

MAD & PWA Lab

Journal

Experiment No.	10
Experiment Title.	To study and implement deployment of Ecommerce PWA to GitHub Pages.
Roll No.	14
Name	Komal Milind Deolekar
Class	D15A
Subject	MAD & PWA Lab
Lab Outcome	LO5: Design and Develop a responsive User Interface by applying PWA Design techniques
Grade:	

AIM : To study and implement deployment of Website 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.

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

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/KomalDeolekar0607/pwa_9

Github Screenshot:

```
D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>git branch -M main

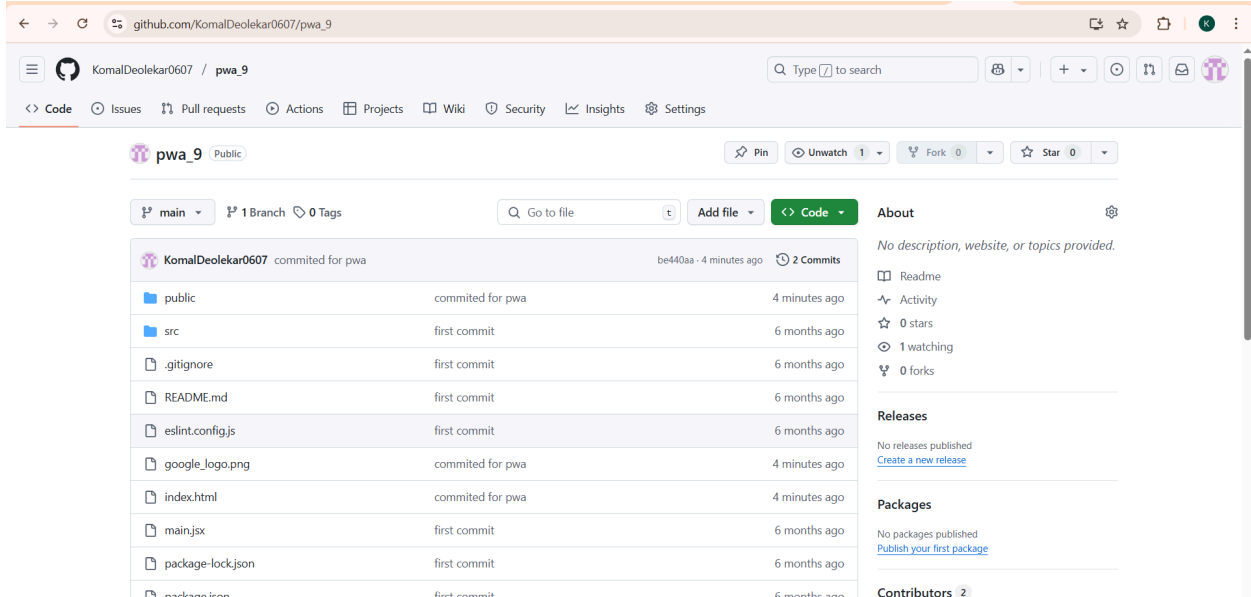
D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>git remote add origin https://github.com/KomalDeolekar0607/pwa_9.git
error: remote origin already exists.

D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>git remote
origin

D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>git remote add pwa https://github.com/KomalDeolekar0607/pwa_9.git

D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>git push -u pwa main
Enumerating objects: 52, done.
Counting objects: 100% (52/52), done.
Delta compression using up to 8 threads
Compressing objects: 100% (51/51), done.
Writing objects: 100% (52/52), 2.71 MiB | 99.00 KiB/s, done.
Total 52 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/KomalDeolekar0607/pwa_9.git
 * [new branch]      main -> main
branch 'main' set up to track 'pwa/main'.

D:\Users\Komal\OneDrive\Desktop\sem 6\mpl_lab\college_website\college_site>
```



The screenshot displays the GitHub repository page for 'pwa_9' by user 'KomalDeolekar0607'. The repository is public and has 1 branch (main) and 0 tags. The file list shows the following files and their commit history:

File	Commit	Time
public	committed for pwa	4 minutes ago
src	first commit	6 months ago
.gitignore	first commit	6 months ago
README.md	first commit	6 months ago
eslint.config.js	first commit	6 months ago
google_logo.png	committed for pwa	4 minutes ago
index.html	committed for pwa	4 minutes ago
main.js	first commit	6 months ago
package-lock.json	first commit	6 months ago
package.json	first commit	6 months ago

The repository statistics show 0 stars, 1 watching, and 0 forks. The 'About' section indicates no description, website, or topics provided. The 'Releases' section shows no releases published, and the 'Packages' section shows no packages published.

Conclusion :

To deploy a Website PWA on GitHub Pages, we build the project and push the production-ready files to a GitHub repository. Hosting it on GitHub Pages makes the PWA accessible via HTTPS, enabling full PWA functionality like installability and offline support.