Deployment Report: Scalable Static Website

Deployment Summary

Objective

To deploy a static HTML website to an AWS S3 bucket and serve it globally using Cloudflare CDN with HTTPS. The deployment is fully automated using GitHub Actions CI/CD pipeline.

Deployment Phases

Phase 1: Create and Push Static Website

- Created a responsive index.html page with a modern design.
- Initialized a GitHub repository: https://github.com/AltrinJabist/your-repo
- Pushed the code to the main branch.

Phase 2: Configure AWS S3

- Created an S3 bucket named altrin (must be globally unique).
- Enabled Static Website Hosting in S3.
- Set index.html as the default document.
- Configured bucket policy to allow public read access for web assets.

Phase 3: GitHub Actions CI/CD

- Used jakejarvis/s3-sync-action@master to auto-deploy to S3 on push to main.
- GitHub Secrets configured for AWS access:
 - AWS_ACCESS_KEY_ID
 - AWS_SECRET_ACCESS_KEY
- Sync options used:
- --acl public-read --delete
- Deployment triggered and verified with successful GitHub Actions run.

Phase 4: Cloudflare + Custom Domain + SSL

- Domain www.altrin.in connected to Cloudflare.

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- Updated domain registrar to use Cloudflare nameservers.
- Configured Cloudflare DNS with CNAME pointing to:

altrin.s3-website-us-east-1.amazonaws.com

- Enabled SSL (Flexible) and Always Use HTTPS in Cloudflare settings.
- Website is now globally accessible via:

https://www.altrin.in

Verification & Screenshot

- Website accessed successfully over HTTPS.
- Cloudflare's orange cloud active (CDN + Proxy).
- Attached screenshot of deployed website and CI workflow success.

Caching and Versioning

- S3 Cache-Control headers will be configured next for performance.
- Versioning will be enabled in S3 for rollback support.

Deliverables

- GitHub Actions Workflow (.github/workflows/deploy.yml)
- Public S3 Bucket with website content
- Live domain with HTTPS: https://www.altrin.in
- Deployment report (this document)
- Screenshot of deployed site + CI success (attach manually)