Project : Host a Website on AWS

This beginner-friendly project which will guide us through setting up a personal website using Amazon S3 and connecting it with a custom domain through Amazon Route 53.

Step #1: Design Your Website
- Design your own personal website or download an existing template.
- You can find free templates at [free-css.com](https://www.free-css.com/).

Step #2: Set Up Amazon S3 Bucket
- Go to the AWS Management Console and open the Amazon S3 console.
- Click "Create bucket" and enter a unique name for your bucket.(caysusdilan.com)
- In the "Properties" section, enable "Static website hosting."
- Upload your website files to the bucket.
- Set the bucket permissions to allow public access.

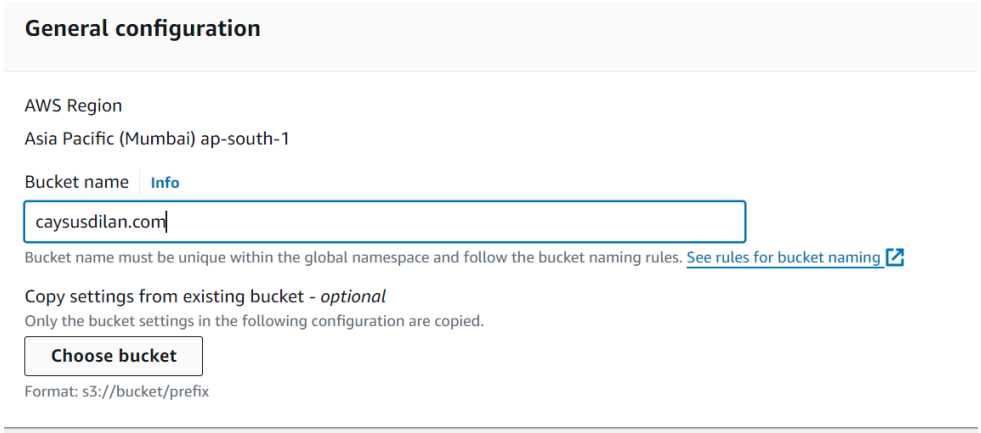
Step #3: Purchase a Custom Domain through Amazon Route 53
- Open the Amazon Route 53 console.
- Choose "Domain registration" and then "Register domain."
- Follow the prompts to purchase your custom domain.
- In the "Route 53 hosted zones," create a new record set.
- Enter your S3 bucket's endpoint as the alias target.

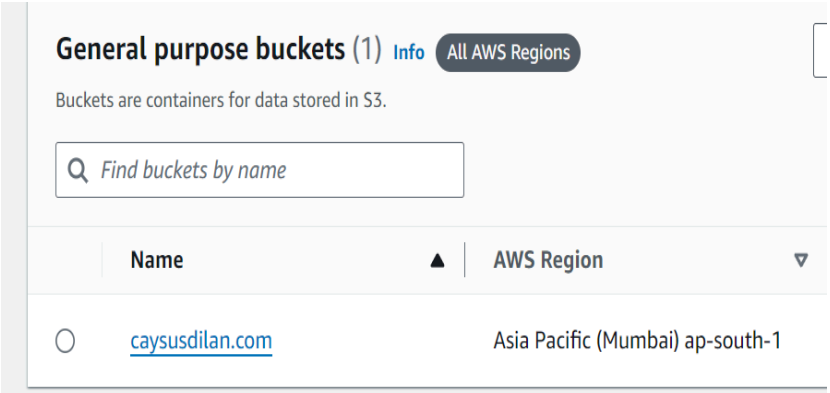
- Additional time may be required for customizing the website design.

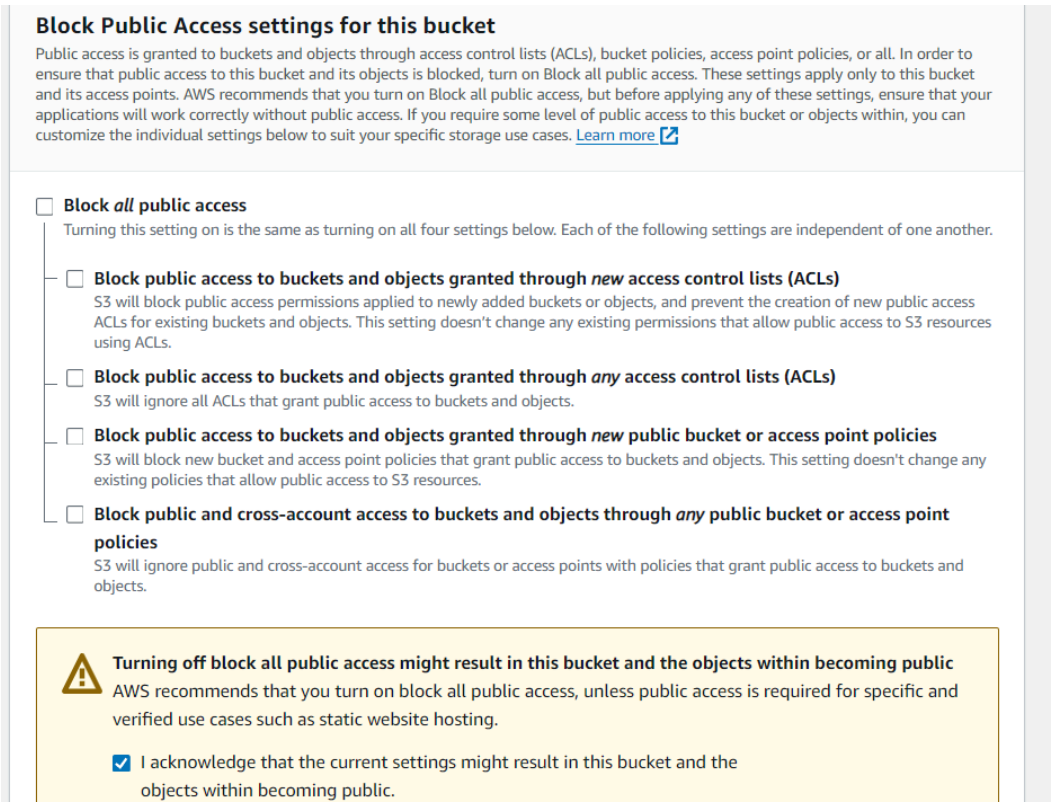
PROJECT OVERVIEW

- Bucket creation

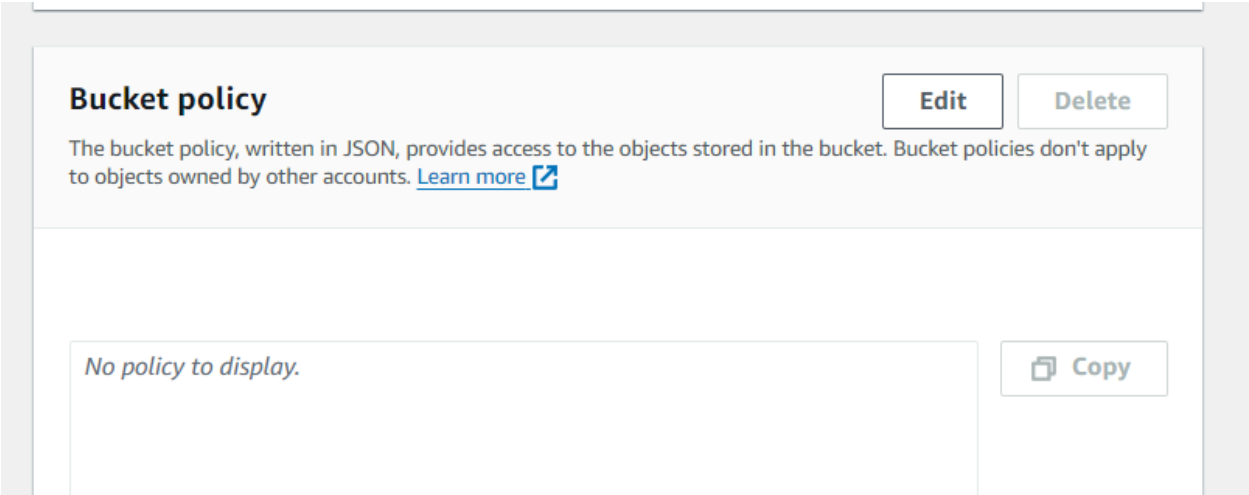
  Name of the Bucket is caysusdilan.com



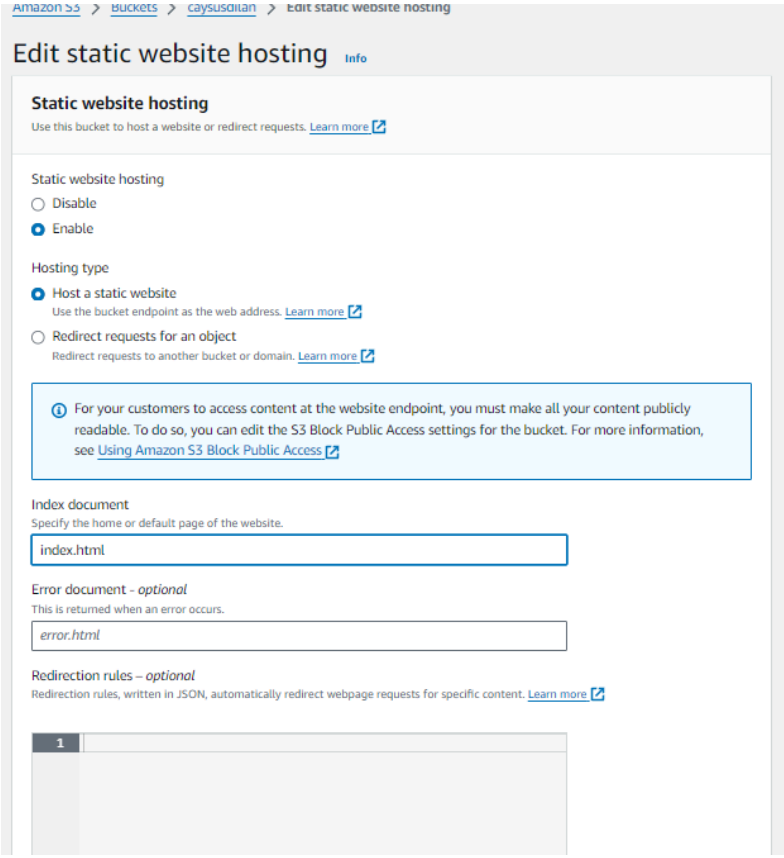


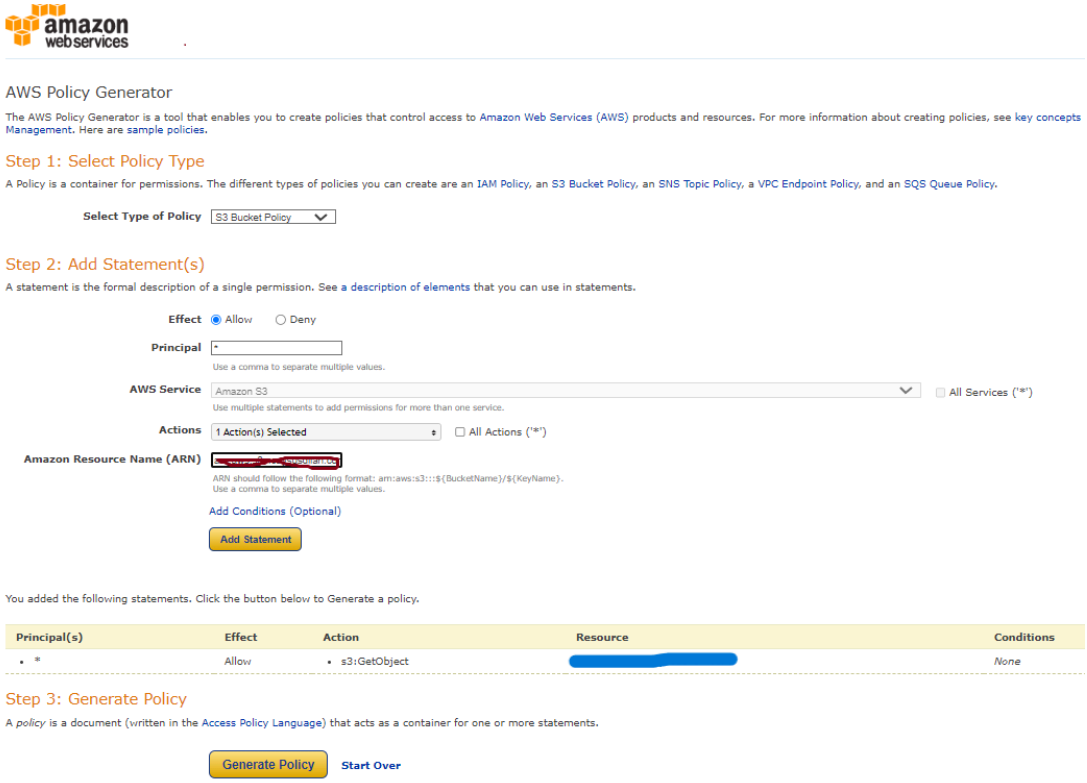


- Uncheck every option so that your Bucket is publicly visible
- Keep the rest options as it is and create a bucket .

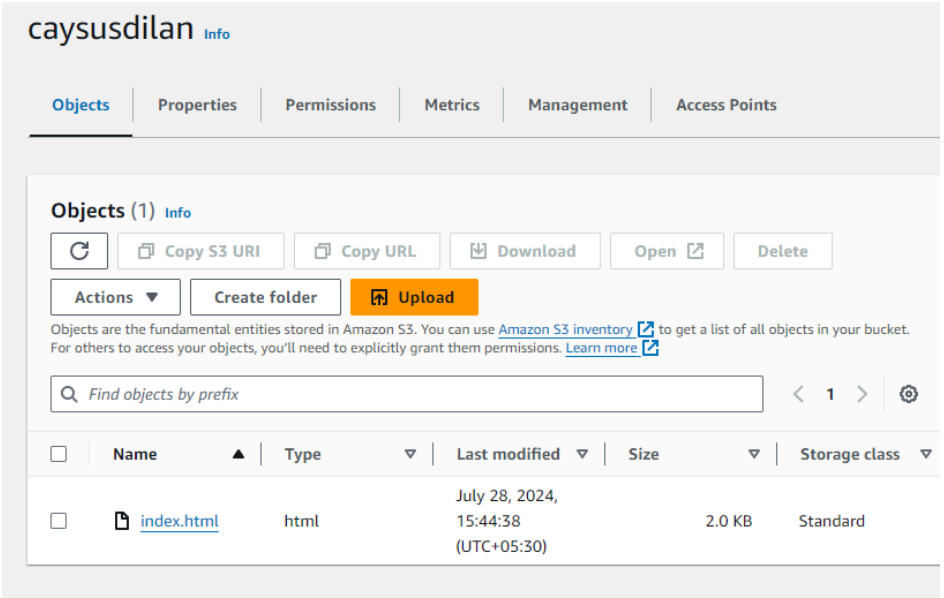


- Click on the bucket created , go to permissions, scroll down to Bucket Policy , click on edit .
- Copy the Bucket ARN ,Click on policy generator.

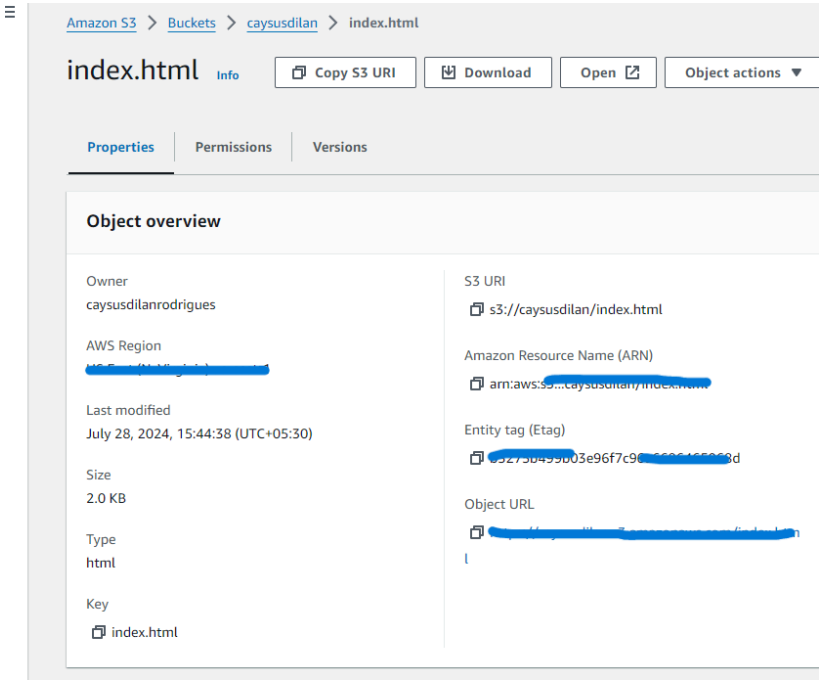




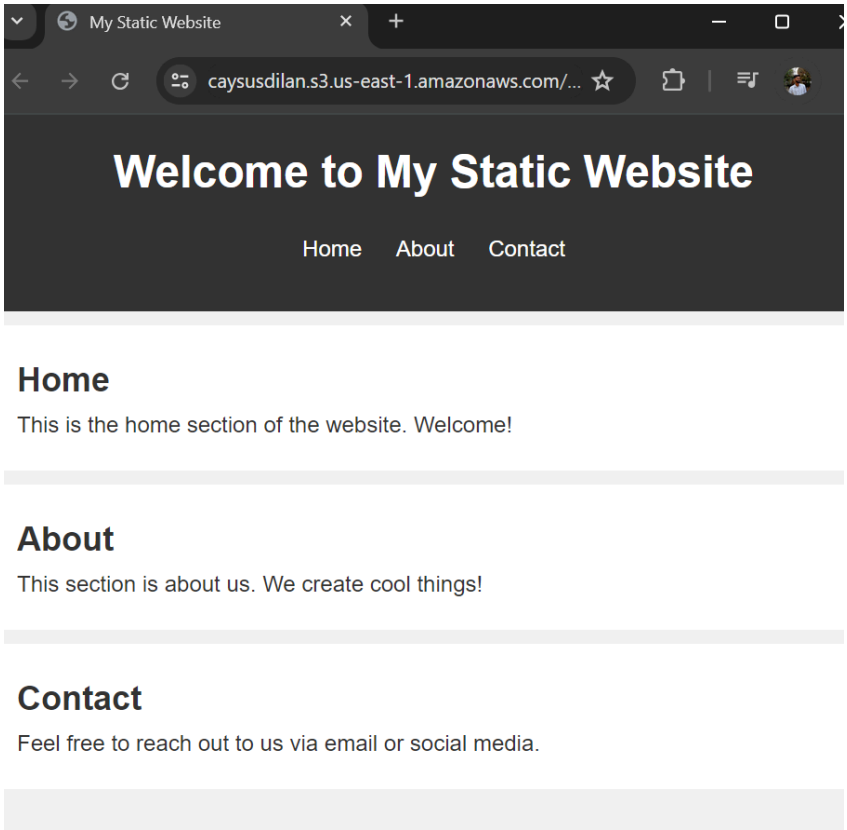
- Go to permissions and scroll down and **enable the Static website Hosting** option.(off by default) . Once enabled enter the name of the index file and save .
- Fill in all the required fields and click on generate policy
- To generate a policy: Choose **S3 bucket policy** in the choose type of policy >> type ***** in the principal section >> **Allow** Effect >> select **Get Object from the actions** - **copy the arn** from bucket edit policy and while pasting add **/*** to the end - **add statement** - **generate policy** - **copy the policy and paste it in edit policy section** - **save the policy** - **then upload the files into the bucket** .



- Click on the bucket , above you can see that I have uploaded a file name index.html
- Click on the file , then click open on the options or copy the object url provided .
- Paste the url in your browser's address bar , you can view the static website that I hoisted just now .



- Your website is visible publicly



- Now the Static website is hosted by the link provided by the Aws s3.
- Now to **connect your S3 bucket to the custom Amazon provided Url** , to redirect the purchased domain to this S3 bucket go to Route 53 , **purchase a domain with the available top level domain**(example: .com, .uk, .us)
- **Click on the hosted zone** in the Route 53 dashboard ,you will find your domain you purchased.
- Click on the domain name, here we need to **add an additional record to make sure that the bucket is connected to the route 53 domain name.**
- Click on **add record** >> choose **simple routing policy** >> **define a simple record** >> in the Value/Route traffic to option **select Alias to S3 bucket** >> next choose the **region where you hosted the bucket** >> **select the s3 endpoint** (provided automatically) >> evaluate target health=NO >> **click define simple record** >> double the fields entered and **click create record**(it may take some time to propagate) .
- Once it's propagated any user types your domain the browser they can view the website .You can see that url you enter will be pointing to route 53 domain and contents are from the S3 bucket you hosted.