(node:33625) NOTE: The AWS SDK for JavaScript (v2) is in maintenance mode.
  SDK releases are limited to address critical bug fixes and security issues only.

Please migrate your code to use AWS SDK for JavaScript (v3).
For more information, check the blog post at https://a.co/cUPnyil
(Use 'node --trace-warnings ...' to show where the warning was created)
SNS sent: {
  ResponseMetadata: { RequestId: 'cc2a16c9-ad31-50f5-94bf-76b2f9cb42a8' },
  MessageId: '4d6524e2-5620-579a-adb7-449902dac5c7'
}
SNS sent: {
  ResponseMetadata: { RequestId: '4e36b4da-841e-52e3-a9ed-d4a1d17e0ae0' },
  MessageId: '171f687c-da1f-5f74-9cd3-08078f7f5777'
}
|
```

```
[ec2-user@ip-172-31-27-42 ~]$ sudo yum install nginx -y
Last metadata expiration check: 12:11:21 ago on Thu Apr 17 16:28:03 2025.
Package nginx-1:1.26.3-1.amzn2023.0.1.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[ec2-user@ip-172-31-27-42 ~]$ sudo vi /etc/nginx/nginx.conf
[ec2-user@ip-172-31-27-42 ~]$ cat /etc/nginx/nginx.conf
user nginx;
worker_processes auto;
error_log /var/log/nginx/error.log notice;
pid /run/nginx.pid;

include /usr/share/nginx/modules/*.conf;

events {
    worker_connections 1024;
}

http {
    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
                    '$$status $body_bytes_sent "$http_referer" '
                    '"$http_user_agent" "$http_x_forwarded_for"';

    access_log /var/log/nginx/access.log main;

    sendfile            on;
    tcp_nopush          on;
    keepalive_timeout   65;
    types_hash_max_size 4096;

    include              /etc/nginx/mime.types;
    default_type         application/octet-stream;

    include /etc/nginx/conf.d/*.conf;
}

[ec2-user@ip-172-31-27-42 ~]$ |
```

```
[ec2-user@ip-172-31-27-42 ~]$ cat /etc/nginx/nginx.conf
user nginx;
worker_processes auto;
error_log /var/log/nginx/error.log notice;
pid /run/nginx.pid;

include /usr/share/nginx/modules/*.conf;

events {
    worker_connections 1024;
}

http {
    log_format main '$remote_addr - $remote_user [$time_local] "$request" '
        '$status $body_bytes_sent "$http_referer" '
        '"$http_user_agent" "$http_x_forwarded_for"';

    access_log /var/log/nginx/access.log main;

    sendfile on;
    tcp_nopush on;
    keepalive_timeout 65;
    types_hash_max_size 4096;

    include /etc/nginx/mime.types;
    default_type application/octet-stream;

    include /etc/nginx/conf.d/*.conf;
}

[ec2-user@ip-172-31-27-42 ~]$ cat /etc/nginx/conf.d/booking-app.conf
server {
    listen 80;
    server_name _;

    location / {
        proxy_pass http://localhost:3000;
        proxy_http_version 1.1;
        proxy_set_header Upgrade $http_upgrade;
        proxy_set_header Connection 'upgrade';
        proxy_set_header Host $host;
        proxy_cache_bypass $http_upgrade;
    }
}

[ec2-user@ip-172-31-27-42 ~]$ |
```

```
[ec2-user@ip-172-31-27-42 ~]$ sudo systemctl daemon-reload
sudo systemctl start booking-app
sudo systemctl enable booking-app
[ec2-user@ip-172-31-27-42 ~]$ sudo systemctl status booking-app
● booking-app.service - Booking App - Node.js
   Loaded: loaded (/etc/systemd/system/booking-app.service; enabled; preset: disabled)
   Active: active (running) since Fri 2025-04-18 04:07:02 UTC; 37min ago
     Main PID: 9684 (node)
       Tasks: 15 (limit: 1111)
      Memory: 26.2M
         CPU: 1.021s
    CGroup: /system.slice/booking-app.service
            └─9684 /usr/bin/node /home/ec2-user/booking-app/server.js

Apr 18 04:14:17 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:11: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
Apr 18 04:14:17 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:12: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
Apr 18 04:14:04 ip-172-31-27-42.us-west-2.compute.internal node[9684]: SNS sent: {
Apr 18 04:14:04 ip-172-31-27-42.us-west-2.compute.internal node[9684]:   ResponseMetadata: { RequestId: 'b3bfbf93-1eed-5806-9d36-dfe8cd1935d1' },
Apr 18 04:14:04 ip-172-31-27-42.us-west-2.compute.internal node[9684]:   MessageId: 'c7e4db02-891d-59ec-a439-bb795ae9f43b'
Apr 18 04:14:04 ip-172-31-27-42.us-west-2.compute.internal node[9684]: }
Apr 18 04:04:38 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:11: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
Apr 18 04:04:38 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:12: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
Apr 18 04:04:38 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:11: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
Apr 18 04:04:38 ip-172-31-27-42.us-west-2.compute.internal systemd[1]: /etc/systemd/system/booking-app.service:12: Standard output type syslog is obsolete, automatically updating to journal. Please update your configuration files.
lines 1-20/20 (END)
[ec2-user@ip-172-31-27-42 ~]$
[ec2-user@ip-172-31-27-42 ~]$
[ec2-user@ip-172-31-27-42 ~]$
```

got to -> <http://34.220.101.200/>

Book Your Appointment

Booking successful! Check your email.

Name
Your Full Name

Email
you@example.com

Service
Type of Service

Preferred Date & Time
mm/dd/yyyy --:-- --

Book Now

