

EXPERIMENT NO: - 10

AIM: - To study and implement deployment of Ecommerce PWA to GitHub Pages.

Theory: -

GitHub Pages: Static Website Hosting Made Simple

GitHub Pages is a free hosting service that allows users to publish **public webpages directly from a GitHub repository**. It is particularly useful for **static websites, project documentation, and blogs**.

Key Features

- **Jekyll Integration:** Built-in support for Jekyll enables easy blogging.
- **Custom Domains:** Allows users to configure their own URLs.
- **Automatic Page Deployment:** Simply push your changes to the repository, and the updates go live.

Why Choose GitHub Pages?

- **Completely Free:** No hosting charges.
- **Seamless GitHub Integration:** Works directly with your repositories.
- **Quick Setup:** Just create a repository, push your files, and your site is live.

Who Uses GitHub Pages?

Companies like **Lyft, CircleCI, and HubSpot** use GitHub Pages for their documentation and static sites. It is widely adopted, appearing in **775 company stacks and 4,401 developer stacks**.

Pros & Cons

Pros

- Familiar interface for GitHub users.

- Simple deployment via the [gh-pages](#) branch.
- Supports custom domains with easy DNS configuration.

Cons

- Repositories need to be public unless you have a paid plan.
 - Limited HTTPS support for custom domains (expected to improve).
 - Jekyll plugins have limited support.
-

Firestore: A Full-Featured Real-Time Backend

Firestore is a cloud-based **real-time application platform** developed by Google. It enables developers to build **dynamic, collaborative applications** with ease.

Key Features

- **Real-Time Database:** Automatically syncs data across all connected clients.
- **Cloud-Based Storage:** JSON-based storage accessible via REST APIs.
- **Scalable Infrastructure:** Works well with existing services and scales automatically.
- **Authentication & Cloud Messaging:** Secure login and push notifications.

Why Choose Firestore?

- **Instant Backend Setup:** No need to build a separate backend.
- **Fast & Responsive:** Real-time data synchronization.
- **Built-in HTTPS:** Free SSL certificates for custom domains.

Who Uses Firestore?

Companies like **Instacart, 9GAG, and Twitch** rely on Firestore for their backend needs. Firestore is widely adopted, appearing in **1,215 company stacks and 4,651 developer stacks**.

Pros & Cons

Pros

- **Hosted by Google**, ensuring reliability and security.
- **Comes with authentication, messaging, and real-time database services.**
- **Free HTTPS support** for all custom domains.

Cons

- **Limited Free Plan:** 10 GB of data transfer per month (can be mitigated with a CDN).
- **Command-Line Deployment:** No GUI for hosting.
- **No Built-in Static Site Generator Support:** Unlike GitHub Pages, Firebase doesn't natively support static site generators like Jekyll.

Link to our GitHub repository:



Hosted link:

<https://sonamcc.github.io/Sonam-Pwa/>

Github Screenshot:







