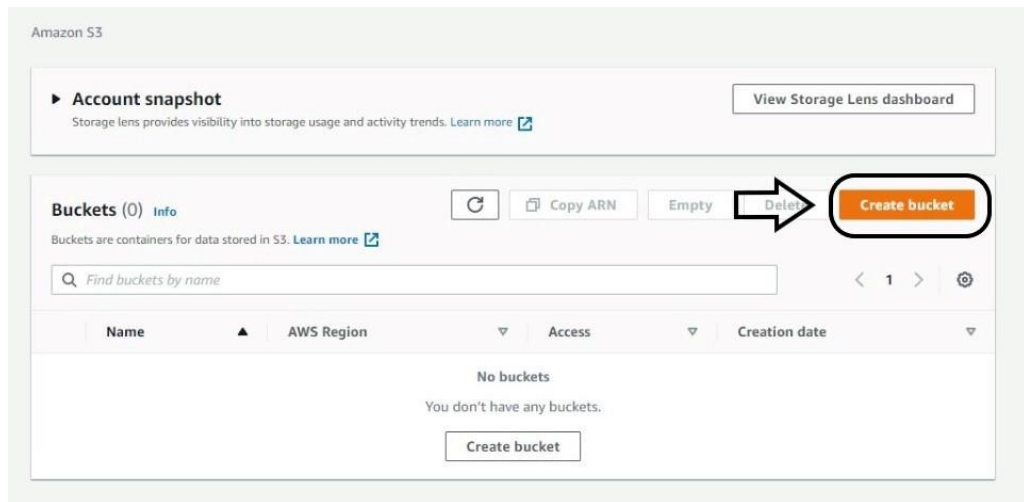


## Assignment 2:

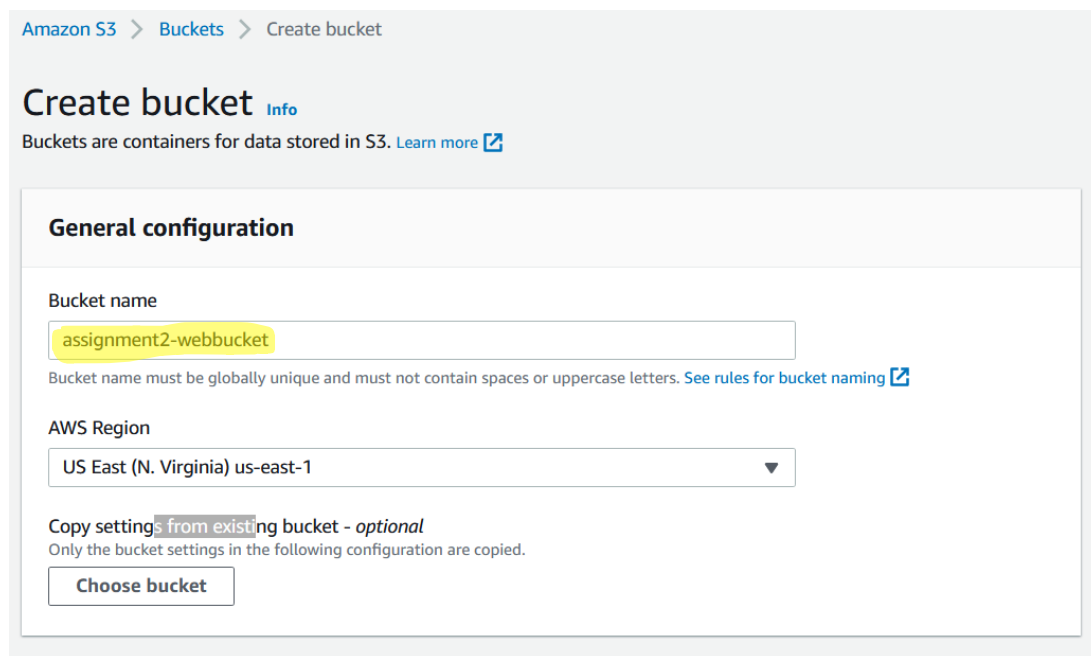
Implement versioning in S3 bucket and attach bucket policies, ACL on objects of bucket to implement user access permissions.

Step 1: Log in to your Amazon Web Services Account → In your console search bar, search S3 → then select the S3.

Step 2: On the Amazon S3 page click on create a bucket.



Step 3: In create bucket page, Give the bucket a Name



## NOTE:

1. Name must be unique and should not contain any space or uppercase letter
2. Select any region
3. Enable ACL (Access Control List basically helps to manage access to created buckets and it's a different version of object)
4. Un-tick Block all public access option (If you want to give it public access)
5. Click on "I acknowledge"
6. Keep default encryption disabled
7. Click on Create 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.

Object Ownership

Bucket owner enforced

## 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.

To enable versioning, we will follow below mentioned steps.

1. In the Buckets list, choose the **name of the bucket** that you want to enable versioning for.
2. Choose Properties.
3. Under Bucket Versioning, choose Edit.
4. Choose **Enable**, and then choose Save changes.

### 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

Note: While creating bucket, select encryption enable/disable based on the requirement.

Step 4: Click on your created bucket → Click on upload → Upload any file

Amazon S3 > Buckets > assignment2-webbucket > Upload

## Upload Info

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose **Add files**, or **Add folders**.

**Files and folders (1 Total, 1.7 KB)** Remove Add files Add folder

All files and folders in this table will be uploaded.

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	index.html	-	text/html	1.7 KB

### Destination

Destination  
[s3://assignment2-webbucket](#)

► **Destination details**  
Bucket settings that impact new objects stored in the specified destination.

### ▼ Properties

Specify storage class, encryption settings, tags, and more.

#### Storage class

Amazon S3 offers a range of storage classes designed for different use cases. [Learn more](#) or see [Amazon S3 pricing](#)

	Storage class	Designed for	Availability Zones	Min storage duration
<input checked="" type="radio"/>	Standard	Frequently accessed data (more than once a month) with milliseconds access	≥ 3	-
<input type="radio"/>	Intelligent-Tiering	Data with changing or unknown access patterns	≥ 3	-

Select objects uploaded and go to object action → Click on the public using ACL.

Upload succeeded  
View details below.

### Upload: status

The information below will no longer be available after you navigate away from this page.

#### Summary

Destination	Succeeded	Failed
s3://assignment2-webbucket	1 file, 1.7 KB (100.00%)	0 files, 0 B (0%)

**Files and folders** | Configuration

**Files and folders (1 Total, 1.7 KB)** Find by name

Name	Folder	Type	Size	Status	Error
index.html	-	text/html	1.7 KB	Succeeded	-

By default, the static website hosting will be **disabled**. To get S3 object as website, **enable** the static website hosting.

**Static website hosting**  
Use this bucket to host a website or redirect requests. [Learn more](#)

Edit

Static website hosting  
Disabled

Amazon S3 > Buckets > assignment2-webbucket > Edit static website hosting

## 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.

**Static website hosting**  
Use this bucket to host a website or redirect requests. [Learn more](#)

Edit

Static website hosting  
**Enabled**

Hosting type  
**Bucket hosting**

**Bucket website endpoint**  
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. [Learn more](#)  
 <http://assignment2-webbucket.s3-website-us-east-1.amazonaws.com>

Using the website endpoint, we will access the web hosted S3.

Successfully edited public access  
View details below.

Close

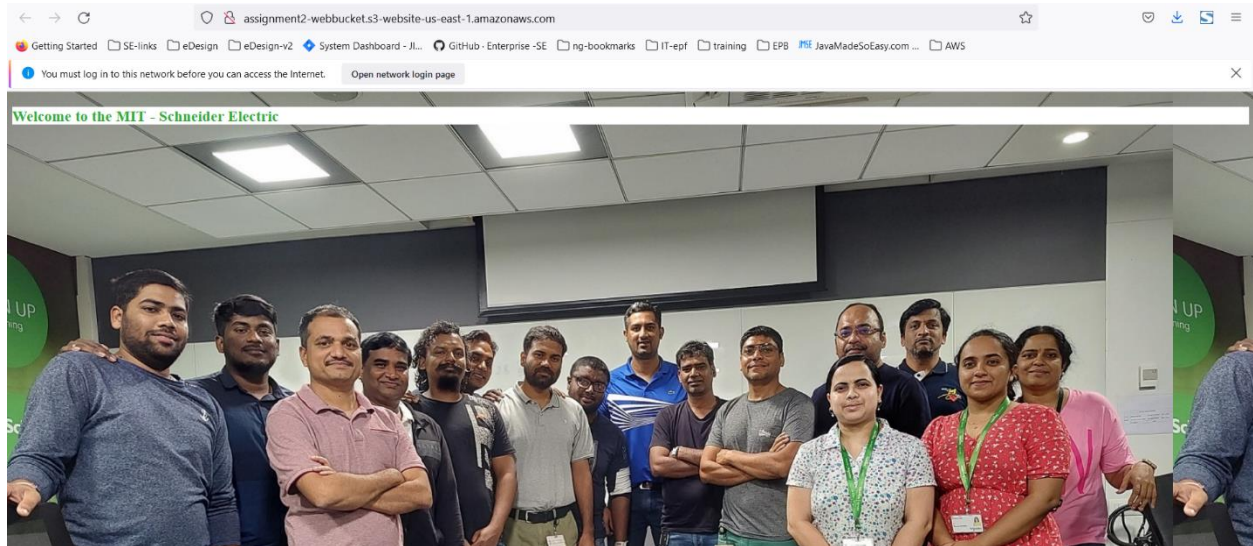
### Make public: status

The information below will no longer be available after you navigate away from this page.

Summary		
Source s3://assignment2-webbucket	Successfully edited public access 1 object, 1.7 KB	Failed to edit public access 0 objects

## Below is the output of the website.

For this output I have added .CSS and image file. Which not available in the screenshot.



Finally, we can see the **number of versions** for the file **index.html**. We have uploaded the file multiple times and its available with version ID's. So that we can restore if it is required for later use or if we want to revert the content.

Amazon S3 > Buckets > assignment2-webbucket > index.html

index.html [Info](#) [Copy S3 URI](#) [Download](#) [Open](#) [Object actions](#)

[Properties](#) [Permissions](#) [Versions](#)

Versions (5) [Download](#) [Open](#) [Delete](#) [Actions](#)

<input type="checkbox"/>	Version ID	Type	Last modified	Size	Storage class
<input type="checkbox"/>	DBE2H6TTHndTxGuHGjL5MjTucZAWv1a (Current version)	html	October 8, 2022, 13:33:53 (UTC+05:30)	897.0 B	Standard
<input type="checkbox"/>	Kt4D5VLKsKsNmoeFH5FTW9f3FUCcObD	html	October 8, 2022, 13:32:47 (UTC+05:30)	871.0 B	Standard
<input type="checkbox"/>	iF0t9Sd7iFVowkAhZRpKdGsEW.qCx1Wb	html	October 8, 2022, 13:29:53 (UTC+05:30)	861.0 B	Standard
<input type="checkbox"/>	8EuQdtqbGTmgD4fhtYzZKaWca1EUhFu	html	October 8, 2022, 13:26:17 (UTC+05:30)	848.0 B	Standard
<input type="checkbox"/>	8tFhkiuJEAEOCw99pR1x_otNhrap4bOp	html	October 8, 2022, 13:01:29 (UTC+05:30)	1.7 KB	Standard