Project 2: Host Static Website with S3 & CloudFront

Overview:

Host a fast, reliable static website using Amazon S3 and deliver content globally via CloudFront CDN. This project is ideal for personal portfolios, resumes, or small business sites.

Problem Statement:

Traditional web hosting may lead to speed and availability issues. Hosting via AWS S3 and CloudFront solves these by offering global distribution, faster access, and high availability.

Objective:

To deploy a static website using AWS S3 for storage and CloudFront as a content delivery network.

Requirements:

- AWS Account
- S3 Bucket
- CloudFront Distribution
- Static Files (HTML, CSS, JS)
- Optional: Custom domain via Route 53

Implementation Steps:

- 1. Create an S3 bucket, disable public access blocking.
- 2. Enable static website hosting and upload files.
- 3. Set 'index.html' as the default root object.
- 4. Add a bucket policy to allow public reads.
- 5. Create a CloudFront distribution with the S3 bucket as origin.
- 6. Set caching and compression settings.
- 7. (Optional) Use Route 53 to map a custom domain.
- 8. Access site via CloudFront URL.

Expected Outcome:

A globally available static site that loads quickly and scales easily. Ideal for lightweight, high-performance web presence.

Sample Output Flow (Visual Architecture):

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