

Placement Empowerment Program Cloud Computing and DevOps Centre

Set Up a Local Git Repository: Initialize a Git repository locally and version control your static website

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Introduction

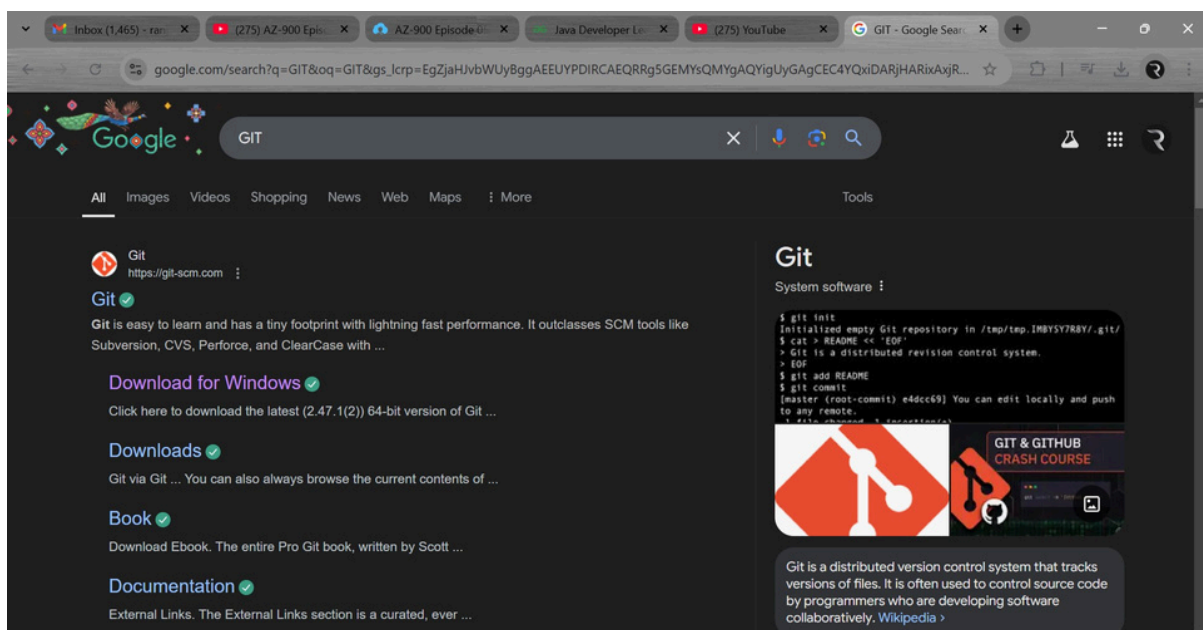
Version control is a fundamental practice in software development that allows you to manage changes to your code over time. It provides a systematic way to track updates, collaborate with others, and revert to previous versions if needed. Git is one of the most widely used version control systems, known for its efficiency, flexibility, and distributed nature.

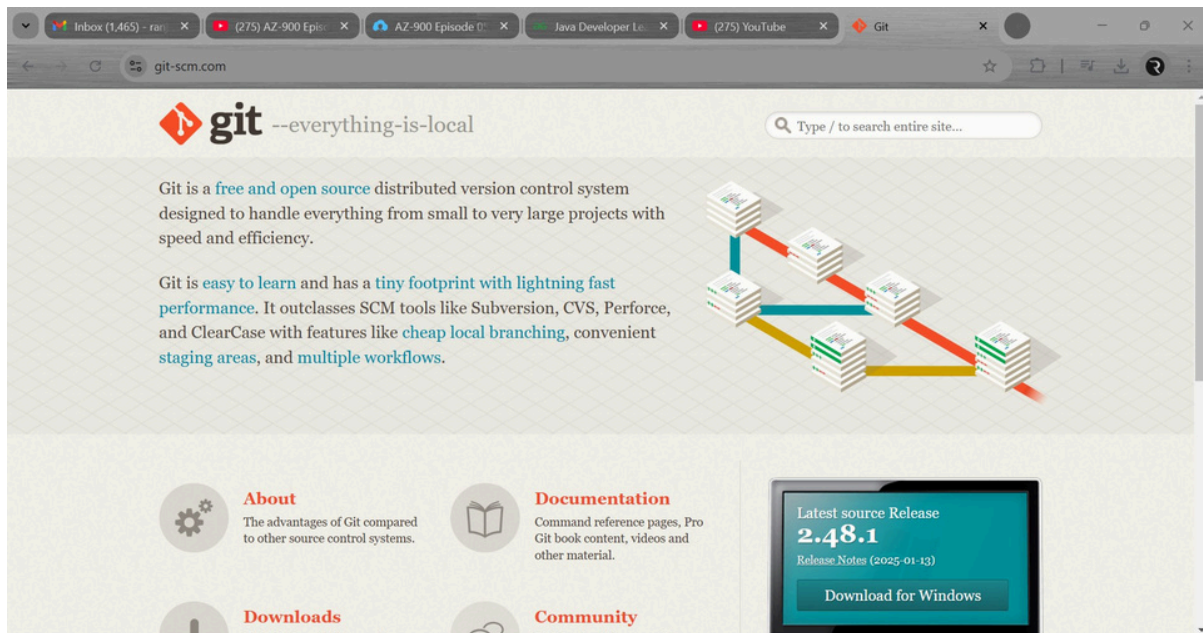
In this POC, we'll initialize a local Git repository to version control your static website. By doing so, you'll be able to track changes to your project files, experiment with new features in a controlled way, and easily share your project with others if needed. Setting up a Git repository is a critical step towards maintaining a structured and reliable workflow, especially for developers and teams working on collaborative projects.

Step-by-Step Overview

Step 1:

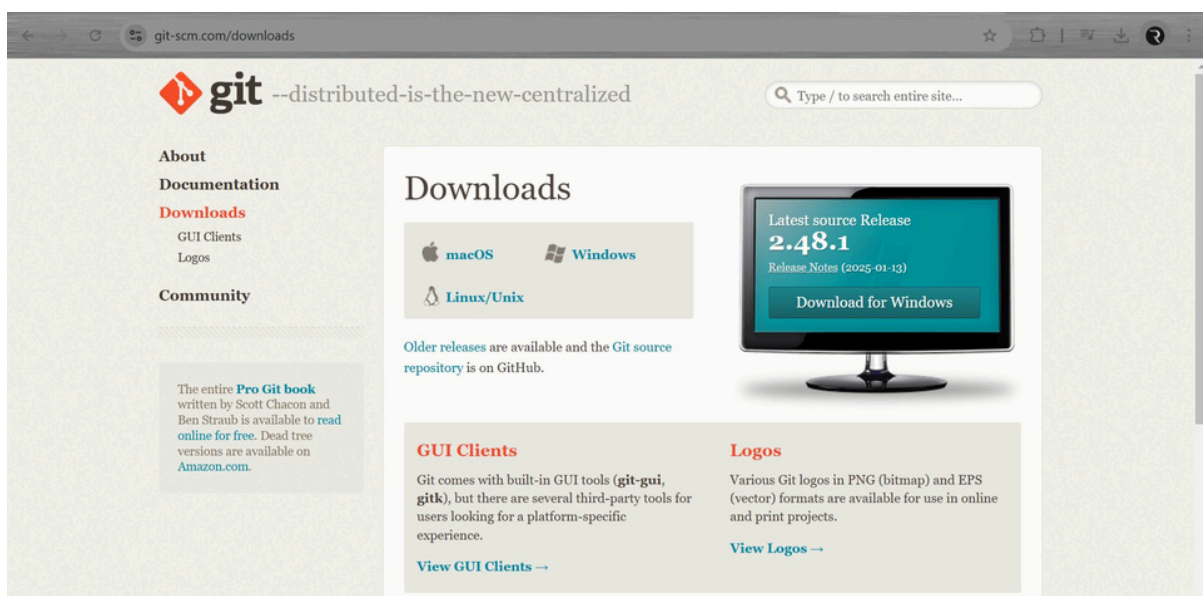
Search for "Git" in Chrome, download it, and click the "Downloads" option on the website.





Step 2

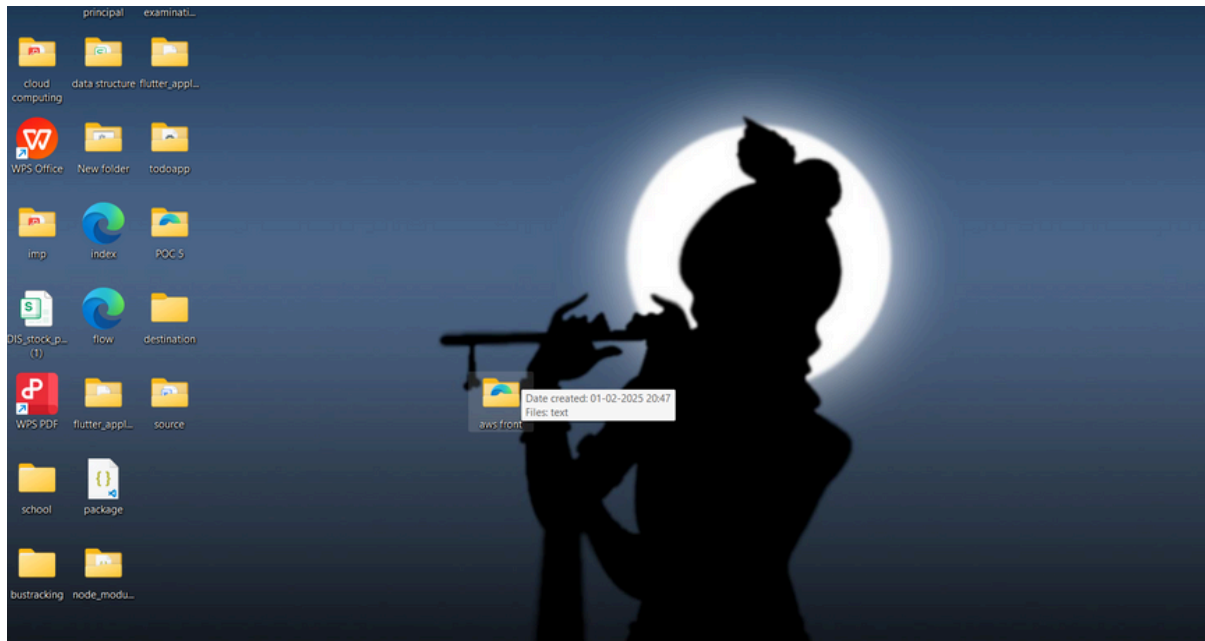
Click the Windows option on the download page and follow the installation wizard.



Step 3

In your Desktop Create a folder named website for your static website

Inside that folder, create a simple HTML file named index.html. You can write some basic HTML Code.



```
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Welcome to AWS Cloud Club</title>
<style>
  body {
    background-color: #ffffff;
    text-align: center;
    font-family: Arial, sans-serif;
    color: #232F3E; /* AWS blue */
  }
  .container {
    margin-top: 20%;
  }
  h1 {
    color: #FF9900; /* AWS orange */
  }
  .btn {
    background-color: #232F3E; /* AWS blue */
    color: white;
    padding: 10px 20px;
    text-decoration: none;
    border-radius: 5px;
    display: inline-block;
    margin-top: 20px;
  }
  .btn:hover {
    background-color: #1A2533;
  }
</style>
</head>
<body>
<div class="container">
```

Step 5

Open the Command prompt and set the path to the folder named website we created

```
C:\Users\sairam>cd desktop  
C:\Users\sairam\Desktop>cd aws font
```

Step 6

Now, initialize Git by typing this command:

git init

This command will create a .git folder inside your project folder, which tells Git to start tracking your files.

```
C:\Users\sairam\Desktop>git init  
Reinitialized existing Git repository in C:/Users/sairam/Desktop/.git/  
C:\Users\sairam\Desktop>|
```

Step 7

Next, we need to tell Git to start tracking your website files.

To tell Git which files to track, use the git add command. If you want to track all the files in your folder, type git add .

This command adds all the files to Git's tracking system.

```
C:\Users\sairam\Desktop>git add .
```

Step 8

Set Up Your Name and Email Globally Git doesn't know who is making the commit because you haven't configured your name and email yet. Git uses this information to track who made the changes.

```
C:\Users\sairam>git config --global user.name "6cooled"

C:\Users\sairam>git config --global user.email "sairamvinjeshan1133@gmail.com"

C:\Users\sairam>
```

Step 9

Now, I
change

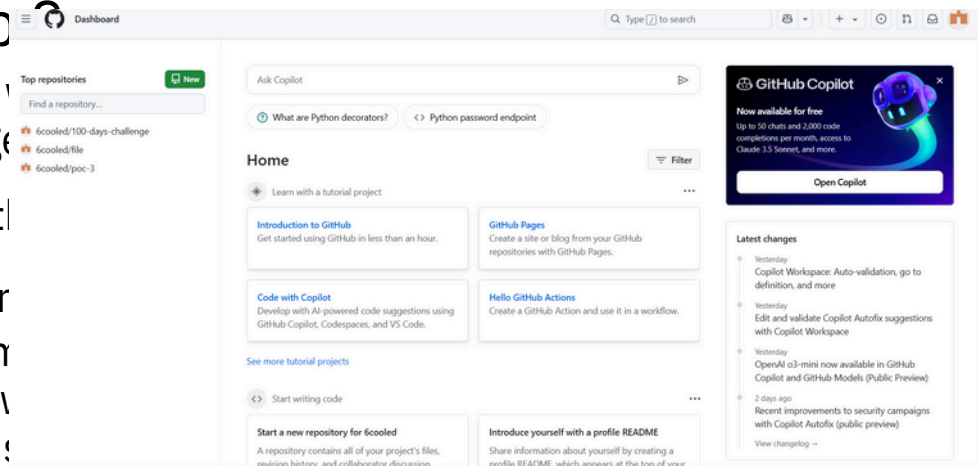
Type the

git command

The -m

case, I

we're



commit"

in this
time

```
C:\Users\sairam\Desktop\aws front>git commit -m "Initial commit of my static website"
[master 4595b66] Initial commit of my static website
 2 files changed, 32 insertions(+)
 create mode 100644 index.html
 delete mode 100644 text.html

C:\Users\sairam\Desktop\aws front>
```

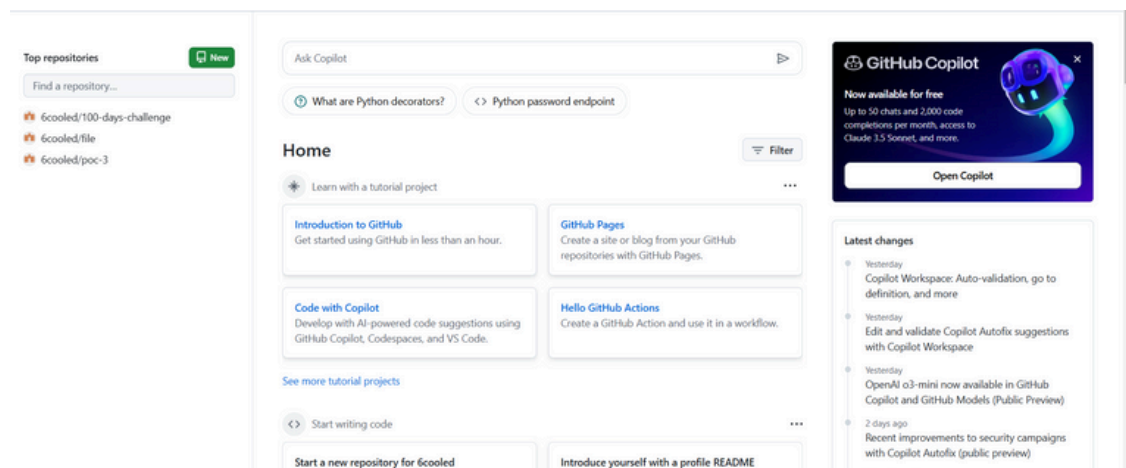
Step 10

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-website.

Leave the other settings as default, and click "Create repository".



Step 11

Add the Remote Repository URL to Your Local Repository:

Go back to your Command Line and type the following:

```
git remote add origin https://github.com/yourusername/my-website.git
```

Replace yourusername with your GitHub username and my-website with the name of your GitHub repository.

```
sers\sairam\Desktop\aws front>git remote
```

Step 12

The git branch -M main command is used to rename the current branch to main. Here's what it does:

-M: This flag forces the renaming, even if a branch named main already exists. It will overwrite the existing main branch.

main: This is the new name for the current branch.

```
C:\Users\RANJITHA PRABHA\OneDrive\Desktop\website>git branch -M main
```

Step 13

The command `git push -u origin main` is used to push your local main branch to the remote repository (origin) and set it as the upstream branch

```
info: please complete authentication in your browser...
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 853 bytes | 142.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/6cooled/file.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

C:\Users\sairam\Desktop\aws front>git push -u origin main
```

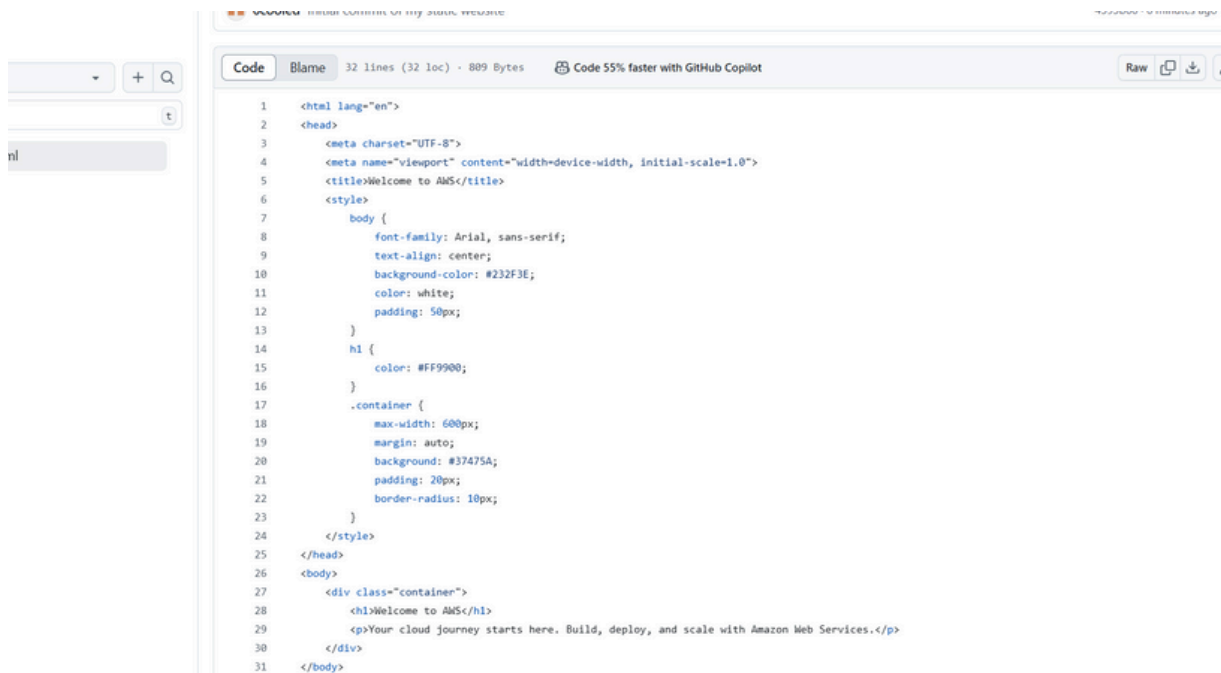
Step 14

Verify Your Files on GitHub

Go to your GitHub Repository:

Open your web browser and navigate to your GitHub repository (e.g., <https://github.com/yourusername/my-website>).

You should see your website files there!



The screenshot shows a code editor interface with a file explorer on the left and a code editor on the right. The file explorer shows a folder named 'nl'. The code editor displays an HTML file with the following content:

```
1 <html lang="en">
2 <head>
3   <meta charset="UTF-8">
4   <meta name="viewport" content="width=device-width, initial-scale=1.0">
5   <title>Welcome to AWS</title>
6   <style>
7     body {
8       font-family: Arial, sans-serif;
9       text-align: center;
10      background-color: #232F3E;
11      color: white;
12      padding: 50px;
13    }
14    h1 {
15      color: #FF9900;
16    }
17    .container {
18      max-width: 600px;
19      margin: auto;
20      background: #37475A;
21      padding: 20px;
22      border-radius: 10px;
23    }
24  </style>
25 </head>
26 <body>
27   <div class="container">
28     <h1>Welcome to AWS</h1>
29     <p>Your cloud journey starts here. Build, deploy, and scale with Amazon Web Services.</p>
30   </div>
31 </body>
```

Outcome

By completing this PoC of setting up a local Git repository, you will:

1. Successfully initialize a Git repository in your local static website folder.
2. Track changes made to your website files (HTML, CSS, etc.) using Git version control.
3. Understand the basic Git commands (git init, git add, git commit) for version control.
4. Commit your changes locally with a descriptive commit message.
5. Gain hands-on experience with Git and how it helps manage and track website file changes.