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D15A Roll No: 37

### Exp 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:

Blogging with Jekyll Custom URL 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.

### **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.
- 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

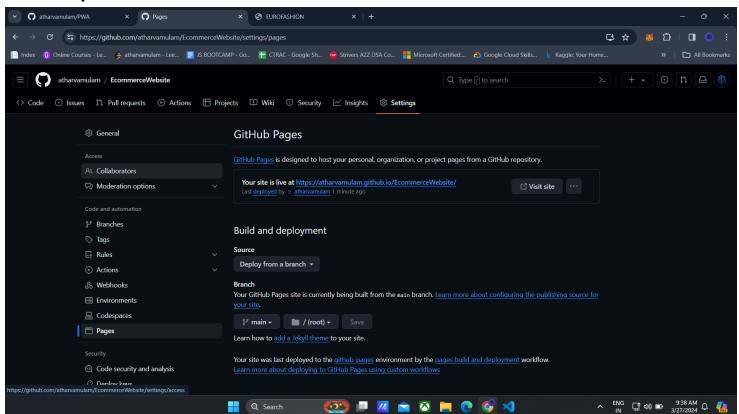
#### **Pros**

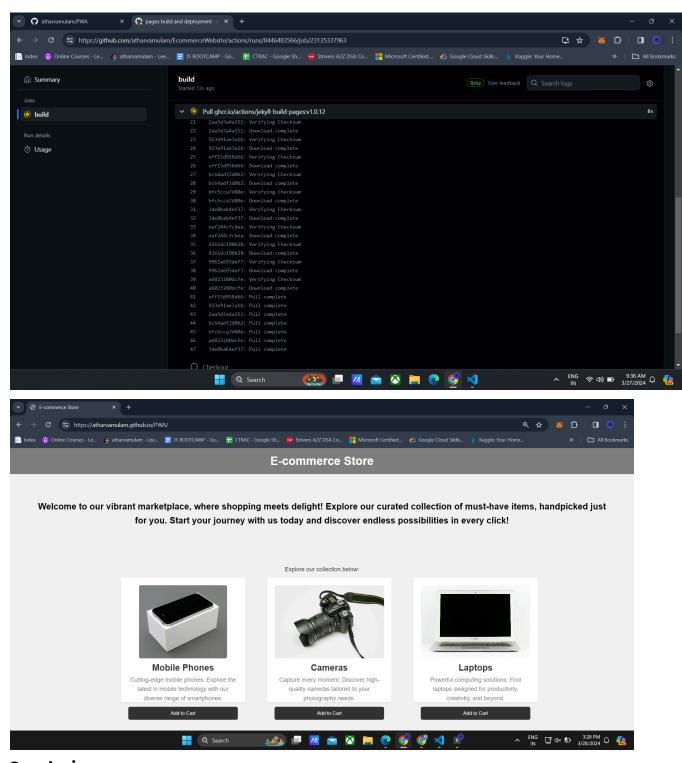
- 1. Hosted by Google. Enough said.
- 2. Authentication, Cloud Messaging, and a whole lot of other handy services will be available to you.
- 3. A real-time database will be available to you, which can store 1 GB of data.
- 4. You'll also have access to a blob store, which can store another 1 GB of data.
- 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.

### **Output:**





## **Conclusion:**

In this experiment, we have registered a service worker, and completed the install and activation process for a new service worker for the E-commerce PWA.