Project 3: Creating a Static Website Using S3

What is Amazon S3?

- Amazon Simple Storage Service is storage for the internet. It is designed to make web-scale computing easier.
- It has a simple web services interface that you can use to store and retrieve any amount of data, at any time, from anywhere on the web.

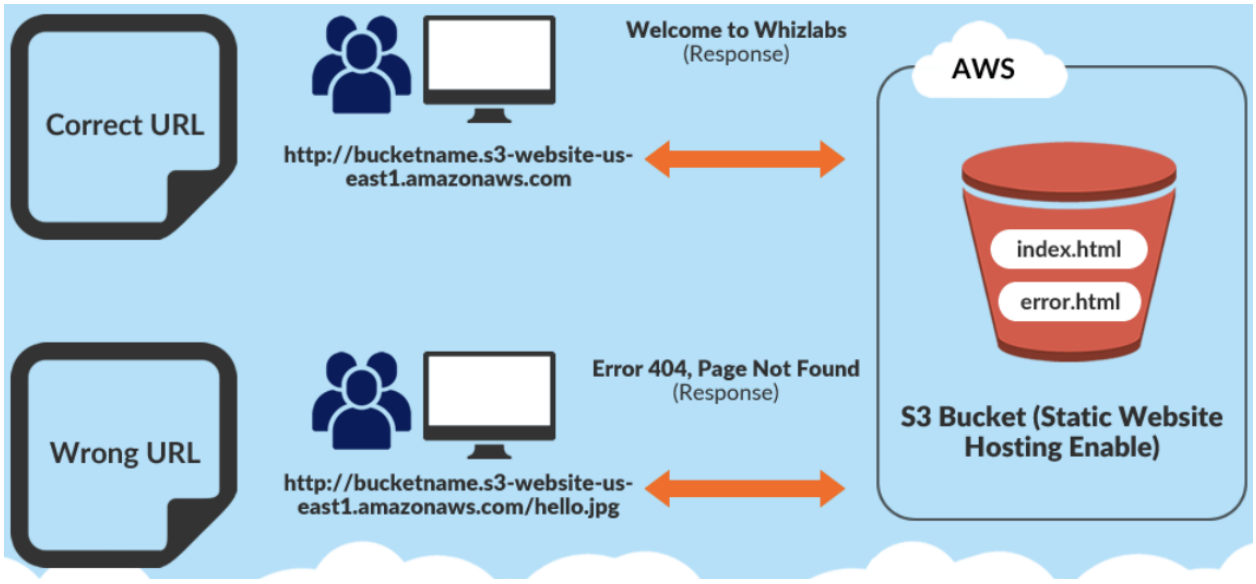
What is a Static Website?

- A static web page is a web page that is delivered to the user's web browser exactly as stored. It holds fixed content, where each page is coded in HTML, and displays the same information to every visitor.

Objective of this Project:

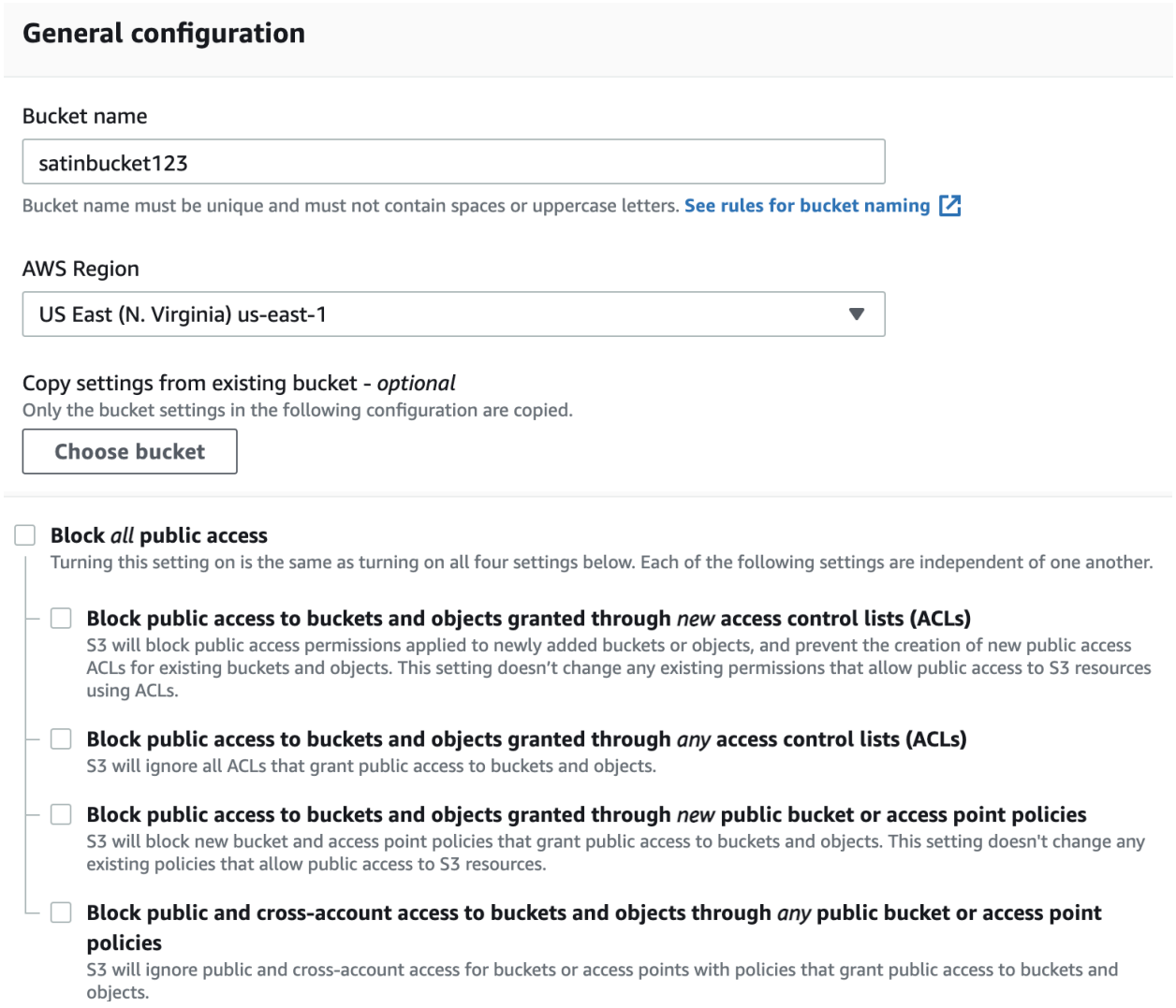
- We will be creating and launching a static website using S3.

Architecture Diagram



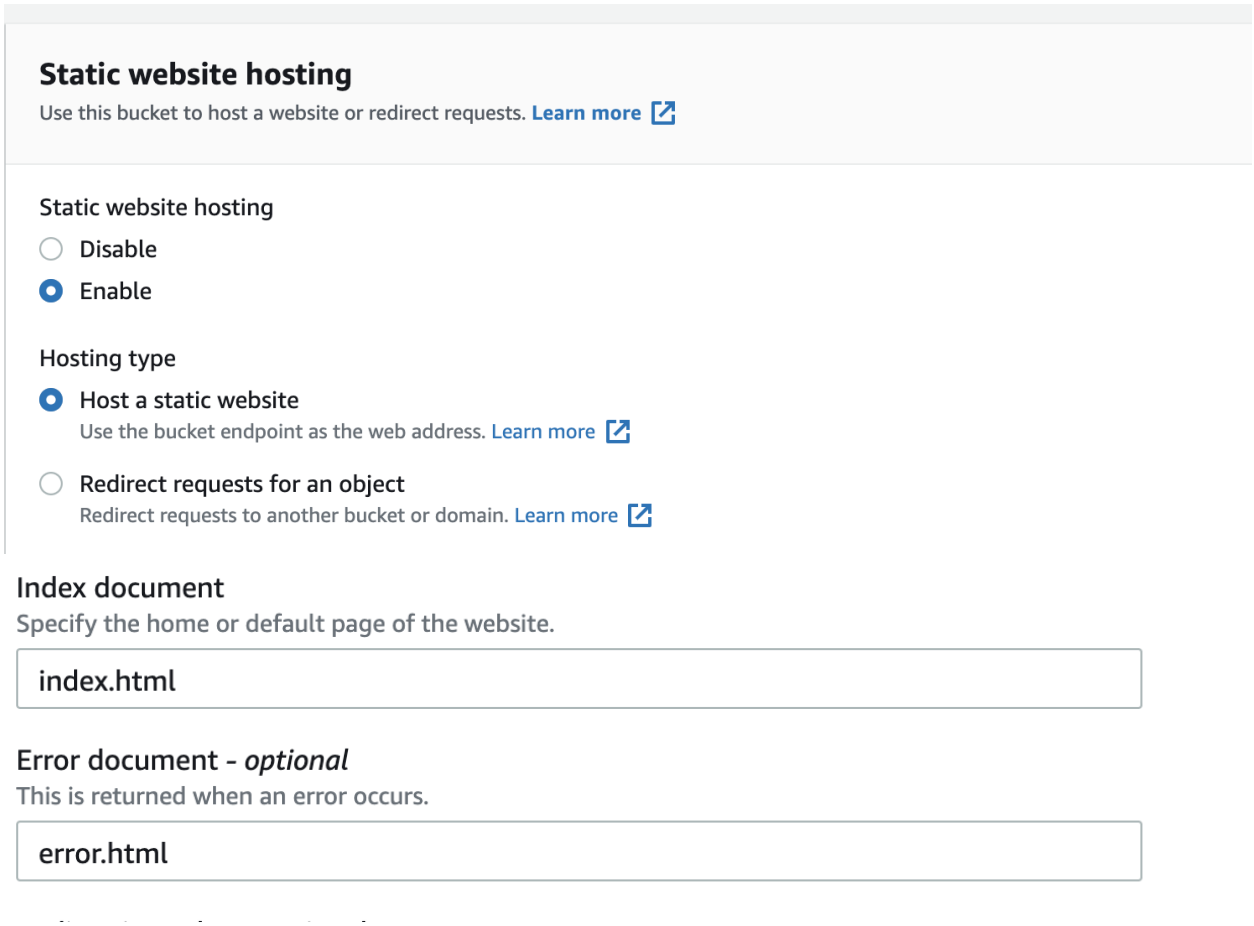
Step 1: Create a Bucket

- We start with creating an S3 bucket with a bucket name that is supposed to be unique. We also make sure it is available and accessible publicly.



Step 2: Enable Static Website Hosting

- We start with allowing the S3 to enable static web hosting. And then we specify the default page of the website which can be index.html. If an error occurs, we specify what the website should return if an error were to occur.



Here's the endpoint: http://satinbucket123.s3-website-us-east-1.amazonaws.com

We upload the error and index files on to the S3 bucket:

Name	Type	Last modified	Size	Storage class
error.html	html	June 24, 2021, 07:52:21 (UTC-07:00)	157.0 B	Standard
index.html	html	June 24, 2021, 07:52:22 (UTC-07:00)	155.0 B	Standard

We then edit the bucket policy:

Policy

```
{
  "Id":"Policy1",
  "Version":"2012-10-17",
  "Statement":[
    {
      "Sid":"Stmt1",
      "Action":[
        "s3:GetObject"
      ],
      "Effect":"Allow",
      "Resource":"arn:aws:s3:::satinbucket123/*",
      "Principal":"*"
    }
```

Step 3: Testing The Website

We copy the website URL and run it on the browser. Since we see the contents of the index.html file, it is shown that the website is working.

Step 4: Testing the Error Page

We test the error page by typing a bunch of random characters on the URL and we see that the error.html file has popped up.

Error 404, Page Not Found!

Its a Sample Error Page of static website sample on AWS S3