

MAD and PWA Lab

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Class: D15A

Roll no:19

Experiment - 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:

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.

Implementation:

ecommercePublic

PinUnwatch1Fork0Star0

main1 Branch0 Tags

Go to file

Code

HarshGawali007manifest2 hours ago4 Commits

publicmanifest2 hours ago

srcmy final commit2 weeks ago

.gitignoremy final commit2 weeks ago

README.mdmy final commit2 weeks ago

package-lock.jsonmy final commit2 weeks ago

package.jsonmy final commit2 weeks ago

README

E-Commerce Website

Aboutecommerce-theta-bice.vercel.app

ReadmeActivity0 stars1 watching0 forks

ReleasesNo releases publishedCreate a new release

PackagesNo packages publishedPublish your first package

Deployments7

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Code security and analysis

Deploy keys

GitHub Pages

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

Build and deployment

Source

Deploy from a branch

Branch

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. Learn more about configuring the publishing source for your site.

NoneSave

Visibility

GITHUB ENTERPRISE

With a GitHub Enterprise account, you can restrict access to your GitHub Pages site by publishing it privately. A privately published site can only be accessed by people with read access to the repository the site is published from. You can use privately published sites to share your internal documentation or knowledge base with members of your enterprise.

Try GitHub Enterprise risk-free for 30 days

Learn more about the visibility of your GitHub Pages site

Pull ghcr.io/actions/jekyll-build-pages:v1.0.12

18 9962a693def7: waiting
19 bc64adf2d8b2: waiting
20 bfc5cca7d80e: waiting
21 2aa5d3a4a151: Verifying Checksum
22 2aa5d3a4a151: Download complete
23 923e91ae3a1b: Download complete
24 eff15d958d66: Verifying Checksum
25 eff15d958d66: Download complete
26 bfc5cca7d80e: Verifying Checksum
27 bfc5cca7d80e: Download complete
28 bc64adf2d8b2: Verifying Checksum
29 bc64adf2d8b2: Download complete
30 3de8bab4ef37: Verifying Checksum
31 3de8bab4ef37: Download complete
32 e6f244cfcbca: Verifying Checksum
33 e6f244cfcbca: Download complete
34 9962a693def7: Verifying Checksum
35 9962a693def7: Download complete
36 4161dc19b028: Verifying Checksum
37 4161dc19b028: Download complete
38 a6023280dcfe: Verifying Checksum
39 a6023280dcfe: Download complete
40 eff15d958d66: Pull complete
41 923e91ae3a1b: Pull complete
42 2aa5d3a4a151: Pull complete

☐ Checkout

☐ Build with Jekyll

☐ Upload artifact

The top screenshot shows a GitHub Actions workflow run titled "pages build and deployment #1". The "build" job is completed, with a status of "succeeded now in 22s". The job steps are: "Set up job" (2s) and "Pull ghcr.io/actions/jekyll-build-pagesv1.0.12" (13s). The logs for the "Pull" step show the following commands:

```
1 Pull down action image 'ghcr.io/actions/jekyll-build-pages:v1.0.12'
2 /usr/bin/docker pull ghcr.io/actions/jekyll-build-pages:v1.0.12
3 v1.0.12: Pulling from actions/jekyll-build-pages
4 eeff14958d66: Pulling fs layer
```

The bottom screenshot shows the same workflow run, but the "build" job is still running, with a status of "Started 9s ago". The job steps are: "Set up job" (2s) and "Pull ghcr.io/actions/jekyll-build-pagesv1.0.12" (6s). The logs for the "Pull" step show the following commands:

```
18 9962a693def7: Waiting
19 bc64ad72dbb2: Waiting
20 bfc5cca7d80e: Waiting
21 2aa5d3a4a151: Verifying Checksum
22 2aa5d3a4a151: Download complete
23 923e91ae3a1b: Download complete
24 eeff14958d66: Verifying Checksum
25 eeff14958d66: Download complete
26 bfc5cca7d80e: Verifying Checksum
27 bfc5cca7d80e: Download complete
28 bc64ad72dbb2: Verifying Checksum
29 bc64ad72dbb2: Download complete
30 3de8bab4ef37: Verifying Checksum
31 3de8bab4ef37: Download complete
32 eaf244cfcbea: Verifying Checksum
33 eaf244cfcbea: Download complete
34 9962a693def7: Verifying Checksum
35 9962a693def7: Download complete
36 4161dc190b28: Verifying Checksum
37 4161dc190b28: Download complete
38 a6023280dcfe: Verifying Checksum
39 a6023280dcfe: Download complete
40 eeff14958d66: Pull complete
41 923e91ae3a1b: Pull complete
42 2aa5d3a4a151: Pull complete
```

The screenshot shows the GitHub repository page for "dorm-mad-lab" by user "Sarvadyaawaghad150503". The "Actions" tab is selected, showing the workflow "pages build and deployment #1". The "build" job is completed, with a status of "succeeded now in 22s". The job steps are: "Set up job" (2s) and "Pull ghcr.io/actions/jekyll-build-pagesv1.0.12" (13s). The logs for the "Pull" step show the following commands:

```
1 Pull down action image 'ghcr.io/actions/jekyll-build-pages:v1.0.12'
2 /usr/bin/docker pull ghcr.io/actions/jekyll-build-pages:v1.0.12
3 v1.0.12: Pulling from actions/jekyll-build-pages
4 eeff14958d66: Pulling fs layer
```

Link to our GitHub repository: <https://github.com/HarshGawali007/ecommerce>

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.