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MAD-PWD Experiment - 10

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

THEORY:

GitHub Pages is a web hosting service provided by GitHub, allowing users to publish static websites directly from their GitHub repositories. Here's a brief overview of GitHub Pages:

1. Hosting for Static Websites:

GitHub Pages is designed to host static websites, which consist of HTML, CSS, and JavaScript files. It does not support server-side scripting languages like PHP or databases like MySQL. This makes it ideal for hosting simple websites, documentation, project pages, or personal blogs.

2. Free Hosting:

One of the significant advantages of GitHub Pages is that it offers free hosting for public repositories. Users can host their websites for free without any additional cost, making it an attractive option for developers, open-source projects, and personal websites.

3. Automatic Deployment:

GitHub Pages automatically deploys websites whenever changes are pushed to the repository's gh-pages branch or the docs folder within the main branch. This streamlined deployment process eliminates the need for manual uploading or configuration, simplifying the publishing workflow.

4. Custom Domains:

GitHub Pages supports custom domains, allowing users to use their own domain names for hosted websites. By configuring DNS settings, users can point their domain to their GitHub Pages site, giving it a professional and personalized web address.

5. HTTPS Encryption:

GitHub Pages provides HTTPS encryption for all hosted websites by default. This ensures that data transmitted between the user's browser and the GitHub Pages server is encrypted, enhancing security and privacy for visitors accessing the website.

6. Built-in Jekyll Support:

GitHub Pages offers built-in support for Jekyll, a static site generator. Users can create and publish Jekyll-powered websites directly from their GitHub repositories. Jekyll simplifies

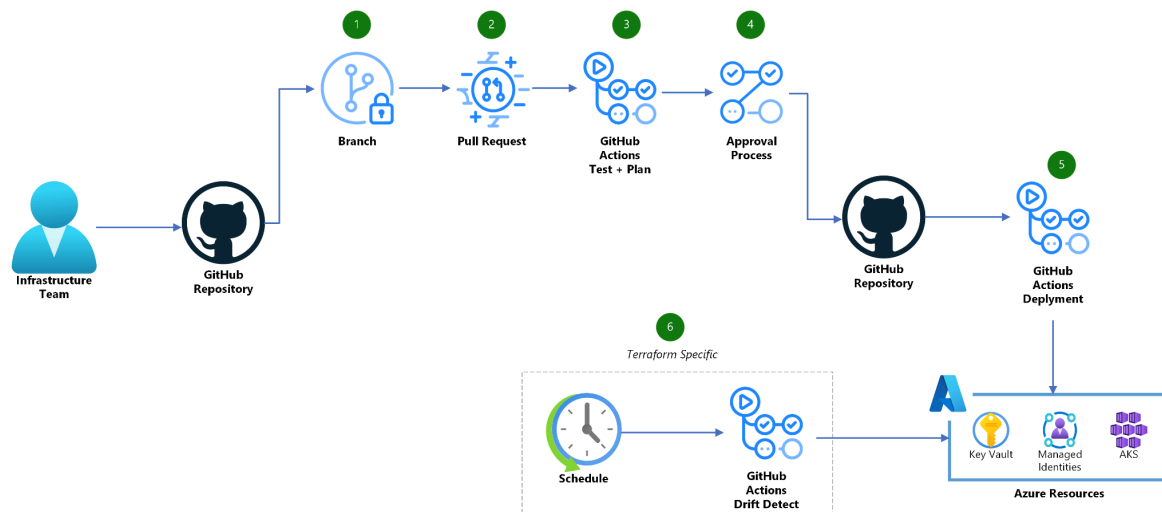
website development by providing templates, layouts, and other features for generating static content.

7. Project Pages:

GitHub Pages allows users to create Project Pages, which are dedicated websites for individual GitHub projects. Project Pages are hosted under a subdomain of `username.github.io/projectname`, providing a centralized platform for showcasing project documentation, demos, and information.

8. Community and Collaboration:

GitHub Pages fosters community and collaboration by providing a platform for sharing and showcasing projects with a global audience. Users can contribute to open-source projects, collaborate on documentation, or showcase their portfolios, leveraging the power of GitHub's collaborative ecosystem.



While GitHub Pages offers many benefits, it also has some limitations and drawbacks:

Limited Server-Side Functionality: GitHub Pages only supports static websites, so it lacks server-side functionality such as dynamic content generation, server-side scripting, and database interaction. This limits the types of web applications and functionality that can be hosted on GitHub Pages.

No Support for Non-Static Content: GitHub Pages does not support hosting non-static content such as databases, server-side applications, or serverless functions. As a result, complex web applications requiring dynamic content or backend processing cannot be hosted on GitHub Pages alone.

File Size and Bandwidth Limits: GitHub Pages imposes limits on file size and bandwidth usage, which may restrict the size and traffic of hosted websites. Large files or high traffic volumes may exceed these limits, resulting in performance issues or additional costs for premium hosting services.

Limited Control over Server Configuration: GitHub Pages offers limited control over server configuration and customization options compared to traditional web hosting services. Users have restricted access to server settings, .htaccess files, and other configuration files, limiting customization options for advanced users.

Dependency on GitHub Infrastructure: GitHub Pages is dependent on GitHub's infrastructure and availability. If GitHub experiences downtime or technical issues, hosted websites may become inaccessible or experience disruptions, impacting the reliability and availability of the hosted content.

No Support for Server-Side Technologies: GitHub Pages does not support server-side technologies such as PHP, Ruby on Rails, or Node.js. This limits the flexibility and functionality of hosted websites, particularly for applications requiring server-side processing or dynamic content generation.

Limited Security Options: GitHub Pages provides basic security features such as HTTPS encryption and GitHub's security measures. However, users have limited control over server security settings and may not be able to implement advanced security measures or custom security configurations.

GitHub Repository Dependency: GitHub Pages hosting is closely tied to GitHub repositories. If a repository is deleted or becomes inaccessible, the associated GitHub Pages website may also become unavailable, potentially resulting in data loss or disruptions to website access.

In summary, while GitHub Pages offers a convenient and cost-effective solution for hosting static websites, it may not be suitable for hosting complex web applications or websites requiring server-side functionality, advanced customization, or scalability beyond its limitations. Users should consider these drawbacks when evaluating GitHub Pages as a hosting solution for their projects.

IMPLEMENTATION:

The image is a screenshot of a web browser window showing the GitHub upload interface. The browser's address bar displays the URL 'github.com/Niyati2609/ecom/upload'. The main content area features a large text prompt: 'Drag additional files here to add them to your repository' with a sub-link 'Or choose your files'. Below this, a list of files is shown, each with a file icon, its name, and a close button (an 'x' in a circle). The files listed are: '/icons/bag.svg', '/icons/cart.svg', '/images/about/1.mp4', '/images/about/a1.png', '/images/about/a2.jpg', '/images/about/a3.png', and '/images/about/a4.png'. At the bottom of the file list, there is a 'Commit changes' section. This section includes a profile picture of a person with dark hair, a green 'Commit changes' button, and a light gray 'Cancel' button. Below the buttons, there is a text input field with the placeholder text 'Add an optional extended description...'. The browser's taskbar at the bottom shows various application icons, including the Windows Start button, a search bar, and icons for Edge, File Explorer, and several other programs. The system tray on the right indicates the temperature is 25°C, the time is 01:11, and the date is 26-03-2024. The footer of the page contains the GitHub logo and a line of text: '© 2024 GitHub, Inc. Terms Privacy Security Status Docs Contact Manage cookies Do not share my personal information'.

Browser tabs: Ecommerce web, ChatGPT, (34) WhatsApp, Untitled docum, Drugs A, B, C, X, github architect, Niyati2609/ecom

github.com/Niyati2609/ecom

Niyati2609 / ecom

Type to search

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

ecom Public

Pin Unwatch 1 Fork 0 Star 0

main 1 Branch 0 Tags

Go to file Add file Code

Niyati2609 Add files via upload 62e0cbf · now 1 Commits	
icons	Add files via upload now
images	Add files via upload now
index.html	Add files via upload now
manifest.json	Add files via upload now
script.js	Add files via upload now
service-worker.js	Add files via upload now
style.css	Add files via upload now

README

About

No description, website, or topics provided.

Activity

0 stars

1 watching

0 forks

Releases

No releases published

[Create a new release](#)

Packages

No packages published

[Publish your first package](#)

Windows taskbar: Type here to search, 25°C, 01:12, 26-03-2024

Browser tabs: Ecommerce web, ChatGPT, (34) WhatsApp, Untitled docum, Drugs A, B, C, X, github architect, General

github.com/Niyati2609/ecom/settings

Niyati2609 / ecom

Type to search

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

General

Access

Collaborators

Moderation options

Code and automation

Branches

Tags

Rules

Actions

Webhooks

Environments

Codespaces

Pages

Security

Repository name

ecom Rename

☐ Template repository

Template repositories let users generate new repositories with the same directory structure and files. [Learn more about template repositories.](#)

☐ Require contributors to sign off on web-based commits

Enabling this setting will require contributors to sign off on commits made through GitHub's web interface. Signing off is a way for contributors to affirm that their commit complies with the repository's terms, commonly the [Developer Certificate of Origin \(DCO\)](#). [Learn more about signing off on commits.](#)

Default branch

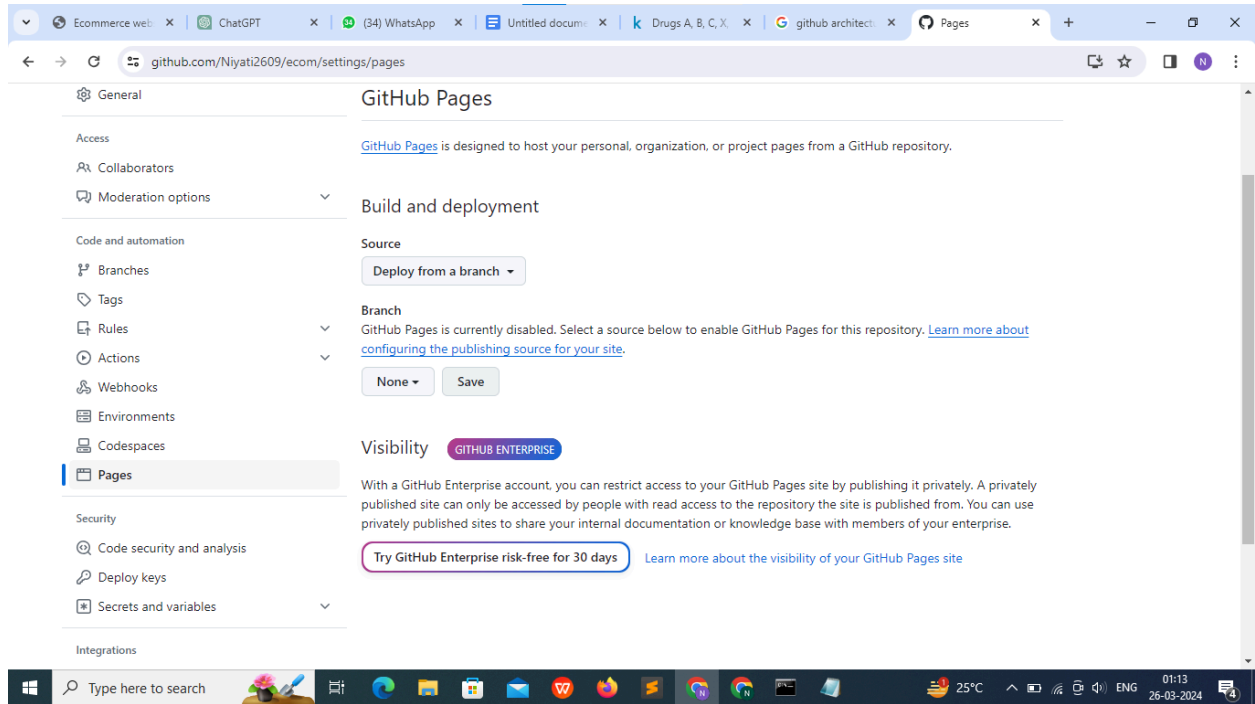
The default branch is considered the "base" branch in your repository, against which all pull requests and code commits are automatically made, unless you specify a different branch.

main

Social preview

@ Code security and analysis

Windows taskbar: Type here to search, 25°C, 01:13, 26-03-2024



Github repo link: <https://github.com/Niyati2609/ecom>

Deployed website link: <https://niyati2609.github.io/ecom/>

CONCUSSION: Deploying your Progressive Web App (PWA) on GitHub provides an accessible platform for users to access your application seamlessly. Leveraging GitHub Pages ensures reliability and scalability while enabling offline functionality. With automatic deployment and custom domain support, your PWA offers an enhanced user experience. By harnessing the power of GitHub's infrastructure, your PWA is poised to reach a wider audience and thrive in the digital landscape.