MPL Practical 10

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

Github Link: https://harshpadyal.github.io/PWA-CAMPUS-CRAZE/

Theory

GitHub Pages is a free hosting service provided by GitHub to publish static websites directly from a GitHub repository. It supports HTML, CSS, JavaScript, and other front-end files, making it ideal for hosting PWAs.

What we implemented in our code

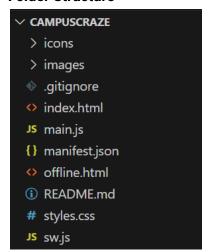
In this experiment, we deployed our E-commerce PWA project, "CampusCraze - Budget-friendly stationery, hostel decor, and fashion for college students

", to GitHub Pages using these steps:

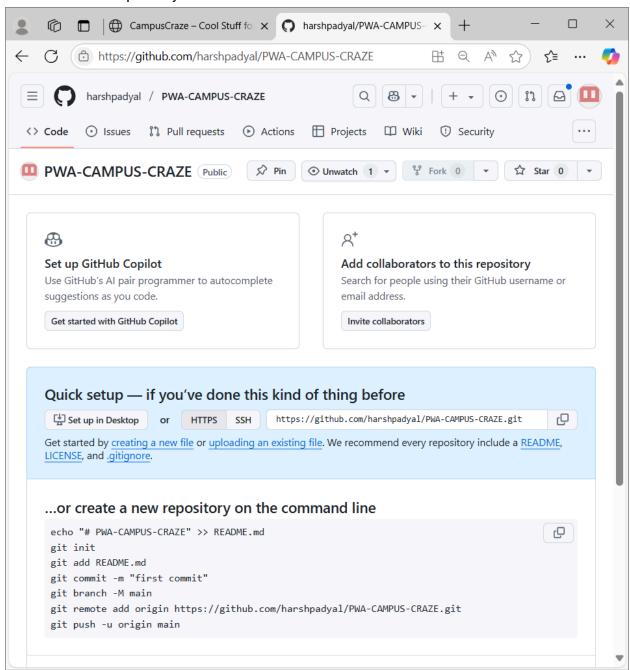
- We ensured all necessary PWA files were in place, such as index.html, manifest.json, sw.js, and offline assets.
- The index.html file used relative paths correctly so resources load properly after deployment.
- We registered the service worker to enable offline access and caching of essential files.
- The manifest.json provided metadata to support "Add to Home Screen" functionality.
- We created a GitHub repository and pushed all project files to it.
- Then, from GitHub Settings → Pages, we selected the main branch and the / (root) folder as the source.
- After saving, GitHub generated a live link through which we accessed the deployed PWA.

This deployment made our PWA fully functional and accessible online with service worker support, offline capabilities, and installability features.

Folder Structure

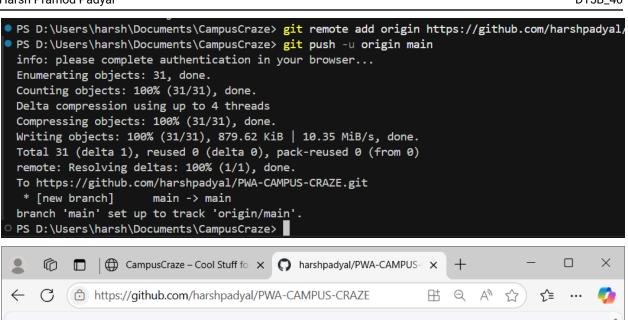


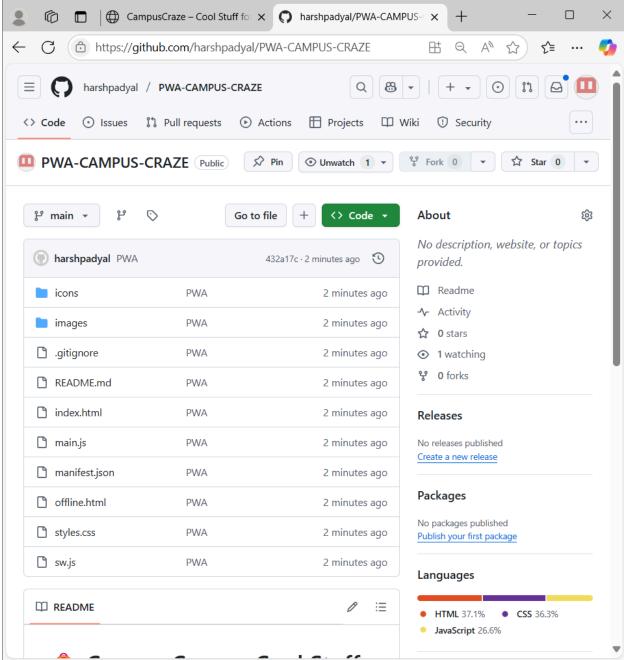
Create a GitHub Repository

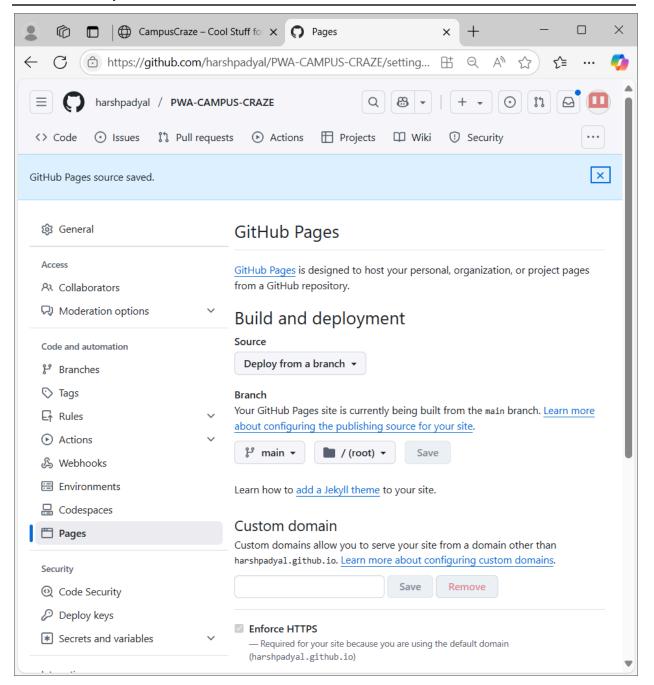


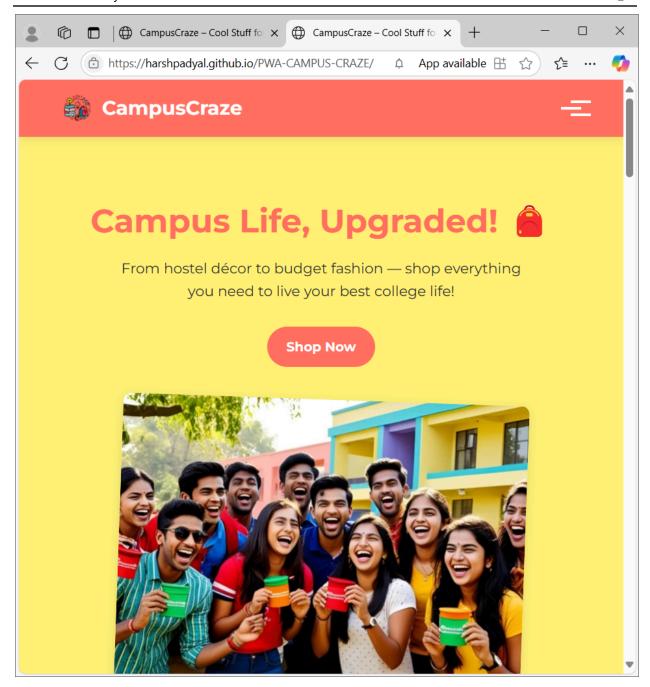
Link Your Local Project to GitHub and Push Changes.

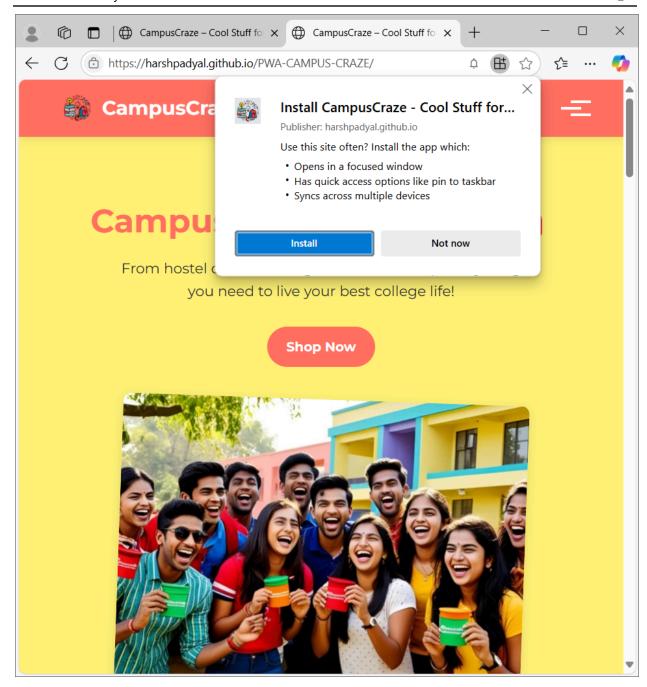
```
PS D:\Users\harsh\Documents\CampusCraze> git init
    Initialized empty Git repository in D:/Users/harsh/Documents/CampusCraze/.git/
PS D:\Users\harsh\Documents\CampusCraze> git add .
PS D:\Users\harsh\Documents\CampusCraze> git commit -m "PWA"
    [main (root-commit) 432a17c] PWA
    27 files changed, 1774 insertions(+)
```











Conclusion

In this experiment, we successfully deployed the CampusCraze PWA to GitHub Pages by ensuring proper setup of service workers and manifest files. Initially, we faced 404 errors for a CSS-based image and offline caching issues, which we resolved by correcting the image path and ensuring only valid resources were cached.