

## Experiment No 10

**Aim :** The aim of this experiment is to study and implement the deployment of an E-commerce Progressive Web Application (PWA) to GitHub Pages. By exploring the capabilities of GitHub Pages, we aim to understand its suitability for hosting PWAs, particularly for e-commerce purposes. Through practical implementation and analysis, we seek to evaluate the ease of deployment, customization options, and overall performance of deploying an E-commerce PWA on GitHub Pages compared to alternative hosting solutions.

### **Theory :**

GitHub Pages:

GitHub Pages offers a convenient platform for hosting static websites directly from GitHub repositories.

Key features include:

**Free Hosting:** Public web pages can be hosted for free, making it an economical choice for deploying E-commerce PWAs.

**Seamless Integration:** GitHub Pages seamlessly integrates with GitHub repositories, providing a familiar environment for developers already using GitHub for version Control.

**Quick Deployment:**

Deployment is straightforward - by pushing static website files to the gh-pages branch, the website becomes live, minimizing setup time.

**Jekyll Support:** GitHub Pages supports Jekyll, a popular static site generator, enabling easy website generation and customization.

**Custom Domain Setup:**

Businesses can maintain brand identity by setting up custom domains for their E-commerce PWAs.

**Blogging with Jekyll:** GitHub Pages supports blogging features with Jekyll, which can be utilized for content marketing strategies within E-commerce websites.

**Firebase:**

Firebase is another platform often considered for hosting web applications, including PWAs. However, it differs from GitHub Pages in several aspects:

**Cost:** While Firebase offers a generous free tier, scaling beyond the free limits can become costly, particularly for high-traffic E-commerce PWAs.

**Complexity:** Firebase requires a deeper understanding of its features and configuration, which may pose challenges for developers unfamiliar with its ecosystem.

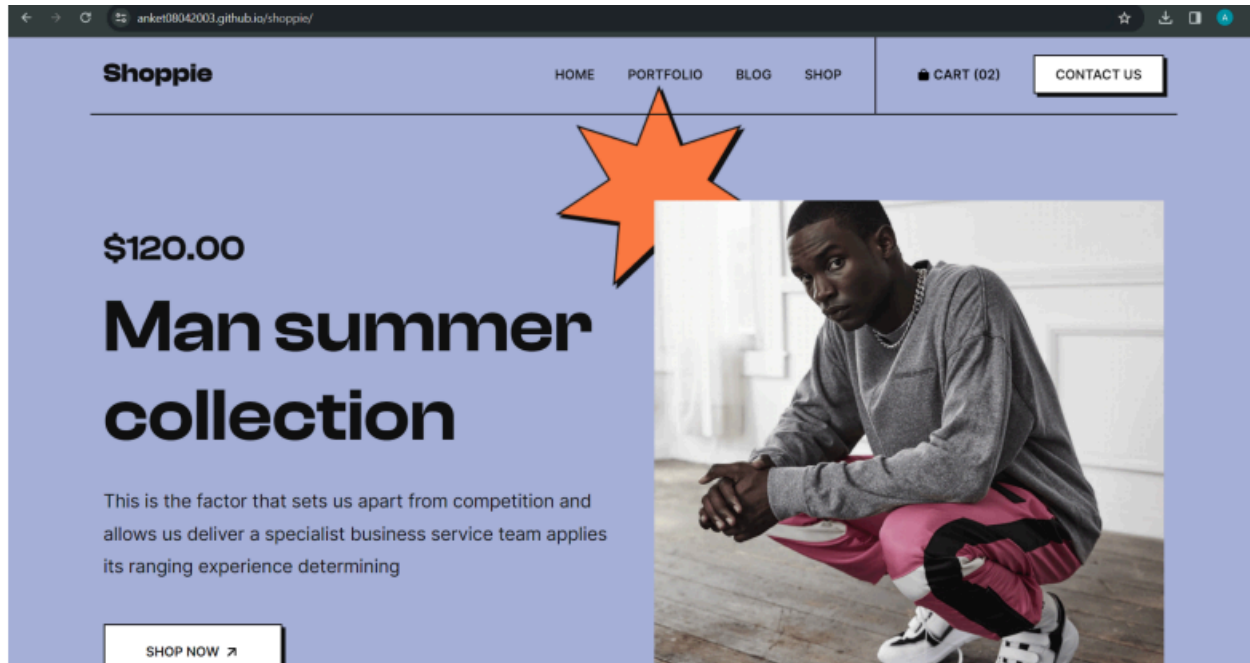
**Limited Support for Static Site Generators:** Unlike GitHub Pages, Firebase does not offer built-in support for static site generators, potentially complicating the

deployment process for developers relying on these tools.

```
MINGW64:/c/Users/anket/codes/shoppie
create mode 100644 assets/images/product-9.png
create mode 100644 assets/js/script.js
create mode 100644 favicon.svg
create mode 100644 index.html
create mode 100644 index.txt
create mode 100644 manifest.json
create mode 100644 readme-images/desktop.png
create mode 100644 serviceworker.js
create mode 100644 style-guide.md

anket@Anket MINGW64 ~/codes/shoppie (master)
$ git remote add origin https://github.com/Anket08042003/shoppie.git

anket@Anket MINGW64 ~/codes/shoppie (master)
$ git push -u origin master
Enumerating objects: 39, done.
Counting objects: 100% (39/39), done.
Delta compression using up to 16 threads
Compressing objects: 100% (36/36), done.
Writing objects: 100% (39/39), 2.12 MiB | 2.31 MiB/s, done.
Total 39 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Anket08042003/shoppie.git
 * [new branch]      master -> master
```



**Conclusion:** In conclusion, GitHub Pages presents an attractive option for deploying E-commerce PWAs due to its simplicity, cost-effectiveness, and seamless integration with GitHub's ecosystem. By leveraging GitHub Pages, businesses can quickly launch and maintain their E-commerce websites, focusing on delivering a smooth shopping experience for their customers. This experiment aims to explore and validate the suitability of GitHub Pages for hosting E-commerce PWAs, providing valuable insights for developers and businesses seeking reliable hosting solutions for their web applications.