

## Experiment No. 10

### 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

Firebase cloud and with other clients within milliseconds.

Some of the features offered by Firebase are:

1. 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.
2. 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.
3. 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:

1. Realtime backend made easy
2. 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

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.

**Link to our GitHub repository:** [https://github.com/bhogalesiddhi/SiddhiB\\_Ecom\\_PWA](https://github.com/bhogalesiddhi/SiddhiB_Ecom_PWA)

**Hosted website Link :** [https://bhogalesiddhi.github.io/SiddhiB\\_Ecom\\_PWA/](https://bhogalesiddhi.github.io/SiddhiB_Ecom_PWA/)

**Github Screenshot:**

The image shows the GitHub Pages configuration interface for the repository 'bhogalesiddhi / SiddhiB\_Ecom\_PWA'. The left sidebar contains navigation links: General, Access, Collaborators, Moderation options, Code and automation, Branches, Tags, Rules, Actions, Webhooks, Environments, Codespaces, and Pages (selected). The main content area is titled 'GitHub Pages' and includes a 'Your site is live at' notification with the URL [https://bhogalesiddhi.github.io/SiddhiB\\_Ecom\\_PWA/](https://bhogalesiddhi.github.io/SiddhiB_Ecom_PWA/) and a 'Visit site' button. Below this is the 'Build and deployment' section, showing 'Source' as 'Deploy from a branch' and 'Branch' as 'main'. A 'Save' button is present. At the bottom, there is a link to 'Learn how to add a Jekyll theme to your site.'

The second part of the image shows the deployed website in a browser. The address bar displays [bhogalesiddhi.github.io/SiddhiB\\_Ecom\\_PWA/](https://bhogalesiddhi.github.io/SiddhiB_Ecom_PWA/). The website has a grey header with the text 'Welcome to Our Store' and a navigation menu with links: Home, Shop, About, and Contact. Below the header is a 'Featured Products' section displaying three products in white cards:

- Product 1**: A gold watch with a black dial, priced at \$19.99, with an 'Add to Cart' button.
- Product 2**: A black smartwatch with a yellow and black strap, priced at \$24.99, with an 'Add to Cart' button.
- Product 3**: A black smartwatch with a yellow and black strap, priced at \$29.99, with an 'Add to Cart' button.

The footer of the website contains the text: © 2024 Ecommerce Store. All rights reserved.

**Conclusion :** We have deployed our Ecommerce Pwa via GitHub pages and understood the working of Github pages