

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

Theory:

GitHub Pages is a free hosting service provided by GitHub to deploy static websites directly from a GitHub repository. It supports custom domains, Jekyll integration, and has a simple workflow—just push your code to the **gh-pages** branch, and your site goes live.

Why GitHub Pages?

- Free and easy to use
- Direct integration with GitHub
- Fast setup without third-party tools
- Custom domain support
- Used by many known companies like Lyft and HubSpot

Steps in General Deployment Process:

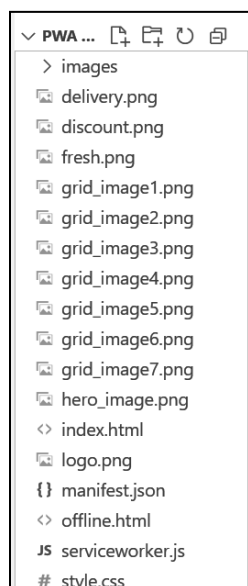
1. Prepare your PWA files (HTML, CSS, JS, manifest, service worker).
2. Create a GitHub repository.
3. Push your local project to GitHub.
4. Use the **gh-pages** branch or configure GitHub Pages from the repo settings.
5. Your site will be live at <https://yourusername.github.io/repository-name>.

What We Implemented:

In our E-commerce PWA:

- We already created the **manifest.json** and registered the **service worker** in earlier experiments to support offline capability and home screen installation.
- Now, in this experiment, we deployed our complete website (including all PWA features) to GitHub Pages.
- We created a repository on GitHub, pushed our files, and enabled GitHub Pages via the **gh-pages** branch.
- After deployment, we verified that the PWA still works properly with install prompt and offline support.

Folder Structure



Create a GitHub Repository & Link Your Local Project to GitHub and Push Changes.

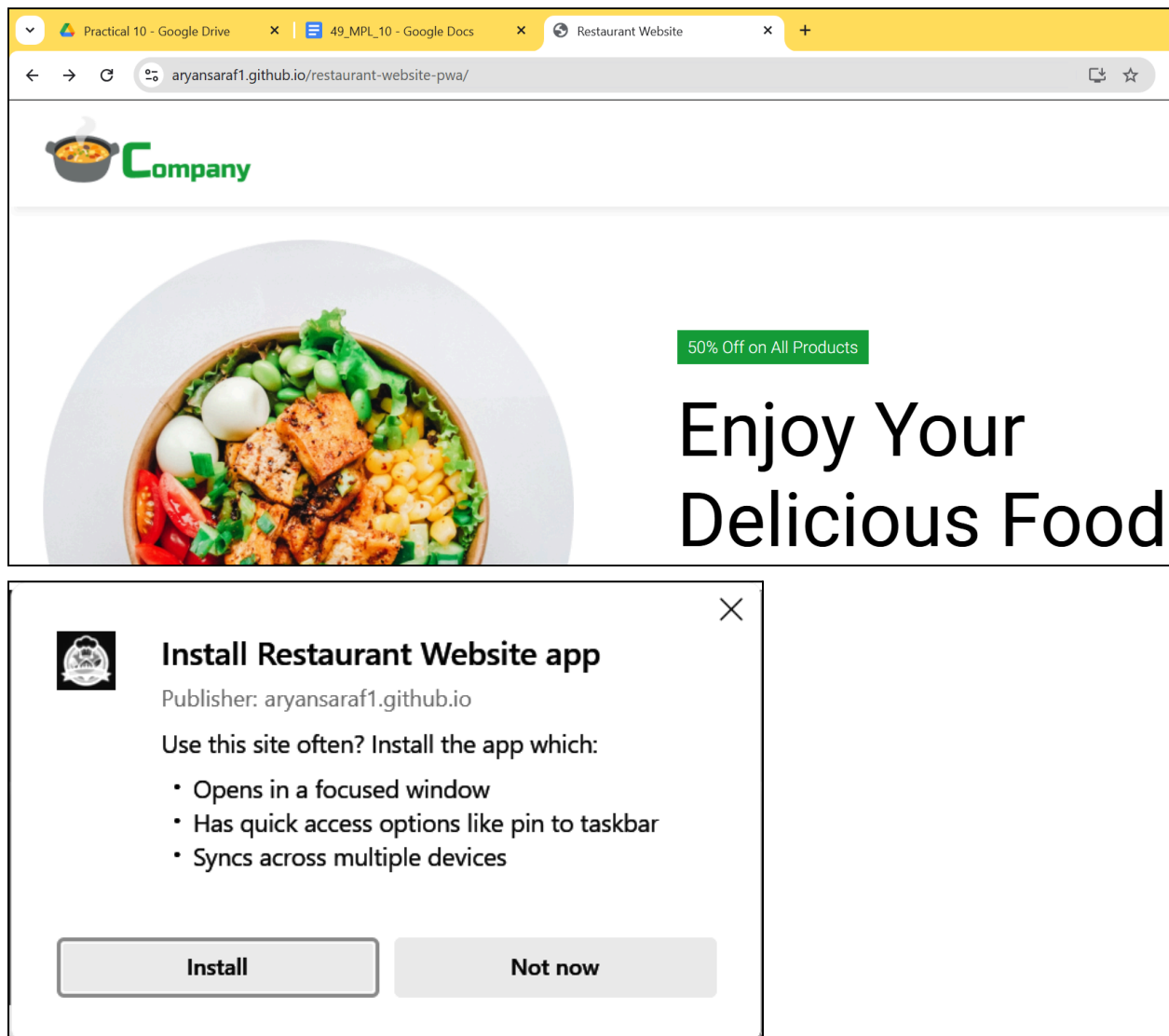
```

● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git init
Initialized empty Git repository in C:/Users/aryan/OneDrive/Desktop/pwa aryan/.git/
● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git add .
● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git commit -m "PWA project"
[main (root-commit) 363d85a] PWA project
 20 files changed, 498 insertions(+)

● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git remote add origin https://github.com/Aryansaraf1/restaurant-website-pwa.git
● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git branch -M main
● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan> git push -u origin main
Enumerating objects: 23, done.
Counting objects: 100% (23/23), done.
Delta compression using up to 12 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (23/23), 2.24 MiB | 2.22 MiB/s, done.
Total 23 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Aryansaraf1/restaurant-website-pwa.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
● PS C:\Users\aryan\OneDrive\Desktop\pwa aryan>

```

The screenshot shows a web browser with three tabs: 'Practical 10 - Google Drive', '49_MPL_10 - Google Docs', and 'Aryansaraf1/restaurant-website-pwa'. The address bar shows the URL 'github.com/Aryansaraf1/restaurant-website-pwa'. The page displays the repository details for 'restaurant-website-pwa' (Private) by user 'Aryansaraf1'. It shows 1 branch (main) and 0 tags. A list of files is displayed, including 'images', '.gitignore', 'delivery.png', 'discount.png', 'fresh.png', 'grid_image1.png', 'grid_image2.png', 'grid_image3.png', and 'grid_image4.png'. Each file is associated with the commit 'PWA project' and the timestamp '8 minutes ago'. The repository has 1 commit in total.



Conclusion

In this experiment, we successfully deployed our Restaurant PWA to GitHub Pages after facing a few issues like incorrect file paths and the service worker not registering initially. We resolved these by updating the relative paths for assets and carefully checking the `scope` and `start_url` in the manifest file to ensure the PWA worked smoothly after deployment.