

Placement Empowerment Program
Cloud Computing and DevOps Centre

Automate Static Website Deployment Locally Create a script that updates your server whenever changes are pushed.

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Introduction

Efficient deployment processes are crucial for maintaining up-to-date static websites. Automating the deployment of static websites ensures that the latest changes are reflected on the server as soon as they are pushed to the repository. This document outlines how to create a script that updates the server with new changes and restarts the necessary services, using Git hooks and scripting techniques.

Objectives

- Understand the use of Git hooks for automating deployment.
- Learn to write scripts for pulling changes and managing server services.
- Automate the deployment process to minimize manual intervention.

Understanding Key Concepts

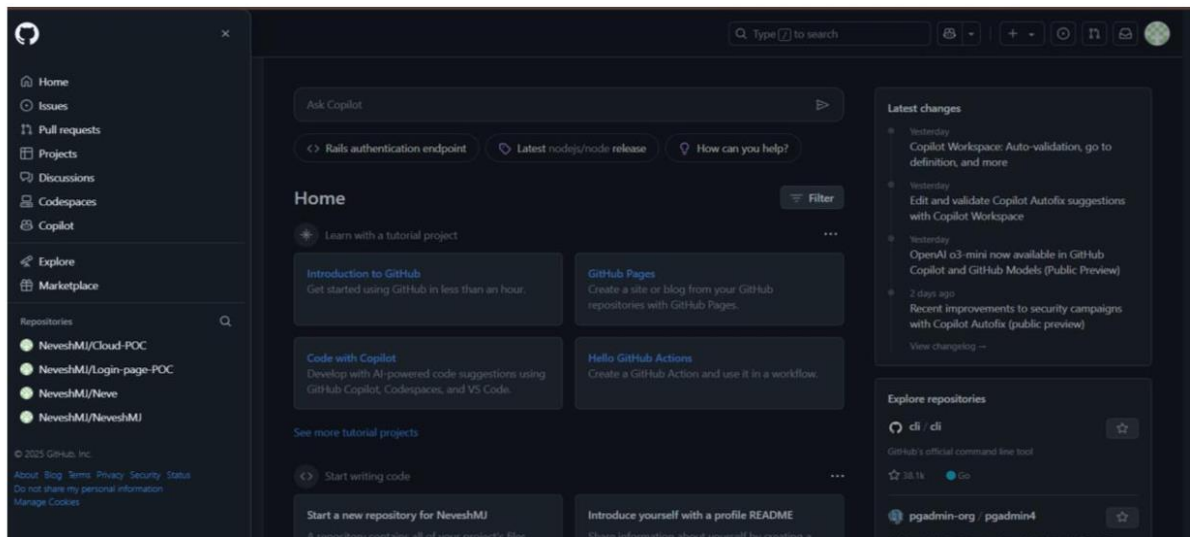
- Git Hooks: Scripts that Git executes automatically on specific events like commits or pushes.
- File Deployment: Updating the server files with the latest code changes.
- Server Management: Restarting services (e.g., Apache or Nginx) to apply changes.

Step by Step Overview

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. Give your repository a name, for example, my-static-website. Leave the other settings as default, and click

"Create repository".



2. Configure Your Remote Server

- Create a folder (e.g., my-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:)

```
File Edit View

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Nevesh's GitHub</title>
</head>
<body>
  <h1>Welcome to Nevesh's GitHub!</h1>
  <p>Explore my projects and code repositories.</p>
</body>
</html>
```

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

```
C:\Users\mjnev>cd C:\Users\mjnev\OneDrive\Desktop\LOGIN1
```

4. Modify the post-receive hook on the remote server:

```
C:\Users\mjnev\OneDrive\Desktop\LOGIN1>git init
Initialized empty Git repository in C:/Users/mjnev/OneDrive/Desktop/LOGIN1/.git/
```

5. Add your website files to the repository:

```
C:\Users\mjnev\OneDrive\Desktop\LOGIN1>git add .
```

6. Save the changes in Git with a commit message:

```
C:\Users\mjnev\OneDrive\Desktop\LOGIN1>git commit -m "Initial commit"
[master (root-commit) f3fe43f] Initial commit
1 file changed, 12 insertions(+)
create mode 100644 index1.html
```

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

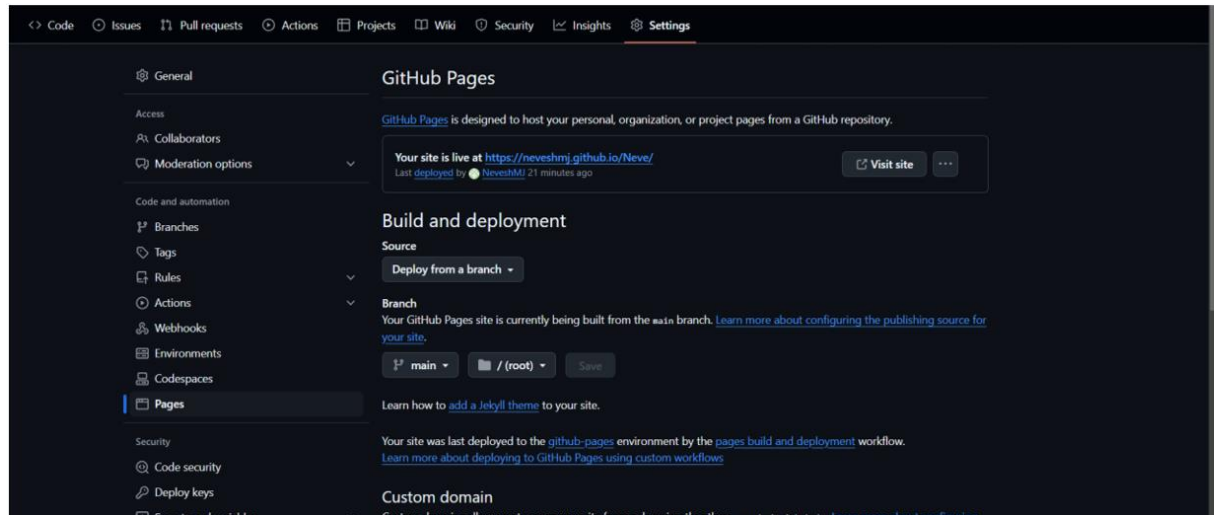
```
C:\Users\mjnev\OneDrive\Desktop\LOGIN1>git remote add origin https://github.com/NeveshMJ/Neve
```

8. Push your files to GitHub:

```
C:\Users\mjnev\OneDrive\Desktop\LOGIN1>git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 426 bytes | 213.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/NeveshMJ/Neve
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

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 o Folder: / (root)
5. Click Save.



Step 10: Access Your Website Wait a few minutes for GitHub Pages to deploy your site. Visit your website

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

Visit your website at:

Welcome to Namrata Choudhary's GitHub

Explore my projects and contributions.

[Visit My GitHub](#)