



Placement Empowerment Program Cloud Computing and DevOps Centre

Deploy your static website using Github Pages: Host your local Git repository's static website directly using Github pages

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Introduction

GitHub Pages is a static site hosting service designed to publish your projects directly from a GitHub repository. It allows developers to showcase their work, create personal websites, or host documentation in an efficient, free, and straightforward way.

Overview

This project demonstrates how to deploy a static website using GitHub Pages. Starting with the basics of setting up a GitHub repository, we'll explore each step required to host a functional static website. This includes initializing a Git repository, pushing files to GitHub, and configuring GitHub Pages for deployment.

Key Features of GitHub Pages:

Free hosting for public repositories.

Support for static files (HTML, CSS, JavaScript).

Easy integration with version control through Git.

Objectives

- 1. Learn the fundamentals of GitHub Pages and its deployment process. 2. Understand the importance of static website hosting and its use cases.
- 3. Gain hands-on experience in using Git and GitHub for project versioning and hosting.
- 4. Successfully publish a static website and make it publicly accessible.

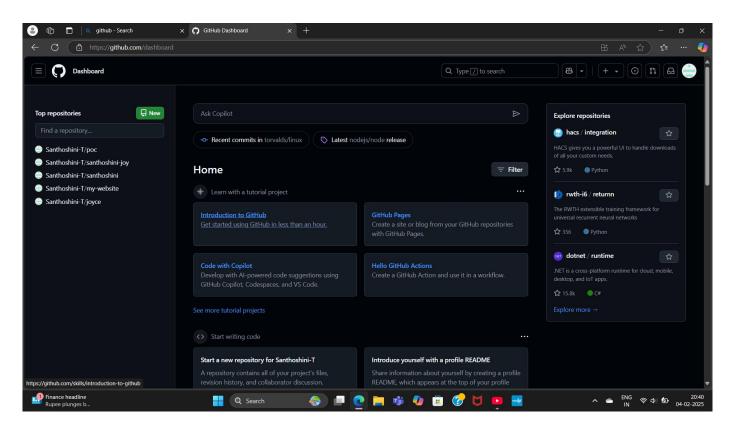
Importance of Hosting with GitHub Pages

- **1. Cost-effective**: Free for public repositories, making it accessible for students and developers.
- **2. Version Control**: Seamlessly integrates with GitHub, enabling easy updates and collaboration.
- **3. Visibility**: A great way to showcase personal portfolios, projects, or documentation.
- **4. Ease of Use**: Minimal setup required compared to other hosting platforms.
- **5. Custom Domains**: Option to configure custom domains, enhancing the professional appeal of your website.

Step-by-Step Overview

Step 1:

Create a New Repository: Once you're logged in, click the green "New" button on the top-right of your GitHub homepage to create a new repository. Leave the other settings as default, and click "Create repository".



Step 2:

Create a folder (e.g., static website) where you'll keep all your website files. Inside that folder, create the main file for your website, called index.html. Here's a simple example of what to put in your index.html:

```
mylogfile.log
                                     index.txt
                                                                X
File
      Edit
             View
<!DOCTYPE html>
<html>
<head>
<title>My Static Website</title>
</head>
<body>
    <h1>Welcome to My Website!</h1>
    This is a static website hosted on GitHub Pages.
</body>
</html>
```

Step 3:

Open Command **Prompt** and navigate to the folder where your index.html file is saved. Use the cd command to navigate.

```
C:\Users\santhoshini>cd C:\Users\santhoshini\OneDrive\Desktop\static website
```

Step 4:

Initialize a Git repository by running.

```
C:\Users\santhoshini\OneDrive\Desktop\static website>git init
Initialized empty Git repository in C:/Users/santhoshini/OneDrive/Desktop/static website/.git/
```

Step 5:

Add your website files to the repository:

```
C:\Users\santhoshini\OneDrive\Desktop\static website>git add .
```

Step 6:

Save the changes in Git with a commit message:

```
C:\Users\santhoshini\OneDrive\Desktop\static website>git commit -m "Initial commit"
[master (root-commit) 1affa7b] Initial commit
1 file changed, 10 insertions(+)
create mode 100644 index.txt
```

Step 7:

Go to your GitHub repository (the one you created earlier). Copy the **repository URL**:

In your Command Prompt, link your local repository to the GitHub repository:

C:\Users\santhoshini\OneDrive\Desktop\static website>git remote add origin https://github.com/Santhoshini-T/my-website

C:\Users\santhoshini\OneDrive\Desktop\static website>git branch -M main

Step 8:

Push your files to GitHub.

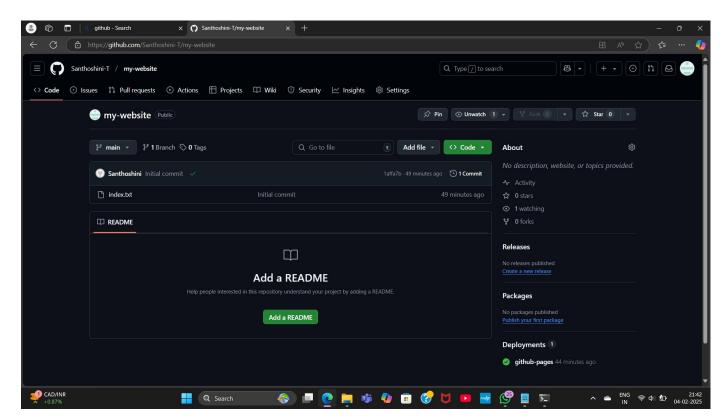
```
C:\Users\santhoshini\OneDrive\Desktop\static website>git push -u origin main Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 351 bytes | 175.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Santhoshini-T/my-website

* [new branch] main -> main
branch 'main' set up to track 'origin/main'.
```

Step 9:

Enable GitHub Pages

- 1. Go to your repository on GitHub.
- 2. Click on the **Settings** tab (it's near the top, next to Code, Issues, etc.).
- 3. Scroll down to the Pages section (on the left menu, under "Code and automation").
- 4. Under Source, select: o Branch: main oFolder: / (root) 5. Click Save.



Step 10:

Access Your Website

Wait a few minutes for GitHub Pages to deploy your site.

Visit your website at:

https://<your-username>.github.io/<your-repository>

Welcome to My Website!

This is a static website hosted on GitHub Pages.

Outcome

By completing this PoC of deploying a static website using GitHub Pages, you will:

- 1. Successfully create and configure a GitHub repository for your project.
- 2. Initialize a Git repository in your local project folder and link it to GitHub.
- 3. Upload your static website files (HTML, CSS, JavaScript) to GitHub.
- 4. Enable GitHub Pages in the repository settings to host your static website.
- 5. Access your static website live on the web via a GitHub Pages URL.

- 6. Gain hands-on experience with Git commands like git init, git add, git commit, git remote add, and git push.
- 7. Understand the process of hosting a static site for free using GitHub Pages.