AWS CloudFront

It is a CDN (content Delivery Network) service provider by AWS
which provides you the content (websites, APIs, web assets, videos)

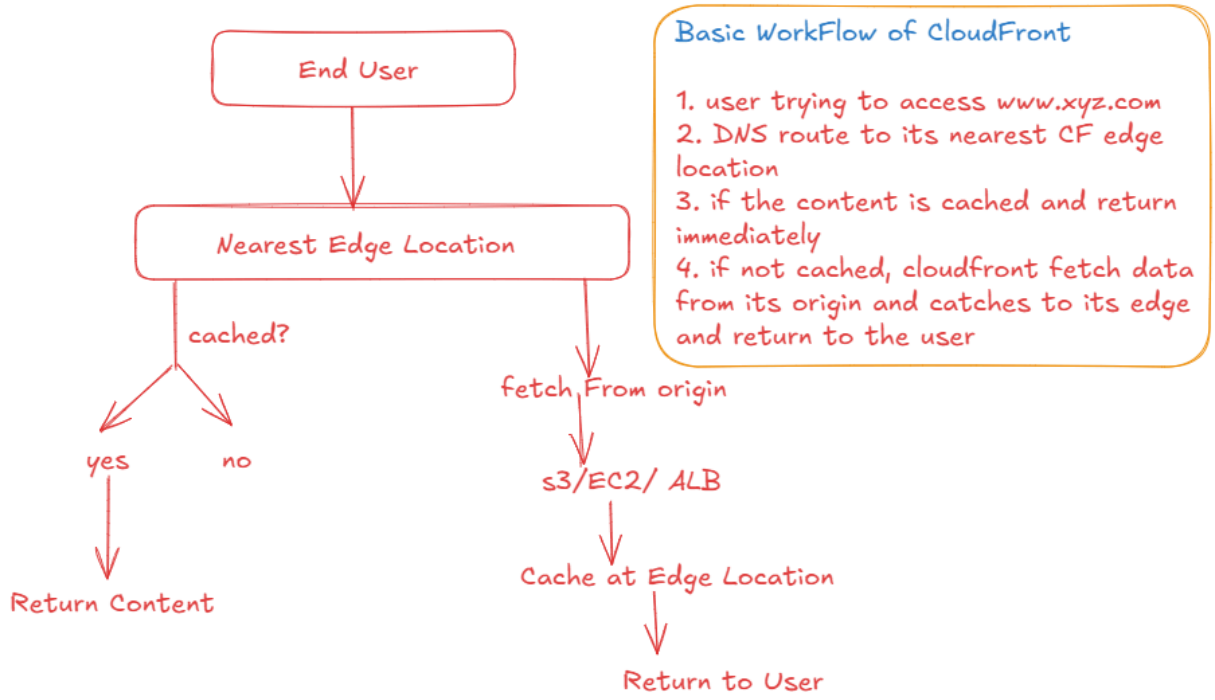
High transfer speed
low letency

Key Features:

1. Global Edge Network:
2. Content Catching:
    a. Reducing load on original server
3. Origin Support
    a. get data from S3 bucket
    b. EC2 Instances
    c. load balancer
    d. https support
    e. Domain supports

Use Cases:

Websites
APIs
Software Distribution
Secure content Delivered
Video streaming



Let's Try to SetUp manual CloudFront and S3 Bucket

Create S3 Bucket:

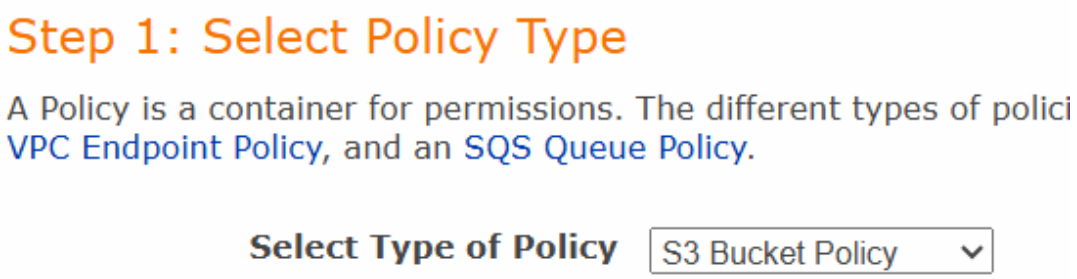
bucket: username-cf-1001

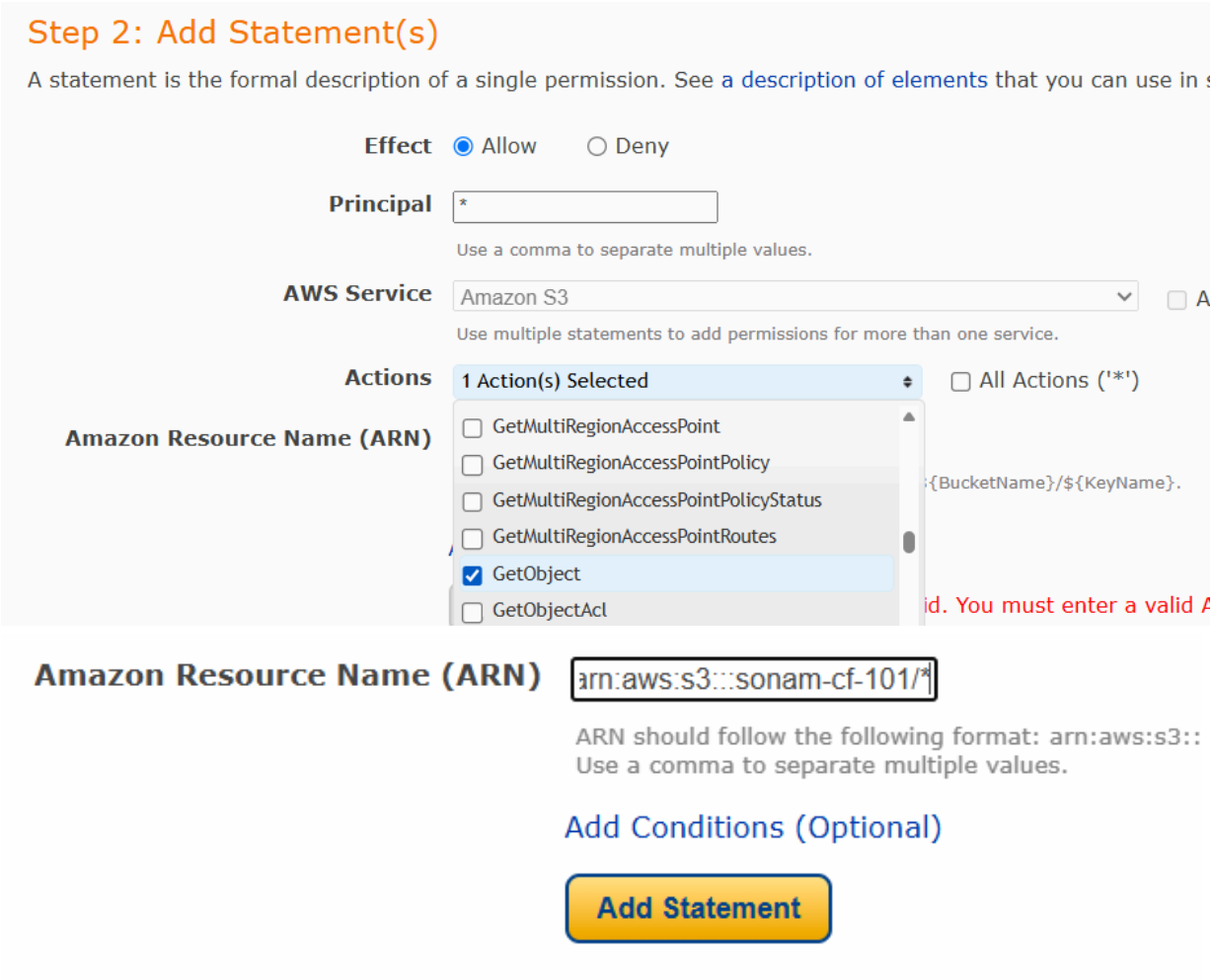
upload index.html, script.js and style.css to your bucket (https://github.com/sonam-niit/PhoneBookProject)

copy content from this Github Repo

Set permission.

click on Permission --> Edit Bucket policy --> click Policy Generator





ARN number and then /* to give access permission to all objects of your bucket.
Click on Add Statement.
Verify Statement and then click on Generate Policy:

You added the following statements. Click the button below to Generate a policy.

Principal(s)	Effect	Action	Resource	Conditions
• *	Allow	• s3:GetObject	arn:aws:s3:::sonam-cf-101/*	*None*

Step 3: Generate Policy

A *policy* is a document (written in the Access Policy Language) that acts as a container for one or more statements.

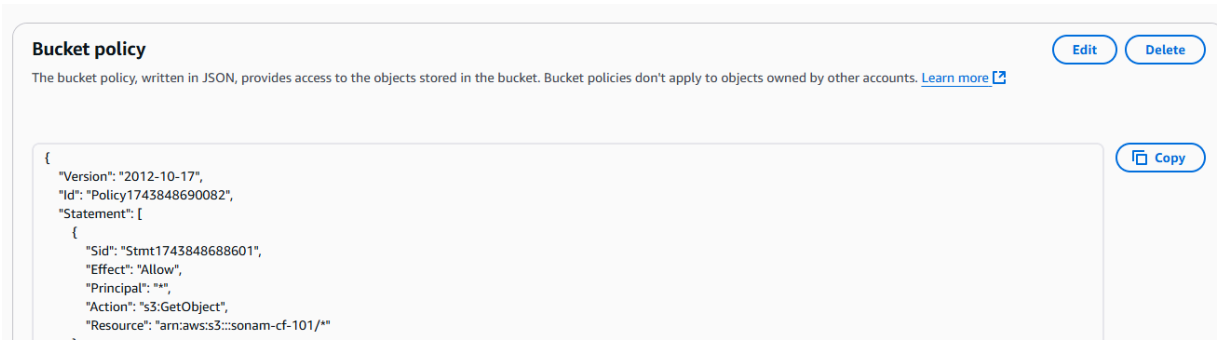
Generate Policy Start Over

Policy JSON Document

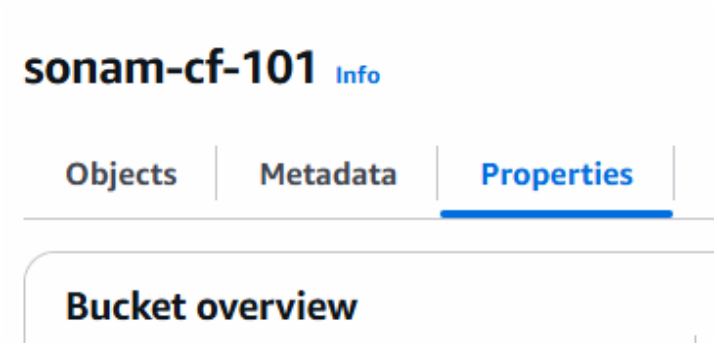
Click below to edit. To save the policy, copy the text below to a text editor.
Changes made below will **not be reflected in the policy generator tool.**

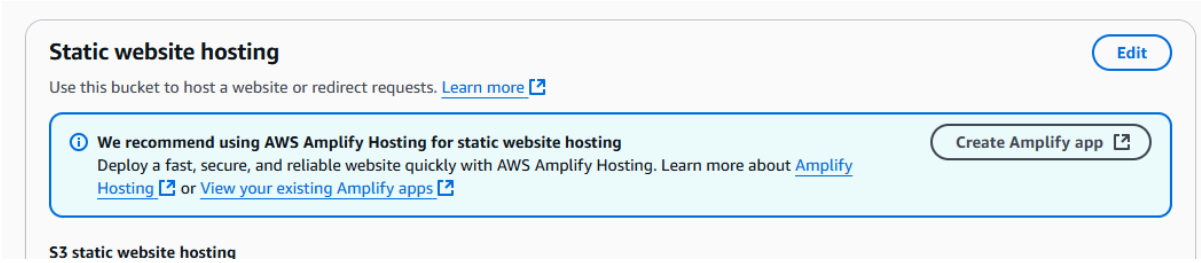

```
{
  "Id": "Policy1743849126091",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1743848688601",
      "Action": [
        "s3:GetObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::sonam-cf-101/*",
      "Principal": "*"
    }
  ]
}
```


Copy it and save it in your bucket policy.

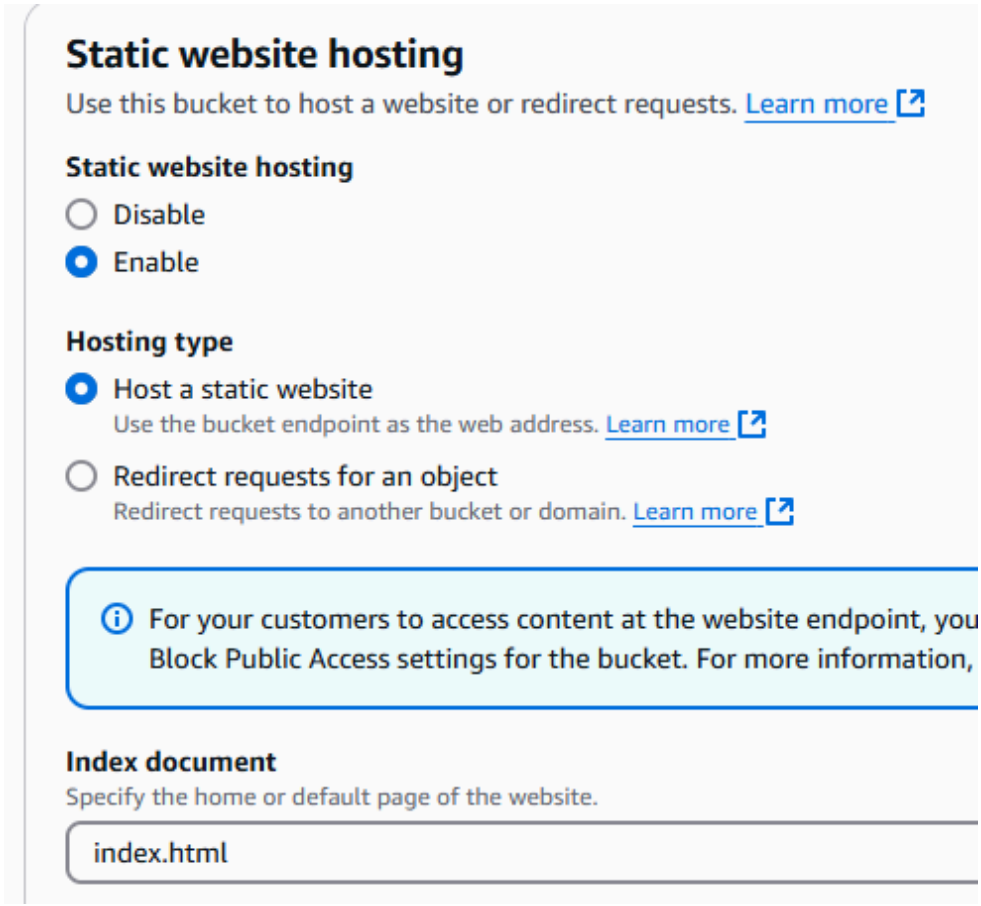


Now



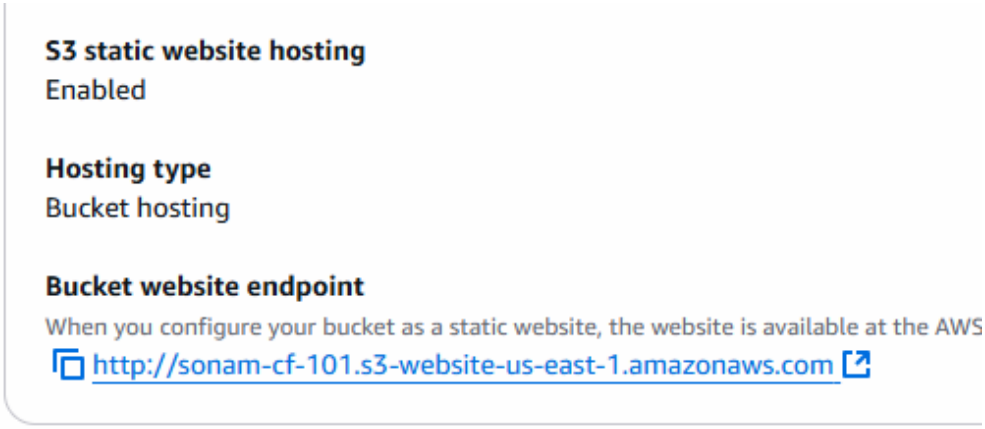


click on edit..



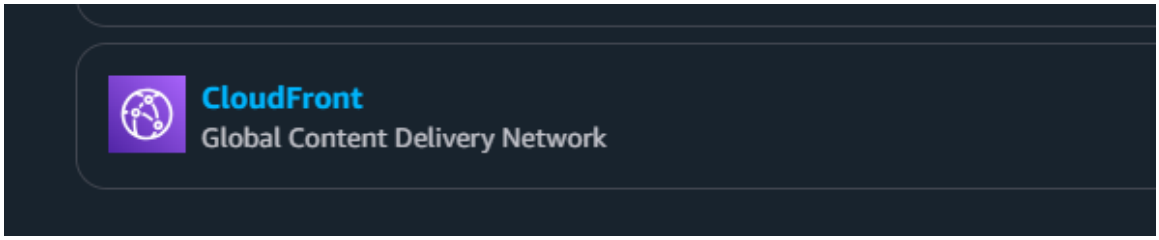
Skip optional Fields and then save Changes.

Check the Endpoint

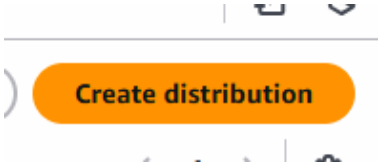


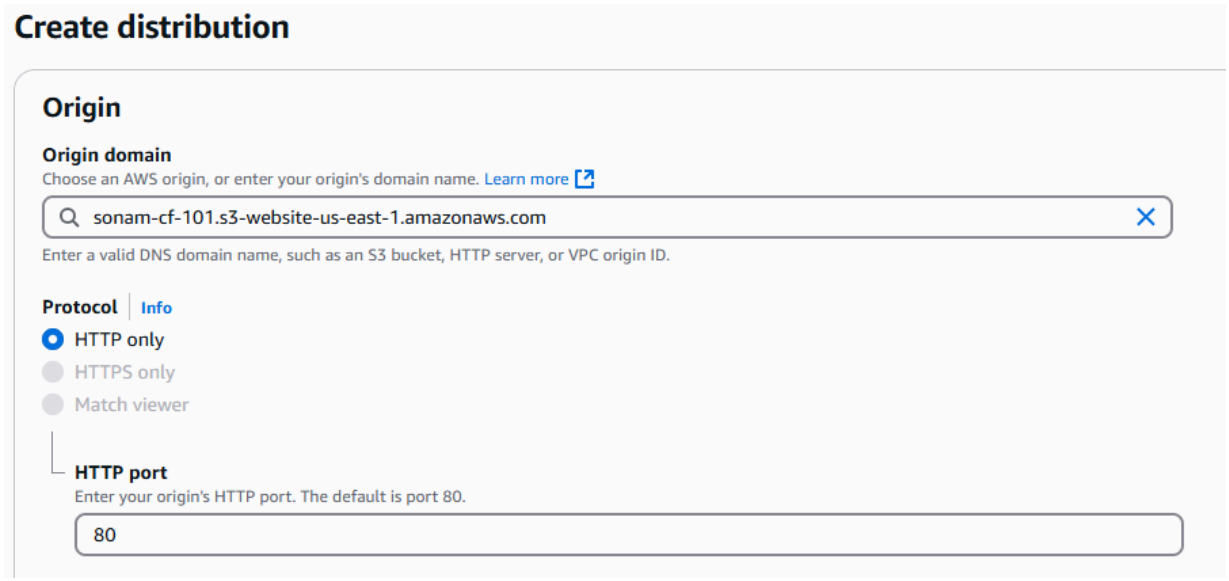
Setting up CloudFront Distribution:

Search For



Click on





Keep Below Configuration as it is

Origin path - *optional*
Enter a URL path to append to the origin domain name for origin requests.

Enter the origin path

Name
Enter a name for this origin.

sonam-cf-101.s3-website-us-east-1.amazonaws.com

Add custom header - *optional*
CloudFront includes this header in all requests that it sends to your origin.

Add header

Enable Origin Shield
Origin shield is an additional caching layer that can help reduce the load on your origin and help protect its availability.

- (•) No
- ( ) Yes

Default cache behavior

Path pattern | Info

Default (*)

Compress objects automatically | Info

- ( ) No
- (•) Yes

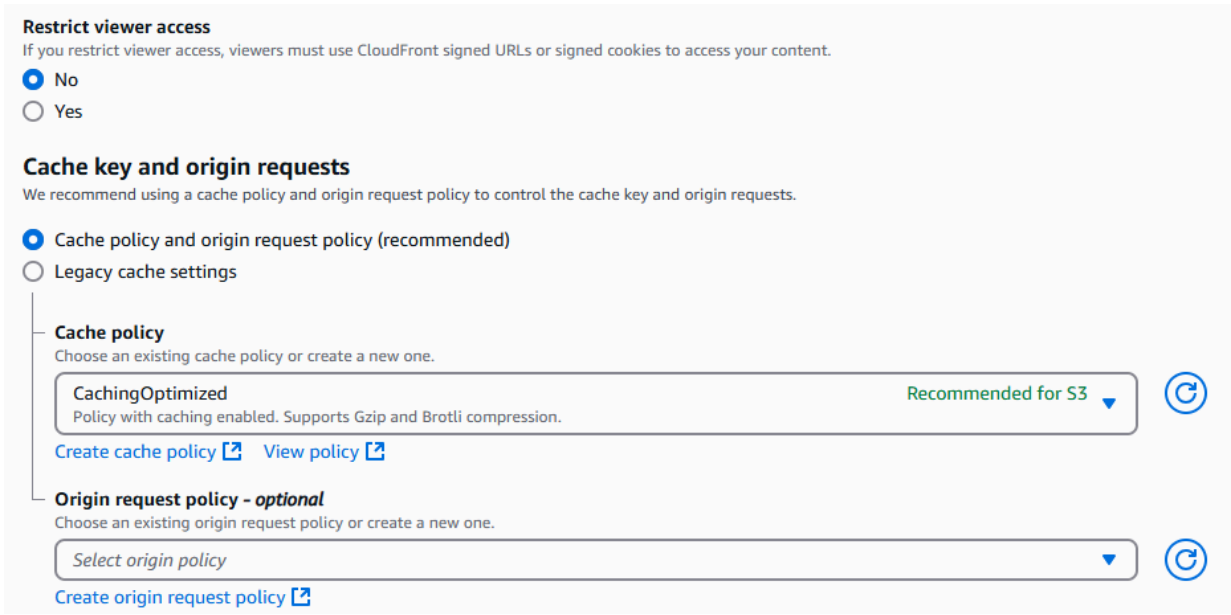
Viewer

Viewer protocol policy

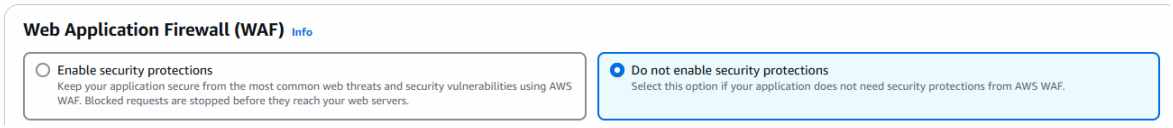
- ( ) HTTP and HTTPS
- ( ) Redirect HTTP to HTTPS
- (•) HTTPS only

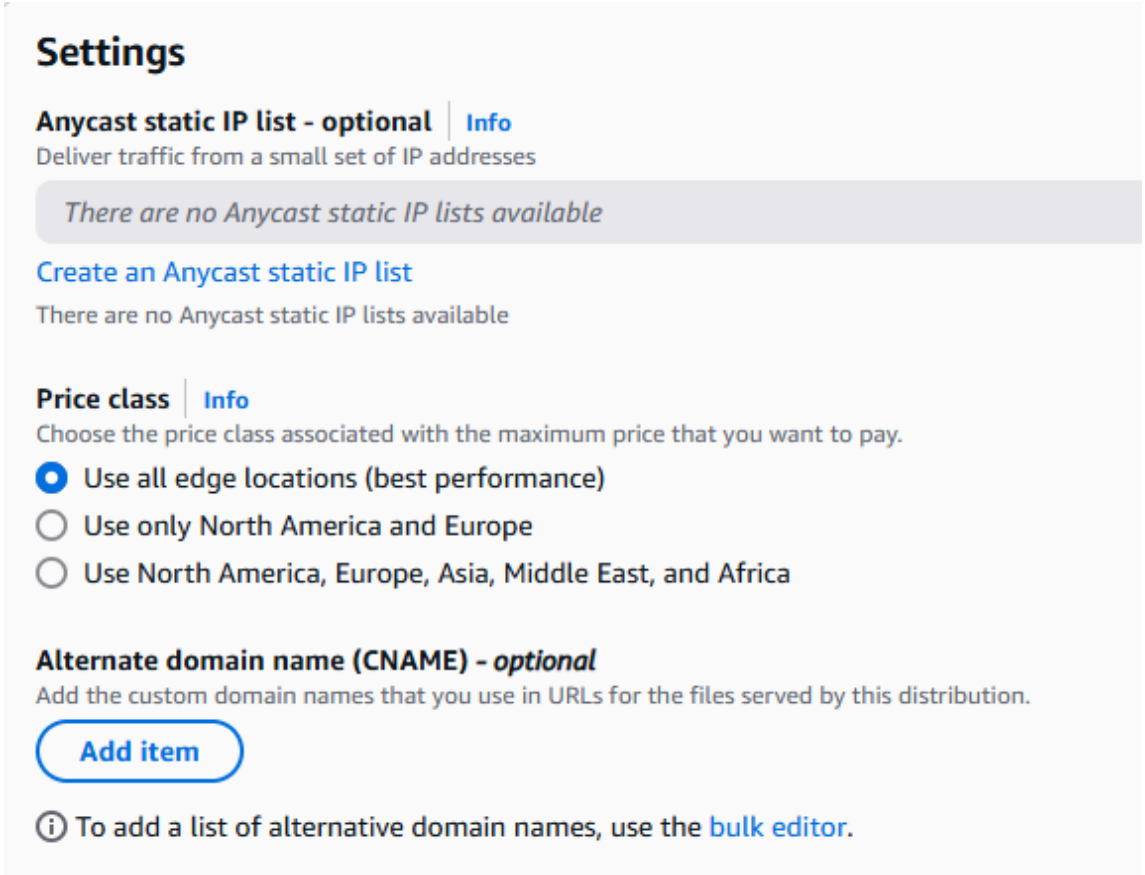
Allowed HTTP methods

- (•) GET, HEAD
- ( ) GET, HEAD, OPTIONS
- ( ) GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE



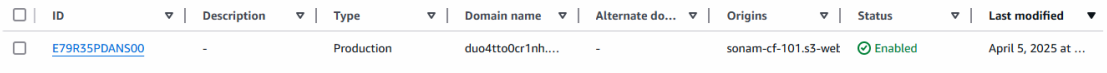
Skip optional Values.



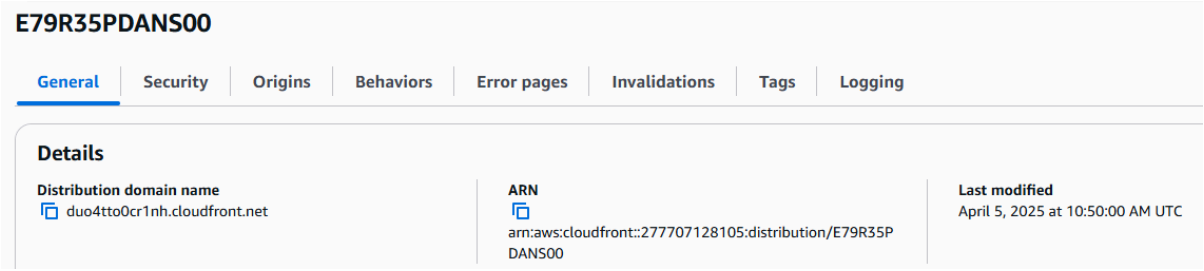


other values you can use as its provided.

click on create Distribution.

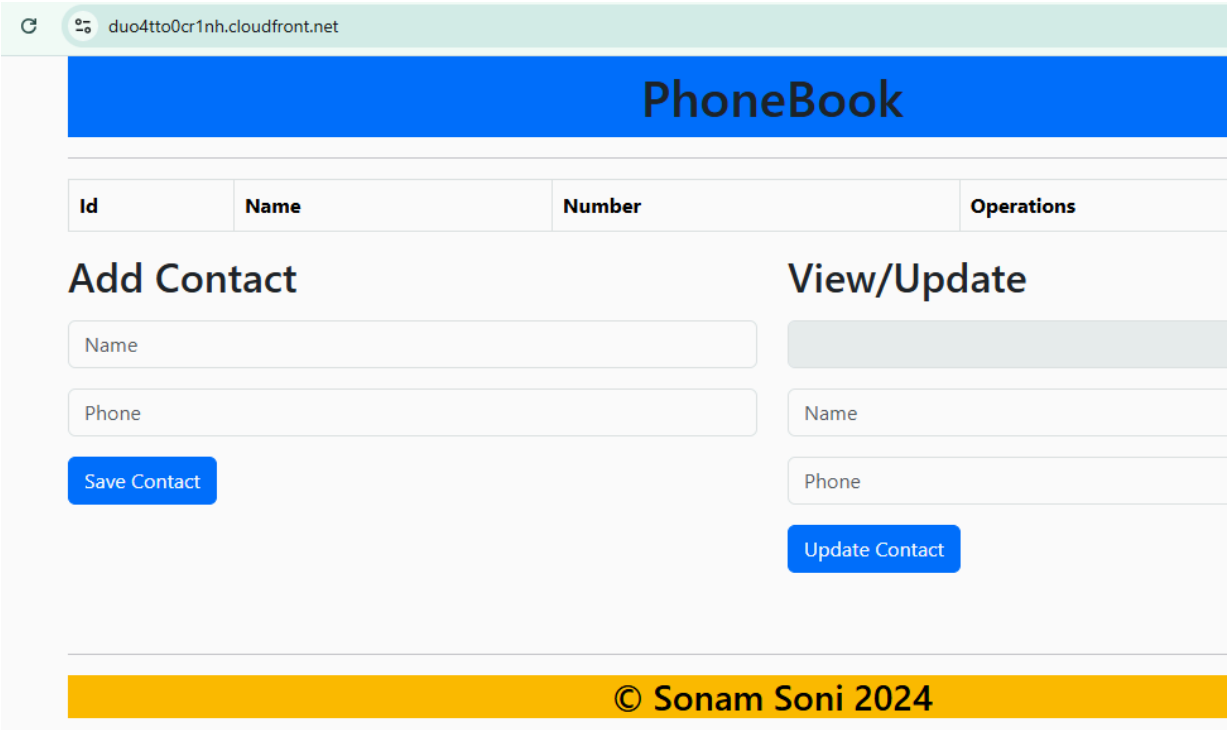


Wait until its Deployed



Check the Domain name:

you can see the output



If We want to automate the above process we can use Terraform Project.

Let's create Project Structure and creating Resources.