Steps to Deploy a Static Website on Amazon S3

1. **Create an S3 Bucket**
   - Go to the AWS S3 service.
   - Click **Create bucket**.
   - Enter a **unique bucket name**.
   - Disable **ACLs** (Access Control Lists).
   - Disable **Versioning** (optional).
   - Click **Create bucket**.
2. **Upload Website Files**
   - Open the newly created bucket.
   - Click **Upload**.
   - Select **files and folders** (do not upload the root folder, only its contents).
   - Click **Upload**.
3. **Enable Static Website Hosting**
   - Go to the **Properties** tab of the bucket.
   - Scroll down to **Static website hosting** and click **Edit**.
   - Enable **Static website hosting**.
   - Set the **index document** (e.g., `index.html`).
   - Click **Save changes**.
   - Copy the **Bucket Website Endpoint** (needed later).
4. **Adjust Permissions to Allow Public Access**
   - Go to the **Permissions** tab.
   - Click **Block public access** > **Edit**.
   - Uncheck **Block all public access**.
   - Click **Save changes** (Security confirmation required).
5. **Set Up a Bucket Policy for Public Access**
   - Go to the **Bucket Policy** section under **Permissions**.
   - Click **Edit**.
   - Copy the **Bucket ARN** (a unique ID for the S3 bucket).
   - Use the **Policy Generator** to create a policy:
     - Select **S3 Bucket Policy**.
     - Choose **Allow** for effect.
     - Set **Principal** to `*` (all users).
     - Set **Action** to `s3:GetObject`.
     - Use `arn:aws:s3:::your-bucket-name/*` as the **ARN**.
     - Click **Add Statement** → **Generate Policy**.
   - Copy the generated JSON policy.
   - Paste it into the **Bucket Policy** editor.
   - Click **Save changes**.
6. **Test the Website**
   - Visit the **Bucket Website Endpoint** (from step 3).
   - If set up correctly, the website should now be accessible.

Steps to Deploy a Static Website on Amazon CloudFront

Create a CloudFront Distribution

- Go to **CloudFront** in AWS.
- Click **Create Distribution**.
- Under **Origin**, set:
  - **Origin Domain Name**: Select your S3 bucket from the dropdown.
  - **Origin Access**: Choose **Origin Access Control (OAC)**.
  - Click **Create new OAC**, give it a name, and click **Create**.
  - Enable **Bucket Policy Update** and apply the changes.
- Under **Default Behavior**, set:
  - **Viewer Protocol Policy**: Redirect HTTP to HTTPS.
  - **Allowed HTTP Methods**: GET, HEAD.
  - **Caching Policy**: Use **Managed-CachingOptimized**.
- Under **Settings**, set:
  - **Price Class**: Use the default or select lower-cost options if needed.
  - **Alternate Domain Names (CNAMEs)**: If using a custom domain, enter it here.
  - **SSL Certificate**: Choose an AWS Certificate Manager (ACM) certificate if using a custom domain.
- Click **Create Distribution**.

Deploy and Test the CloudFront Distribution

- Wait for CloudFront to finish deploying (takes a few minutes).
- Copy the **CloudFront Domain Name** (e.g., `https://d194hn8qxrfbu.cloudfront.net/.cloudfront.net`).
- Open it in a browser to verify the website is working.

CloudFront site Link - https://d194hn8qxrfbu.cloudfront.net/
S3 Link - http://webknot-css-major.s3-website.eu-north-1.amazonaws.com/