

# EXPERIMENT NO: - 10

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**D15A-19**

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

## **Theory:** -

GitHub Pages: Static Website Hosting Made Simple

GitHub Pages is a free hosting service that allows users to publish public webpages directly from a GitHub repository. It is particularly useful for static websites, project documentation, and blogs.

### Key Features

- Jekyll Integration: Built-in support for Jekyll enables easy blogging.
- Custom Domains: Allows users to configure their own URLs.
- Automatic Page Deployment: Simply push your changes to the repository, and the updates go live.

### Why Choose GitHub Pages?

- Completely Free: No hosting charges.
- Seamless GitHub Integration: Works directly with your repositories.
- Quick Setup: Just create a repository, push your files, and your site is live.

### Who Uses GitHub Pages?

Companies like Lyft, CircleCI, and HubSpot use GitHub Pages for their documentation and static sites. It is widely adopted, appearing in 775 company stacks and 4,401 developer stacks.

### Pros & Cons

Pros

- Familiar interface for GitHub users.
- Simple deployment via the [gh-pages](#) branch.
- Supports custom domains with easy DNS configuration.

#### Cons

- Repositories need to be public unless you have a paid plan.
  - Limited HTTPS support for custom domains (expected to improve).
  - Jekyll plugins have limited support.
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### Firebase: A Full-Featured Real-Time Backend

Firebase is a cloud-based real-time application platform developed by Google. It enables developers to build dynamic, collaborative applications with ease.

#### Key Features

- Real-Time Database: Automatically syncs data across all connected clients.
- Cloud-Based Storage: JSON-based storage accessible via REST APIs.
- Scalable Infrastructure: Works well with existing services and scales automatically.
- Authentication & Cloud Messaging: Secure login and push notifications.

#### Why Choose Firebase?

- Instant Backend Setup: No need to build a separate backend.
- Fast & Responsive: Real-time data synchronization.
- Built-in HTTPS: Free SSL certificates for custom domains.

## Who Uses Firebase?

Companies like Instacart, 9GAG, and Twitch rely on Firebase for their backend needs. Firebase is widely adopted, appearing in 1,215 company stacks and 4,651 developer stacks.

## Pros & Cons

### Pros

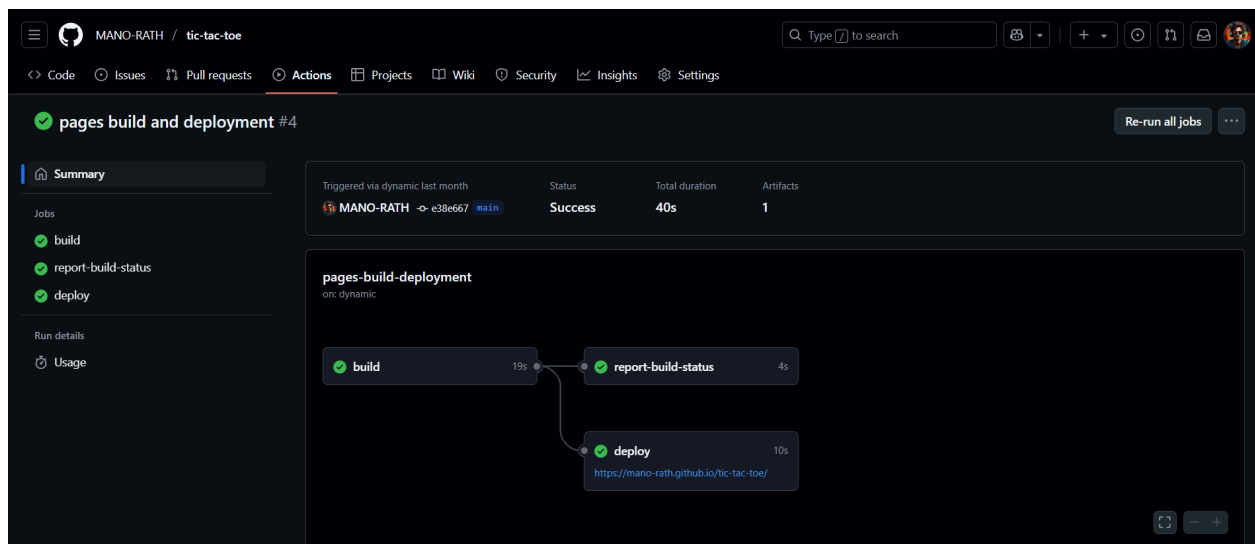
- Hosted by Google, ensuring reliability and security.
- Comes with authentication, messaging, and real-time database services.
- Free HTTPS support for all custom domains.

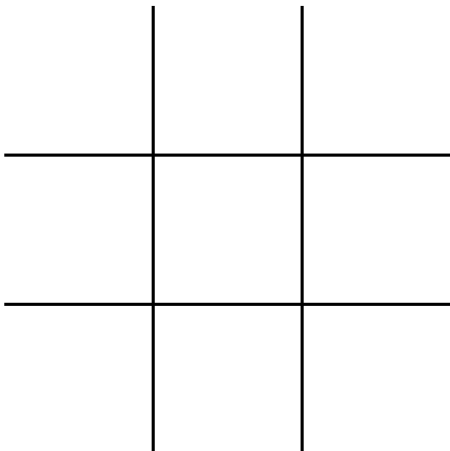
### Cons

- Limited Free Plan: 10 GB of data transfer per month (can be mitigated with a CDN).
- Command-Line Deployment: No GUI for hosting.
- No Built-in Static Site Generator Support: Unlike GitHub Pages, Firebase doesn't natively support static site generators like Jekyll.

hosted link: [website link](#)

## Github Screenshot:





# Welcome to Tic Tac MyTicTacToe

Turn for X

Reset

