

Launch a website on Amazon S3 | AWS Project |

Let's build together! In this blog, we will be deploying a static website on AWS. This is a beginner-friendly mini AWS project:

- **Services used:** Amazon S3, Amazon Route 53
- **Duration:** 15-20 minutes
- **Cost** (with free tier): ~\$3 USD for custom domain name

For the static web page hosting, we need only AWS S3 and Amazon Route 53:

About Amazon Route 53:

Amazon **Route 53** is a highly available and scalable [Domain Name System \(DNS\)](#) web service. **Route 53** connects user requests to internet applications running on AWS or on-premises.

Create, visualize, and scale complex routing relationships between records and policies with easy-to-use global **DNS** features.

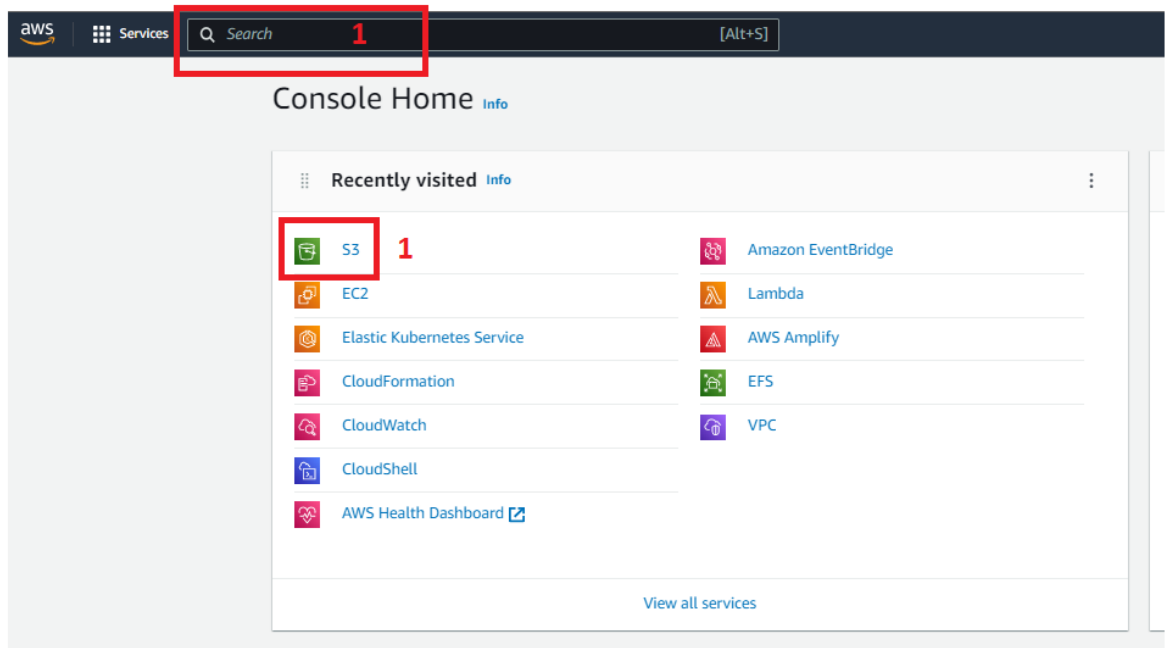
About S3:

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

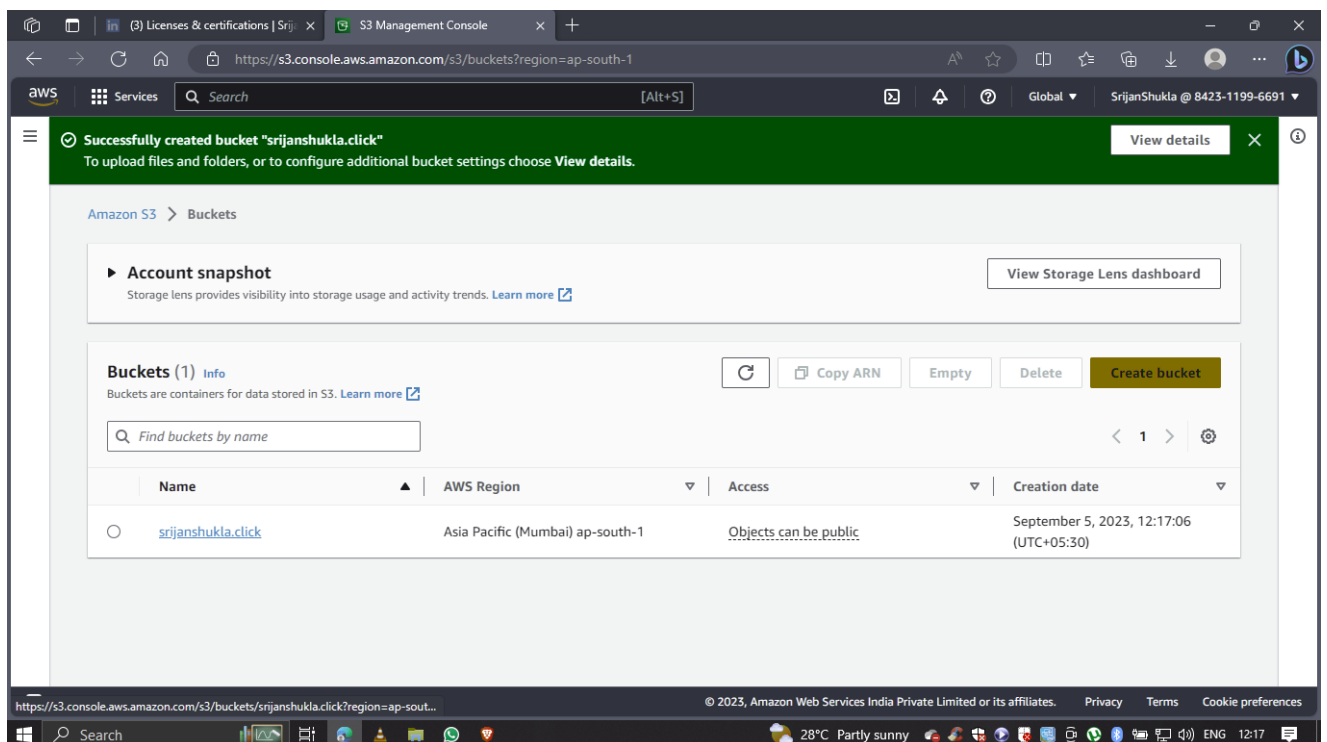
Store and protect any amount of data for a range of use cases, such as data lakes, websites, cloud-native applications, backups, archive, machine learning, and analytics.

This project is straightforward and fairly easy to complete. Follow the below steps and you can understand how to deploy the static web:

Navigate to the **S3** service in the **AWS** console (You can either search this service from the "Search bar" or if you have used this service previously, it will appear under the "Recently Visited" tab.)



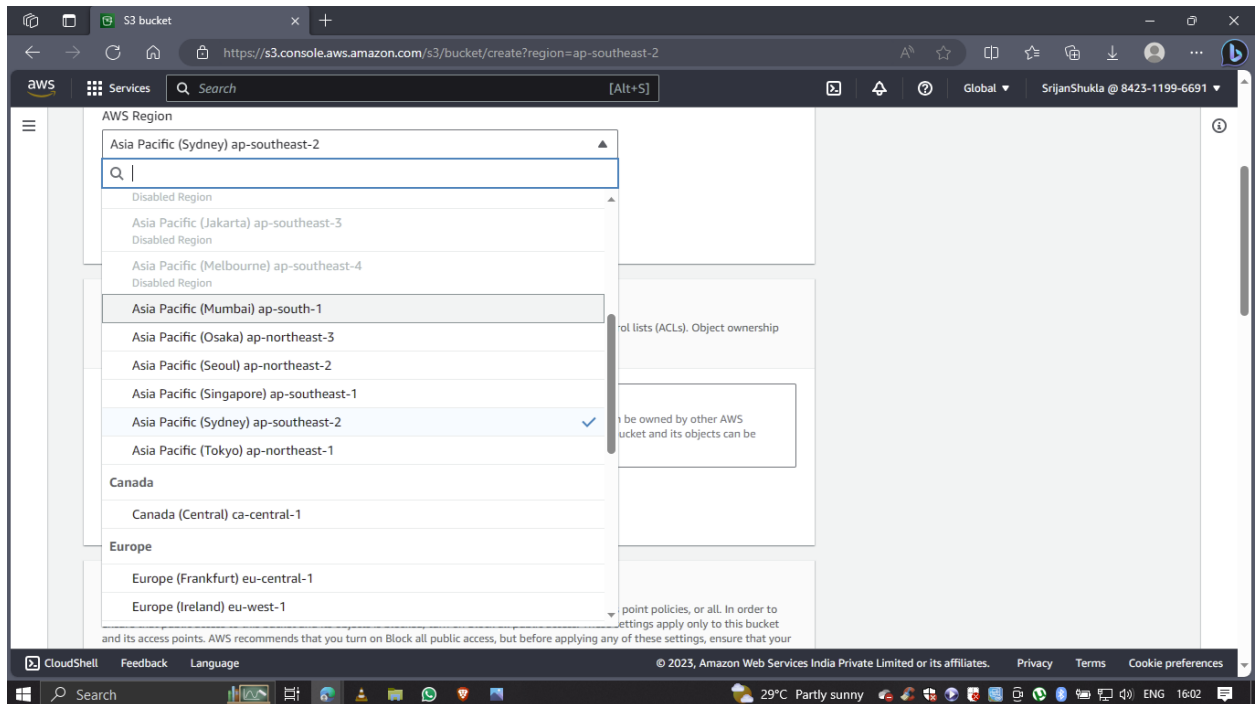
- Click on the "**Create bucket**" option to create the bucket.
- Create a bucket with a unique name. I created one using the "**Create Bucket**" option and then with the name "[srijanshukla.click](#)".



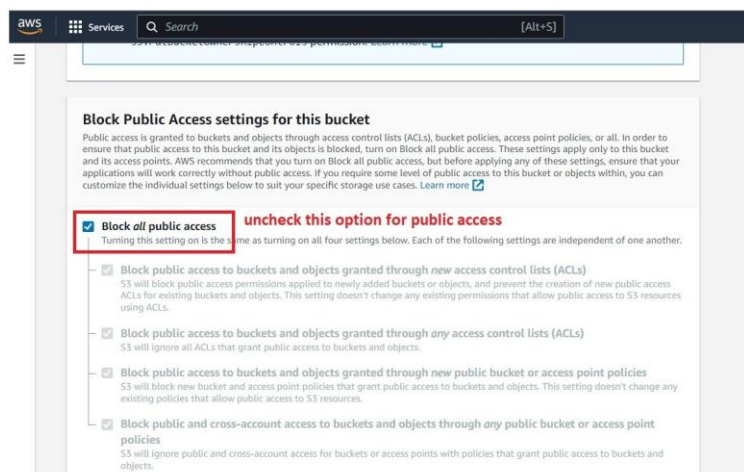
- While creating the bucket, make sure to enable the "**ACLs enabled**" option.

If the bucket is created without issues, it will appear on the **S3** console as shown below. Else, it will point you to the error point and we can modify the same.

- You need to choose the **AWS** region as closet you can choose. for me the closet region was **Mumbai (Asia Pacific)** region.



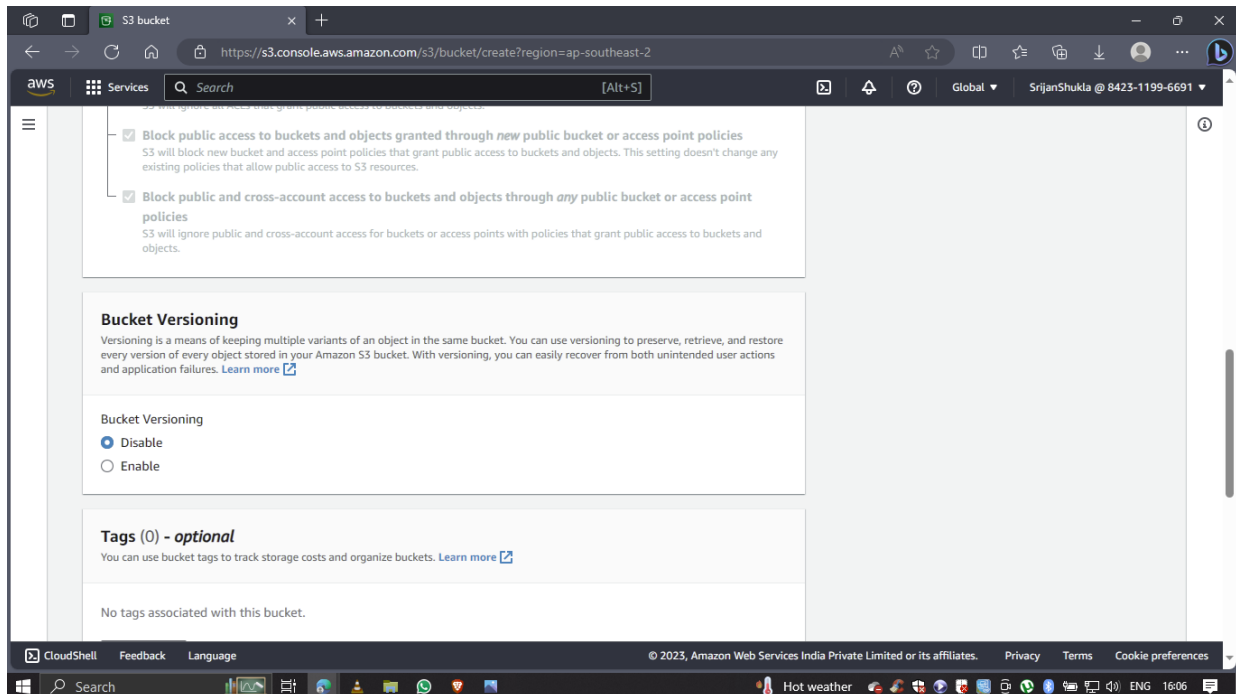
- Uncheck the "**Block All Public Access**". Agree to the terms and conditions by checking the "I acknowledge" box under the block all public access setting.



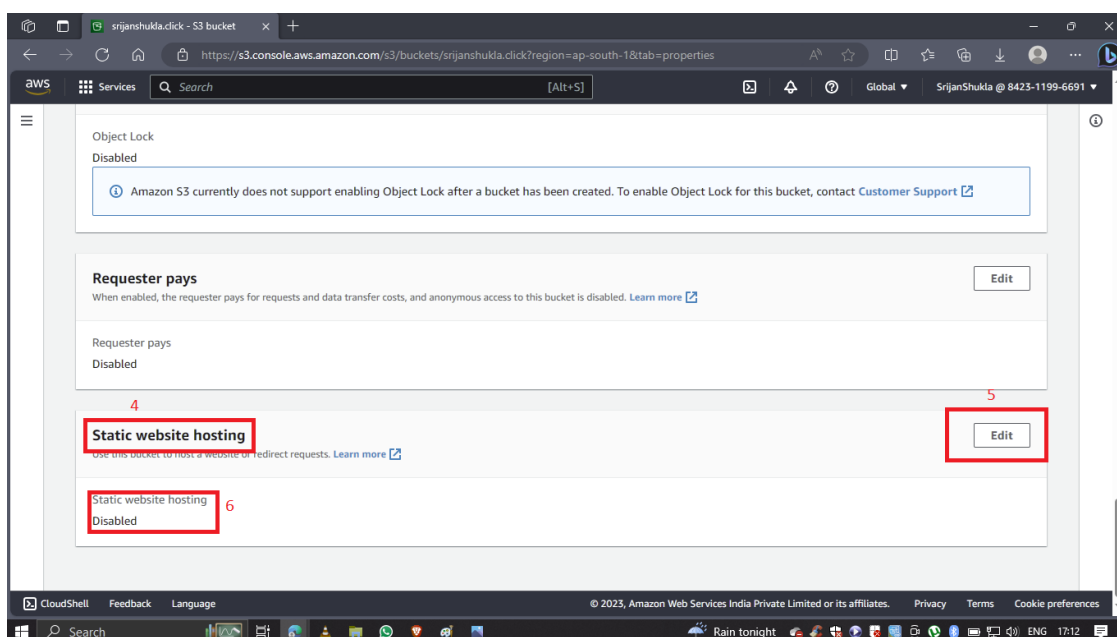
- Create/Upload a html file into your bucket, i am manifesting a file with data of **HTML** named index.html,i am floating the sample html file for your ease as

youtube/1-static-website-on-aws/index.html at main · techwithlucy/youtube · GitHub

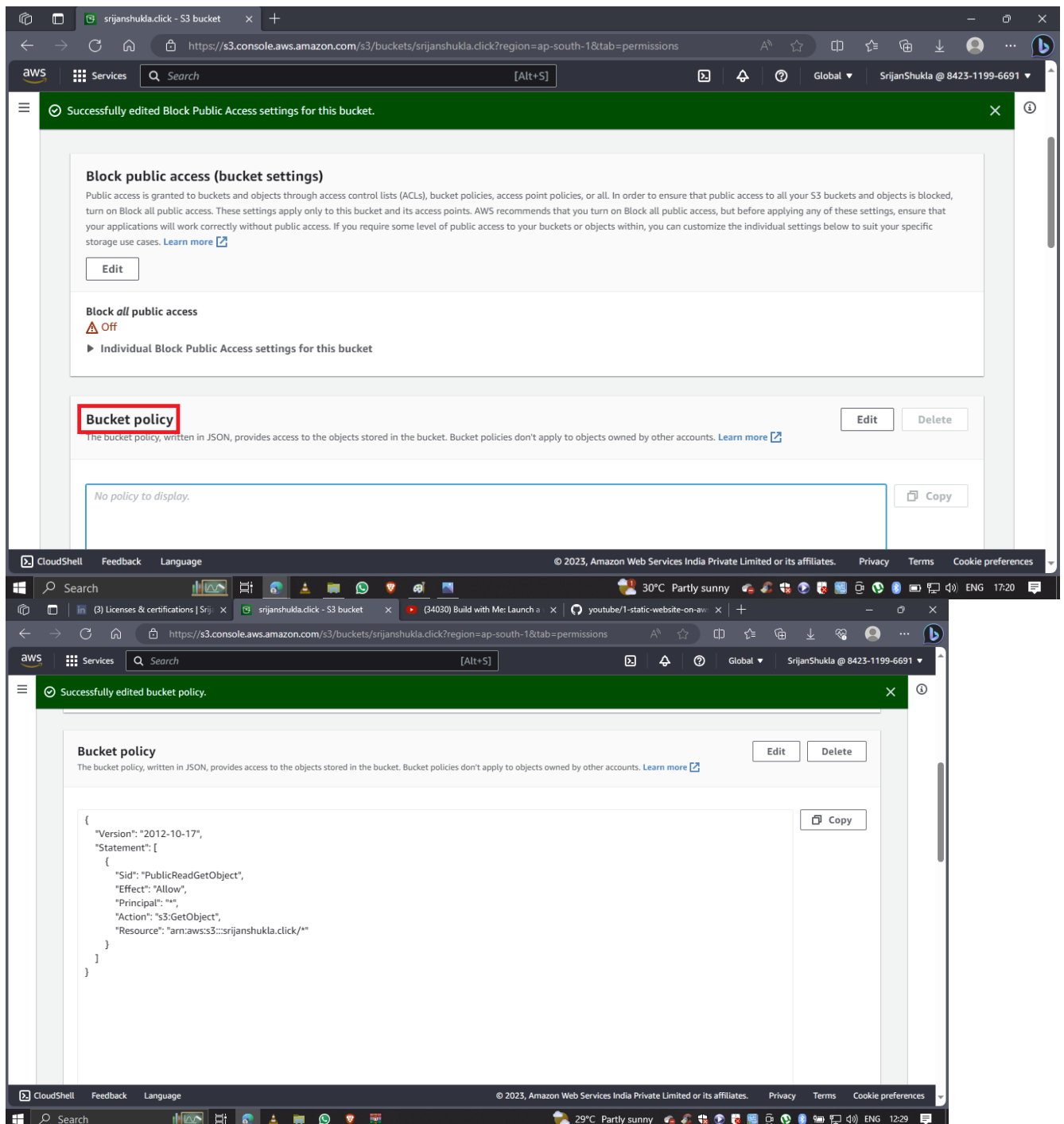
- You can Enable the bucket versioning option it will help from accidental deletions.



- Now, In the **Buckets** list, choose the name of the bucket that you want to enable static website hosting, for us it will be srijanshukla.click.
- Choose **Properties**, Under **Static website hosting**, choose **Edit**.
- Choose **Use this bucket to host a website**, Under **Static website hosting**, choose **Enable**.

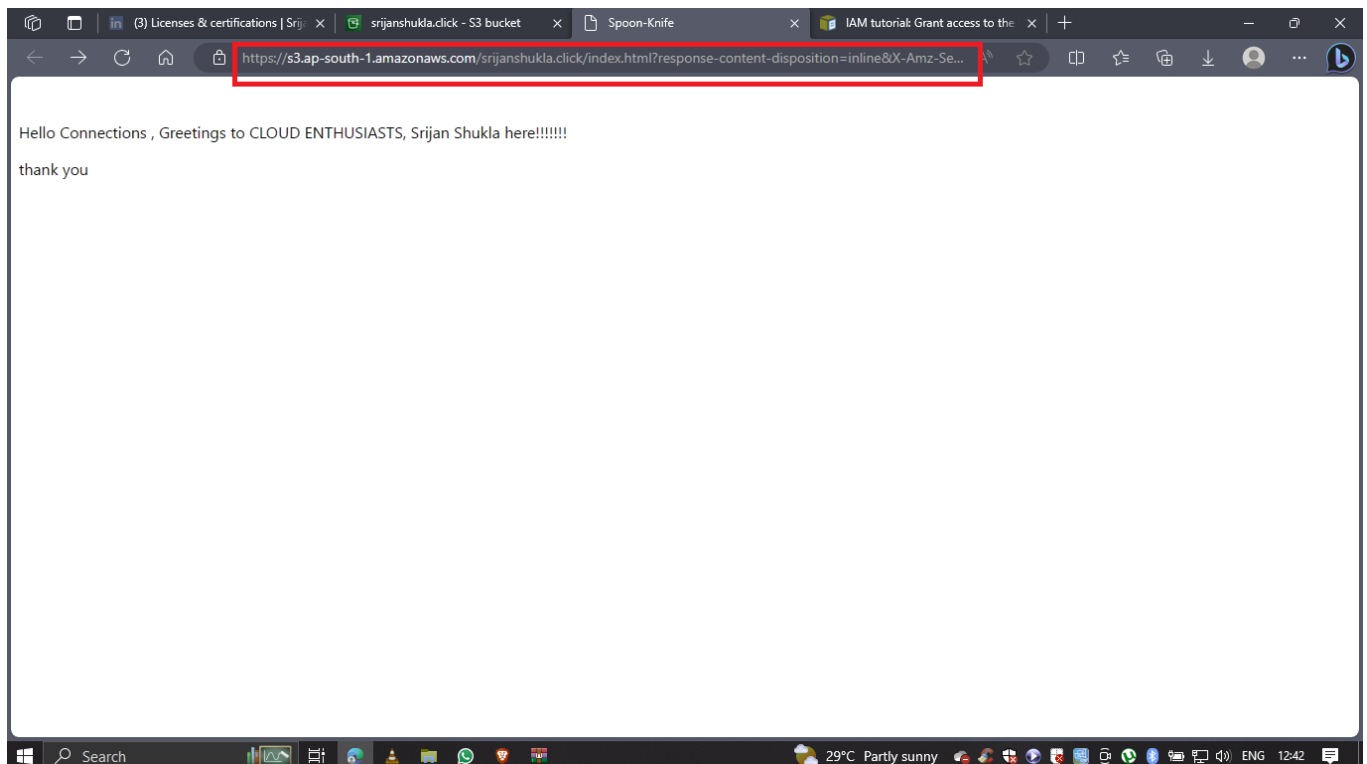


- In **Index document**, enter the file name of the index document, typically index.html.
- Now in permission section, we have to update the **Resource Policy** of bucket.

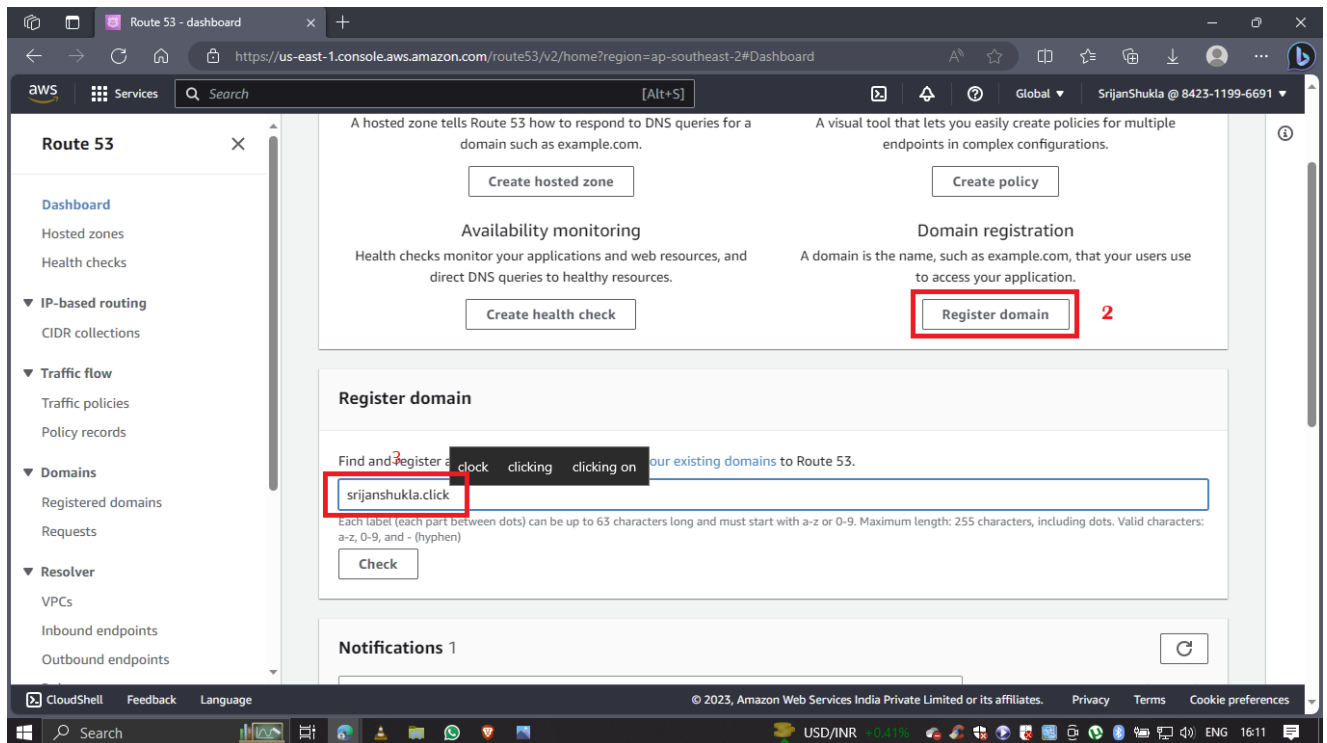


In the Bucket Policy section, we have to upload the policy file or we can also achieve it by custom method. I am floating the sample policy file i used, all you have to do is to update your bucket name there, [youtube/1-static-website-on-aws/S3 Bucket Policy at main · techwithlucy/youtube · GitHub](https://github.com/techwithlucy/youtube/blob/main/S3%20Bucket%20Policy.json)

- After doing in **resource policy**, when we open our web, it will be like:

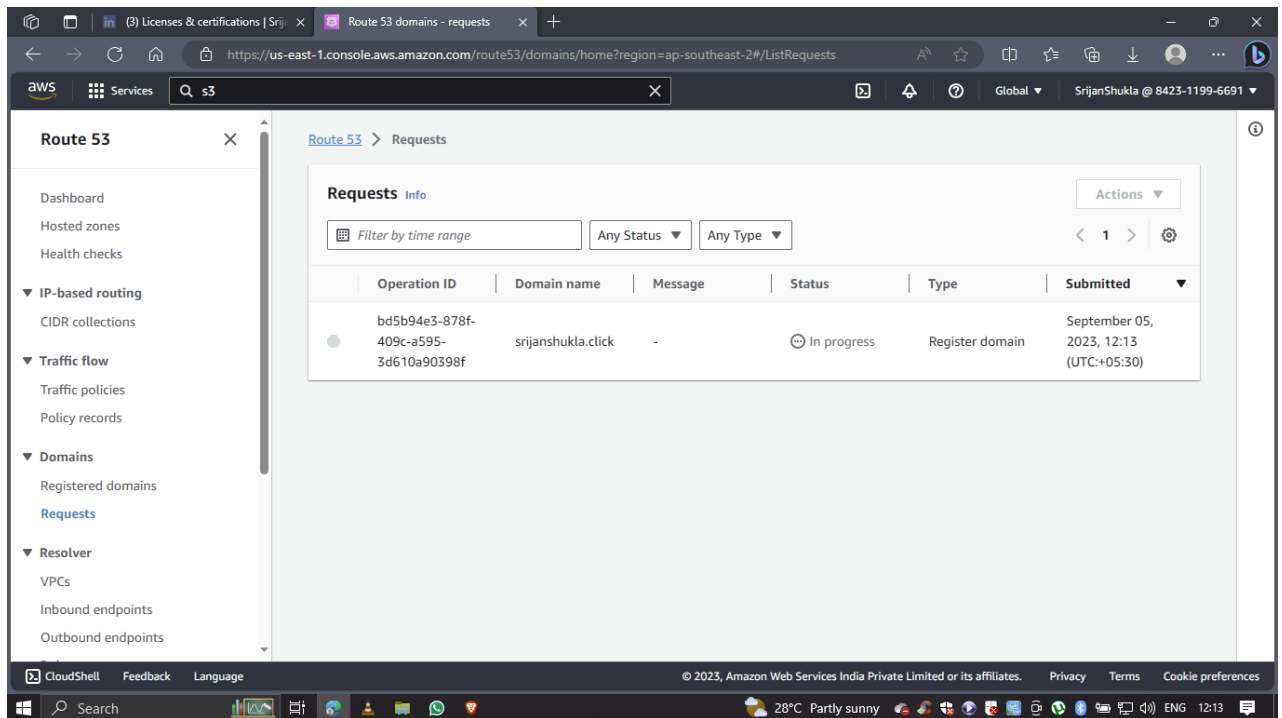


- But the URL on our web page is Amazon provided, not custom AWS, we wanted so we have to establish the relation between Amazon Route 53 & AWS S3.
- Now after successfully creating and uploading task on our **S3** bucket we need to register our Domain name in **Amazon Route 53**, you can jump ahead if you already have one registered.



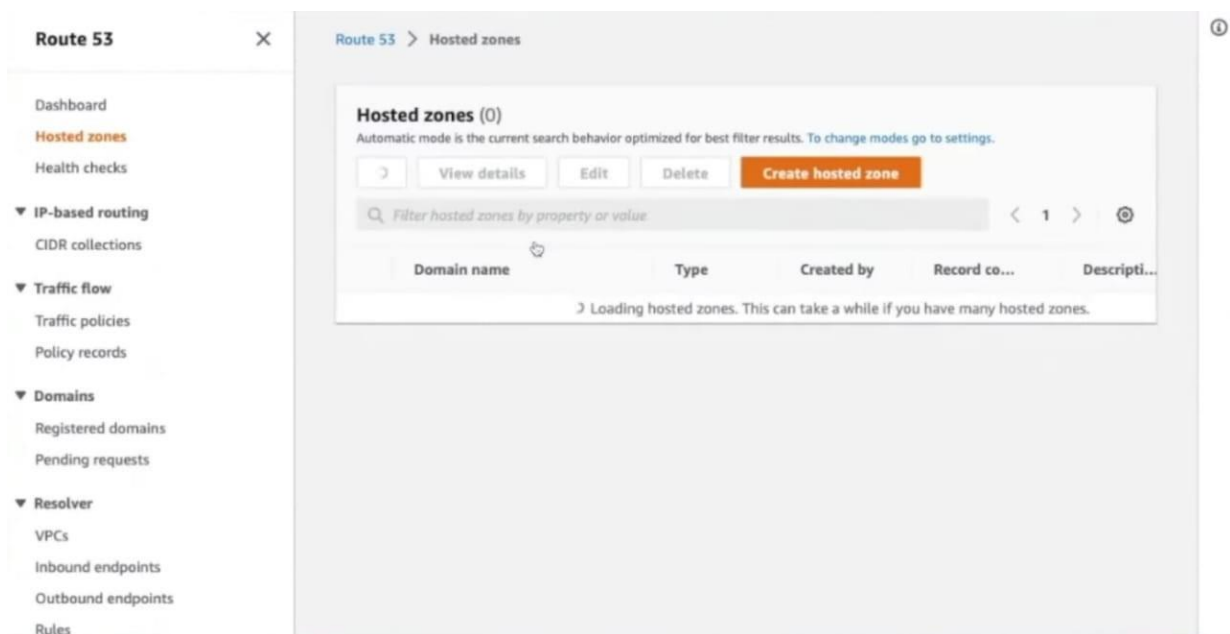
NOTE: The name of S3 bucket and your registered domain should match, i wrote srijanshukla.click on both the sides.

- Your domain will register after taking nearly 20 - 30 minutes, for me it was just 5 minutes.
- AWS will wait till you open the Domain registration in progress: To finish registering your domain with Route 53, you must sign into the AWS Management Console, open the Billing and Cost Management console, and verify your payment for the registration.

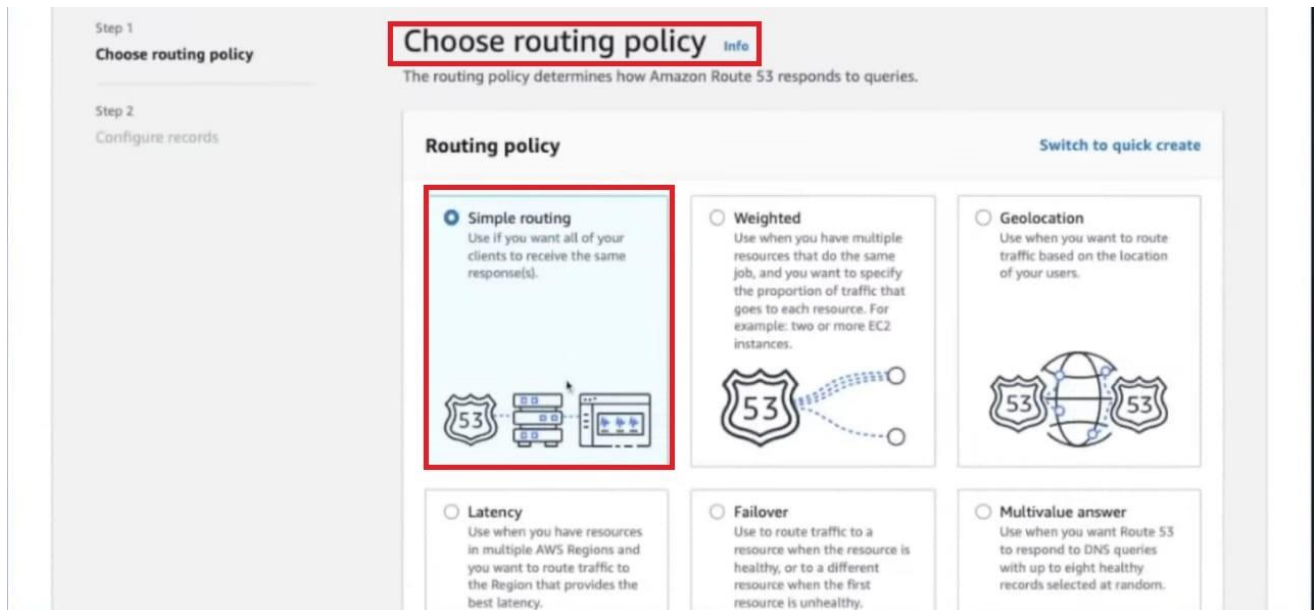


- After registering of our domain, it's time to open our Hosted Zone.

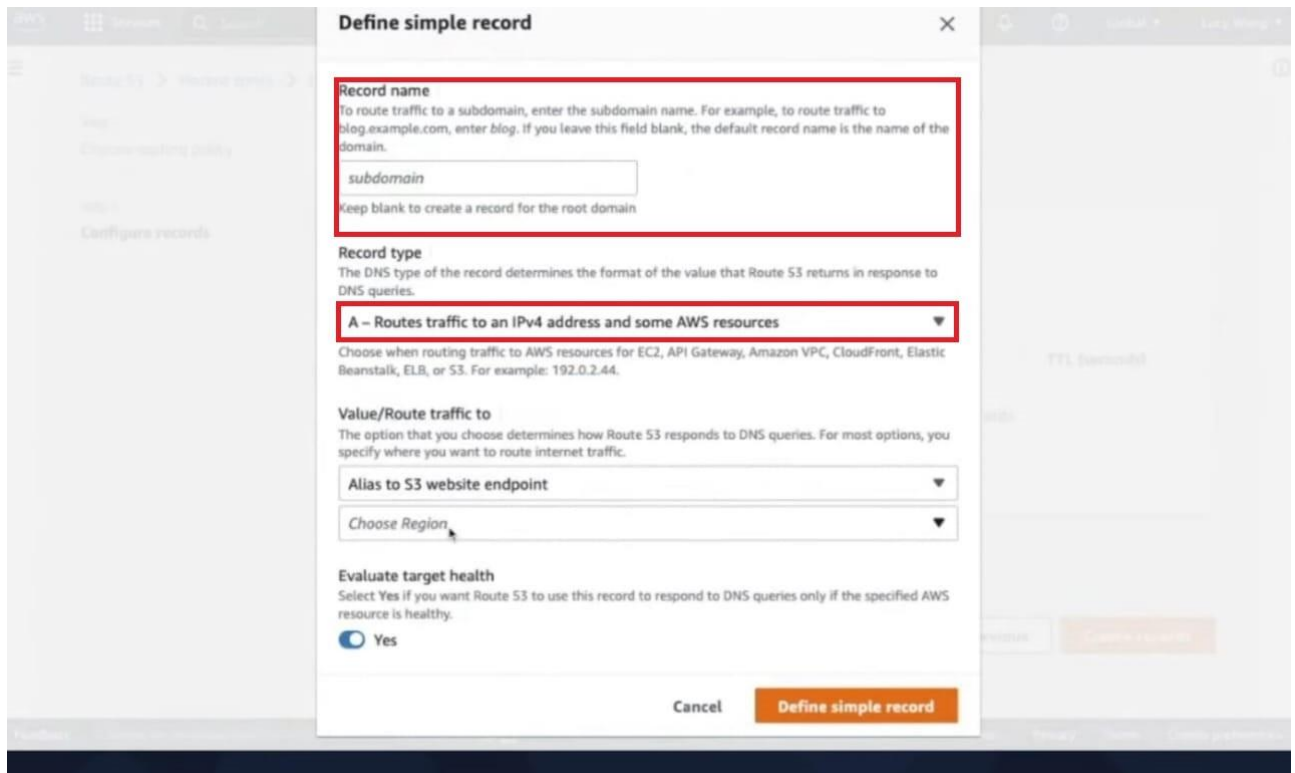
Navigate to the AWS Route 53 service, open hosted zone.



- Afterwards, Specify the following values:**Routing policy & Record Name**Choose the applicable routing policy.For us, the need is of Simple Routing policy.

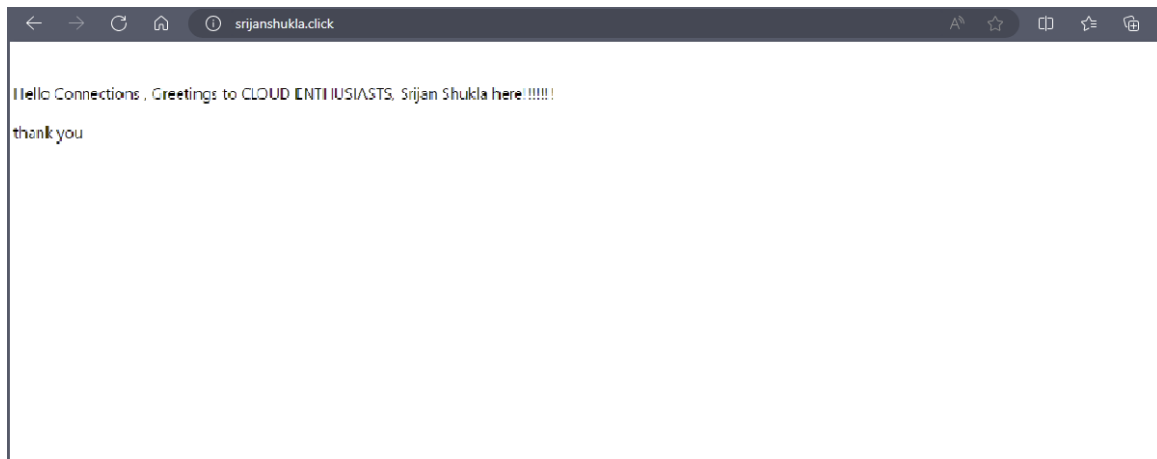


- About Simple Routing policy: Simple Routing Policy is the most basic routing policy defined using an A record to resolve to a single resource always without any specific rules.
- **Record name** Enter the domain name that you want to use to route traffic to your S3 bucket. The default value is the name of the hosted zone. **Record type**: Choose **A – IPv4 address**.



Here, we have to select "**Alias to S3 website endpoint**" and the region will be same as Mumbai region.

- We have nothing to do with **Evaluate Target health** as it is simply a demo kind project, not real time active project.
- Then define Simple Records and create them. It takes some few more minutes to evaluate.
- Now you can see it pointing to our S3 bucket & showing same message but with our Custom domain name. The web content can be now seen directly through our domain.



All right!! Everything is done and working as well, so if you are doing the demo alone, make sure you delete all the resources created to save your money!! Else, a bill will be generated for sure :)

Summary :

1. Use an Amazon S3 bucket to host a sample website.
2. Create custom domain name using Amazon Route 53.
3. Enable static website hosting and direct the domain to the S3 bucket.

