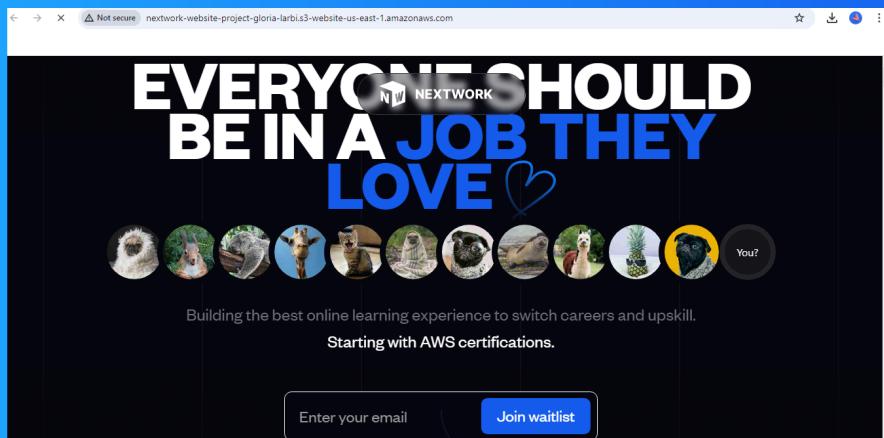




NextWork.org

Host a Website on Amazon S3

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Introducing Today's Project!

What is Amazon S3

Amazon S3 is a cloud storage service that lets you store and retrieve data easily. It's useful for securely saving files, backups, or even hosting websites, offering scalability, durability, and accessibility from anywhere.

How I used Amazon S3 in this project

I used Amazon S3 in today's project to create a bucket, upload website files like index.html and the NextWork folder, and enabled static website hosting. This allowed my website to be accessible via the S3 bucket's endpoint URL

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

The error messages

This project took me...

It took me 25 minutes



How I Set Up an S3 Bucket

Creating an S3 bucket took me 2 minutes, and it was a simple process. I was amazed at how seamless it was to set up, configure permissions, and immediately start uploading files. What's even cooler is the flexibility—you can store anything from image

The Region I picked for my S3 bucket was us-east-1 because it was closest to me, offering lower latency and faster access times for my data. Additionally, us-east-1 is known for being cost-effective and widely supported across various AWS services.

S3 bucket names are globally unique! This means that no two buckets across the entire AWS network can have the same name. Once a bucket name is taken by someone, it cannot be used by anyone else, ensuring that each bucket can be uniquely identified w

The screenshot shows the AWS S3 console interface. At the top, there is a header with the text "General purpose buckets (1) Info All AWS Regions". Below the header, a message states "Buckets are containers for data stored in S3." There is a search bar labeled "Find buckets by name". To the right of the search bar are several buttons: "Create bucket" (orange), "Delete" (gray), "Empty" (gray), "Copy ARN" (gray), and "C" (gray). Below these buttons is a pagination control with arrows and the number "1". A table below the controls lists the single bucket information:

Name	AWS Region	IAM Access Analyzer	Creation date
nextwork-website-project-gloria-larbi	US East (N. Virginia) us-east-1	View analyzer for us-east-1	September 20, 2024, 22:06:25 (UTC+00:00)



Upload Website Files to S3

index.html and image assets

I uploaded two files to my S3 bucket there were index.html and the NextWork folder, which holds files like images, styles, and scripts. The index.html serves as the main page, and the folder contains resources to make the website visually appealing.

Both files are necessary for this project as **index.html** is the main webpage users will see, while the **NextWork** folder contains supporting files like images, stylesheets, and scripts that enhance the appearance and functionality of the site.

The screenshot shows the AWS S3 console interface. The top navigation bar includes tabs for Objects, Properties, Permissions, Metrics, Management, and Access Points. The 'Objects' tab is selected. Below the tabs, there is a toolbar with actions: Copy S3 URI, Copy URL, Download, Open, Delete, Actions, Create folder, and Upload. A search bar labeled 'Find objects by prefix' is present, along with a 'Show versions' checkbox. The main content area displays a table of objects:

Name	Type	Last modified	Size	Storage class
index.html	html	September 20, 2024, 22:27:34 (UTC+00:00)	58.8 KB	Standard
NextWork - Everyone should be in a job they love_files/	Folder	-	-	-



Static Website Hosting on S3

Website hosting means storing your website's files (like HTML, images, etc.) on a server so that people can access it online. The host provides space, security, and a domain connection, making your website accessible to users through the internet

To enable website hosting with my S3 bucket, I went to the Properties tab, enabled Static website hosting, set the index.html as the main document, and saved the changes. This allowed my bucket to serve web pages to visitors.

Access Control Lists (ACL)

An ACL (Access Control List) defines permissions for who can access specific resources and what actions they can perform. It's used in S3 to control access to objects or buckets. I enabled it to manage permissions and ensure secure access to my data.



Bucket Endpoints

Once static website hosting is enabled, S3 produces a bucket endpoint URL, which is the web address that users can access to view your website. This URL directs traffic to your S3 bucket where the website files are stored and served to visitors.

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.

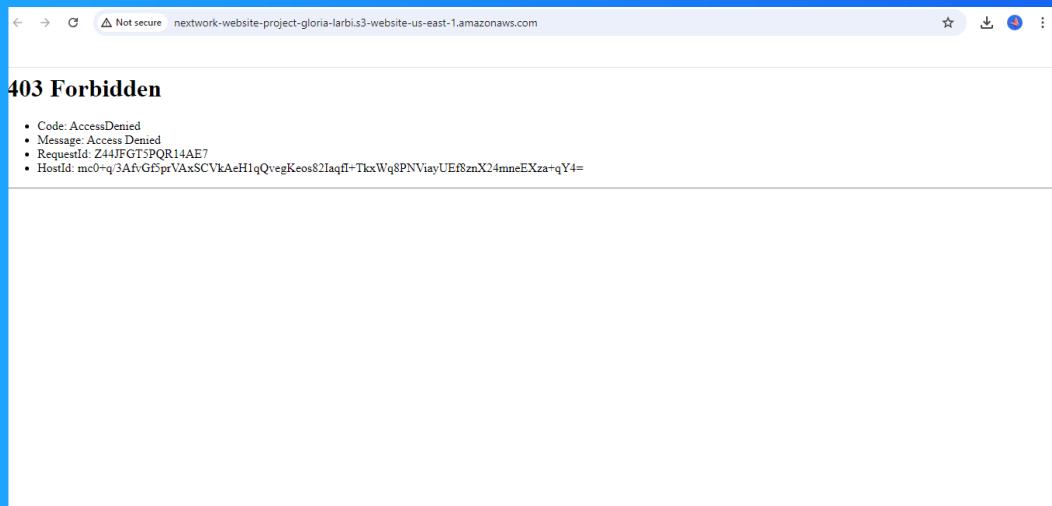
`error.html`



An error!

When I first visited the bucket endpoint URL, I saw 403 Forbidden error and Access Denied message

The reason for this error was the actual HTML/image files I uploaded are still private.



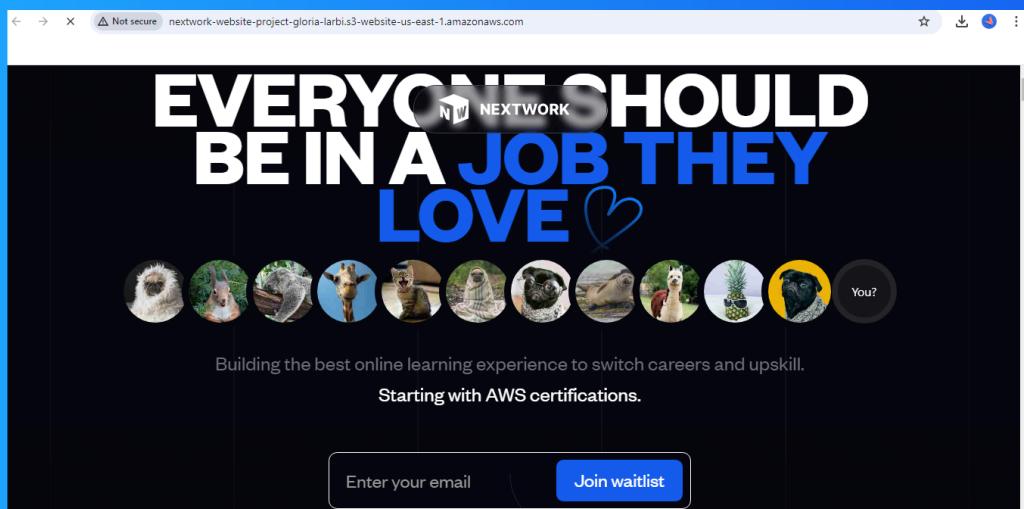


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Success!

To resolve this connection error, I enabled ACL access, granting the necessary permissions for public-read access to the files in my S3 bucket. This ensured that users could access the website resources without encountering permission issues





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