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

Git is a widely used version control system that allows developers to track changes in their codebase, collaborate efficiently, and maintain different versions of their projects. By using Git, you can ensure the **stability and consistency** of your static website while keeping a history of modifications.

Overview

This POC walks you through the process of **initializing a Git repository for your static website and version-controlling it**. You will learn how to:

- Set up Git in your project directory
- Stage and commit files
- Connect to a remote repository (optional)
- Push changes to GitHub or another remote platform

Objective

The main objective is to:

- Initialize a Git repository for your static website.
- Track and manage changes efficiently.
- Maintain version history for future references.
- Enable collaboration and backup using a remote repository.

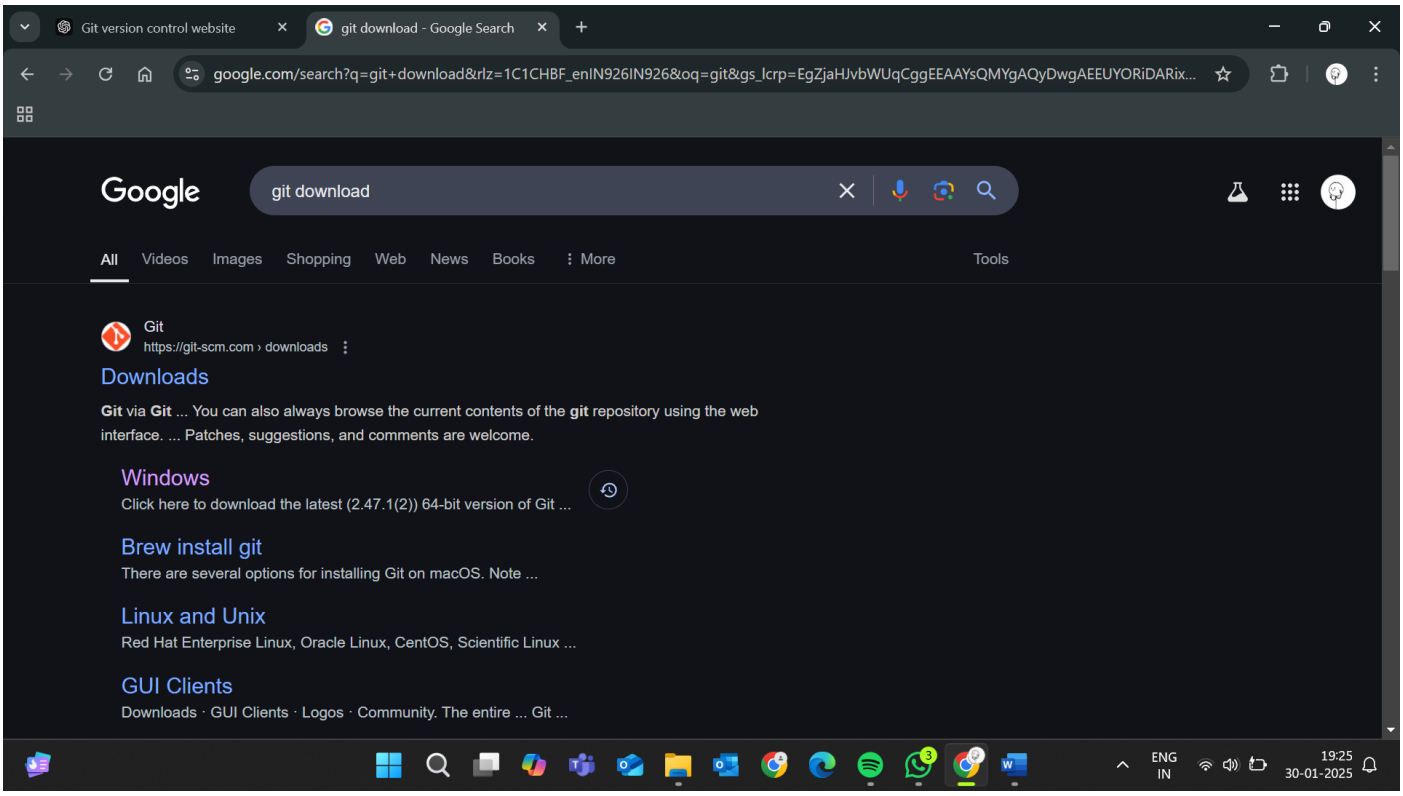
Important Concepts

- **Repository**: A storage location where your project's files and history are tracked.
- **Commit**: A snapshot of changes made to the project.
- **Branch**: A parallel version of the project for feature development.
- **Remote Repository**: A cloud-hosted repository (e.g., GitHub, GitLab).
- **Push/Pull**: Sending and receiving updates to/from the remote repository.

Step-by-Step Overview

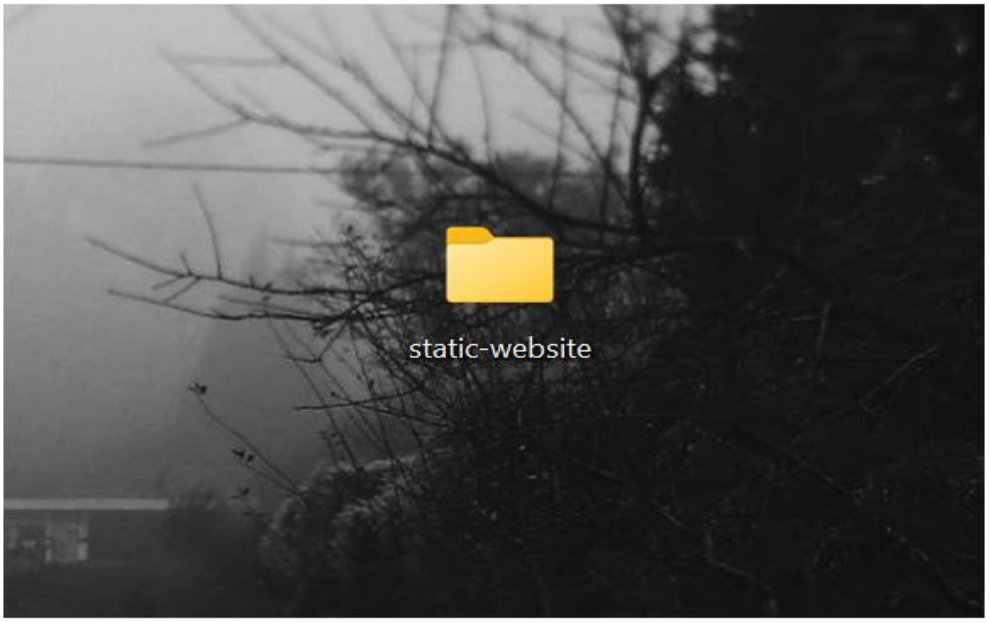
Step1:

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



Step 2 :

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



Step 3:

- Inside that folder, create a simple HTML file named index.html. You can write some basic HTML
- You can also write basic css code in file to style your static website.

index.html styles.css M script.js

index.html > html > body > header > nav > ul

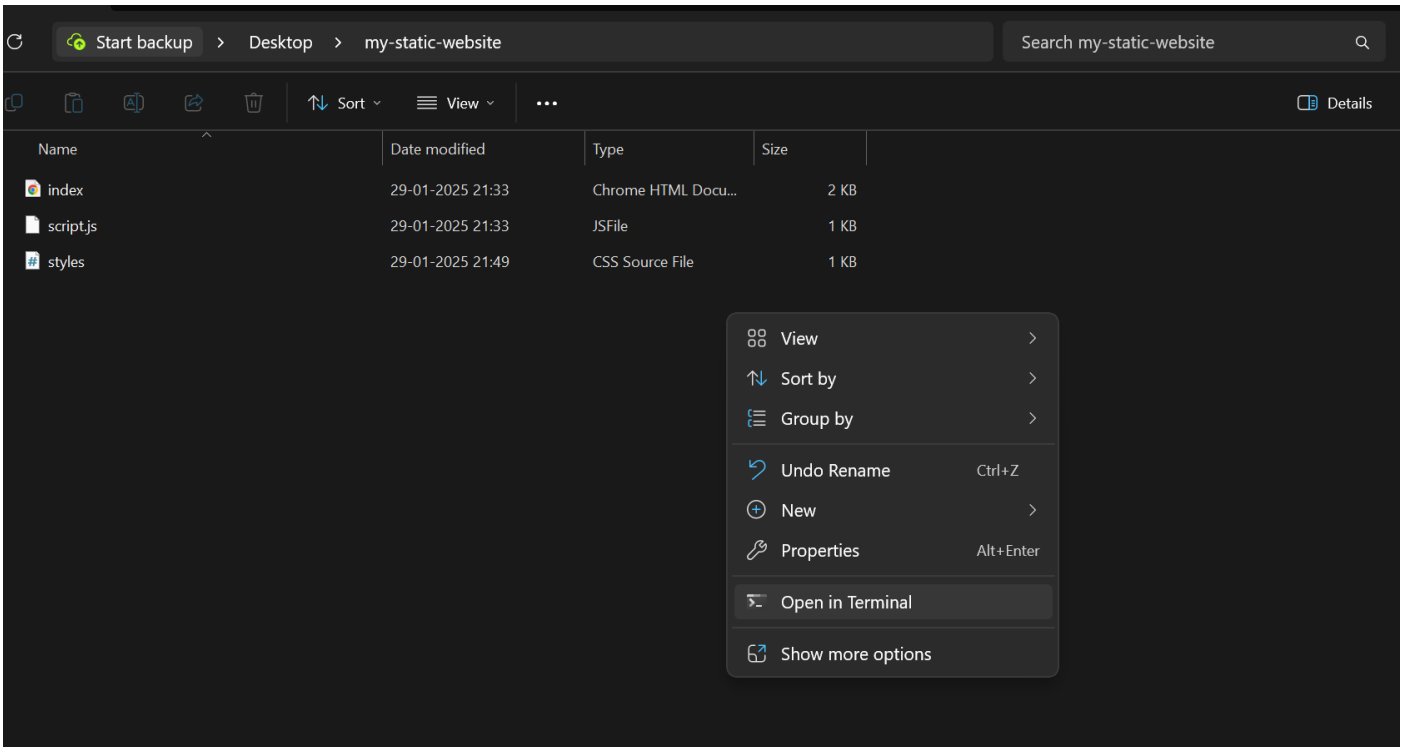
```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Static Website</title>
    <link rel="stylesheet" href="styles.css">
</head>
<body>
    <header>
        <h1>Welcome to My Static Website</h1>
        <nav>
            <ul>
                <li><a href="#home">Home</a></li>
                <li><a href="#about">About</a></li>
                <li><a href="#contact">Contact</a></li>
            </ul>
        </nav>
    </header>

    <section id="home">
        <h2>Home Section</h2>
        <p>This is a simple static website using HTML, CSS, and JavaScript.</p>
    </section>

    <section id="about">
        <h2>About</h2>
        <p>This website is hosted using vs code.</p>
    </section>
```

Step 4:

Open the terminal in the folder where the html file is located.

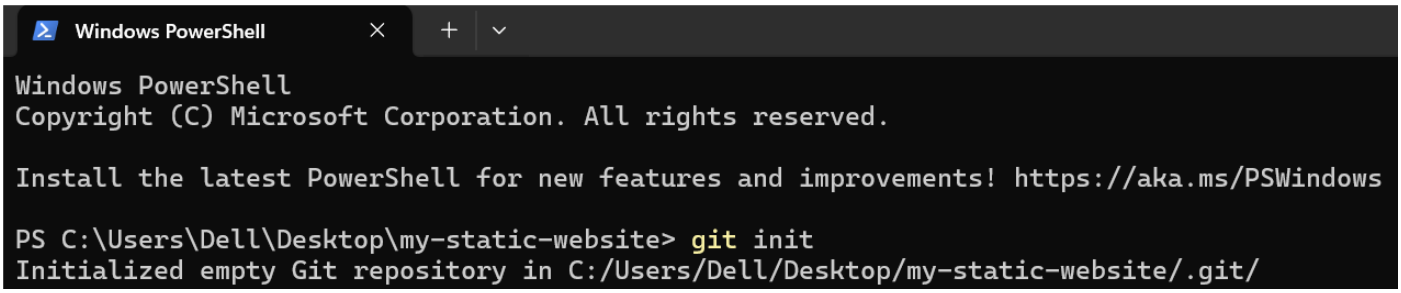


Step 5:

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.

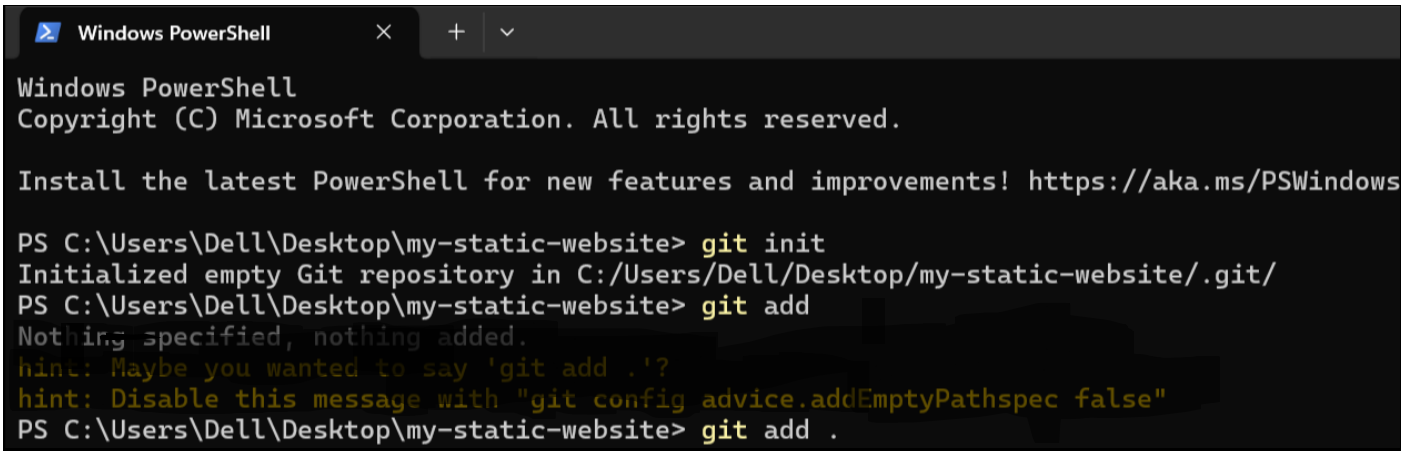


Step 6:

- 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.



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Step 7:

Now, we need to save these changes in Git. When you "commit" changes, Git takes a snapshot of your files.

- Type the following command to commit your changes:

  git commit -m "First Initial commit of my static website"

The -m flag allows you to add a message about your changes. In this case, we're saying this is the "initial commit," meaning the first time we're saving our work.

```
PS C:\Users\Dell\Desktop\my-static-website> git commit -m "initial commit - vesion control for my-static-website"
[master (root-commit) 89ab7b6] initial commit - vesion control for my-static-website
 3 files changed, 97 insertions(+)
 create mode 100644 index.html
 create mode 100644 script.js
 create mode 100644 styles.css
```

Step 8:

Verify Repository Status

- Check the status of your repository using:

  git status

```
PS C:\Users\Dell\Desktop\my-static-website> git add .
PS C:\Users\Dell\Desktop\my-static-website> git commit -m "initial commit - vesion control for my-static-website"
[master (root-commit) 89ab7b6] initial commit - vesion control for my-static-website
 3 files changed, 97 insertions(+)
 create mode 100644 index.html
 create mode 100644 script.js
 create mode 100644 styles.css
PS C:\Users\Dell\Desktop\my-static-website> git status
On branch master
nothing to commit, working tree clean
```

Conclusion

By following these steps, you have successfully initialized a Git repository and version-controlled your static website. This ensures better tracking of changes, collaboration, and backup of your project.