

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

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:

1. Blogging with Jekyll
2. Custom URL
3. Automatic Page Generator

Reasons for favoring this over Firebase:

1. Free to use
2. Right out of github
3. 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

1. Very familiar interface if you are already using GitHub for your projects.
2. Easy to set up. Just push your static website to the gh-pages branch and your website is ready.
3. Supports Jekyll out of the box.
4. 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

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

Firestore

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

Reasons for favoring over GitHub Pages:

1. Realtime backend made easy
2. Fast and responsive

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

Pros :

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

Cons:

1. 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.
2. Command-line interface only.
3. No in-built support for any static site generator.

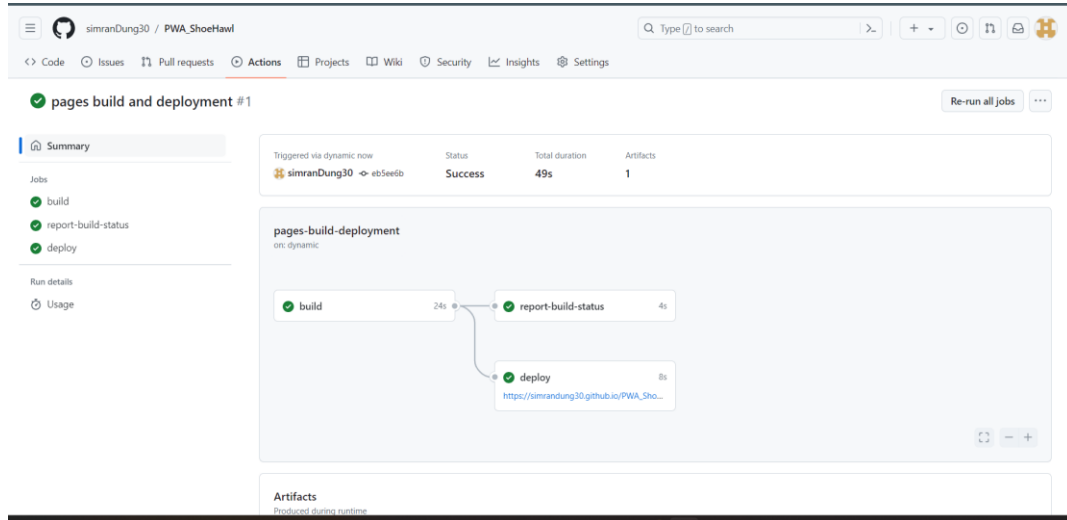
GITHUB REPO : https://github.com/simranDung30/PWA_ShoeHawl/tree/main

HOSTED LINK : https://simrandung30.github.io/PWA_ShoeHawl/

The screenshot shows the GitHub repository page for 'simranDung30 / PWA_ShoeHawl'. The left sidebar displays the file structure under the 'main' branch, including a folder named 'PWA_ShoeHawl' which contains an 'images' folder and several files: 'home.html', 'manifest.json', 'script.js', 'service.js', 'shop.html', 'style.css', 'sw.js', and 'README.md'. The main content area shows the commit history for the 'PWA_ShoeHawl / PWA_ShoeHawl' path. It lists a series of commits, all with the message 'Add files via upload', made by 'simranDung30' at 'now'.

Name	Last commit message	Last commit date
..		
images	Add files via upload	now
home.html	Add files via upload	now
manifest.json	Add files via upload	now
script.js	Add files via upload	now
service.js	Add files via upload	now
shop.html	Add files via upload	now
style.css	Add files via upload	now
sw.js	Add files via upload	now

The screenshot shows the 'Settings' page for the 'simranDung30 / PWA_ShoeHawl' repository, specifically the 'Pages' tab. The left sidebar lists various settings categories, with 'Pages' selected. The main content area is titled 'GitHub Pages' and includes a description: 'GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.' Under the 'Build and deployment' section, the 'Source' is set to 'Deploy from a branch'. The 'Branch' section indicates that GitHub Pages is currently disabled and provides a link to 'Learn more about configuring the publishing source for your site'. The 'Visibility' section, marked with a 'GITHUB ENTERPRISE' badge, explains that with a GitHub Enterprise account, access to the GitHub Pages site can be restricted. A button 'Try GitHub Enterprise risk-free for 30 days' is visible, along with a link to 'Learn more about the visibility of your GitHub Pages site'.



Conclusion: In essence, the experiment effectively demonstrated deploying an Ecommerce Progressive Web App (PWA) to GitHub Pages. While we encountered hurdles such as connection issues and HTTPS configuration, the experiment provided valuable hands-on experience and underscored the practicality and advantages of hosting PWAs on GitHub Pages. Going forward, persistently refining deployment strategies and capitalizing on the strengths of PWAs will be paramount to maximizing the potential of Ecommerce solutions onweb platform.

