Static Website Hosting on AWS S3 with CloudFront

# Project Overview

This project demonstrates how to host a static website on AWS by leveraging Amazon S3, CloudFront, and optionally Route 53. The website files (HTML, CSS, JavaScript, images) are stored in an S3 bucket, served securely and globally through CloudFront.

# Key AWS Services Used

Amazon S3 – Stores static website files (HTML, CSS, JavaScript, images).

Amazon CloudFront – CDN that caches content globally, improves performance, and enables HTTPS.

# Steps to Implement

**1. Create an S3 Bucket and Upload Website Files**

- Create an S3 bucket (unique name, same region).  
- Enable static website hosting in bucket properties.  
- Upload website files (index.html, style.css, etc.).  
- Configure bucket policy to allow CloudFront access.

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**2. Configure CloudFront Distribution**

- Create a CloudFront distribution with S3 as the origin.  
- Set Default Root Object = index.html.  
- Enable OAI (Origin Access Identity) for secure S3 access.  
- Enable HTTPS for secure communication.

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**3. Test and Verify**

- Access your site via the CloudFront distribution domain.  
- Verify static assets load properly.

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# Skills Demonstrated

Cloud Hosting with AWS S3.

CDN Implementation with CloudFront.

Security: IAM, bucket policies, and HTTPS setup.

Troubleshooting access and configuration issues.