**Phase 6-> Deployment**

The **Deployment** phase marks the transition of the SkyLens weather application from development to a live, accessible platform for end-users. This phase involves preparing the system for public access, configuring hosting environments, and ensuring the application is secure and stable.

**Deployment to Web Server**

SkyLens was deployed to a cloud-based hosting service such as **Amazon Web Services (AWS)** or **Microsoft Azure**, chosen for their reliability and scalability. These platforms provide the necessary infrastructure to host HTML, CSS, and JavaScript files, manage storage, and serve the application efficiently to users around the world.

Deployment steps included:

1. Creating a hosting environment using AWS S3, AWS Amplify, or Azure Static Web Apps.
2. Uploading the application files: projectfinal.html, searchfinal.html, alertsfinal.html, moonfinal.html, and tendayfinal.html.
3. Ensuring API endpoints used in the app were active and allowed cross-origin resource sharing (CORS) where required.

**Domain Configuration and Security**

To make the application accessible with a custom domain, domain name configuration was set up using DNS services. Additionally, HTTPS was enabled to secure the connection between users and the application, preventing unauthorized access or data interception.

SSL certificates were either provided by the hosting service or manually installed to ensure encrypted connections.

Other security considerations included:

1. Configuring permissions for public access.
2. Minimizing exposed sensitive data in the JavaScript code (e.g., hiding API keys if using a backend).

**Files Categorized**

All five files—projectfinal.html, searchfinal.html, alertsfinal.html, moonfinal.html, and tendayfinal.html—were part of the deployment package. Each file represents a vital user-facing feature of the SkyLens application, and their successful deployment marked the project’s completion from development to public release.