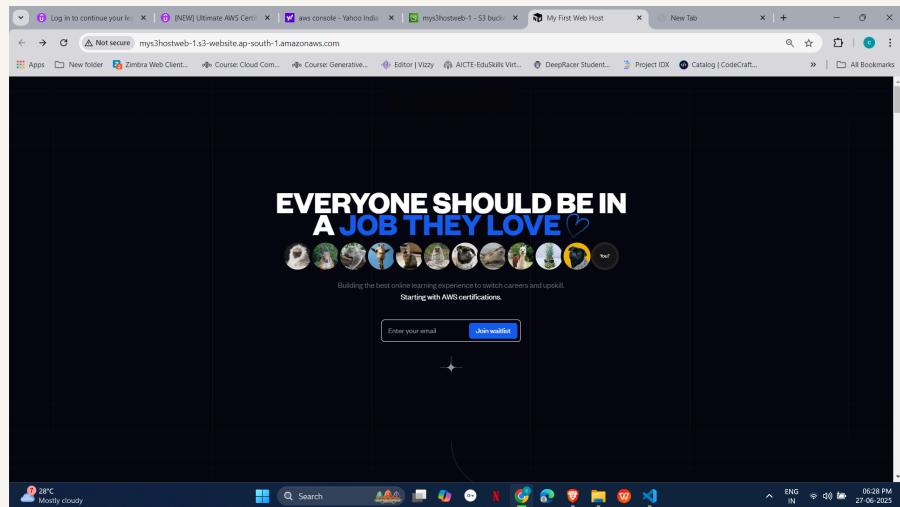




Host a Website on Amazon S3

A

Abhijeet Pandit





Introducing Today's Project!

In this project, we will demonstrate how to use S3 to host a static website. We're doing this project to learn about AWS and cloud services and how they can be used to store objects in the cloud and even host websites.

Tools and concepts

The service we used was Amazon S3. Key concepts we learned include bucket policies, uploading static website files, the role of `index.html`, bucket endpoint URLs, and ACLs—how they control access to the objects in our bucket.

Project reflection

This project took us around 1.5 hours, including demo time, quiz time, and the secret mission. The most challenging part was resolving the 403 Forbidden error. The most rewarding moment was seeing our webpage go live!



How I Set Up an S3 Bucket

Creating an S3 bucket took us less than 5 minutes - we needed to learn a few new concepts like block public access and ACLS, but once that learning is done, we can create buckets in even shorter time. An S3 bucket took me...

The Region I picked for my S3 bucket was... because that region is closest to me. It's best practice to pick the region closest to you because it lowers time to retrieve your things(i.e Latency).

S3 bucket names are globally unique! This means no two Amazon S3 buckets in the same name. They have to be completely unique, regardless of the region of the account ID.

A

Abhijeet Pandit

Successfully created bucket "mys3hostweb-1"
To upload files and folders, or to configure additional bucket settings, choose View details.

View details X

► Account snapshot - updated every 24 hours All AWS Regions

Storage lens provides visibility into storage usage and activity trends. Metrics don't include directory buckets. Learn more ↗

View Storage Lens dashboard

General purpose buckets Directory buckets

General purpose buckets (1) Info All AWS Regions

Buckets are containers for data stored in S3.

Find buckets by name

Name	AWS Region	IAM Access Analyzer	Creation date
mys3hostweb-1	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	June 27, 2025, 17:30:50 (UTC+05:30)

Copy ARN Empty Delete Create bucket

Upload Website Files to S3

index.html and image assets

We uploaded two files to our S3 bucket - they were an index.html file (this defines the structure i.e. what goes inside your website) and a folder of images and assets (this will fill in the website with images and things look at)

Both files are essential for this project. The index.html defines the structure what goes where but it doesn't contain the actual content. For example, if it says "insert image here," the image itself must be uploaded separately. That's why we include

mys3hostweb-1 [Info](#)

Objects [\(2\)](#) [Properties](#) [Permissions](#) [Metrics](#) [Management](#) [Access Points](#)

[Actions](#) [Create folder](#) [Upload](#)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix Show versions

Name	Type	Last modified	Size	Storage class
image/	Folder	-	-	-
index.html	html	June 27, 2025, 17:45:51 (UTC+05:30)	1.3 KB	Standard

Static Website Hosting on S3

Website hosting means placing our website files on a web server—a special computer that turns those files into a webpage people can visit and interact with online!

To enable website hosting with our S3 bucket, we went into the Properties tab of our bucket, enabled static website hosting and we also labelled "index.html" as our index document i.e. this is the document that we're trying to host.

An ACL (Access Control List) lets us set permissions on bucket files. Though AWS suggests disabling ACLs, we enabled them to explore how they work and later compare them with bucket policies for managing access to our website files.

A

Abhijeet Pandit

Edit static website hosting Info

Static website hosting

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

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

Bucket Endpoints

Once static website hosting is enabled, S3 generates a bucket endpoint URL. This URL lets you—and anyone on the internet—access the website you’re hosting directly from the bucket.

When we first visited the bucket endpoint URL, we got a 403 Forbidden error. That's because, by default, objects in an S3 bucket are private even if "Block all public access" is turned off. To fix this, we need to make the website files public

404 Not Found

- Code: NoSuchBucket
- Message: The specified bucket does not exist
- BucketName: mys3hostweb-1
- RequestId: 5K82ZJ6WTNCNPBAG
- HostId:
vxObjrvvHAgUdBSp5Y/5L0PkH/Gphq7N9ntn+DAb+GNQSC63nnvimxK/5+UNKt2c/zx+b/FTGh8=

Success!

To fix the 403 Forbidden error, we updated the access settings of the files in our bucket. Using ACLs, we made the files public. After that, checking our S3 endpoint showed our webpage fully loaded and live!

