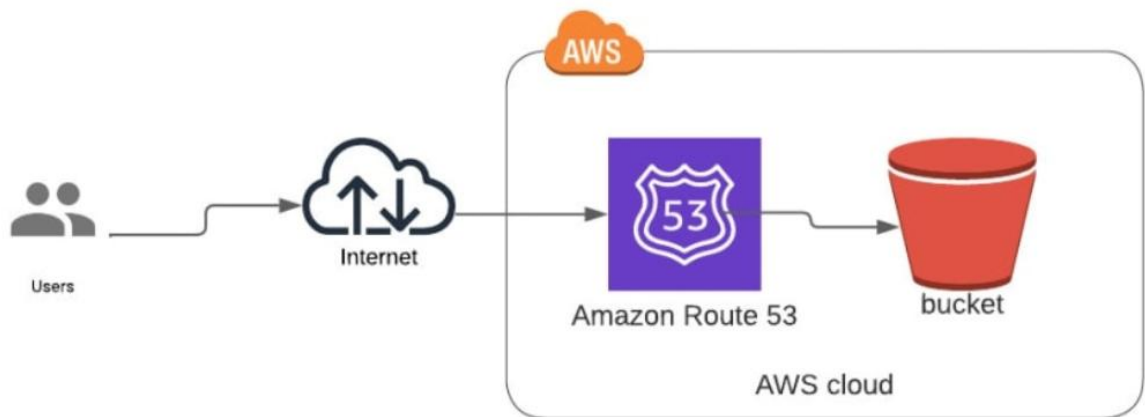


Project



Deploying a static website on Amazon S3 using Amazon Route 53

Host a Static website on Amazon S3 Bucket using Route 53

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Himanshu Nimje
Nagpur-440017

Overview

The object storage service, AWS Simple Storage Service (S3), is one of the many storage options provided by AWS. Aside from being suitable for storing any data in AWS S3, it goes further by offering the option of hosting static websites. Any static website can be hosted and made accessible using AWS S3 in minutes, negating the need for more time-consuming static web hosting techniques. This article explains how to host a static website on S3.

Introduction

Static websites deliver HTML, JavaScript, images, video and other files to your website visitors. Static websites are very low cost, provide high-levels of reliability, require almost no IT administration, and scale to handle enterprise-level traffic with no additional work.

Benefits

1. No ongoing maintenance
2. Highly Available
3. Security
4. Simple way to register a custom domain
5. Easy to manage and maintain
6. Easy integration with other AWS services (like CloudFront, Route53, CloudWatch, Lambda)

Used

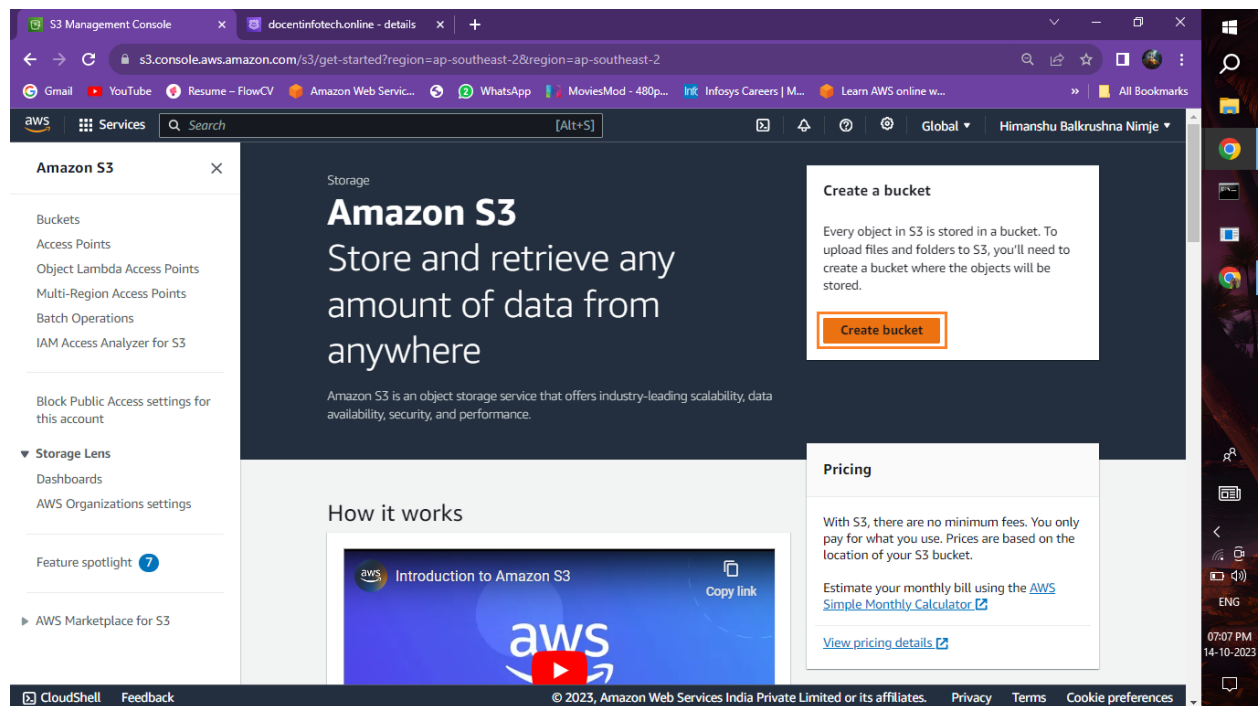
Amazon S3
Amazon Route 53

Steps

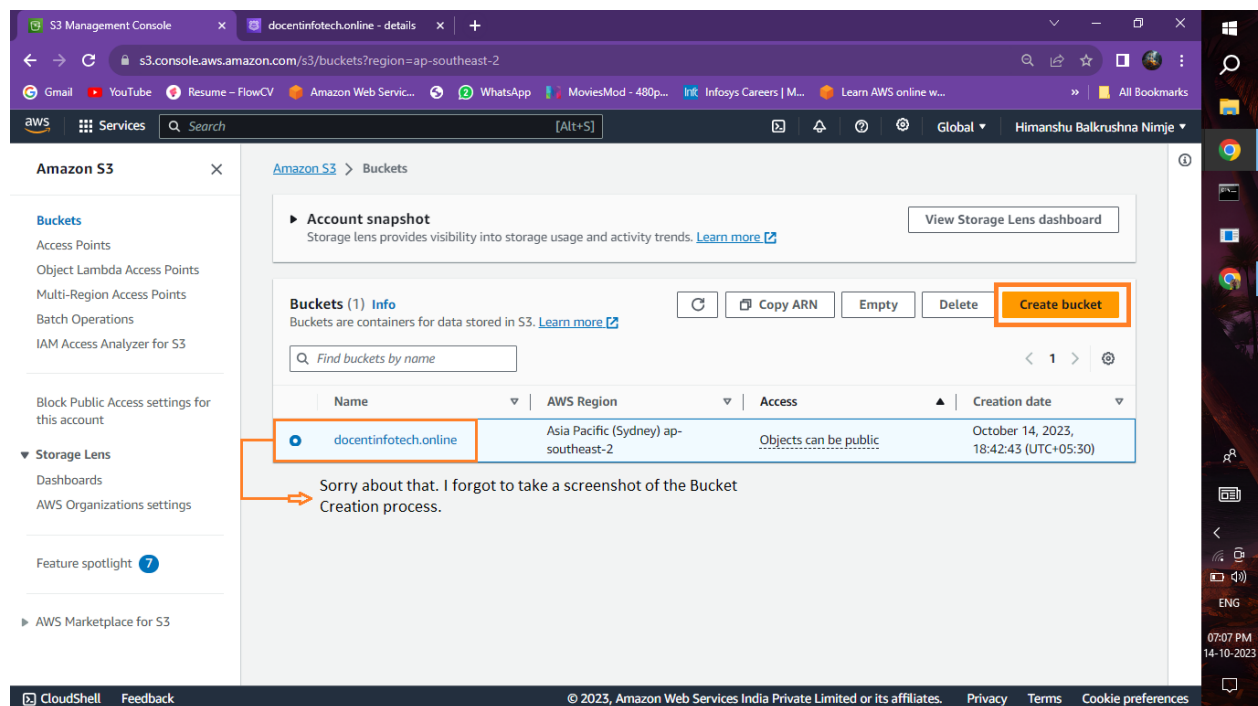
1. Create or purchase a domain name using Amazon Route 53
2. Create an S3 bucket
3. Upload your website to your S3 bucket
4. Enable static website hosting on S3
5. Attach a bucket policy

Implementation ↴

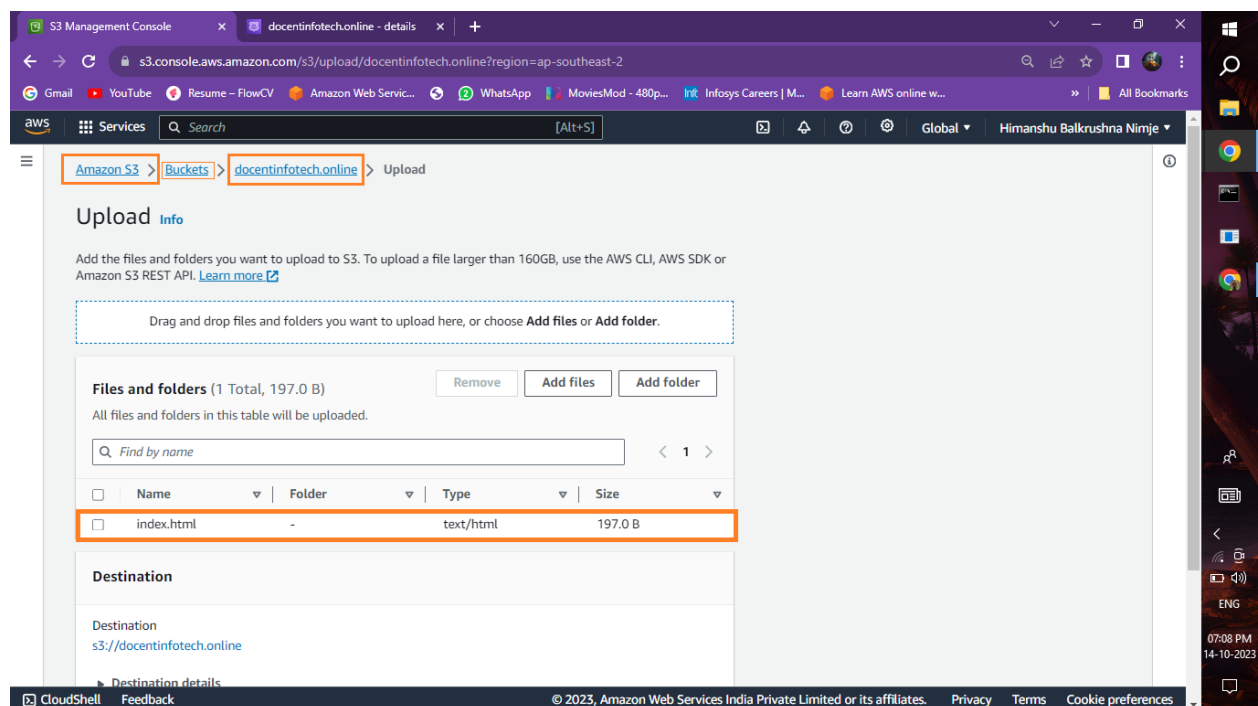
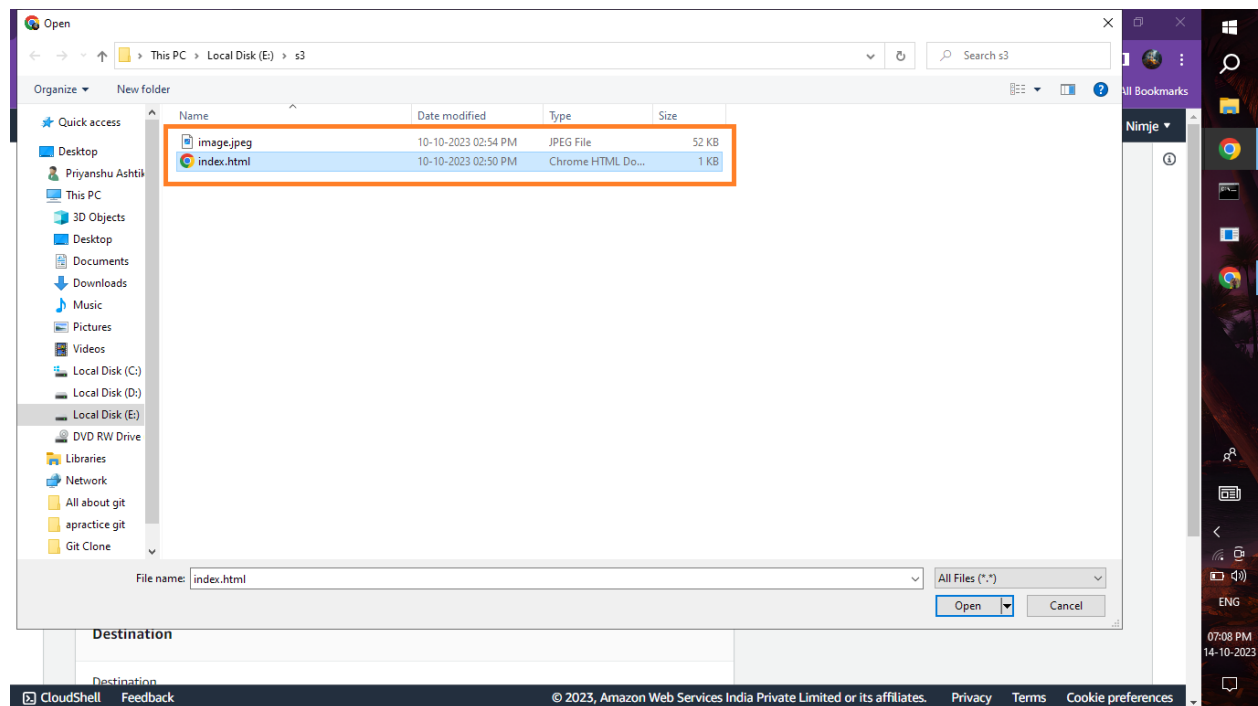
Navigate to Amazon S3 Dashboard and Create a bucket



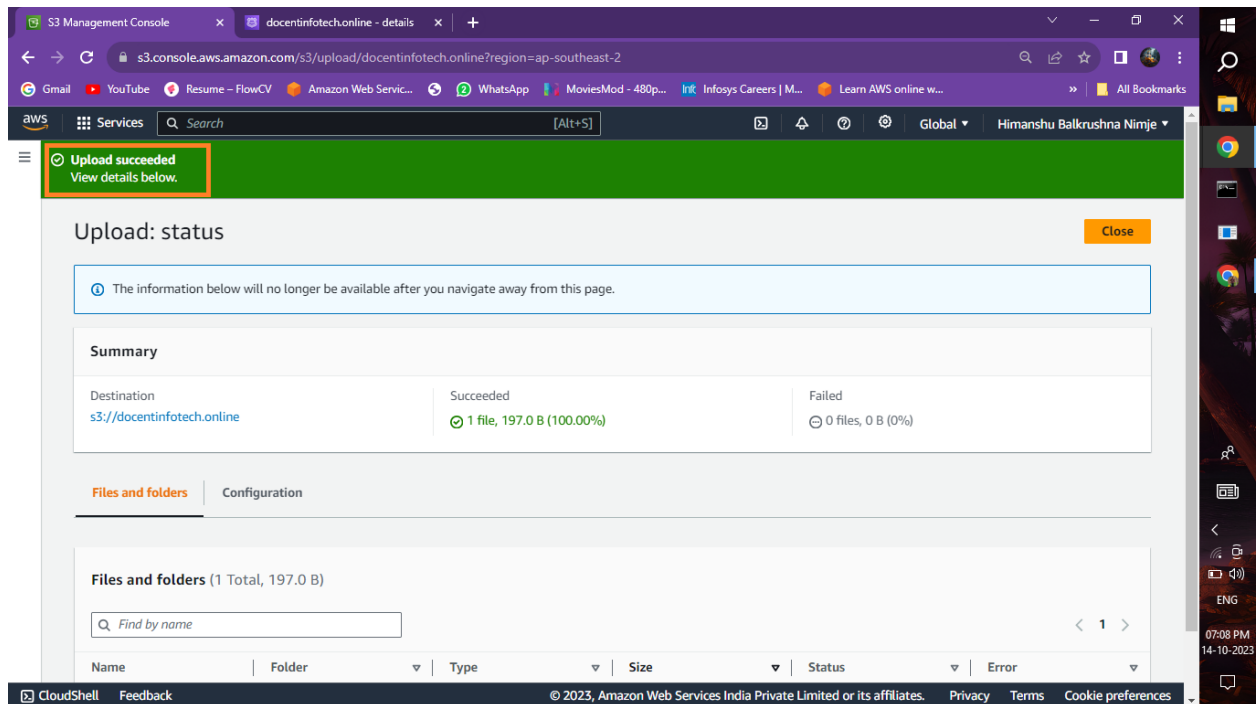
Naming the Bucket of Same Domain name



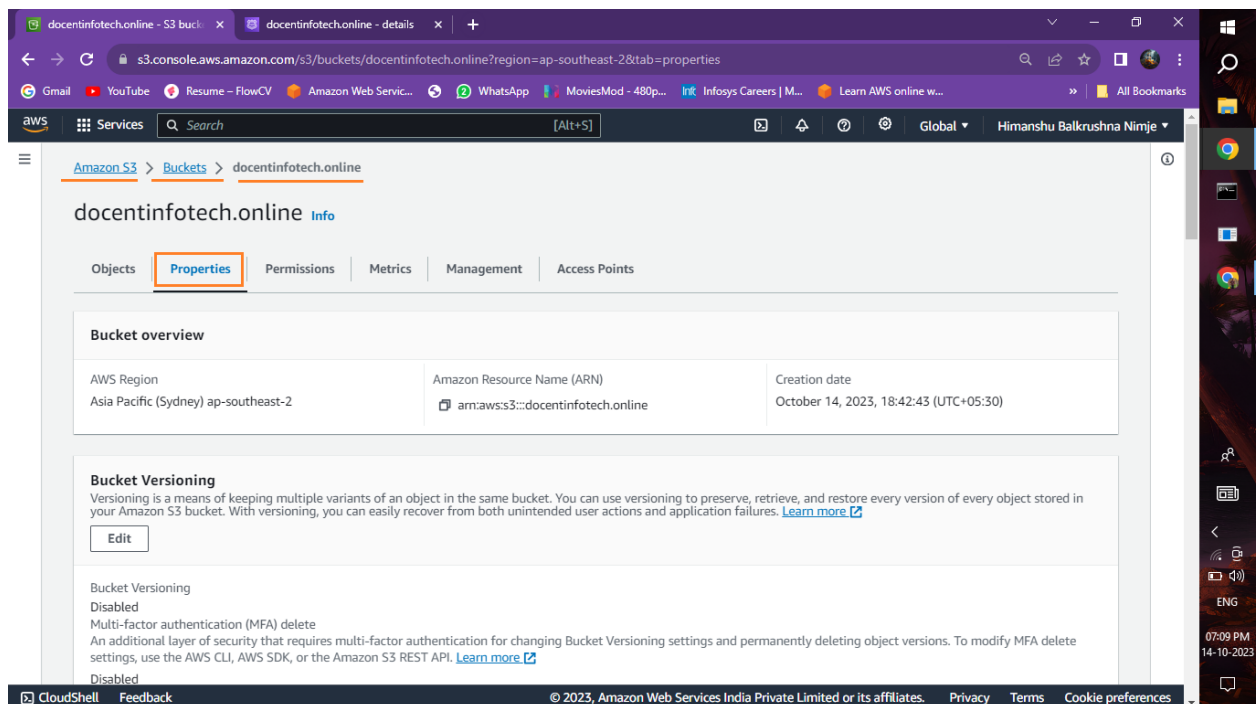
Upload index.html file



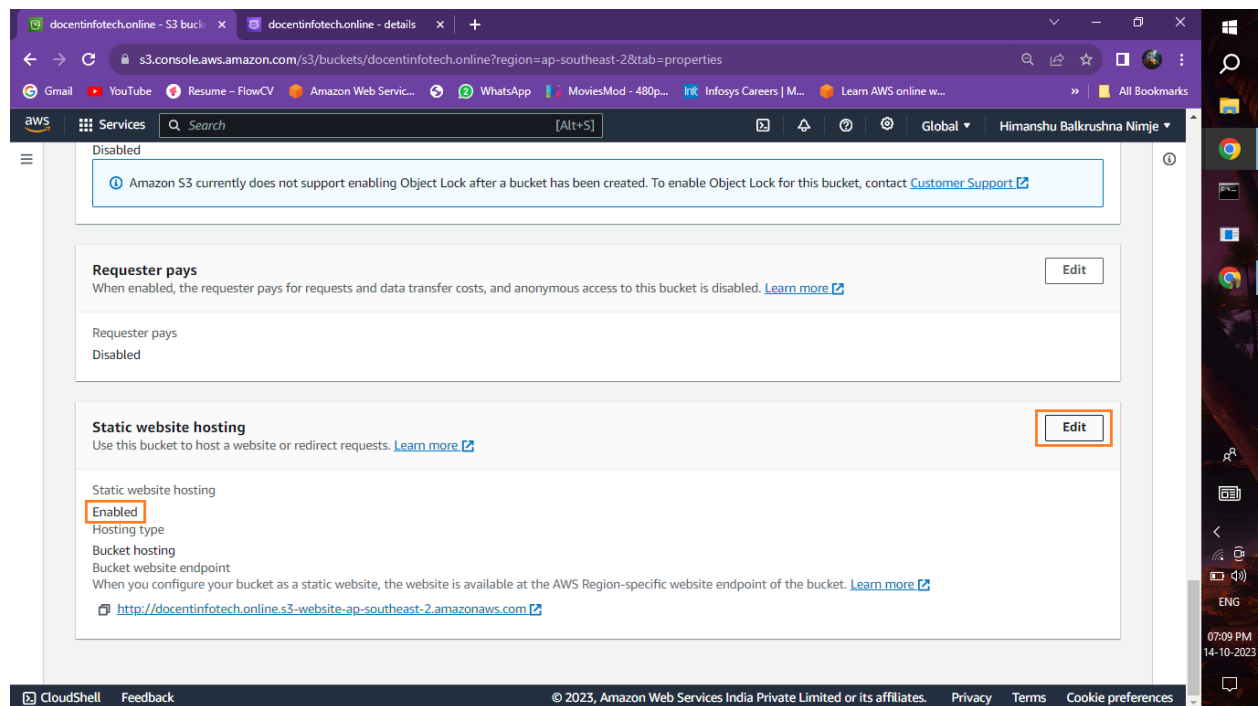
The file has been uploaded successfully



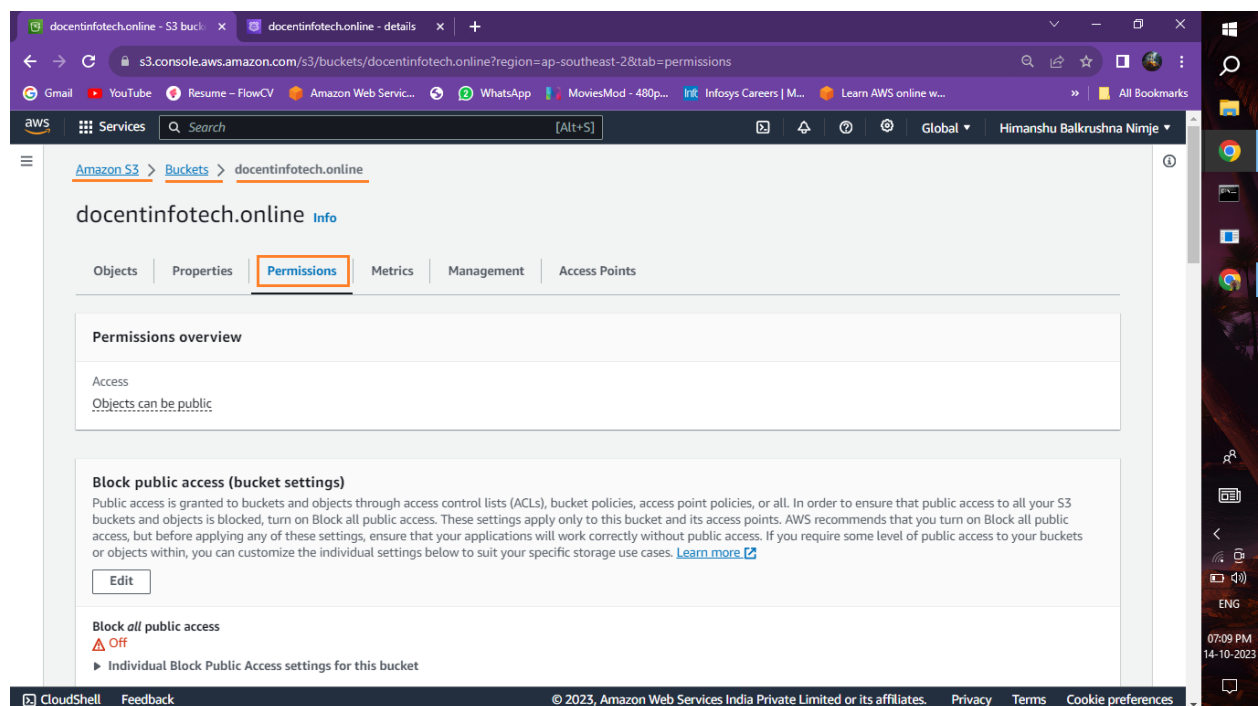
Now enable the option of statics website hosting, Go inside to the bucket and scroll down, at the bottom there is an option of statics website hosting, click on Edit and enable



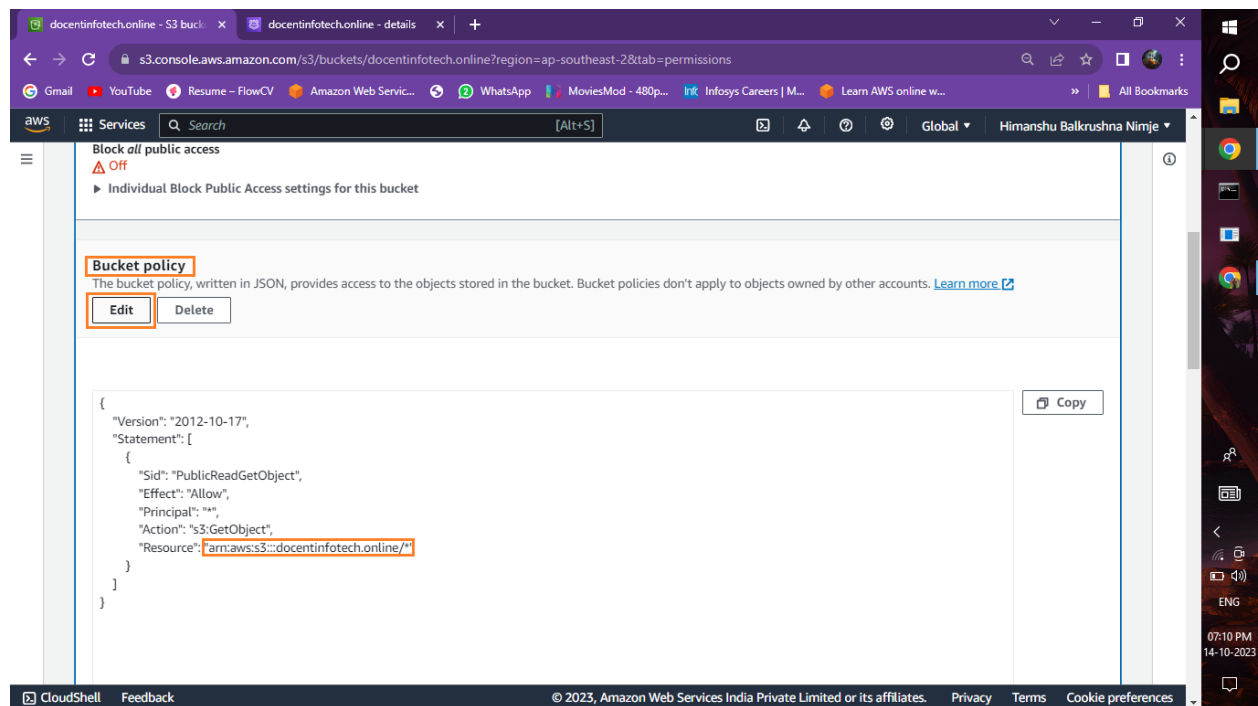
statics website hosting option has been enabled



Update the bucket policy, Go to the Permission option and scroll down, Bucket Policy, click on Edit



Put Bucket name in the Policy and click on save

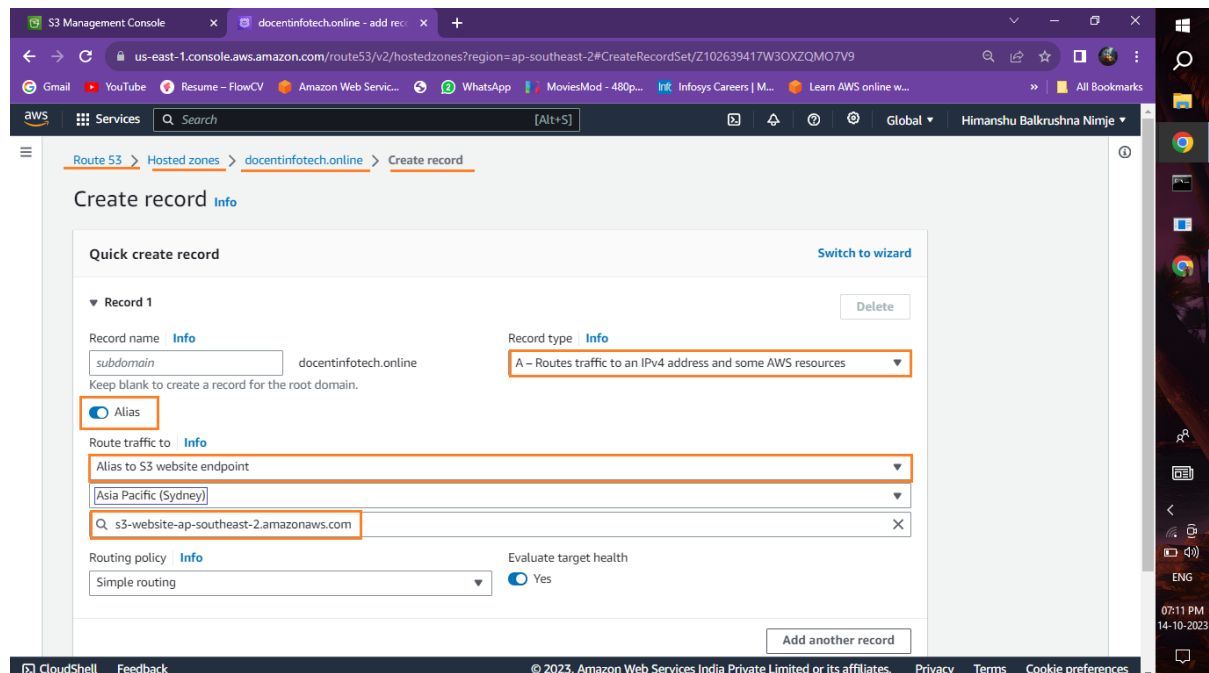


Go to the Amazon Route 53, Go to the Hosted Zone

Create a Record

Select option→ record type→ turn on the Alias

Select (Alias to S3 website endpoint)



Create Record ↴

The screenshot shows the AWS Route 53 console with the 'Create Record' form for the domain `docentinfotech.online`. The form is titled 'Record 1' and includes the following fields:

- Record name:** `subdomain` (with a note: 'Keep blank to create a record for the root domain.')
- Record type:** `A - Routes traffic to an IPv4 address and some AWS resources`
- Alias:** ☒ (Note: 'Keep blank to create a record for the root domain.')
- Route traffic to:** `Alias to S3 website endpoint`
- Region:** `Asia Pacific (Sydney)`
- Routing policy:** `Simple routing`
- Evaluate target health:** ☒ Yes

Buttons at the bottom include 'Delete', 'Add another record', 'Cancel', and 'Create records' (highlighted with an orange box).

Below the form, there is a section 'View existing records' with the text: 'The following table lists the existing records in docentinfotech.online.'

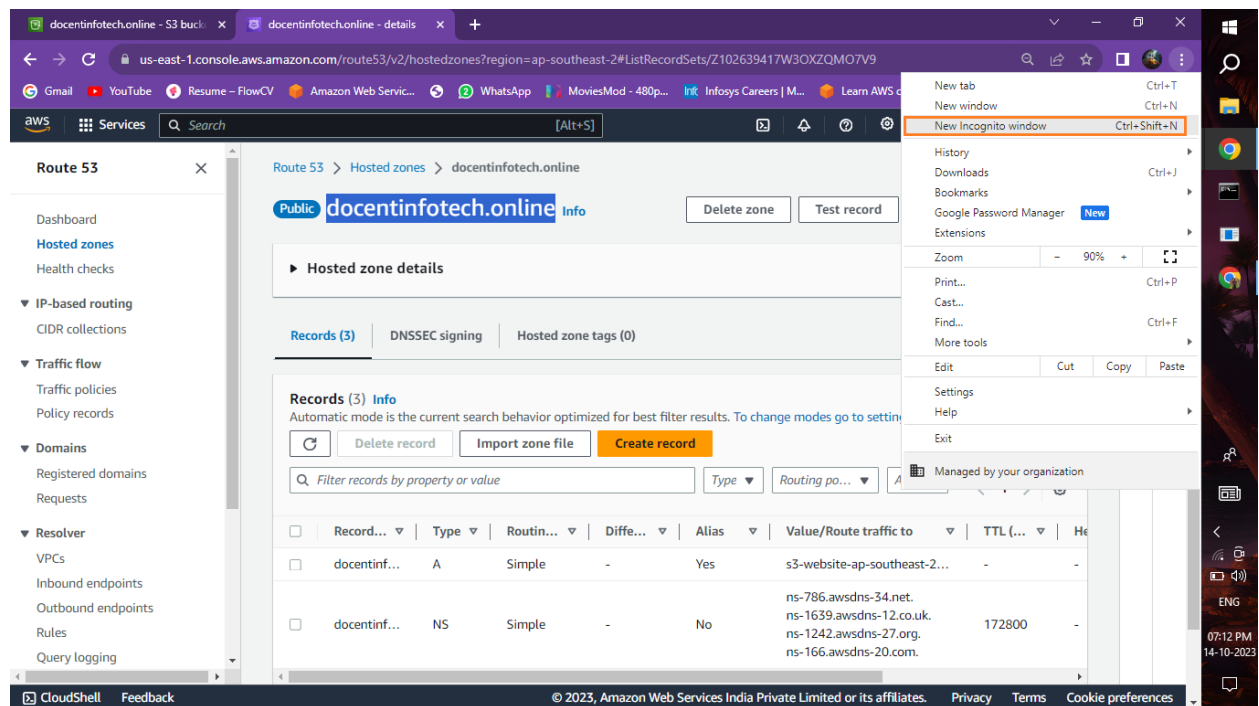
Record is Perfectly Created

The screenshot shows the AWS Route 53 console with the 'Hosted zone details' for the domain `docentinfotech.online`. The 'Records (3)' tab is selected, showing a table of records.

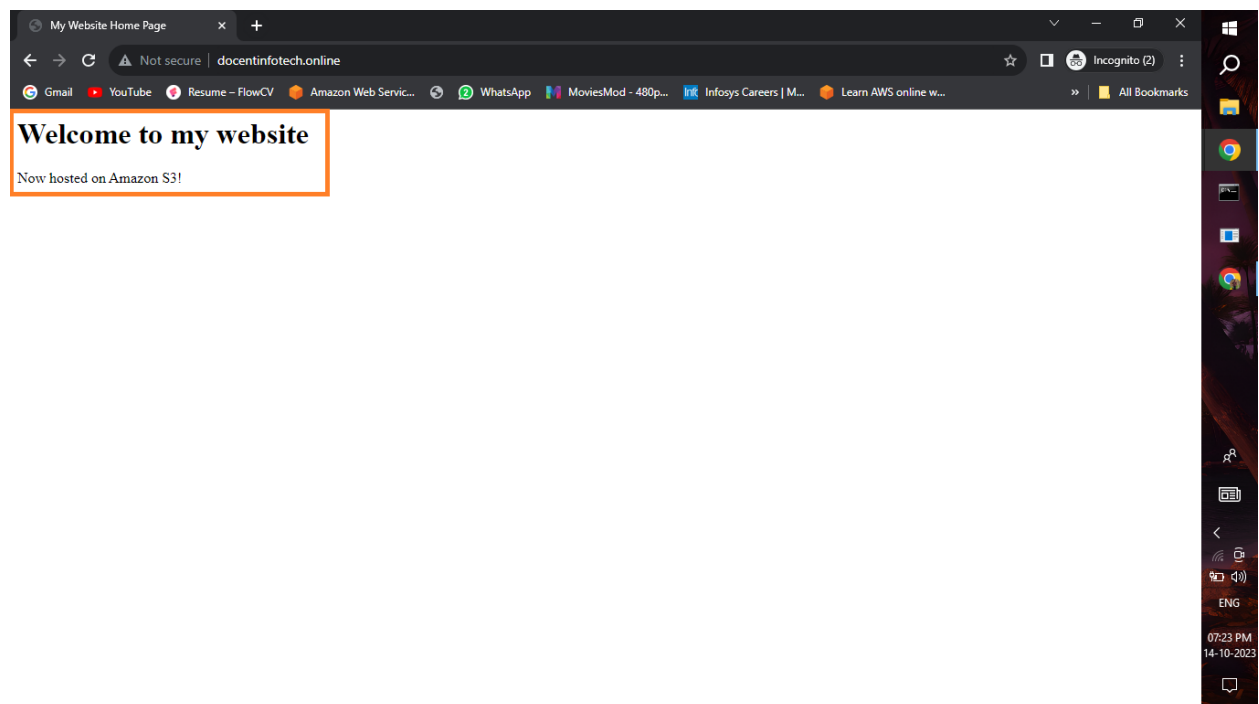
Record...	Type	Routin...	Diffe...	Alias	Value/Route traffic to	TTL (...)	He
<input type="checkbox"/> docentinf...	A	Simple	-	Yes	s3-website-ap-southeast-2...	-	-
<input type="checkbox"/> docentinf...	NS	Simple	-	No	ns-786.awsdns-34.net. ns-1639.awsdns-12.co.uk. ns-1242.awsdns-27.org. ns-166.awsdns-20.com.	172800	-

The first record is highlighted with an orange box. The 'Create record' button is also highlighted with an orange box.

Copy the Domain Name and open Incognito window then paste Domain Name



Website has been successfully hosted



What I Learned

1. I learned how to create and configure S3 buckets for static website hosting.
2. Configuring bucket policies and permissions to make the content publicly accessible.
3. Learning the differences between static and dynamic websites.
4. Configuring DNS records, such as A (Address) and CNAME (Canonical Name) records.
5. Understanding versioning and managing different versions of your website.
6. Configuring bucket policies and IAM roles to control access to resources.

By Hosting a static website on Amazon S3 and using Route 53, I have gained practical experience with key AWS services for web hosting and domain management, and the ability to configure, secure, and optimize static websites on the AWS platform.