

**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

- **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:

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

- **Compare and contrast GitHub Pages hosting versus Firebase Hosting**

<b>Feature</b>	<b>GitHub Pages</b>	<b>Firebase Hosting</b>
Hosting Type	Static Website	Static Website or Web Application
Supported Languages	HTML, CSS, JavaScript, Markdown	HTML, CSS, JavaScript, and most server-side languages such as Node.js, Python, PHP, Ruby
Custom Domain	Yes	Yes
SSL Certificate	Included with custom domains	Included with custom domains
CDN	GitHub CDN	Google Cloud CDN
Bandwidth Limit	100 GB per month	360 GB per month
Deployment	Automatic on commit to specified branch	Manual or automatic using Firebase CLI or integrations
Database	Not included, but can be integrated with Jekyll or other static site generators	Firebase Realtime Database or Cloud Firestore
Authentication	GitHub authentication	Firebase Authentication

Storage	Not included, but can be integrated with Jekyll or other static site generators	Firebase Cloud Storage
Analytics	Not included	Firebase Analytics
Cost	Free with limited features and storage, paid plans available	Free with limited features and storage, paid plans available

**Repository link -** <https://github.com/Manavjawrani/SEM-6-PWA-Website.git>

**Github Pages link -** <https://manavjawrani.github.io/SEM-6-PWA-Website/>

## Output -

