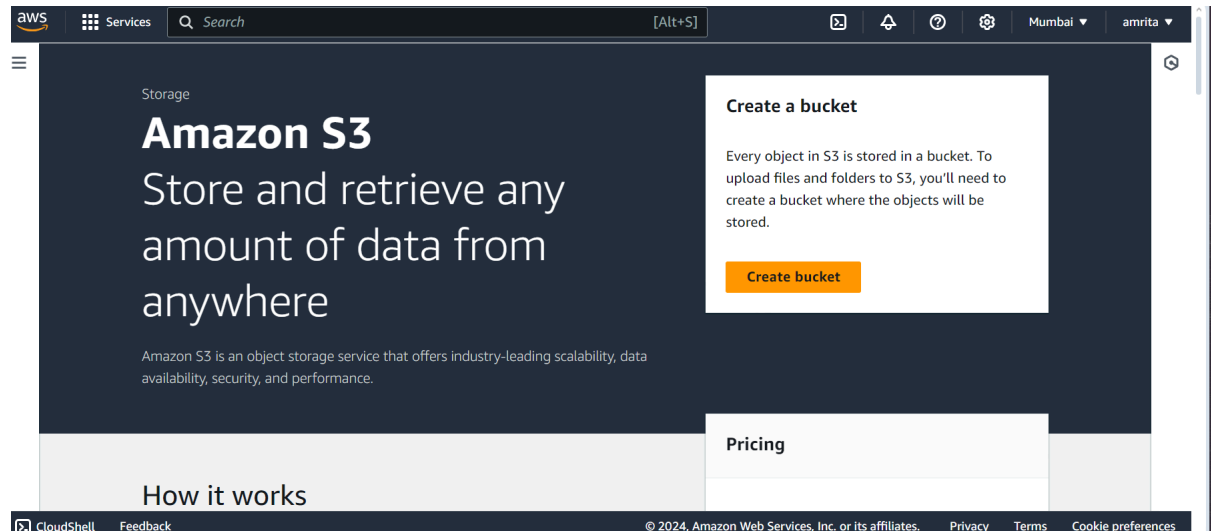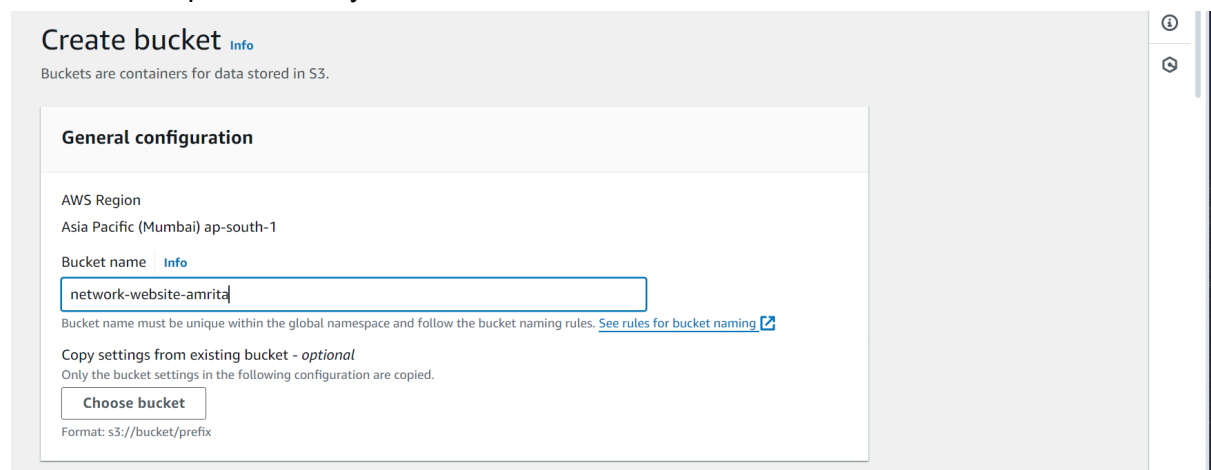Project:
Host a website on S3

Step 1:
Login into your AWS console and choose S3 service

Step 2:

Upon Landing into this page click on Create Bucket Option

Step 3:
Provide a unique name to your bucket

Step 4:
This talks about the controlling the access to your bucket.

Object Ownership Info

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

○ **ACLs disabled (recommended)**
All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

● **ACLs enabled**
Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

⚠ We recommend disabling ACLs, unless you need to control access for each object individually or to have the object writer own the data they upload. Using a bucket policy instead of ACLs to share data with users outside of your account simplifies permissions management and auditing.

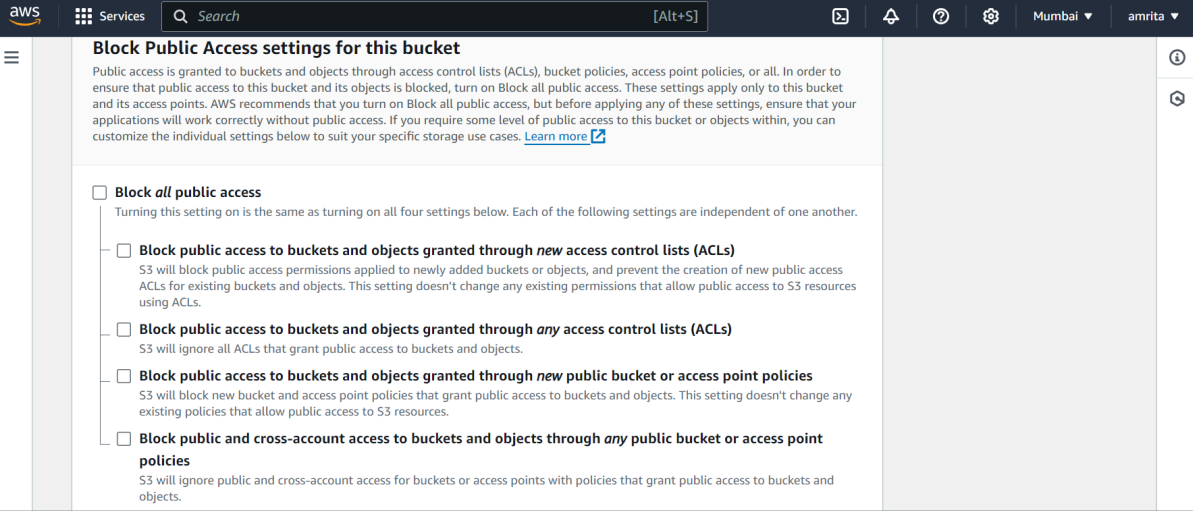Object Ownership

● Bucket owner preferred
If new objects written to this bucket specify the bucket-owner-full-control canned ACL, they are owned by the bucket owner. Otherwise, they are owned by the object writer.

○ Object writer
The object writer remains the object owner.

Step 5:
Uncheck the block all public access because we want our static website to be accessible to the public.

Block Public Access settings for this bucket

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. Learn more [↗]

☐ **Block *all* public access**
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

  ☐ **Block public access to buckets and objects granted through *new* access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.

  ☐ **Block public access to buckets and objects granted through *any* access control lists (ACLs)**
S3 will ignore all ACLs that grant public access to buckets and objects.

  ☐ **Block public access to buckets and objects granted through *new* public bucket or access point policies**
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.

  ☐ **Block public and cross-account access to buckets and objects through *any* public bucket or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

⚠ **Turning off block all public access might result in this bucket and the objects within becoming public**
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☑ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

Step 6:

Bucket Versioning: Just like how we use GitHub for our file versioning here for versioning the buckets , we use this feature which helps us to keep a track of what's happening everytime we perform some action in the buckets.

So enable to bucket versioning

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. Learn more ⤴

Bucket Versioning

○ Disable

● Enable

Step 7:

Go ahead and create the bucket

UPLOADING FILES TO S3 BUCKET

Step 1:
After creating the bucket click on the bucket that you have created.
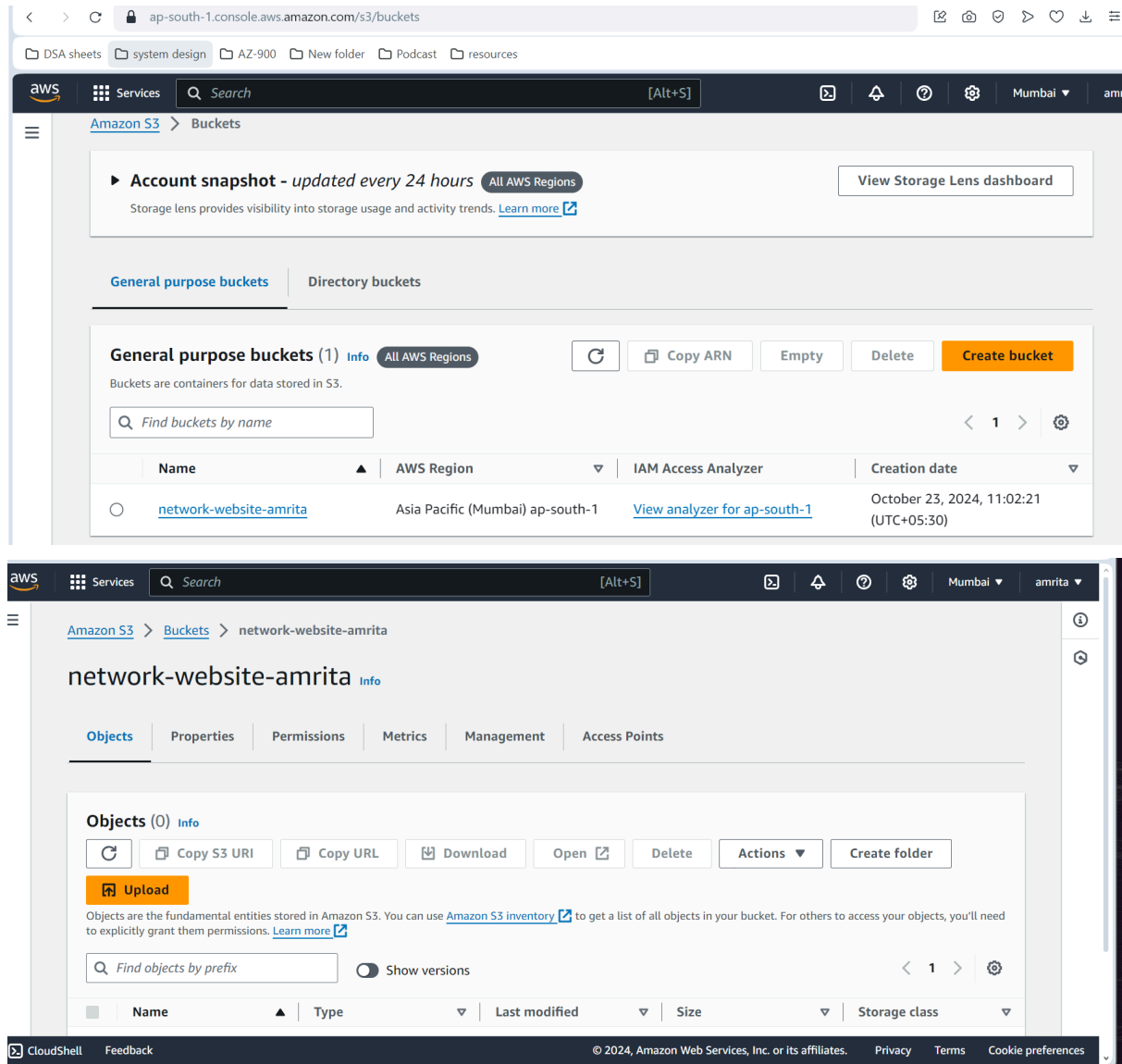
Step 2:
Click on upload and then first upload index.html and all other required files

Step 3:
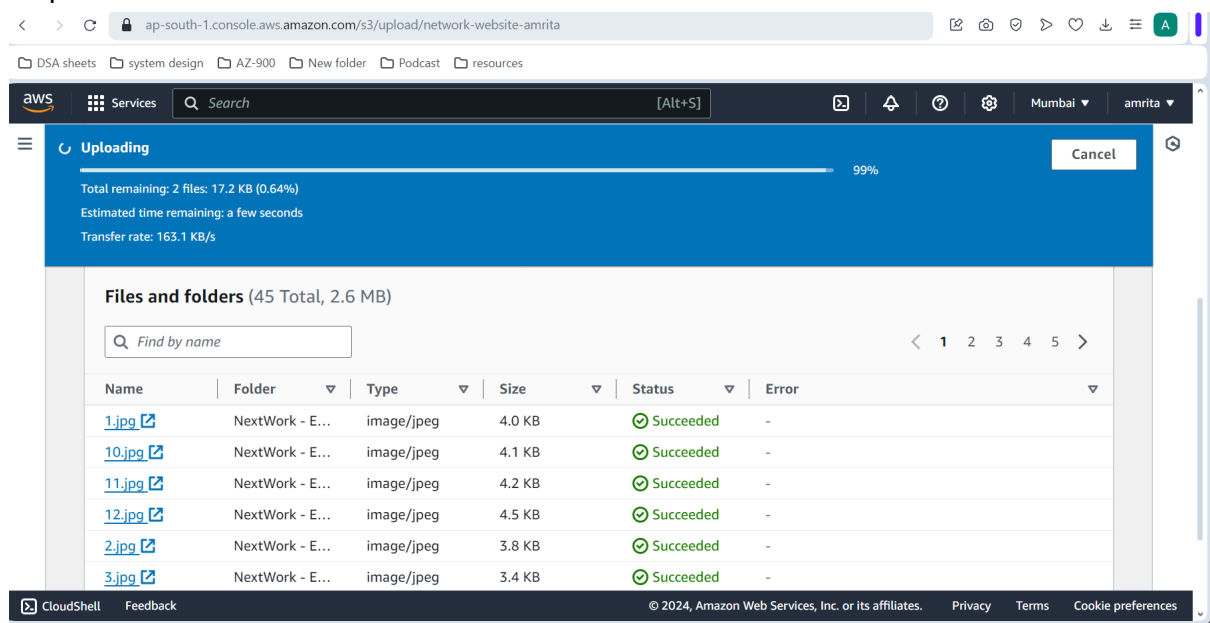
After clicking on upload you'll see the above screen and and you'll get the following screen on successful upload of your files

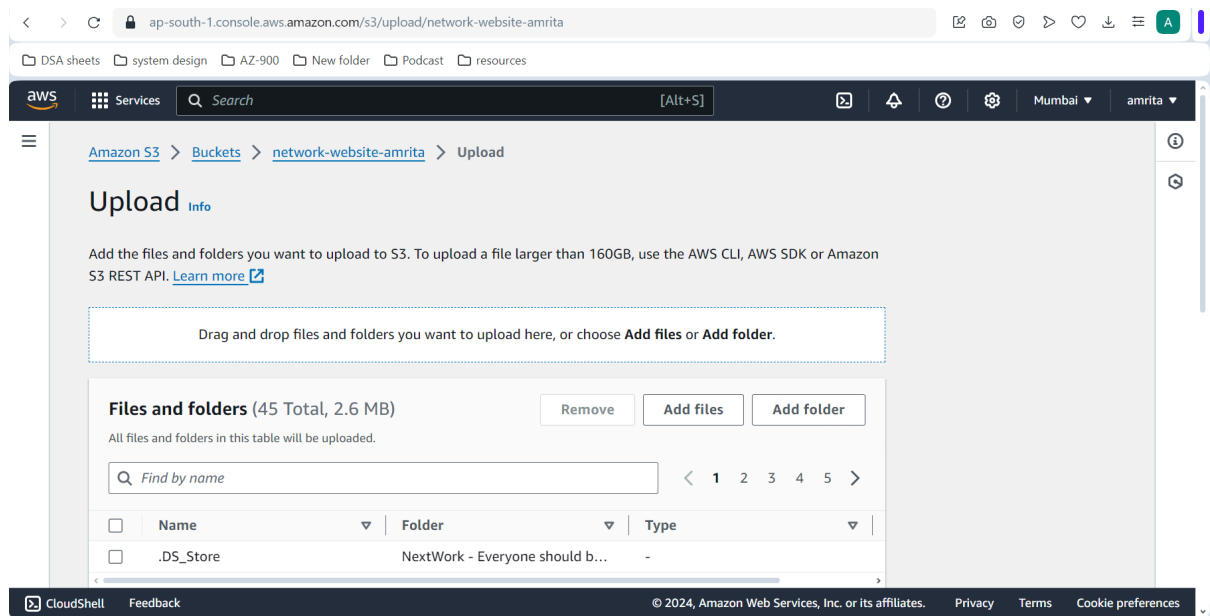Click on the close button.
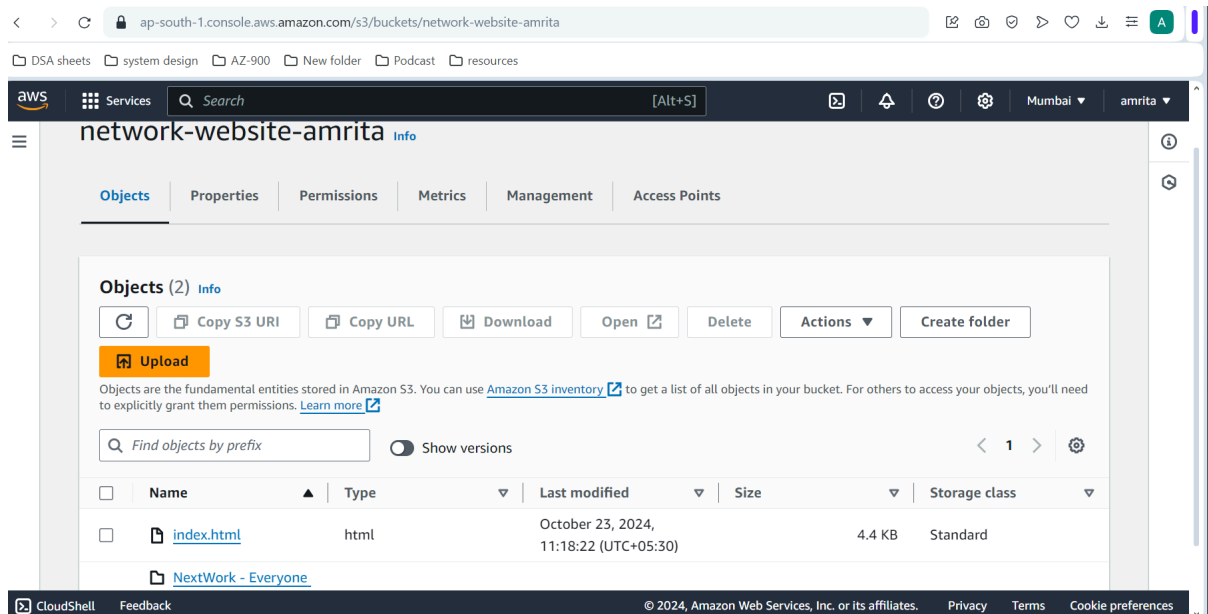
CONFIGURE STATIC WEBSITE ON S3

Hosting website on S3:

Make website hosting public on internet is making the website available to everyone.
By configuring your S3 bucket for hosting, we're telling this bucket: "please create a URL that will take anyone to a page that displays the HTML file I just uploaded.

Step 1:
Click on the Properties tab
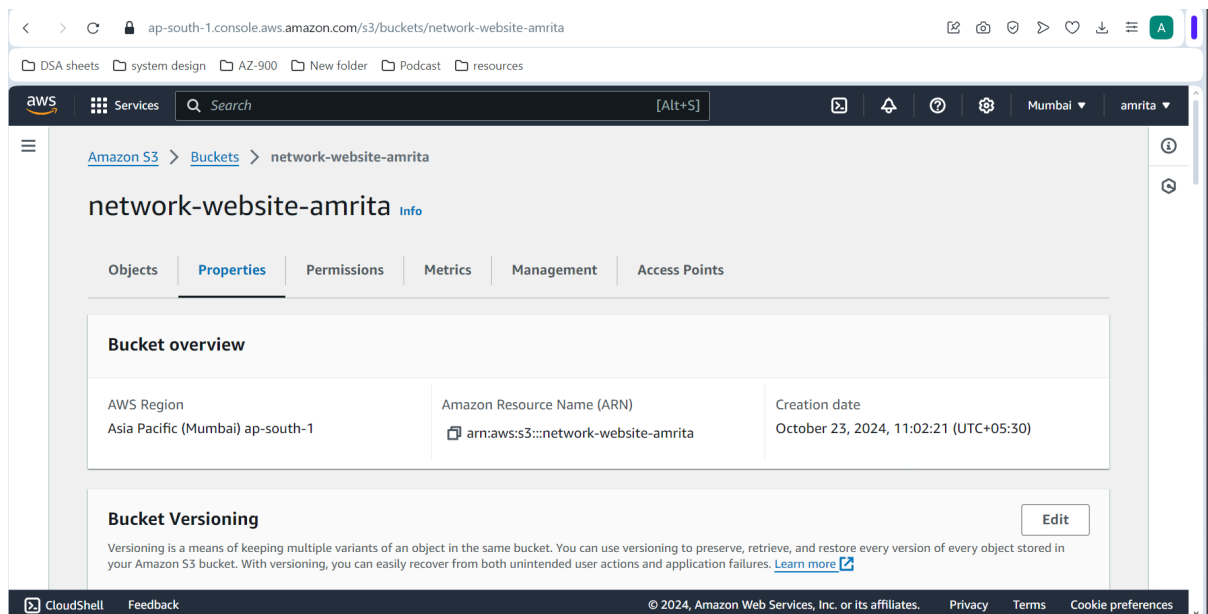
Step 2:

Scroll all the way down to static website hosting
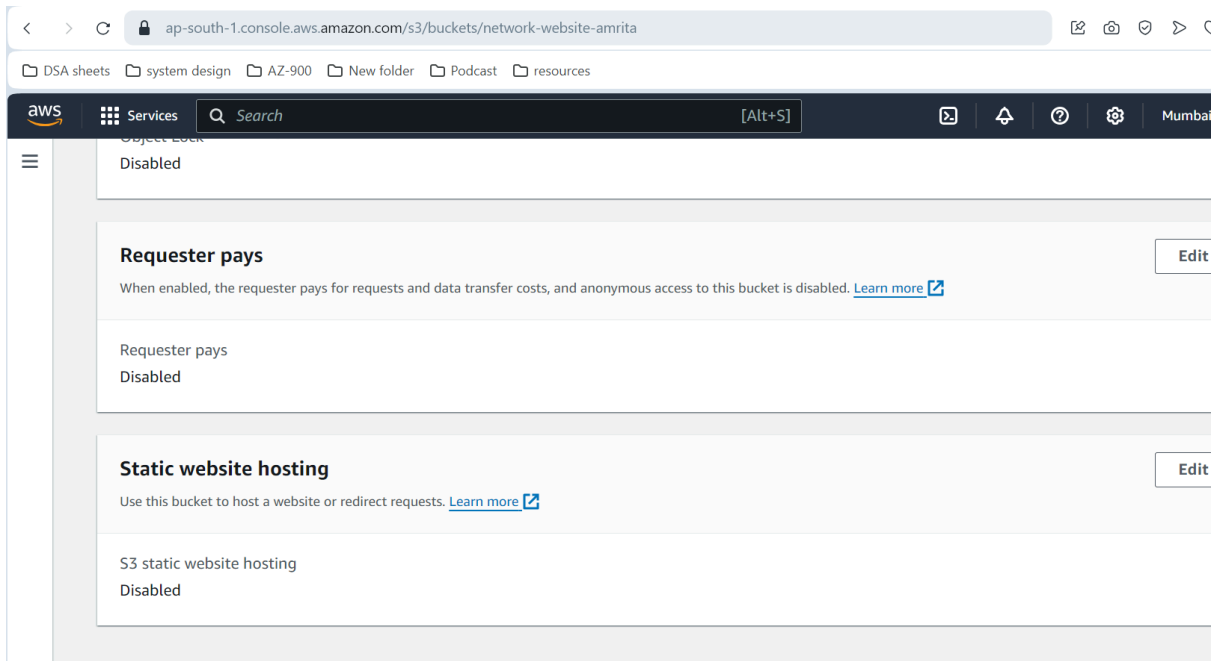
Step 3:
Click edit and enable static website hosting.
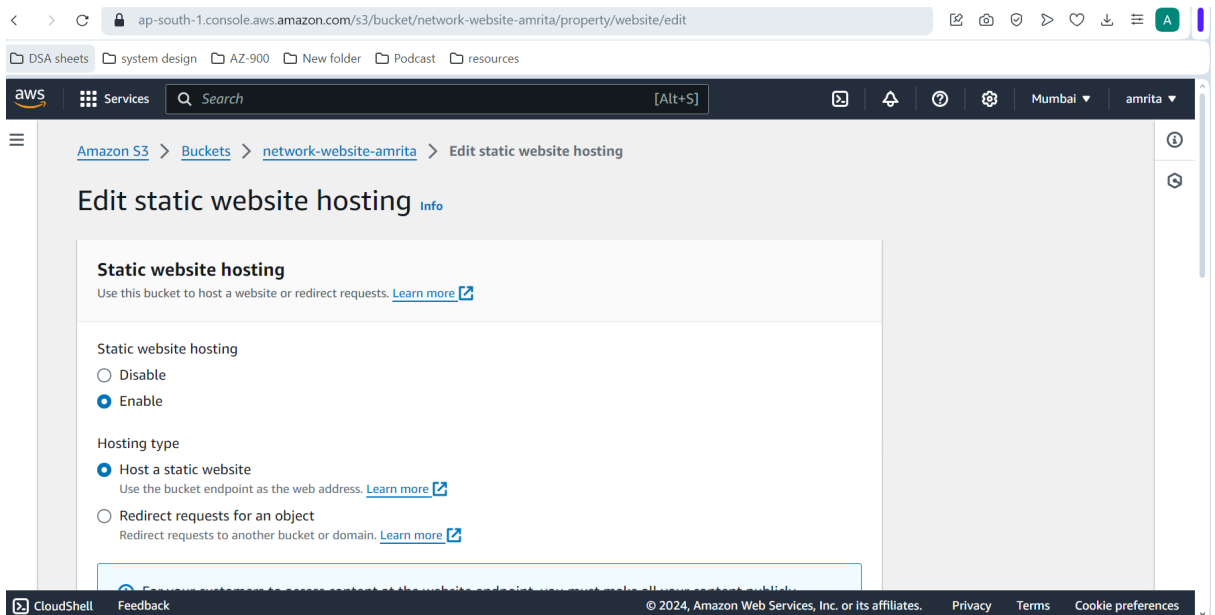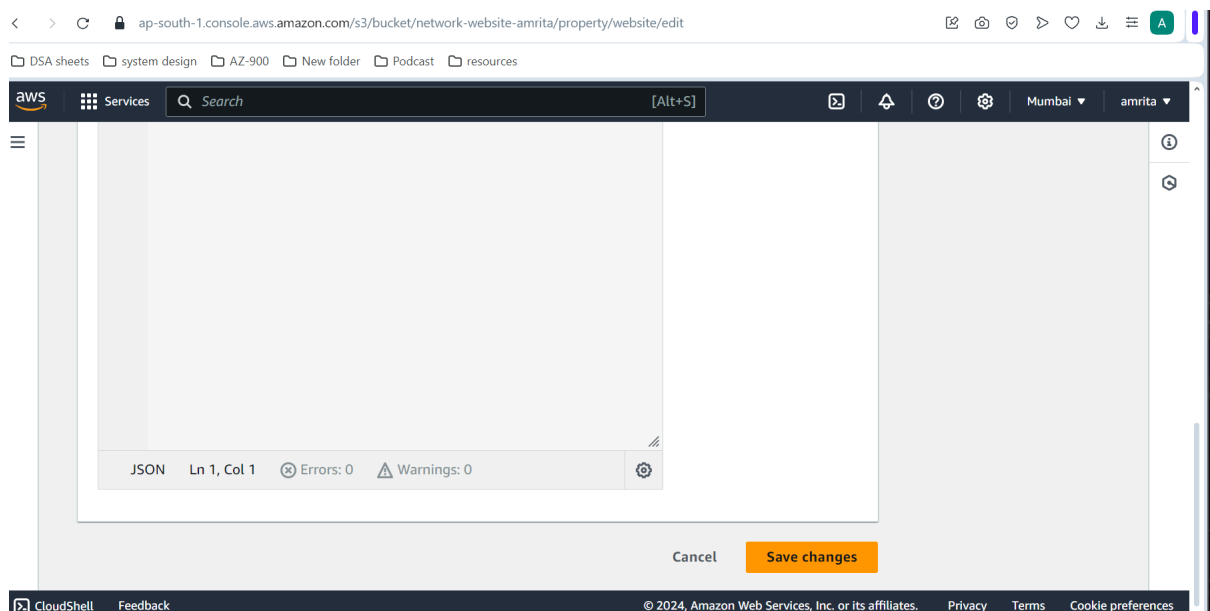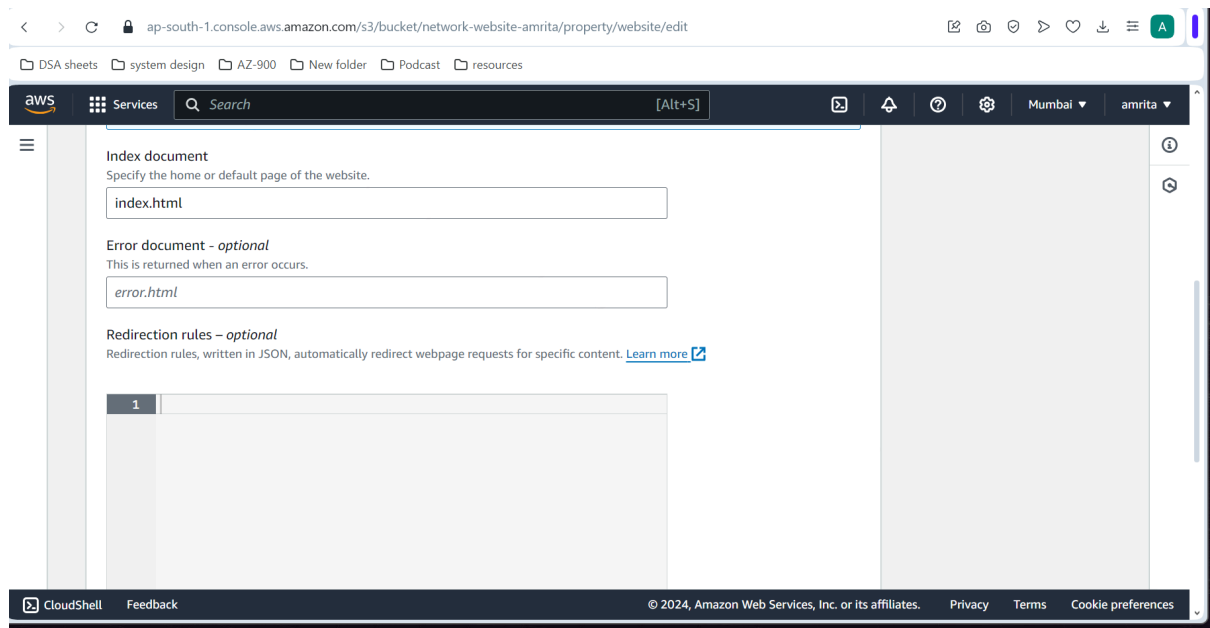
Then click save changes

💡 Why did I get this error?Objects (in this case, the HTML and images files you uploaded) are private by default. This default setting helps keep your account's data secure

A private object is an object that is not accessible to the public.. When you upload files to S3, they are private by default. This means that only you can access them. To make your website public, you need to change the permissions on your objects so that they can be accessed by everyone.

403 Forbidden

- Code: AccessDenied
- Message: Access Denied
- RequestId: G2MG12HJ2EDEM2WS
- HostId: QuAPn/4+IEXXpKR6IiiRtXo4PxrHh+whrJqY5HikiNzlnJJ00tLwb6ND39A5q4nSROjzAAgAMck=
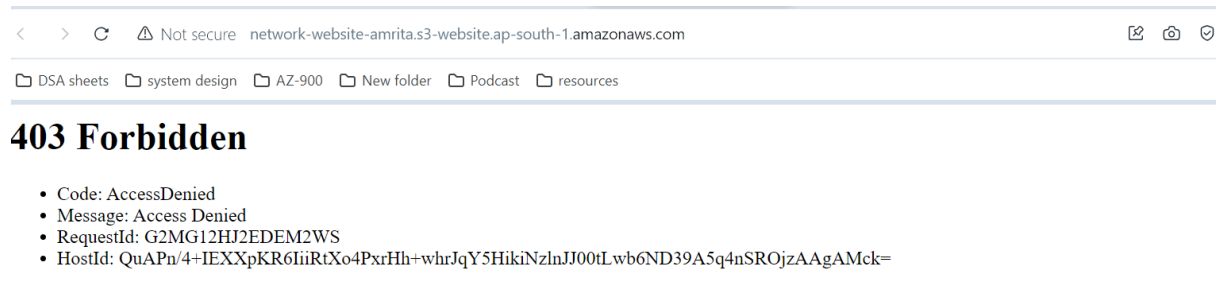
Now hosting is done but we still did not get the public access so how?

ACL Settings
Use ACLs to make objects in your S3 bucket public

Step 1:
Go to objects tab of your bucket
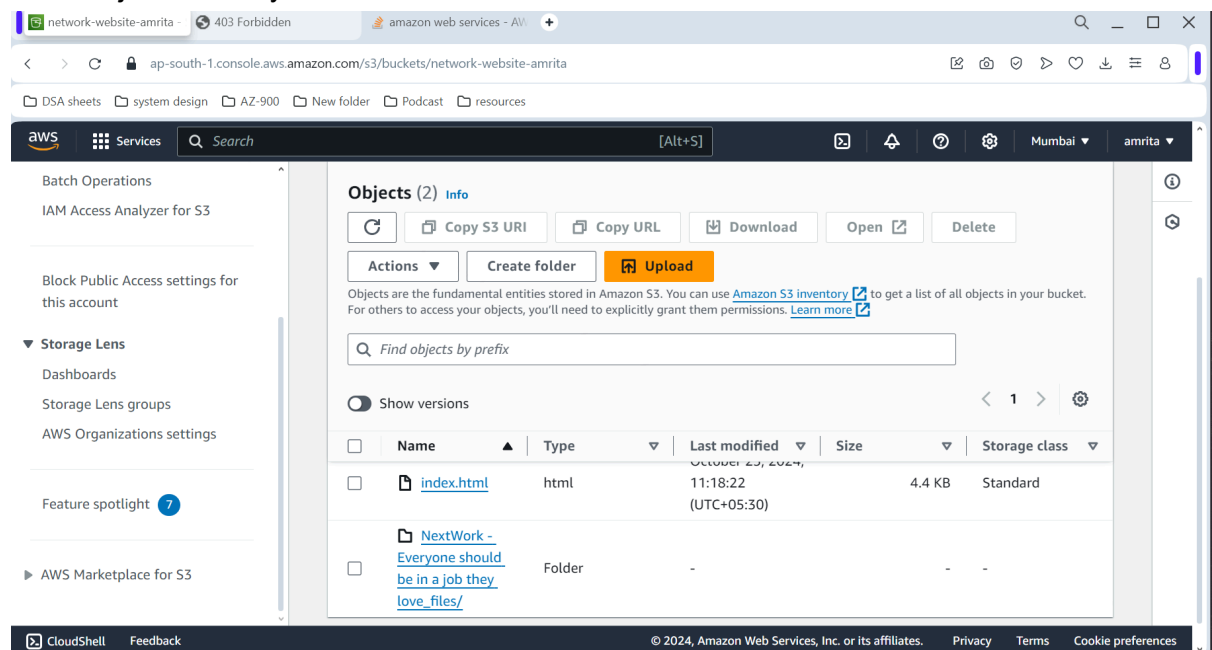
Select and click on Actions
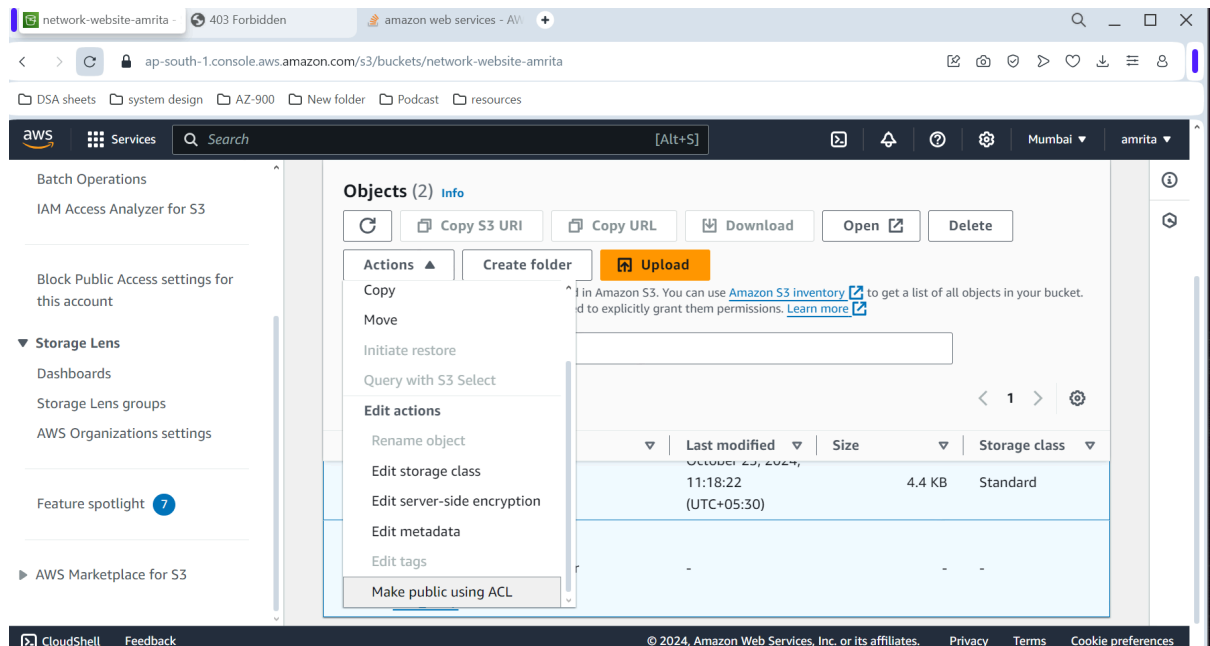
Choose Make public using ACL option.
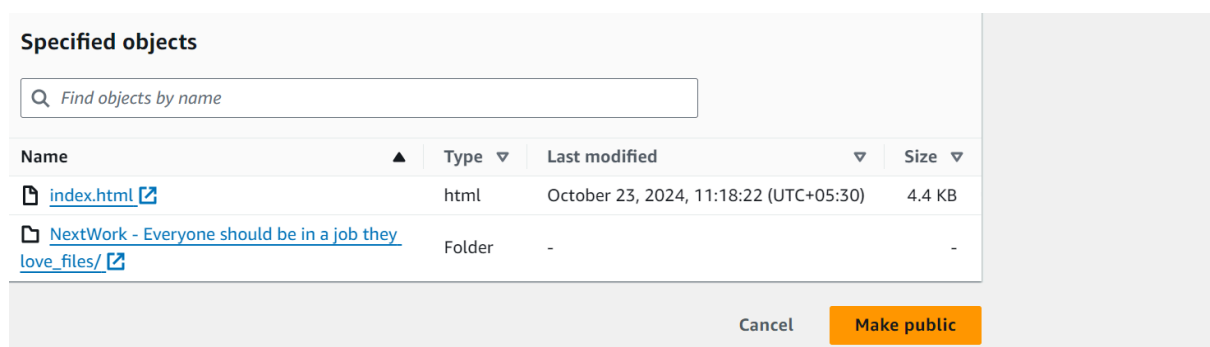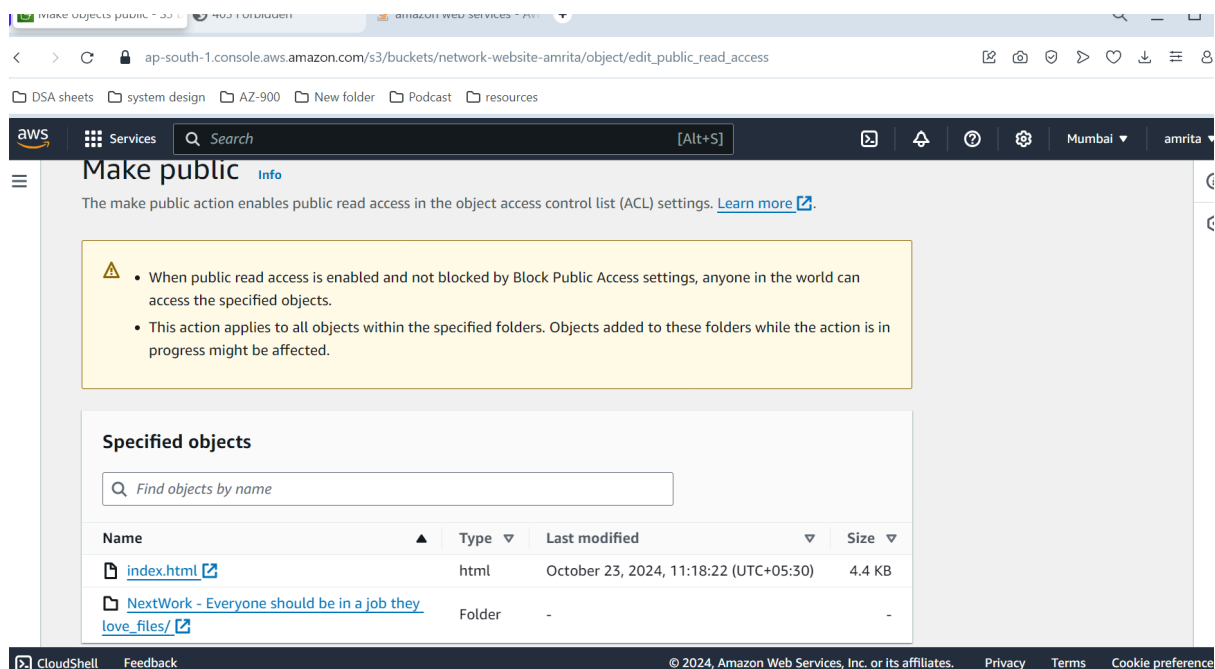
Click on make public
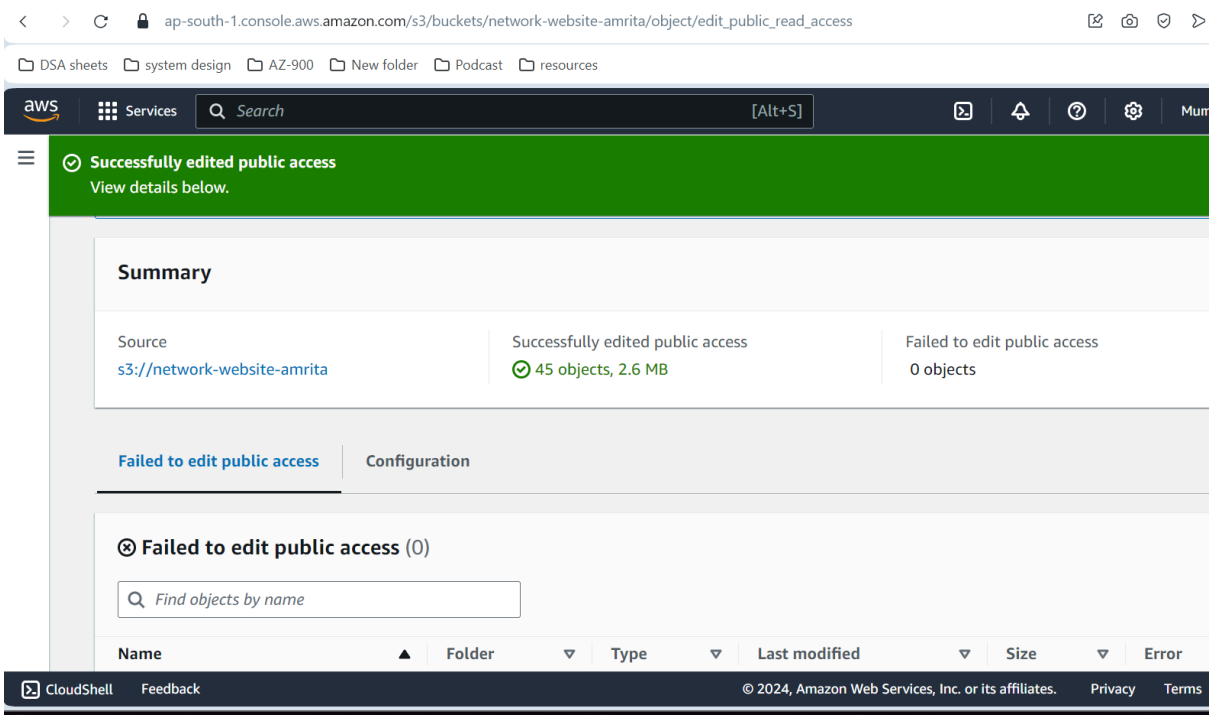
Ta da….
Website just got public
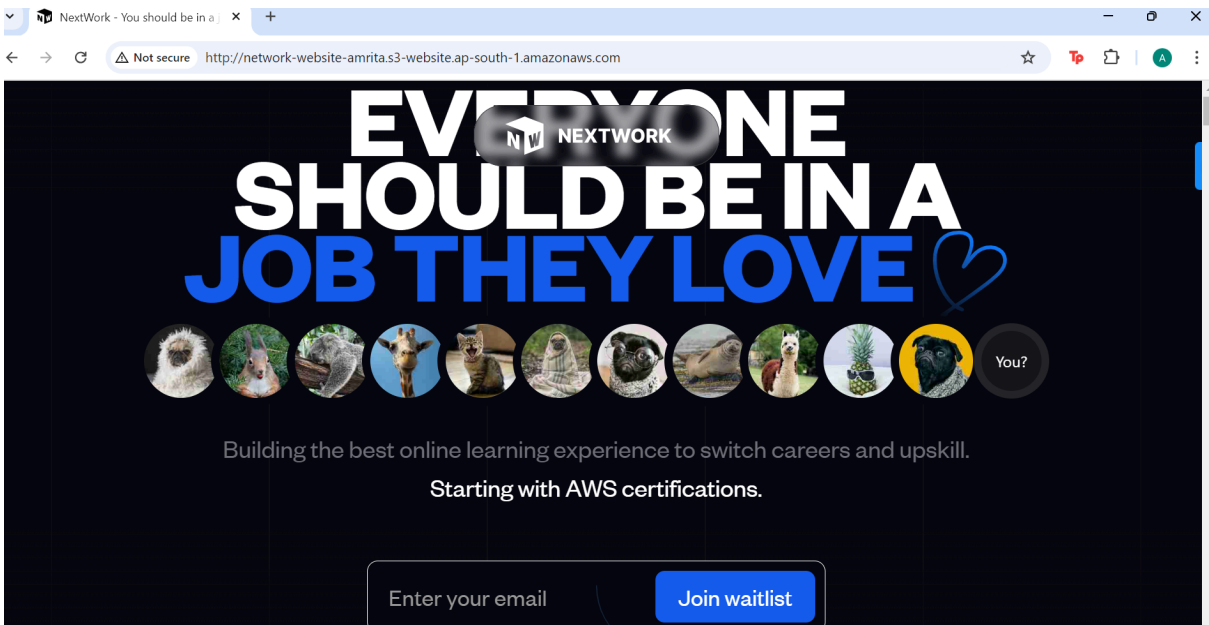
Deleting it because I can't afford the bill right now 😛

ap-south-1.console.aws.amazon.com/s3/buckets/network-website-amrita

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aws   ::: Services   🔍 Search   [Alt+S]   ⚲ ⌂ ? ⚙ Mumbai ▼   amrita ▼

Objects (2)   Info

| 🔄 | 🗐 Copy S3 URI | 🗐 Copy URL | ⬇ Download | Open ⬈ | Delete | 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   ‹ 1 › ⚙

☑	Name ▲	Type ▽	Last modified ▽	Size ▽	Storage class ▽
☑	📄 index.html	html	October 23, 2024, 12:23:19 (UTC+05:30)	58.8 KB	Standard
☑	📄 NextWork - Everyone should be in a job they love_files/	Folder	-	-	-

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‹ › C ↻ 🔒 ap-south-1.console.aws.amazon.com/s3/buckets/network-website-amrita/object/delete

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aws   ::: Services   🔍 Search   [Alt+S]   ⚲ ⌂ ? ⚙ Mumbai ▼   amrita ▼

Amazon S3 › Buckets › network-website-amrita › Delete objects

Delete objects Info

⚠ If a folder is selected for deletion, all objects in the folder will be deleted, and any new objects added while the delete action is in progress might also be deleted. If an object is selected for deletion, any new objects with the same name that are uploaded before the delete action is completed will also be deleted.

Learn more ⬈

ⓘ **Deleting the specified objects adds delete markers to them**
If you need to undo the delete action, you can delete the delete markers. Learn more ⬈

Specified objects

🔍 Find objects by name

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ap-south-1.console.aws.amazon.com/s3/buckets/network-website-amrita/object/delete

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aws | Services | Q Search | [Alt+S] | Mumbai ▼ | amrita ▼

Specified objects

Find objects by name

Name ▲	Type ▽	Last modified ▽	Size ▽
index.html 🗗	html	October 23, 2024, 12:23:19 (UTC+05:30)	58.8 KB
NextWork - Everyone should be in a job they love_files/ 🗗	Folder	-	-

Delete objects?

To confirm deletion, type *delete* in the text input field.

delete

Cancel | **Delete objects**

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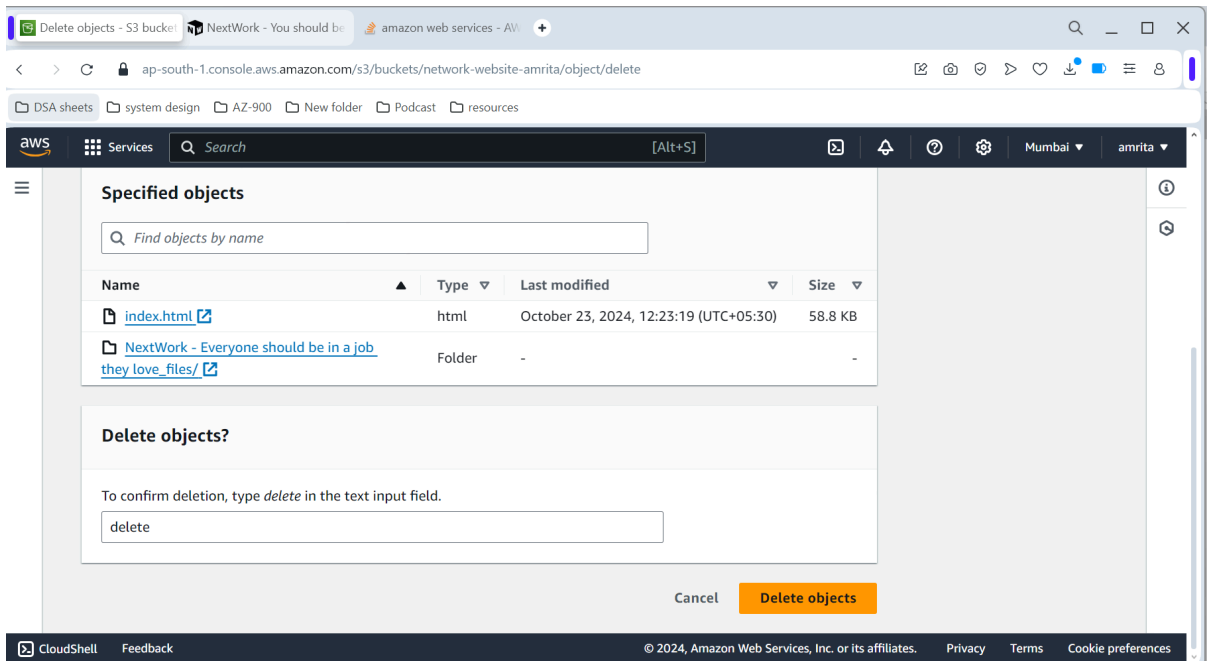
Now deleting the bucket also

ap-south-1.console.aws.amazon.com/s3/buckets

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aws | Services | Q Search | [Alt+S] | Mumbai ▼ | amrita ▼

Amazon S3 > Buckets

▶ **Account snapshot** - *updated every 24 hours* All AWS Regions

Storage lens provides visibility into storage usage and activity trends. 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.

🔄 | Copy ARN | Empty | Delete | **Create bucket**

Find buckets by name

< 1 > ⚙

	Name ▲	AWS Region ▽	IAM Access Analyzer	Creation date ▽
🔘	network-website-amrita	Asia Pacific (Mumbai) ap-south-1	View analyzer for ap-south-1	October 23, 2024, 11:02:21 (UTC+05:30)

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Amazon S3 > Buckets > network-website-amrita > Delete bucket

Delete bucket Info

⚠ • Deleting a bucket cannot be undone.
• Bucket names are unique. If you delete a bucket, another AWS user can use the name.
• If this bucket is used with a Multi-Region Access Point in an external account, initiate failover before deleting the bucket.
• If this bucket is used with an access point in an external account, the requests made through those access points will fail after you delete this bucket.
• This bucket is configured to host a static website. We recommend that you clean up the Route 53 hosted zone settings that are related to the bucket.

Learn more ↗

Delete bucket "network-website-amrita"?

To confirm deletion, enter the name of the bucket in the text input field.

• Bucket names are unique. If you delete a bucket, another AWS user can use the name.
• If this bucket is used with a Multi-Region Access Point in an external account, initiate failover before deleting the bucket.
• If this bucket is used with an access point in an external account, the requests made through those access points will fail after you delete this bucket.
• This bucket is configured to host a static website. We recommend that you clean up the Route 53 hosted zone settings that are related to the bucket.

Learn more ↗

Delete bucket "network-website-amrita"?

To confirm deletion, enter the name of the bucket in the text input field.

network-website-amrita

Cancel   **Delete bucket**