# Host a Website on Amazon S3

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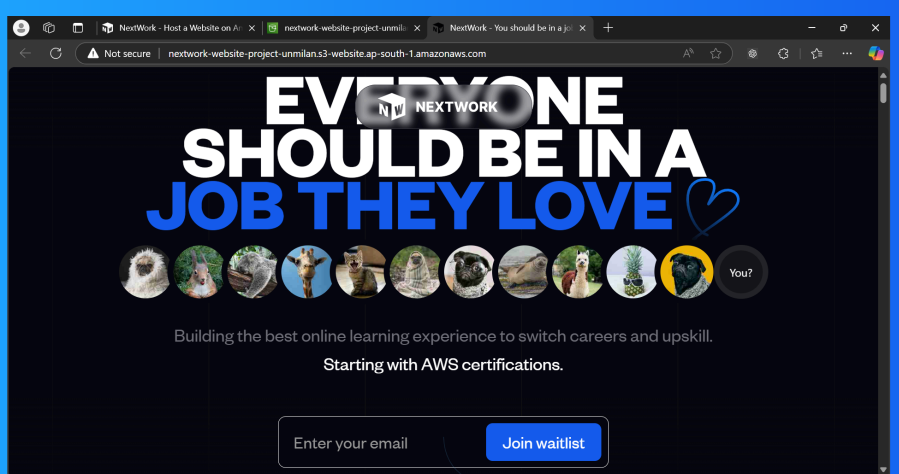


# Introducing Today's Project!

## What is Amazon S3

Amazon S3 is a secure object storage service that is offered by AWS that allows us to store, retrieve and even host files in it for various purposes. It is useful to host website data, large media files, documents, etc.

## How I used Amazon S3 in this project

I used Amazon S3 to store the html and media files required for the website we wanted to host today. I also used static website hosting to make the website publicly available.

## One thing I didn't expect in this project was...

I did not expect AWS S3 to be so easy to use and host static websites from.

## This project took me...

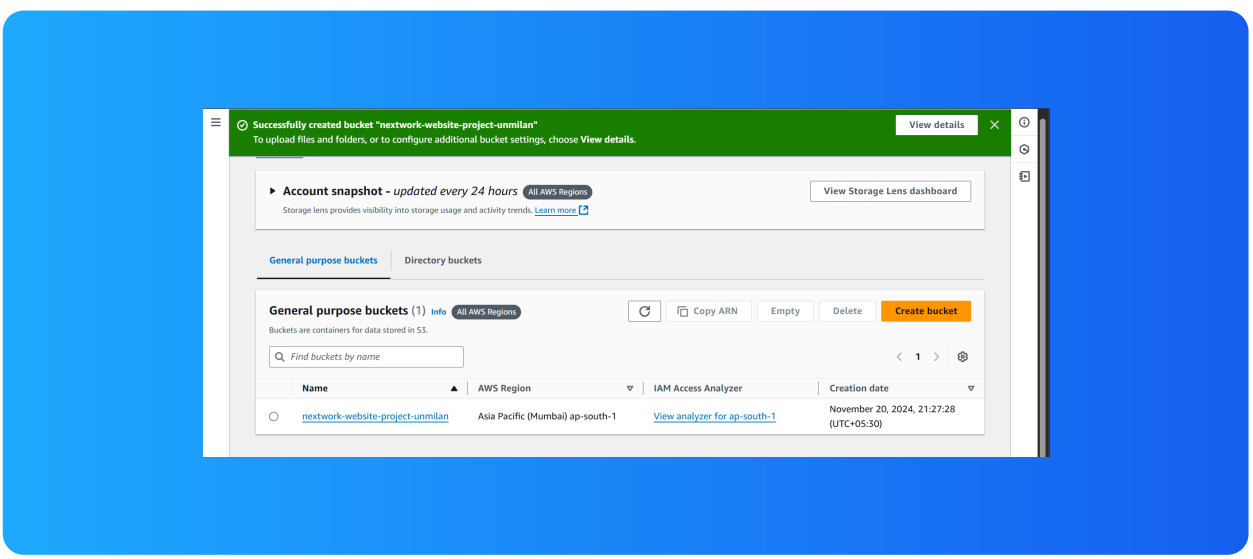
This project took me roughly 15-20 minutes.

# How I Set Up an S3 Bucket

Creating an S3 bucket took me like 10 seconds.

The Region I picked for my S3 bucket was Asia Pacific (Mumbai) ap-south-1 because it is the closest region to my actual location and it will give me the lowest latency and ping. This means uploads and downloads happen faster.

S3 bucket names are globally unique! This means that nobody else in the entire world can use the same bucket name as me unless I delete the bucket on my end!

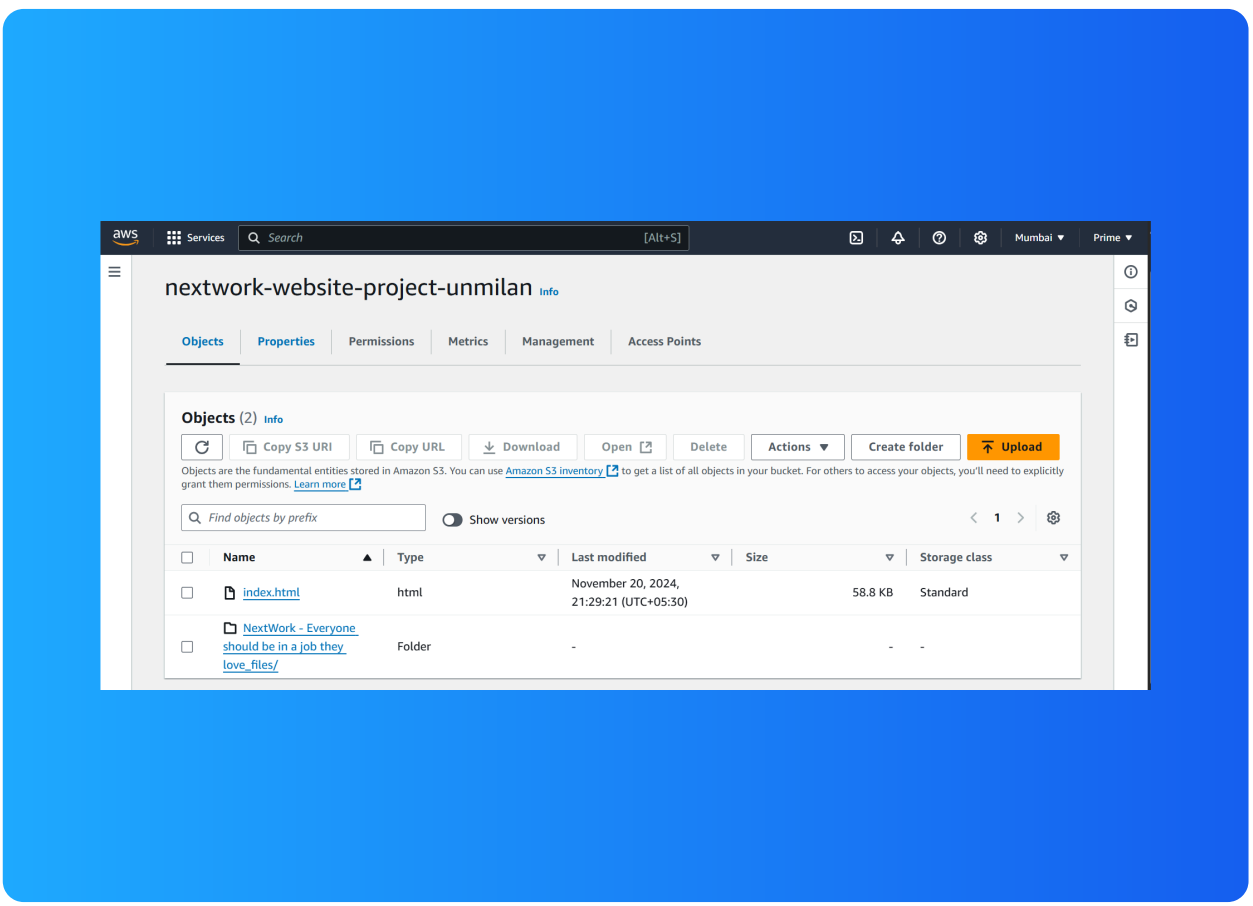


# Upload Website Files to S3

## index.html and image assets

I uploaded two files to my S3 bucket - they were: index.html and NextWork - Everyone should be in a job they love_files folder

Both files are necessary for this project as the index.html is used to create the webpage blueprint itself and the zip file consists of the images and other media that is to be displayed on the webpage.

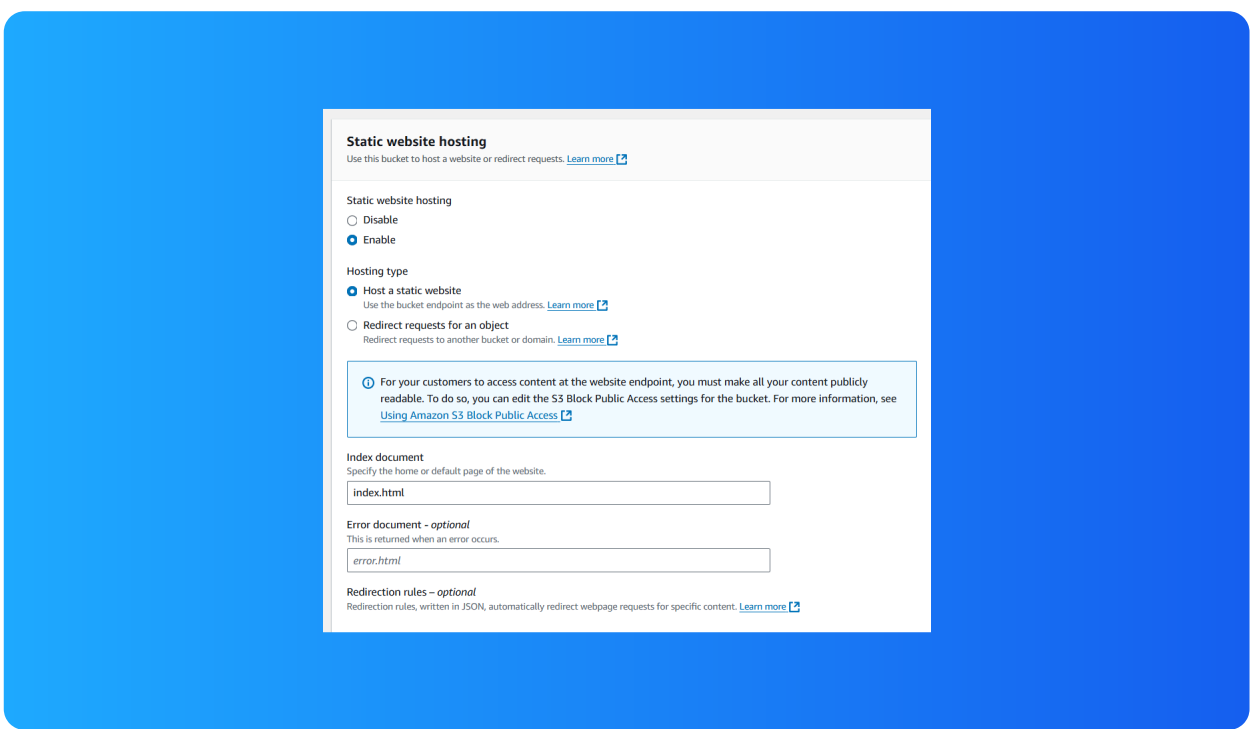


# Static Website Hosting on S3

Website hosting means making my website publicly available on the internet to freely visit, see and navigate.

To enable website hosting with my S3 bucket, I had to enable the static website hosting option in the properties section of my S3 bucket and then enter index.html page as my entrypoint or home page for the website.

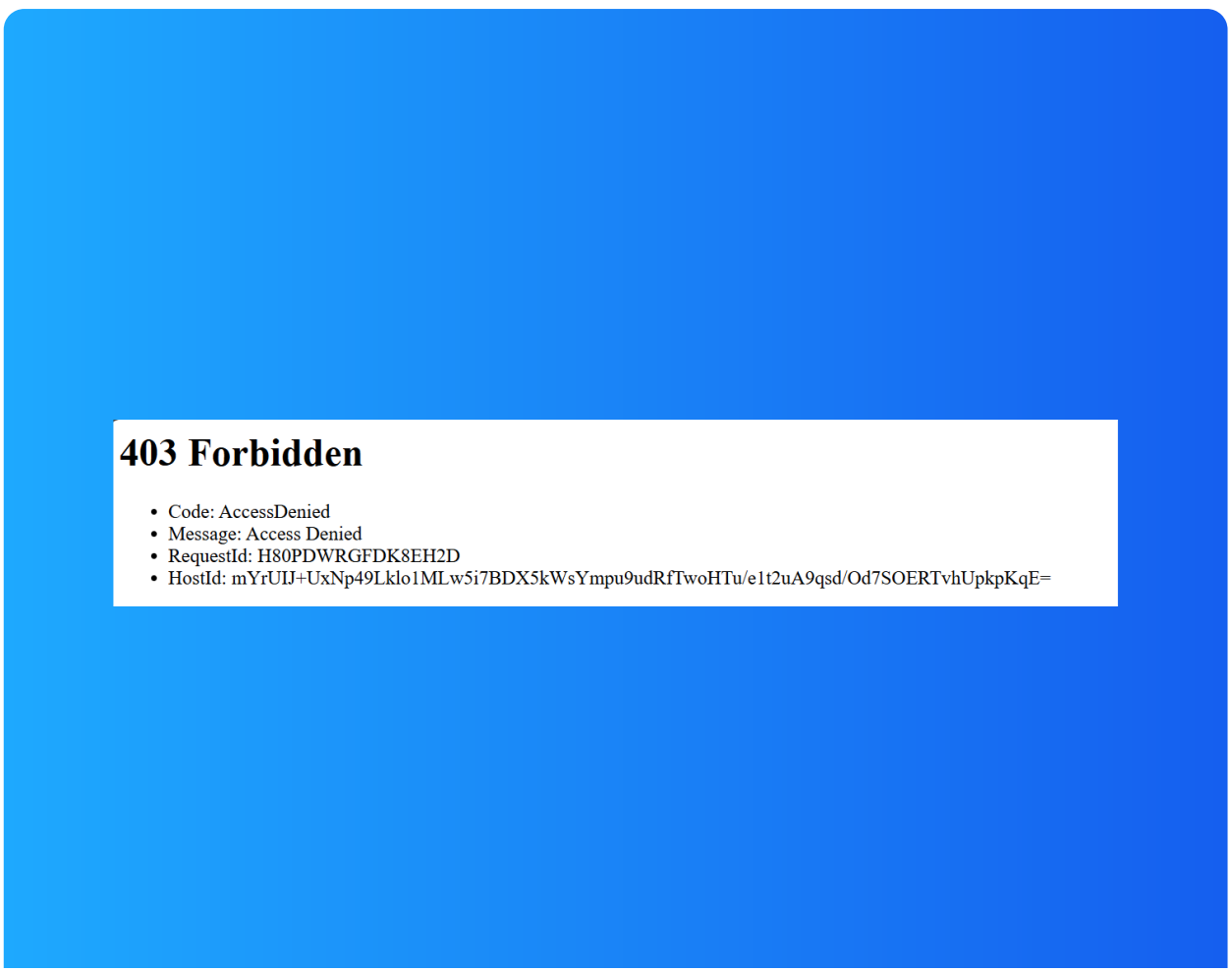
An ACL is an Access Control List. I enabled ACL because I want to see how it works but in general bucket policies are usually the way to go and easier. However we should use ACL if we want to manage access for each object in our bucket individually.



# Bucket Endpoints

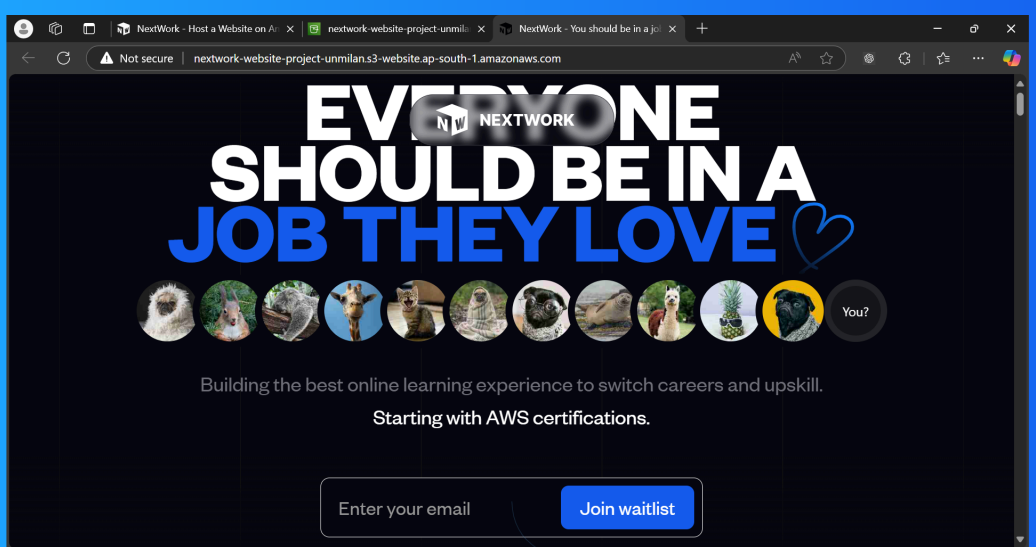
once static website is enabled, S3 produces a bucket endpoint URL, which is the URL that we can visit to access the website that we uploaded to S3. This is kind of like putting our bucket up for display.

When I first visited the bucket endpoint URL, I saw 403 Forbidden error. The reason for this error was that even though we have hosted our website URL publicly, the html/media files in our bucket are still private by default.



# Success!

To resolve this connection error, I simply selected all the objects in my bucket -> Clicked the Actions button -> Selected "Make public using ACL" -> Refreshed the page.



# Bucket Policies

An alternative to ACLs are bucket policies, which are some rules that can be applied to objects. The benefit of using bucket policies is that we have higher control while ACLs are useful for managi access for each object in the bucket.

My bucket policy denies the deletion of the index.html file in the S3 bucket. I tested this by trying to delete the idex.html file from the bucket and saw that I got an error saying "Access Denied".