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<div align="center">**EXP 10**</div>

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.

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 GitHub repository: https://github.com/pranavraikar01/pwa-project

```json
package.json M  X
package.json > {} scripts
1    {
2      "homepage": "https://pranavraikar01.github.io/pwa-project",
3      "name": "to-do-list",
4      "version": "0.1.0",
5      "private": true,
6      "dependencies": {
7        "@testing-library/jest-dom": "^5.17.0",
8        "@testing-library/react": "^13.4.0",
9        "@testing-library/user-event": "^13.5.0",
10       "react": "^18.2.0",
11       "react-dom": "^18.2.0",
12       "react-router-dom": "^6.16.0",
13       "react-scripts": "5.0.1",
14       "web-vitals": "^2.1.4"
15     },
       ▷ Debug
16     "scripts": {
17       "start": "react-scripts start",
18       "predeploy":"npm run build",
19       "deploy":"gh-pages -d build",
20       "build": "react-scripts build",
21       "test": "react-scripts test",
22       "eject": "react-scripts eject"
23     },
24     "eslintConfig": {
25       "extends": [
26         "react-app",
27         "react-app/jest"
28       ]
```
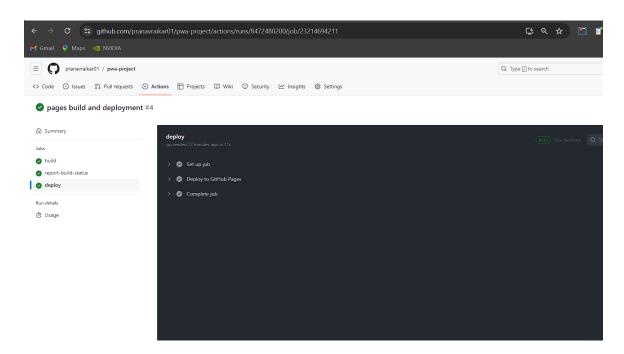
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

```
PS D:\Full_stack_projects\PWA LAB\pwa-project> npm run deploy

> to-do-list@0.1.0 predeploy
> npm run build


> to-do-list@0.1.0 build
> react-scripts build

Creating an optimized production build...
Browserslist: caniuse-lite is outdated. Please run:
  npx update-browserslist-db@latest
  Why you should do it regularly: https://github.com/browserslist/update-db#readme
One of your dependencies, babel-preset-react-app, is importing the
"@babel/plugin-proposal-private-property-in-object" package without
declaring it in its dependencies. This is currently working because
```
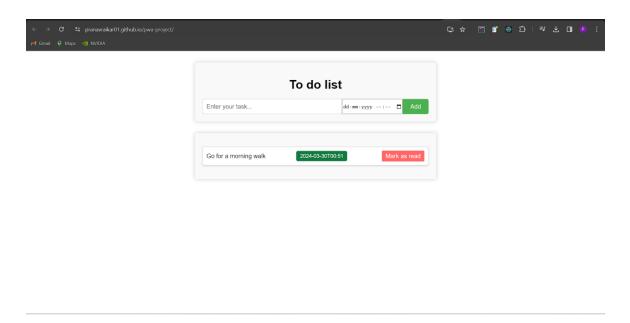
pranavraikar01 / pwa-project

<> Code   Issues   Pull requests   Actions   Projects   Wiki   Security   Insights   Settings

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Code and automation

Branches

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Actions

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Pages

Security

Code security and analysis

Deploy keys

Secrets and variables

Integrations

GitHub Apps

Email notifications

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is live at https://pranavraikar01.github.io/pwa-project/
Last deployed by pranavraikar01 5 minutes ago

Visit site   ...

Build and deployment

Source

Deploy from a branch

Branch

Your GitHub Pages site is currently being built from the gh-pages branch. Learn more about configuring the publishing source for your site.

gh-pages   / (root)   Save

Learn how to add a Jekyll theme to your site.

Your site was last deployed to the github-pages environment by the pages build and deployment workflow.
Learn more about deploying to GitHub Pages using custom workflows

Custom domain

Custom domain

Custom domains allow you to serve your site from a domain other than pranavraikar01.github.io. Learn more about configuring custom domains.

Save   Remove

---

pranavraikar01 / pwa-project

<> Code   Issues   Pull requests   Actions   Projects   Wiki   Security   Insights   Settings

Type / to search

✓ pages build and deployment #4

Summary

Jobs

✓ build

✓ report-build-status

✓ deploy

Run details

Usage

deploy
succeeded 12 minutes ago in 11s

Beta Give feedback

> ✓ Set up job

> ✓ Deploy to GitHub Pages

> ✓ Complete job

HOSTED LINK:
https://pranavraikar01.github.io/pwa-project/

HOSTED IMAGE:

Conclusion:Thus we have implemented deployment of PWA website to GitHub Pages.