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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:

The screenshot shows the main view of a GitHub repository named 'EcommerceWebsite' by user 'YuktaBhatia25'. The repository is private. The interface includes a top navigation bar with links to Code, Issues, Pull requests, Actions, Projects, Security, Insights, and Settings. Below the navigation bar, there's a section for the repository name and a dropdown for the 'master' branch. A table lists the files in the repository, including 'public', 'src', '.gitignore', 'README.md', 'package-lock.json', 'package.json', and 'tailwind.config.js'. To the right of the file list, there's an 'About' section with links to Readme, Activity, Stars, Watching, and Forks. Below the 'About' section, there's a 'Releases' section and a 'Packages' section. At the bottom, there's a 'Languages' section.

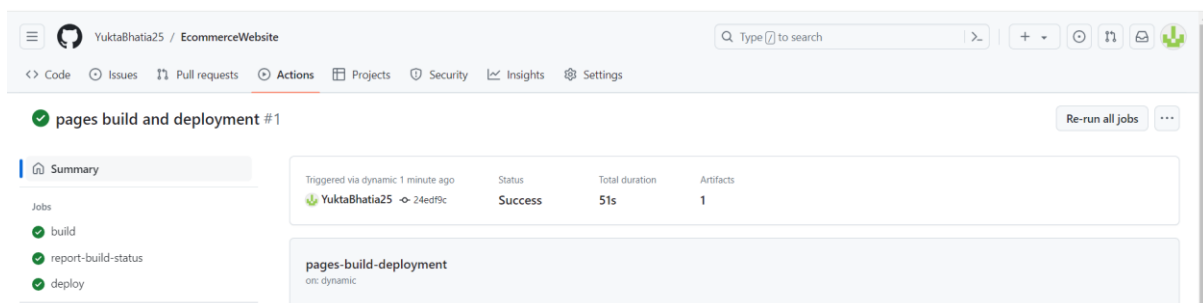
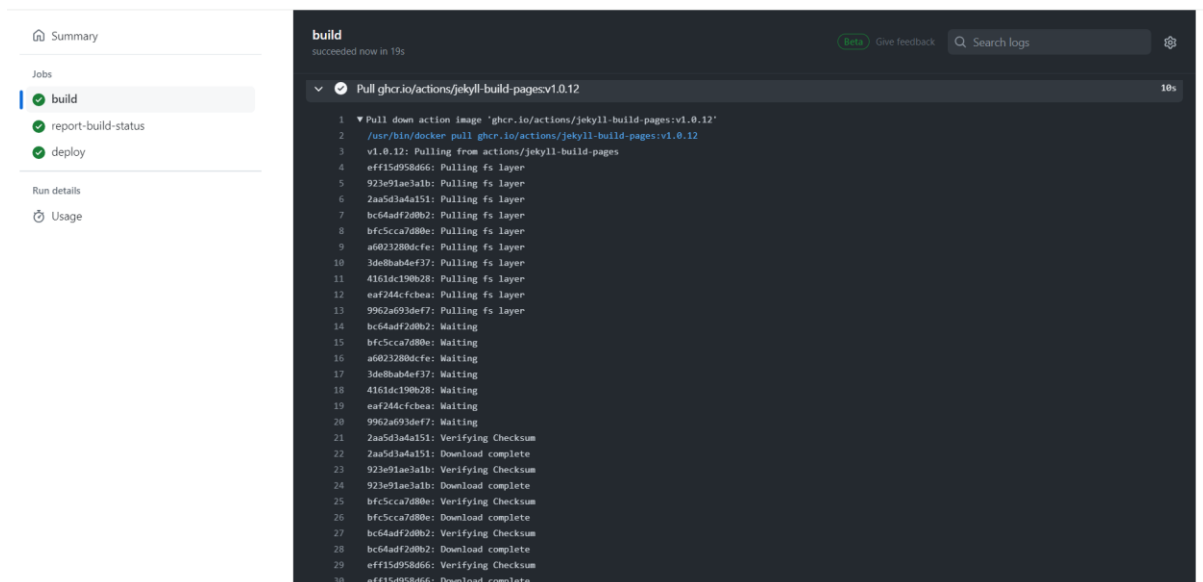
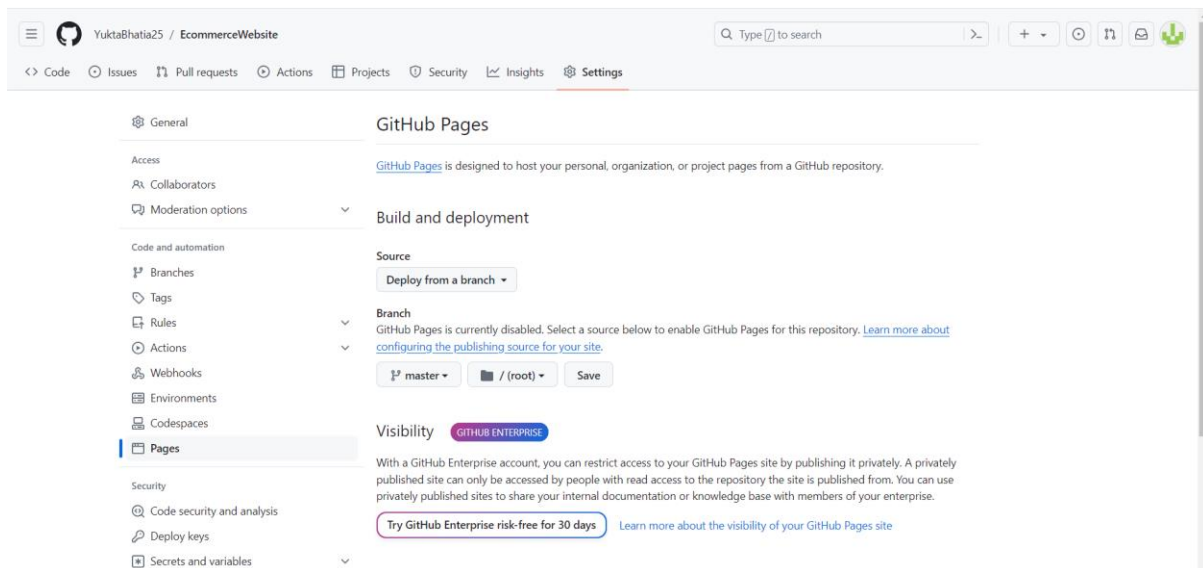
File	Uploaded files	24edf9c · now	3 Commits
public	Uploaded files	now	
src	Uploaded files	2 minutes ago	
.gitignore	Uploaded files	2 minutes ago	
README.md	Initial commit	6 minutes ago	
package-lock.json	Uploaded files	now	
package.json	Uploaded files	now	
tailwind.config.js	Uploaded files	now	

README

EcommerceWebsite

The screenshot shows the 'Settings' page for the 'EcommerceWebsite' repository. The left sidebar contains a list of settings categories: General, Access, Collaborators, Moderation options, Code and automation, Branches, Tags, Rules, Actions, Webhooks, Environments, Codespaces, Pages (selected), Security, Code security and analysis, Deploy keys, and Secrets and variables. The main content area is titled 'GitHub Pages' and contains the following sections:

- General**: A link to 'GitHub Pages' is provided, stating it is designed to host your personal, organization, or project pages from a GitHub repository.
- Build and deployment**: This section includes a 'Source' dropdown menu set to 'Deploy from a branch'. Below this, a 'Branch' section indicates that GitHub Pages is currently disabled and provides a link to 'Learn more about configuring the publishing source for your site.' There are 'None' and 'Save' buttons.
- Visibility**: This section features a 'GITHUB ENTERPRISE' badge. Below the badge, a paragraph explains that with a GitHub Enterprise account, you can restrict access to your GitHub Pages site by publishing it privately. A link to 'Try GitHub Enterprise risk-free for 30 days' and a link to 'Learn more about the visibility of your GitHub Pages site' are provided.



Github repository:- <https://github.com/YuktaBhatia25/EcommerceWebsite>

Conclusion:- In this experiment, Website has been deployed on github pages.