

MPL Experiment 10 (PWA)

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Aim: To study and implement deployment of Ecommerce PWA to GitHub Page.

Theory:

GitHub Pages

Public web pages are freely hosted and easily published. Public webpages hosted directly from your GitHub repository. Just edit, push, and your changes are live.

GitHub Pages provides the following key features:

- Blogging with Jekyll
- Custom URL
- Automatic Page Generator

Reasons for favoring this over Firebase:

- Free to use
- Right out of github
- Quick to set up

GitHub Pages is used by Lyft, CircleCI, and HubSpot.

GitHub Pages is listed in 775 company stacks and 4401 developer stacks.

Pros

- Very familiar interface if you are already using GitHub for your projects.
- Easy to set up. Just push your static website to the gh-pages branch and your website is ready.
- Supports Jekyll out of the box.
- Supports custom domains. Just add a file called CNAME to the root of your site, add an A record in the site's DNS configuration, and you are done.

Cons

- The code of your website will be public, unless you pay for a private repository.
- Currently, there is no support for HTTPS for custom domains. It's probably coming soon though.
- Although Jekyll is supported, plug-in support is rather spotty.
- Firebase

The Realtime App Platform. Firebase is a cloud service designed to power real-time, collaborative applications. Simply add the Firebase library to your application to gain access to a shared data structure; any changes you make to that data are automatically synchronized with the Firebase cloud and with other clients within milliseconds.

Some of the features offered by Firebase are:

- Add the Firebase library to your app and get access to a shared data structure. Any changes made to that data are automatically synchronized with the Firebase cloud and with other clients within milliseconds.
- Firebase apps can be written entirely with client-side code, update in real-time out-of-the-box, interoperate well with existing services, scale automatically, and provide strong data security.
- Data Accessibility- Data is stored as JSON in Firebase. Every piece of data has its own URL which can be used in Firebase's client libraries and as a REST endpoint. These URLs can also be entered into a browser to view the data and watch it update in real-time.

Reasons for favoring over GitHub Pages:

- Realtime backend made easy
- Fast and responsive

Instacart, 9GAG, and Twitch are some of the popular companies that use Firebase. Firebase has a broader approval, being mentioned in 1215 company stacks & 4651 developers stacks.

Pros

- Hosted by Google. Enough said.
- Authentication, Cloud Messaging, and a whole lot of other handy services will be available to you.
- A real-time database will be available to you, which can store 1 GB of data.
- You'll also have access to a blob store, which can store another 1 GB of data.
- Support for HTTPS. A free certificate will be provisioned for your custom domain within 24 hours.

Cons

- Only 10 GB of data transfer is allowed per month. But this is not really a big problem, if you use a CDN or AMP.
- Command-line interface only.
- No in-built support for any static site generator.

Link to our GitHub repository:

<https://github.com/Sneha0321/Weather-App-PWA>

Link to our Hosted website:

<https://sneha0321.github.io/Weather-App-PWA/>

Github Screenshot:

The image displays two screenshots of a GitHub repository page for 'Weather-App-PWA' by user 'Sneha0321'.

Top Screenshot: Repository Overview

The repository is public and has 5 commits. The file list shows:

File	Upload Time
api.css	9 minutes ago
icon-192x192.png	7 minutes ago
icon-512x512.png	7 minutes ago
index.html	10 minutes ago
manifest.json	9 minutes ago
narrow.png	7 minutes ago
sw.js	9 minutes ago
wide.png	7 minutes ago

The right sidebar shows the 'About' section with no description, website, or topics provided. It also lists 'Releases' (no releases published), 'Packages' (no packages published), and 'Deployments' (5 deployments, with 'github-pages' deployed 6 minutes ago).

Bottom Screenshot: GitHub Pages Settings

The 'Settings' page for the repository is shown, specifically the 'GitHub Pages' section. It indicates that the site is live at <https://sneha0321.github.io/Weather-App-PWA/> and was last deployed by 'Sneha0321' 7 minutes ago. The 'Build and deployment' section shows the source is 'main' and the deployment is configured to deploy from the 'main' branch to the '/(root)' directory. The 'Custom domain' section is also visible, stating that custom domains allow serving the site from a domain other than 'sneha0321.github.io'.