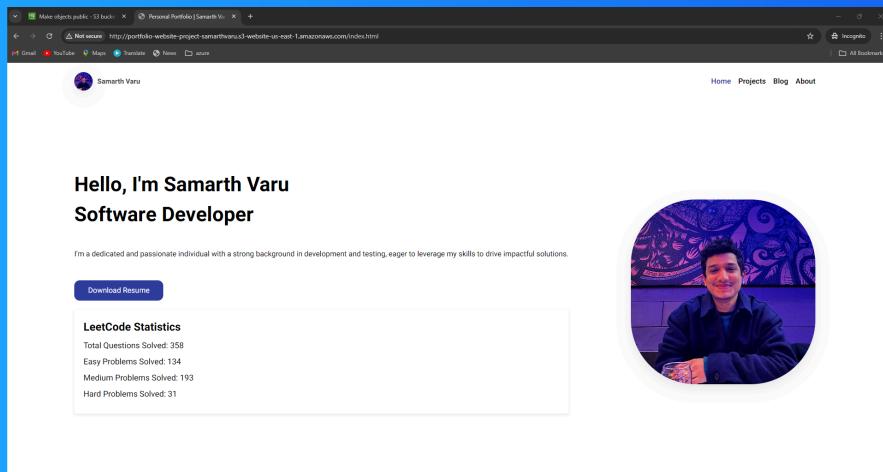




# Host a Website on Amazon S3



Samarth Varu





**Samarth Varu**  
NextWork Student

[NextWork.org](http://NextWork.org)

# Introducing Today's Project!

## What is Amazon S3

Amazon S3 is a scalable, high-speed, web-based cloud storage service designed for online backup and archiving of data and applications on Amazon Web Services (AWS).

## How I used Amazon S3 in this project

I used Amazon S3 to host my portfolio.

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

I didn't expect it to be this easy.

## This project took me...

It took me 15 mins to complete the project hosting my own portfolio.



**Samarth Varu**  
NextWork Student

[NextWork.org](http://NextWork.org)

# How I Set Up an S3 Bucket

Creating an S3 bucket took me 2 mins. I enabled ACL and versioning for the bucket.

The Region I picked for my S3 bucket was us-east-1 as it is nearest to my location.

S3 bucket names are globally unique! This means no other AWS account in the entire world can use your bucket's name unless you delete the bucket.

General purpose buckets (3) <small>Info All AWS Regions</small>			
Buckets are containers for data stored in S3.			
Find buckets by name		Create bucket	
Name	AWS Region	IAM Access Analyzer	Creation date
<a href="#">codepipeline-us-east-1-711360314562</a>	US East (N. Virginia) us-east-1	<a href="#">View analyzer for us-east-1</a>	May 22, 2024, 15:20:18 (UTC-04:00)
<a href="#">portfolio-website-project-samarthvaru</a>	US East (N. Virginia) us-east-1	<a href="#">View analyzer for us-east-1</a>	August 6, 2024, 17:51:33 (UTC-04:00)
<a href="#">samarth2506-terraform-state-bucket</a>	US East (N. Virginia) us-east-1	<a href="#">View analyzer for us-east-1</a>	May 20, 2024, 19:52:02 (UTC-04:00)



# Upload Website Files to S3

## index.html and image assets

I uploaded all the files to my S3 required for my portfolio website. The main file was index.html.

All the files are necessary for the project as assets folder contains the static images referenced by the html files.

Objects (6) <a href="#">Info</a>					
<small>Objects are the fundamental entities stored in Amazon S3. You can use <a href="#">Amazon S3 inventory</a> to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. <a href="#">Learn more</a></small>					
<input type="text"/> <a href="#">Find objects by prefix</a>		<input type="checkbox"/> <a href="#">Show versions</a>			
Name	Type	Last modified	Size	Storage class	
<a href="#">about.html</a>	html	August 6, 2024, 17:39:13 (UTC-04:00)	5.6 KB	Standard	
<a href="#">assets/</a>	Folder			-	
<a href="#">blog.html</a>	html	August 6, 2024, 17:39:15 (UTC-04:00)	5.2 KB	Standard	
<a href="#">index.html</a>	html	August 6, 2024, 17:39:14 (UTC-04:00)	8.6 KB	Standard	
<a href="#">README.md</a>	md	August 6, 2024, 17:39:15 (UTC-04:00)	77.0 B	Standard	
<a href="#">screenshots/</a>	Folder	-	-	-	
<a href="#">style.css</a>	css	August 6, 2024, 17:39:16 (UTC-04:00)	11.3 KB	Standard	
<a href="#">works.html</a>	html	August 6, 2024, 17:39:16 (UTC-04:00)	7.5 KB	Standard	



# Static Website Hosting on S3

Website hosting means something that makes your website public on the internet. Even if you perfect an HTML file, no one else can see it when it's stored as a local file on your computer! Website hosting = storing your HTML file.

To enable website hosting with my S3 bucket, I had to enable the website hosting under the properties section of the bucket. I also indicated the main file (index.html).

## Access Control Lists (ACL)

An ACL is a set of rules that decides who can get access to a resource. Enabling ACLs in this S3 setup lets you control who can access and do things with the objects (i.e. website files) you upload into your bucket.



**Samarth Varu**  
NextWork Student

[NextWork.org](http://NextWork.org)

# Bucket Endpoints

Once static website is enabled, S3 produces a bucket endpoint URL, which is "http://portfolio-website-project-samarthvaru.s3-website-us-east-1.amazonaws.com".

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.

**Error document - optional**  
This is returned when an error occurs.

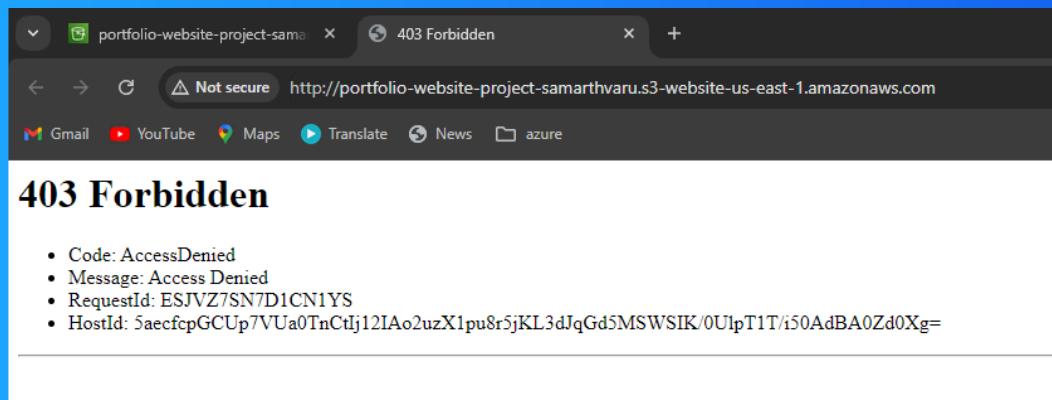
**Samarth Varu**  
NextWork Student

[NextWork.org](http://NextWork.org)

# An error!

When I first visited the bucket endpoint URL, I saw an access denied error message.

The error message is telling that the static website is being hosted by S3, but the actual HTML/image files that are uploaded are still private.



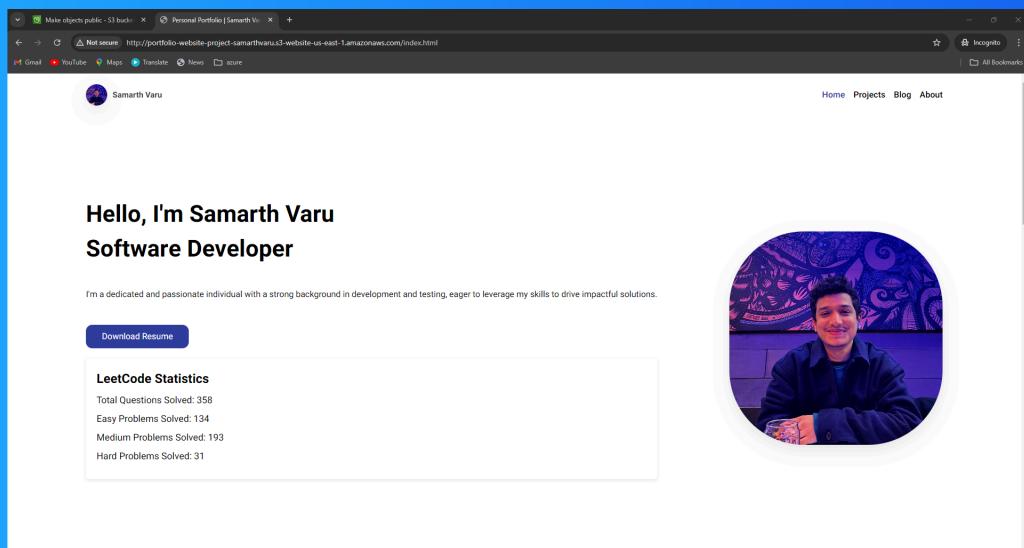


**Samarth Varu**  
NextWork Student

[NextWork.org](http://NextWork.org)

# Success!

To resolve this connection error, I had to use ACLs to make objects in your S3 bucket public.





NextWork.org

**Everyone  
should be in a  
job they love.**

Check out nextwork.org for  
more projects

