

EXP 10

Aim: To study and implement deployment of Ecommerce PWA to GitHub Pages.

Theory:

Deploying an E-commerce PWA built using Flutter to GitHub Pages involves converting the Flutter project into static web assets and hosting them on GitHub. Flutter compiles the UI and logic into HTML, CSS, and JavaScript files stored in the build/web directory. GitHub Pages is a free hosting platform provided by GitHub for serving static content directly from a repository.

To deploy:

1. A new Git branch (commonly gh-pages) is created to hold the web build.
2. The contents of build/web are added to this branch.
3. The repository is then configured to serve this branch via GitHub Pages.

This process makes the PWA publicly accessible through a GitHub URL and allows users to interact with it without any backend server.

Features:

1. Hosts static content from the GitHub repository.
2. Automatically deploys upon each push to the repository.
3. Supports Jekyll for static site generation.
4. Offers custom domain configuration with simple DNS setup.

Advantages:

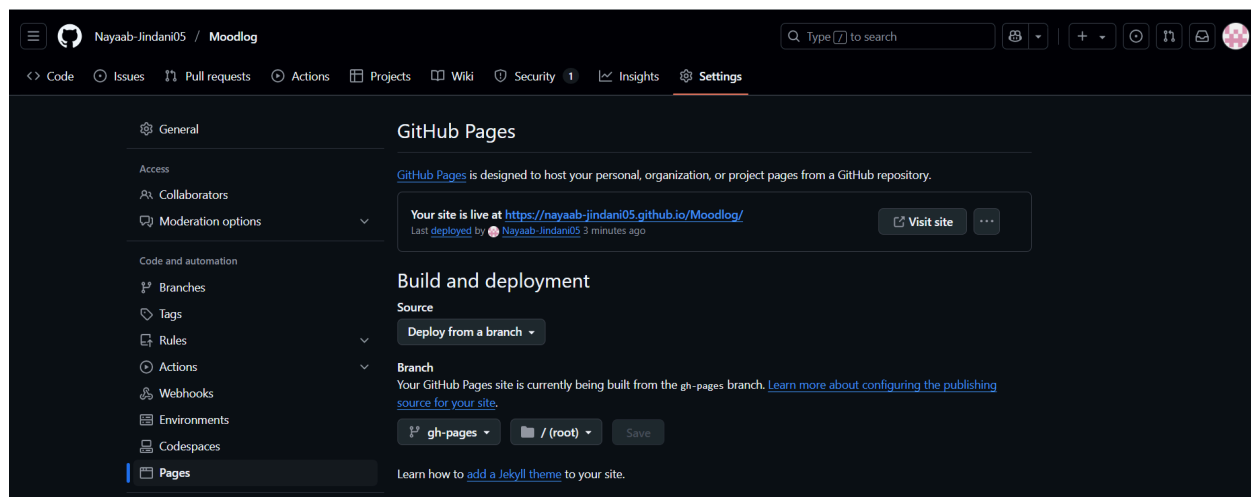
1. Easy to set up for users familiar with GitHub.
2. Native support for static site generators like Jekyll.
3. Custom domain support using a CNAME file.
4. No command-line tools required for basic deployments.

Disadvantages:

1. The website's code must be public unless a paid private repository is used.
2. Limited plugin support when using Jekyll.
3. Historically lacked HTTPS support for custom domains (now available when using GitHub's DNS).

Output:

```
PS C:\flutterapps\moodlog_project\build\web> cd build/web
>> git init
>> git remote add origin https://github.com/nayaab-jindani05/Moodlog.git
>> git checkout -b gh-pages
>> git add .
>> git commit -m "Deploy Flutter Web to GitHub Pages"
>> git push origin gh-pages --force
```



Conclusion:

In this experiment, the deployment of the Flutter-based PWA was successfully achieved using GitHub Pages. By initializing a Git repository inside the build/web directory and pushing the content to the gh-pages branch of the GitHub repository, the app became publicly accessible online. This method provides a simple and free hosting solution for Flutter web applications.