Project Title: Global Static Website Delivery using Amazon S3 and CloudFront CDN

Step-by-Step Project Implementation (AWS)

1. Create a static website file (index.html) on local system.
2. Login to AWS Console and navigate to Amazon S3 service.
3. Create an S3 bucket with a globally unique name.
4. Disable Block Public Access while creating the bucket.
5. Upload index.html file to the S3 bucket.
6. Enable Static Website Hosting from bucket properties.
7. Set index.html as the default index document.
8. Configure bucket permissions by disabling Block Public Access.
9. Add bucket policy to allow public read access (s3:GetObject).
10. Verify website access using the S3 bucket website endpoint.
11. Navigate to Amazon CloudFront service.
12. Create a new CloudFront distribution.
13. Configure S3 website endpoint as CloudFront origin.
14. Enable Redirect HTTP to HTTPS in cache behavior settings.
15. Set index.html as the default root object in CloudFront.
16. Wait for CloudFront distribution to deploy globally.
17. Access the website using the CloudFront distribution domain name.
18. Verify secure HTTPS access and global content delivery.
19. After completion, disable and delete CloudFront to avoid charges.
20. Empty and delete the S3 bucket if no longer required.

Outcome

The static website is successfully hosted on Amazon S3 and delivered globally using CloudFront CDN with improved performance, scalability, and secure HTTPS access.