

Static Website Deployment with S3 + Cloudflare + GitHub Actions

Deployment Report

Project Overview

The goal of this project was to host and auto-deploy a static website using AWS S3, Cloudflare, and GitHub Actions, ensuring global content delivery with HTTPS security.

Tools Used

- **AWS S3** (Free Tier) – for static file storage and hosting.
 - **Cloudflare** (Free Plan) – for DNS management, SSL/TLS, and CDN caching.
 - **GitHub Actions** – for automated CI/CD.
 - **HTML/CSS** – for the static site content.
-

Steps Taken

1. **Static Site Creation**
 - Built a simple static HTML/CSS page.
2. **S3 Bucket Setup**
 - Created a public S3 bucket.
 - Enabled static website hosting on the bucket.
 - Configured bucket policies to allow public read access.
3. **GitHub Actions Workflow**
 - Created a `deploy.yml` in `.github/workflows/`.
 - Configured it to:
 - Trigger on push to the main branch.
 - Sync the updated content to S3 using `aws s3 sync`.
4. **Cloudflare Integration**
 - Added a custom domain to Cloudflare.
 - Pointed the domain's DNS to S3 hosting.
 - Enabled SSL/TLS encryption (Full/Strict mode).
 - Applied page rules for caching and redirects.

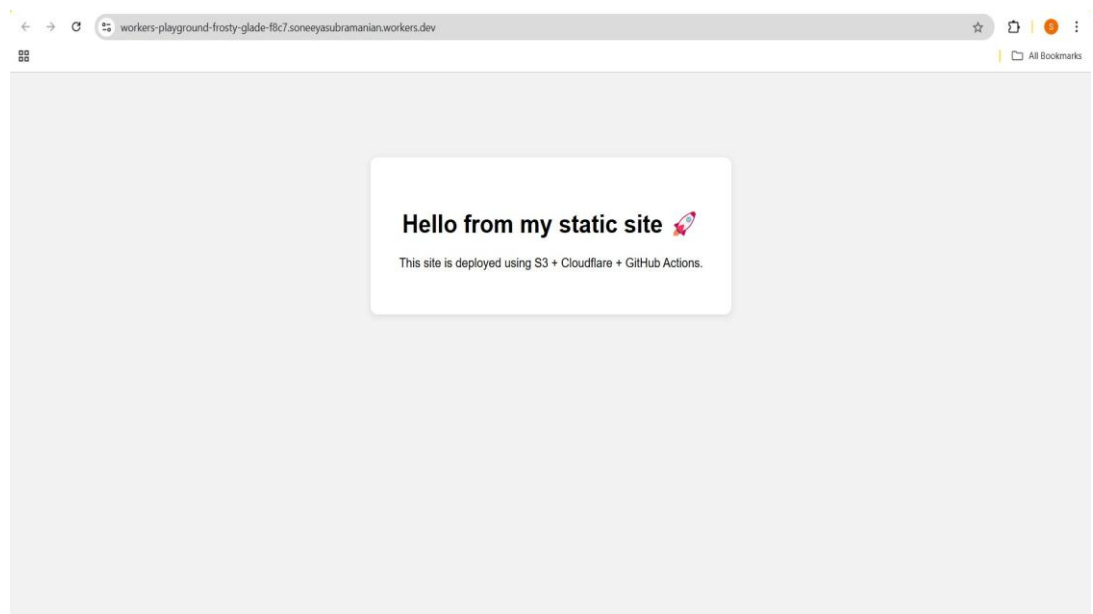
5. Testing and Validation

- Verified that every new push to GitHub triggers a successful deployment via Actions.
- Ensured the site loads over HTTPS globally via Cloudflare.

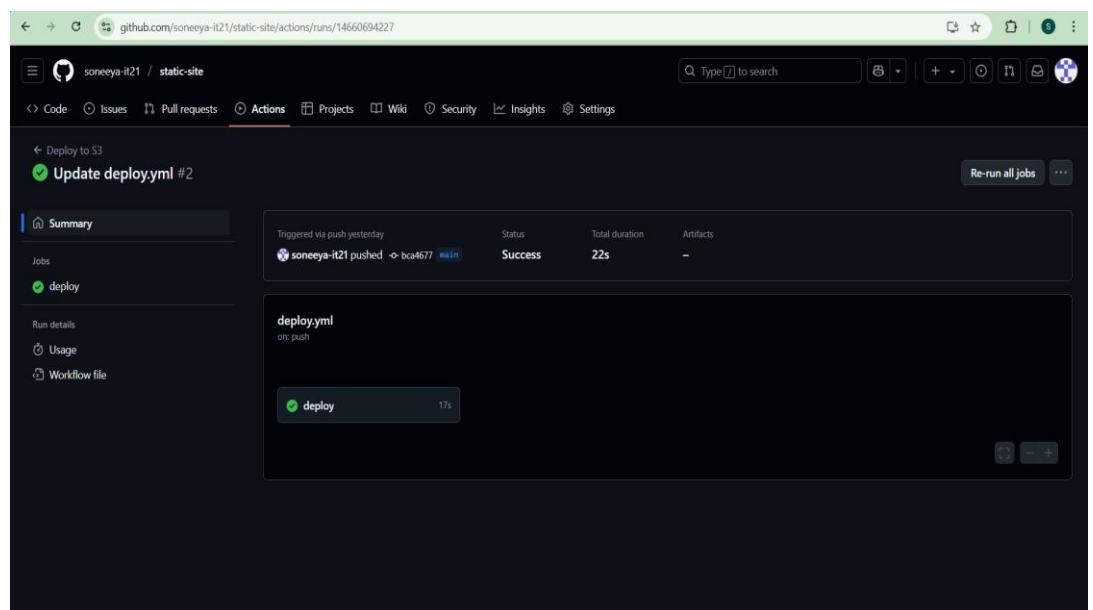
Deliverables

- **Live Site:**
<https://workers-playground-frosty-glade-f8c7.soneeyasubramanian.workers.dev>
- **Screenshots:**

1. Live site hosted and secured with HTTPS ✓



2. GitHub Actions deployment workflow success ✓



- **GitHub Repository:**

<https://github.com/soneeya-it21/static-site.git>

Notes

- GitHub Actions are set to automatically deploy on each push.
- Cloudflare CDN ensures fast global delivery with HTTPS.
- S3 bucket versioning and caching settings applied for optimization.