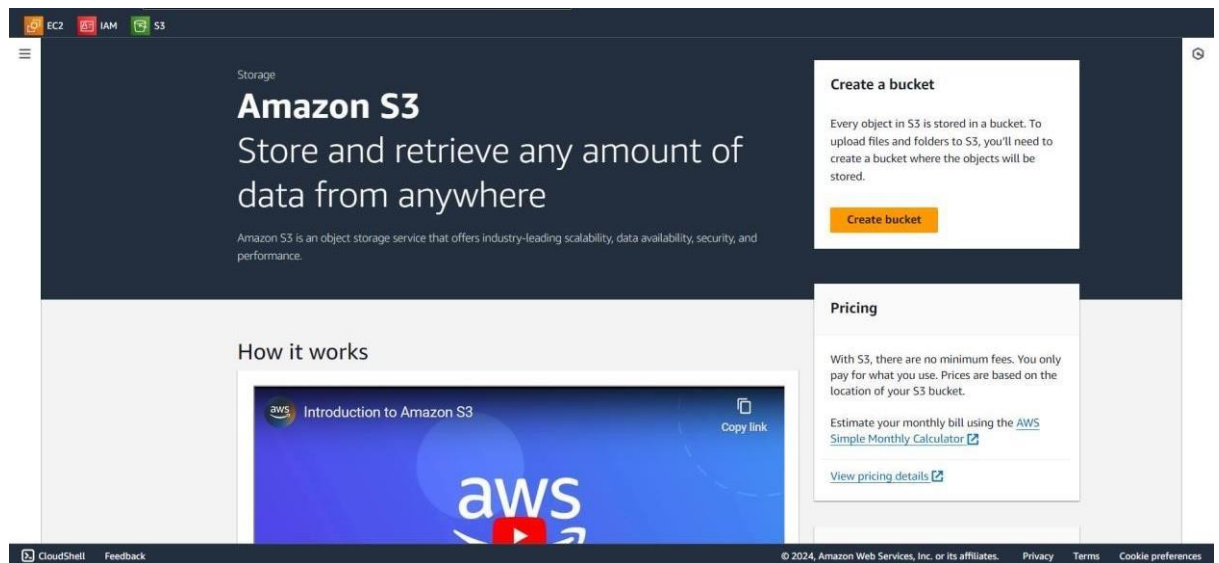# S3 Bucket

Amazon Simple Storage Service (S3) is a storage service designed to store and retrieve any amount of data from anywhere on the web.
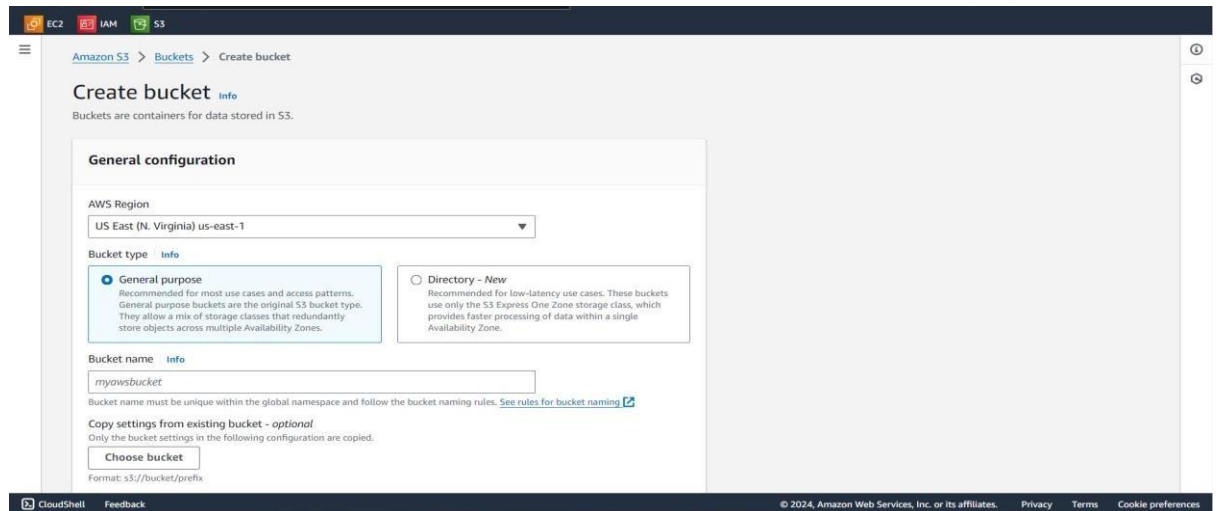
It is highly scalable, durable and secure object storage system provided by AWS. Objects are the entity to be stored in the bucket i.e. files.

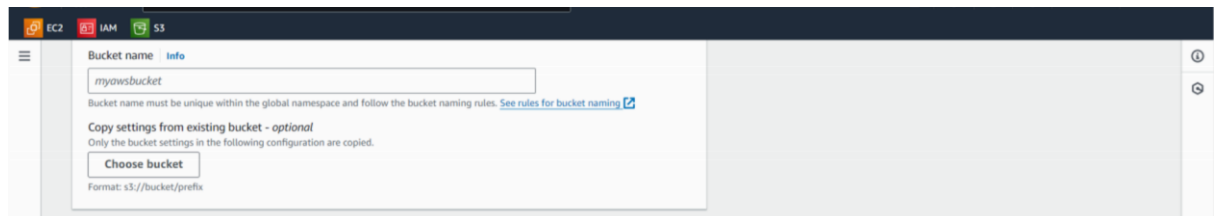## Creating S3 Bucket:

1. Search for S3 Service and open it.

2. Now click on "Create bucket". There will be various options and settings for the bucket to be created. Choose them according to your requirements.
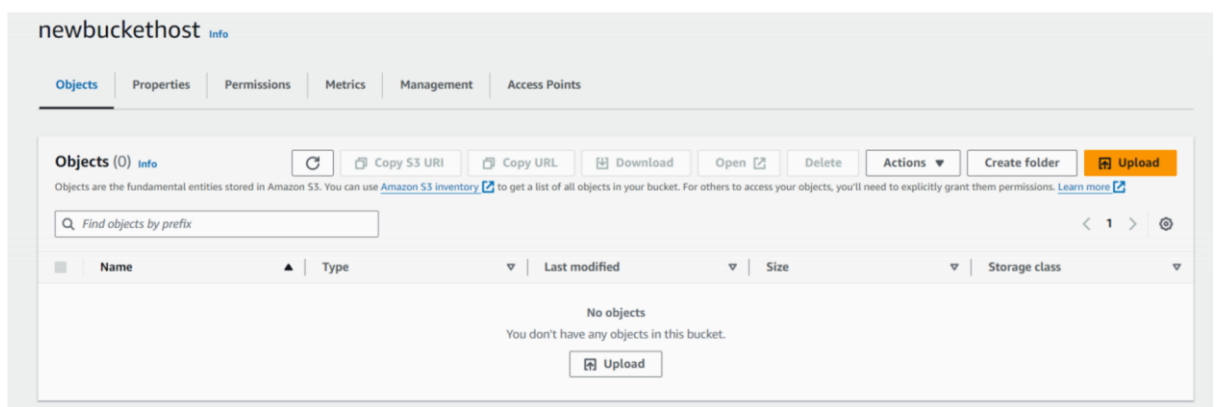

3. Enter the bucket name. Decide whether to block the public access or not.

4. We can upload the files by clicking on upload option.

Versioning in the S3 bucket.

Versioning allows you to keep multiple versions of the same object (with same name) in the same bucket.

After enabling versioning for a bucket, S3 service automatically creates new version of an object every time it is updated or overwritten.

Steps for enabling and verifying versioning are given below:

1. Open the bucket for which you want to enable versioning. Go to properties section of the bucket.
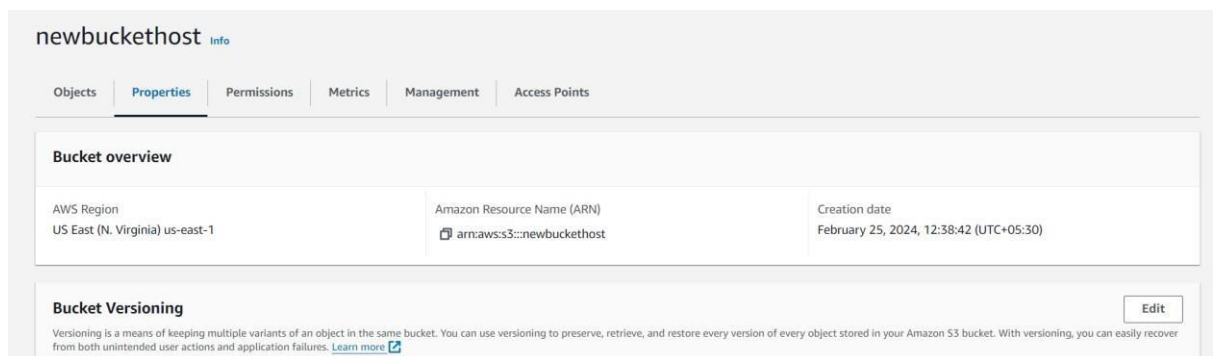
2. Scroll down to "Bucket versioning" and click on "Edit". Bucket versioning is suspended, enable the versioning and save changes.
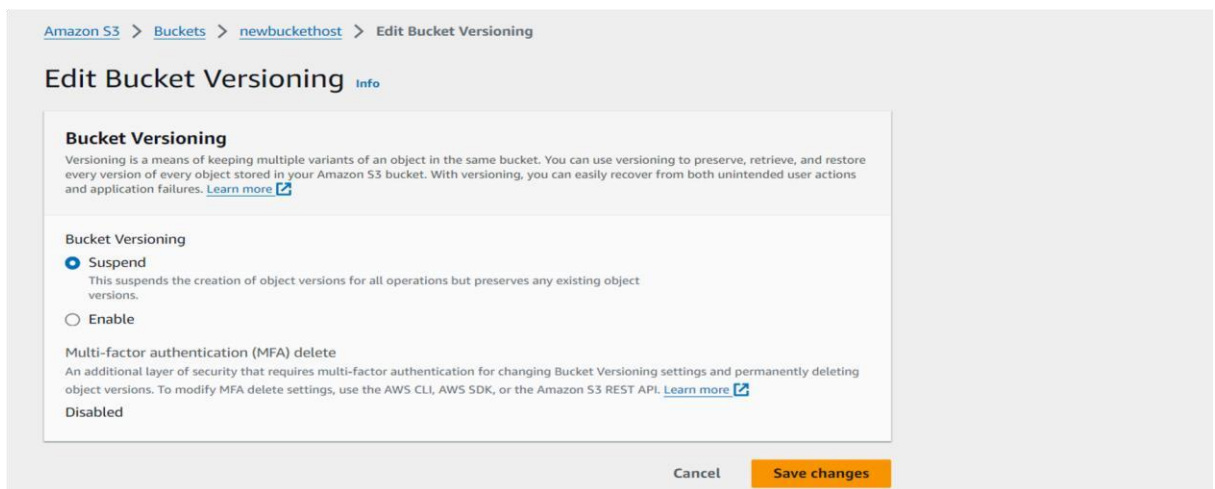
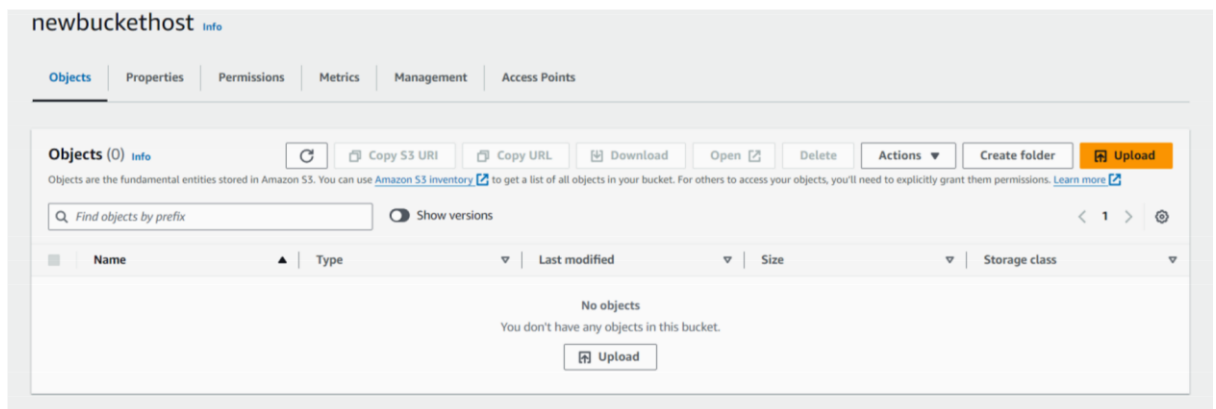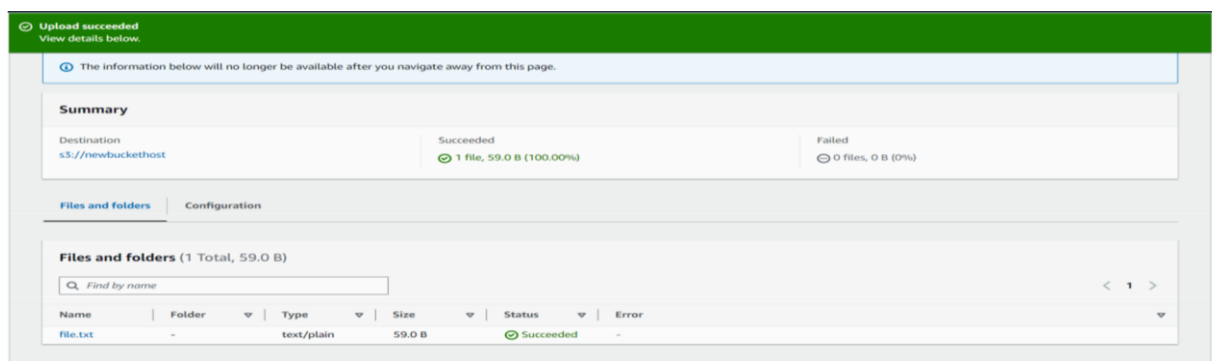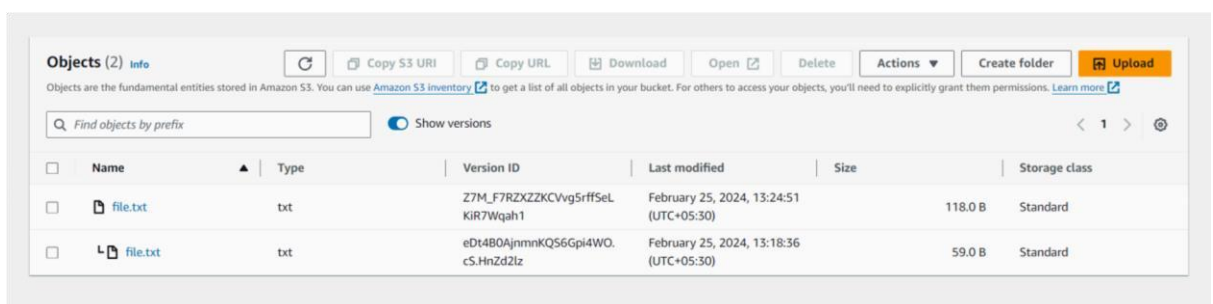3. Open the objects section of your bucket and upload any file you want versioning enabled for this file. Click on upload.

4. There are two options i.e. we can either upload file or folder, click on add files and select the file. Scroll down and click on upload.


5. Now make changes in the file and upload the new version. To see the versions click on "Show versions" option.

Hosting the static website using S3 service.

Amazon S3 service provides feature called "Static website hosting" that allows you to host static website from your S3 bucket. This feature is useful for hosting simple website consist of HTML, CSS, JavaScript, images & static elements. We'll host static gym web page, follow steps mentioned below:

1. Go to the bucket we have created and open the "Properties" section of the website. Scroll all the way down to the "Static website hosting" section and click on Edit.
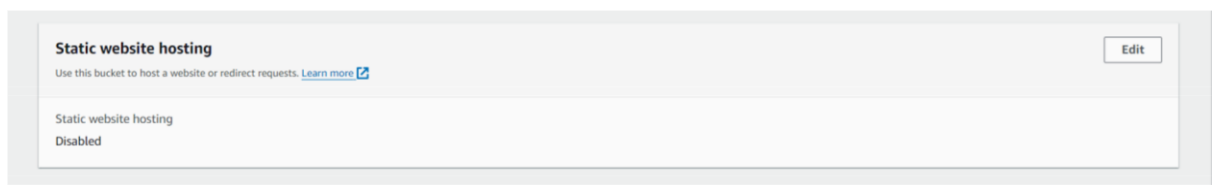
2. Click on enable then add index document name (This is the document that run by browser whenever we search for the url for our website), there is also error document name which is optional. Click on save changes.
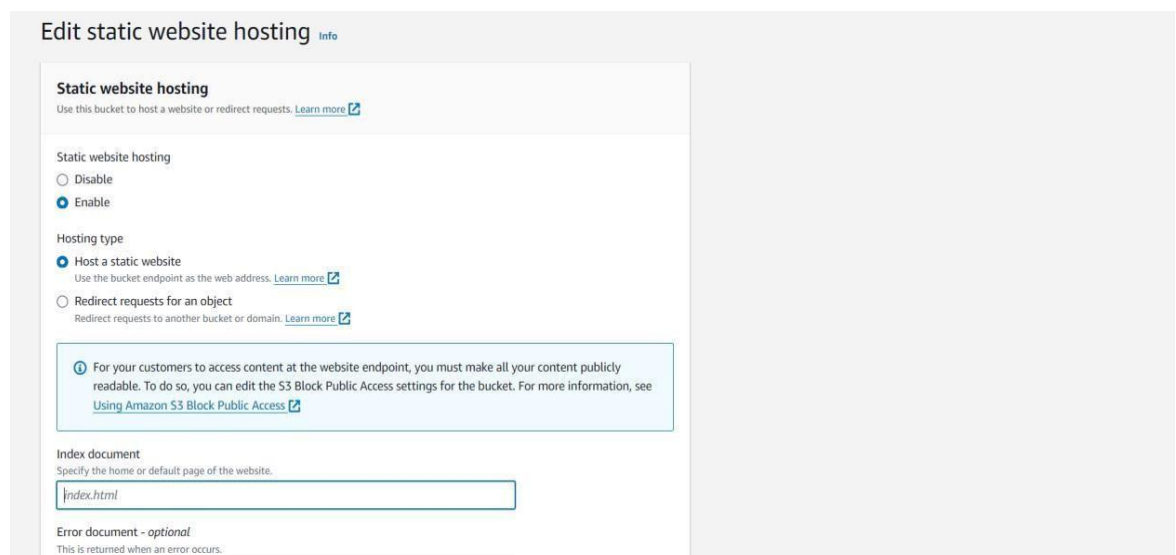
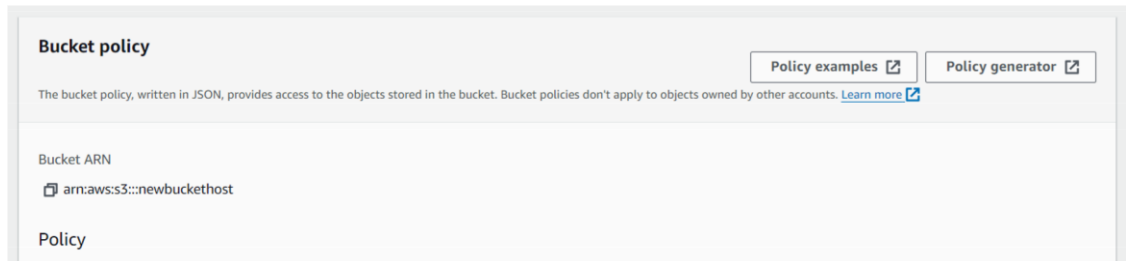**3.** Upload all the required folders and files of your project.
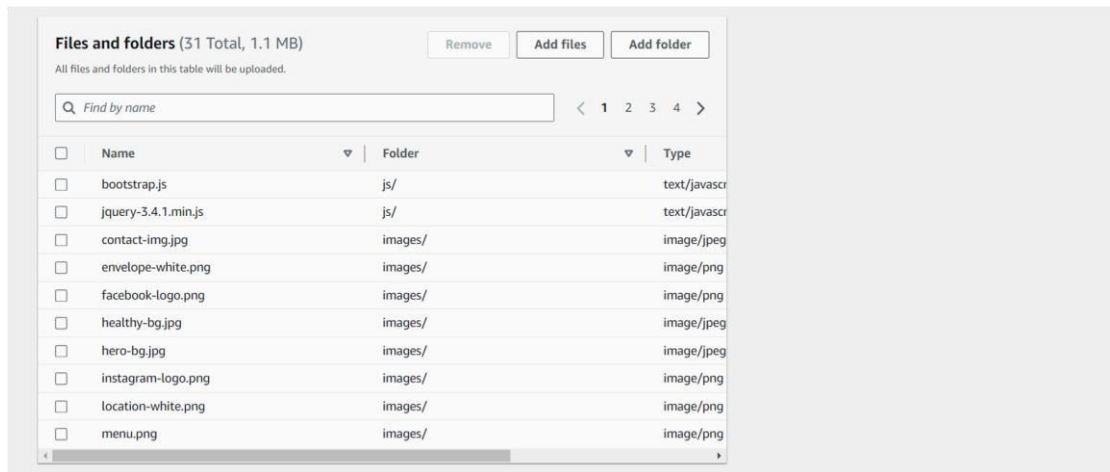
4. Now we have to create bucket policy. This option is under the bucket permissions.

Bucket policy is the JSON file which acts as the set of rules which include who can access the website, making files public, etc. For example, think of the bucket policy like you set the rules for who can come inside your house and what they can do once they're inside.
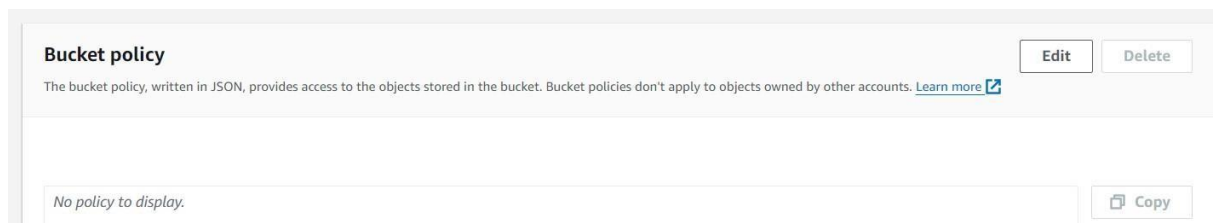
5. Click on edit and then we can write our own JSON script or you can also create policy using "Policy generator" option. Since we'll go to policy generator because of its simplicity and no knowledge of JSON is required.
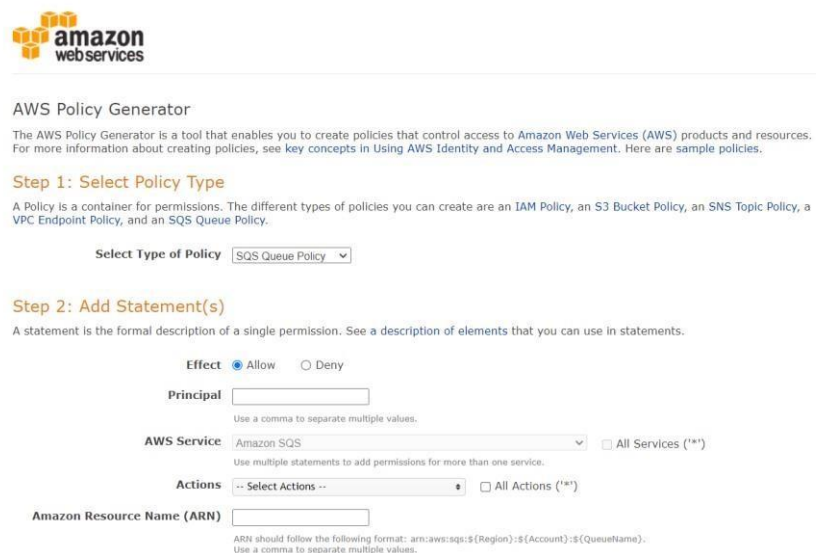

6. Select type of policy generator as S3, give principal value *, then select action as GetObject and last enter the ARN of the bucket hosting the website. Then click on add statement and then "Generate policy".
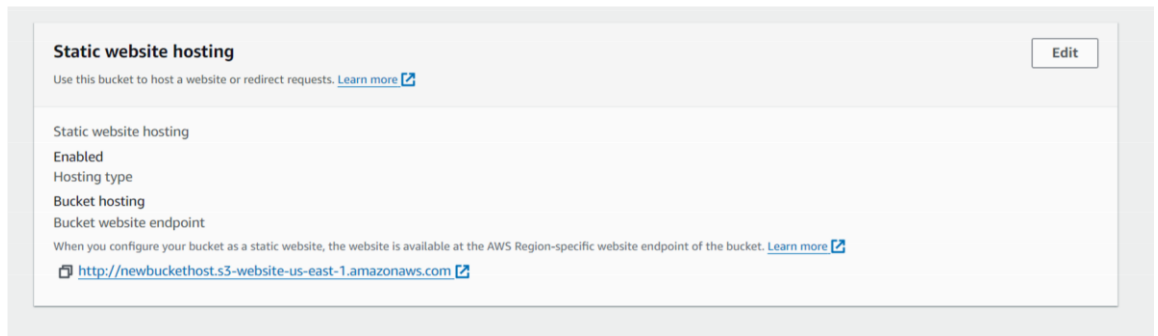
7. Now copy the policy.

8. Go to bucket policy and paste it there and then save changes.

9. Go to properties scroll all the way down again to the static website hosting and copy the link. Paste it in incognito mode of your browser to see the hosted website.

Website Is Hosted Successfully…..