

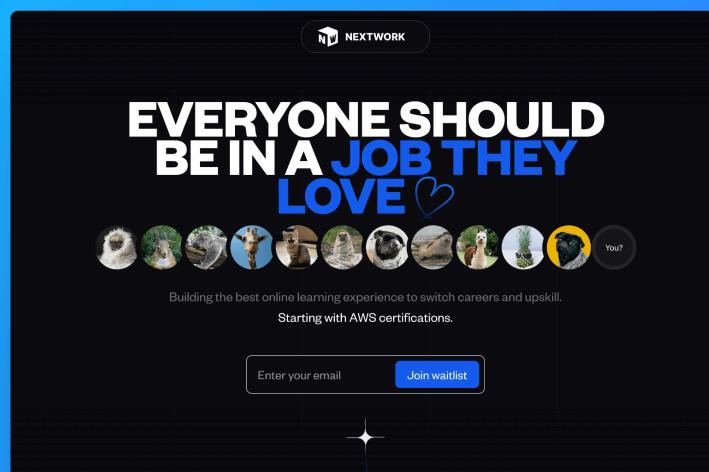


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# Host a Website on Amazon S3



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# Introducing Today's Project!

## What is Amazon S3

Amazon S3 (Simple Storage Service) is a scalable object storage service by AWS for storing and retrieving data. It offers high durability, cost-effectiveness, and strong security, making it ideal for backups, static website hosting, and data management.

## How I used Amazon S3 in this project

In today's project, I used Amazon S3 to store and host static website files, including HTML, CSS, and images. I configured the bucket for static website hosting, uploaded the necessary files, set permissions for public access, and accessed the site.

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

One thing I didn't expect in this project was the level of detail required for configuring bucket permissions. Ensuring the right access settings for public visibility while maintaining security took more time than anticipated, highlighting the importance of careful configuration.

## This project took me...

This project took me approximately 1/2 hours to complete. Most of the time was spent setting up the S3 bucket, configuring static website hosting, uploading files, and adjusting permissions. Testing the website to ensure everything worked correctly also contributed to the total time.

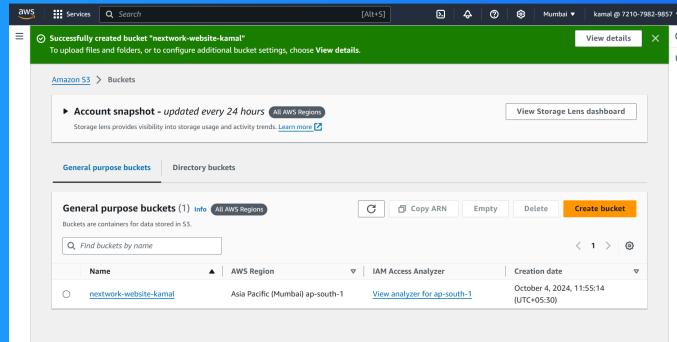


# How I Set Up an S3 Bucket

Creating an S3 bucket on AWS takes less than a minute. Simply log into the AWS Management Console, navigate to the S3 dashboard, click "Create bucket," enter a name, select a region, and adjust settings if needed. The process is quick and straightfor

Pick an AWS region based on latency (closer to users), cost (varies by region), compliance (data residency laws), and service availability (features may differ by region). Pick an AWS region based on latency (closer to users), cost (varies by region)

When AWS states that S3 buckets must be globally unique, it means that each bucket name must be distinct across all AWS accounts and regions worldwide. No two buckets, regardless of their owner or geographic location, can have the same name. This uni





# Upload Website Files to S3

## index.html and image assets

I uploaded two files to my S3 bucket – a sales\_report.csv containing quarterly sales data for analysis and an app\_logo.png used for branding purposes on our website. These files are now securely stored and accessible for future use.

Both files are necessary for this project as the sales\_report.csv provides critical data for analyzing sales trends, while the app\_logo.png is used to create a professional visual presentation in reports and the app interface, ensuring consistent bra

The screenshot shows the AWS S3 console interface. The top navigation bar includes the AWS logo, Services, Search, and user information (Mumbai, kamal @ 7210-7982-9857). The main navigation path is Amazon S3 > Buckets > nextwork-website-kamal. The bucket name 'nextwork-website-kamal' is displayed with an 'info' link. Below the navigation, there are tabs for Objects, Properties, Permissions, Metrics, Management, and Access Points. The 'Objects' tab is selected. A sub-header 'Objects (2) info' is shown. Below it is a toolbar with actions: Create, Copy S3 URI, Copy URL, Download, Open, Delete, Actions (highlighted), Create folder, and Upload (highlighted). A search bar 'Find objects by prefix' and a 'Show versions' toggle are also present. The main content area lists the objects:

Name	Type	Last modified	Size	Storage class
index.html	html	October 4, 2024, 12:01:31 (UTC+05:30)	32.8 KB	Standard
Portfolio Project using HTML & CSS/	Folder	-	-	-



# Static Website Hosting on S3

Website hosting means providing the services and infrastructure necessary to store, maintain, and serve websites on the internet. This includes storing the website's files, such as HTML, CSS, images, and scripts, on servers that are accessible to use.

To enable website hosting with my S3 bucket, I configured the bucket settings by navigating to the Properties tab in the AWS Management Console. There, I selected the Static website hosting option and provided the necessary details, such as the index.

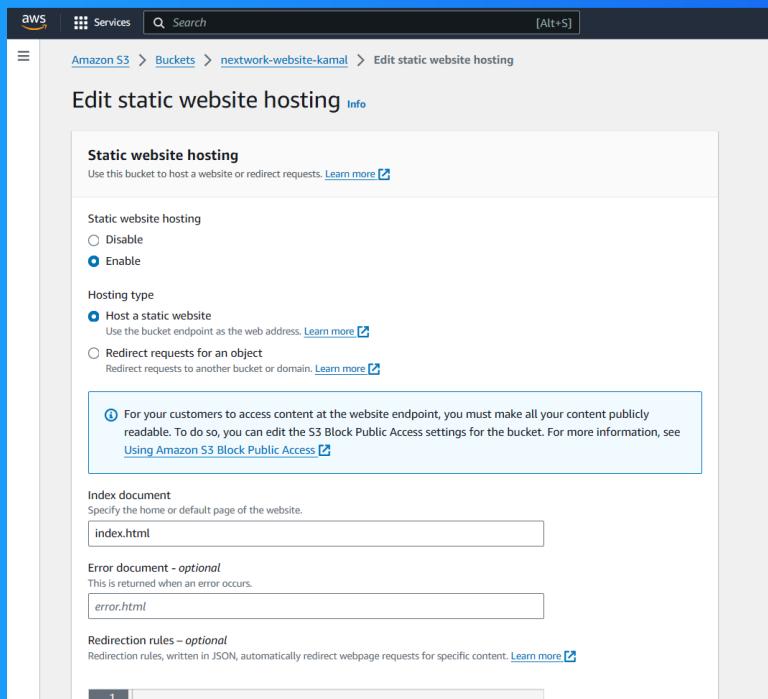
## Access Control Lists (ACL)

An Access Control List (ACL) is a security feature in Amazon S3 that manages access to buckets and objects. It defines who (which AWS accounts or users) can access specific resources and what actions they are allowed to perform, such as read or write.



# Bucket Endpoints

Once static website hosting is enabled, S3 produces a bucket website endpoint URL, which is a unique web address that allows users to access the hosted content directly. This URL typically follows the format `http://<bucket-name>.s3-website-<region>.amazonaws.com`





# An error!

When I first visited the bucket endpoint URL, I saw the index.html page displayed, which served as the homepage of my static website. The layout and content loaded correctly, showcasing the intended design and information. If there were any images or

The reason for this error was likely due to a misconfiguration in the static website hosting settings or permissions. Specifically, if the index document was not specified correctly in the bucket settings, or if the file was not uploaded to the bucke

## 403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: H014FCACPHNQWK86
- HostId: gOBuXksy5hE6nKNCHkOjPm8+OfyJGUKyigagPdqUHYH9Fc7fruo87Zr2yrzCvt8xjEZrS7Uudk=

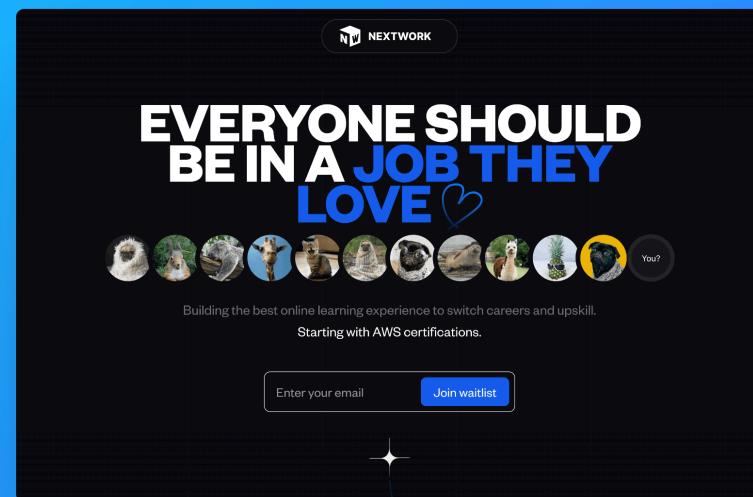


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# Success!

To resolve this connection error, I double-checked the static website hosting settings to ensure the correct index document was specified. I also reviewed the bucket permissions and adjusted them to allow public access, ensuring that users could view





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