Lesson:

Git in VS Code

PW SKILLS

Topics

- Introduction to the source section of VS code
- Handling all the git operations using the VS code source control section

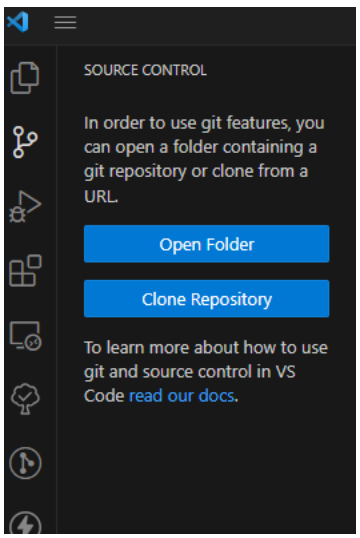
Introduction to the source section of VS code

The Visual Studio Code has integrated source control management (SCM) and includes Git support out-of-the-box. Source control is a system for tracking changes to a set of files over time. It is essentially for any software developer. As it allows you to -

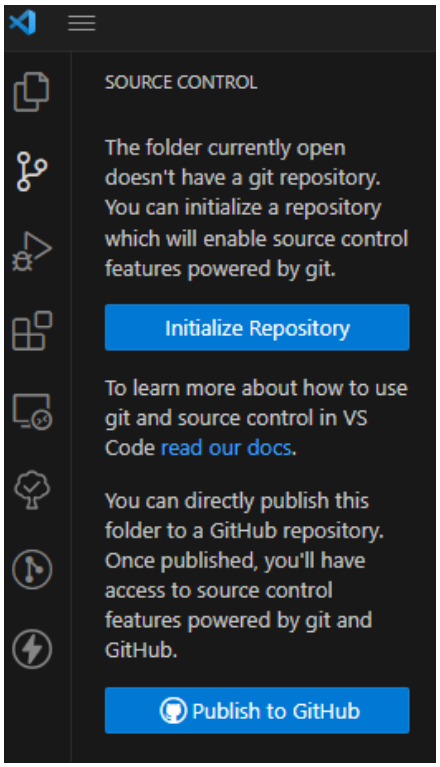
- Track your changes and revert to previous versions
- Collaborate with other developers on the same codebase
- Share your code with others in a controlled way.

To open the Source Control Section in VS Code, Click the Source Control icon in the Activity Bar on the left side of the window as shown below

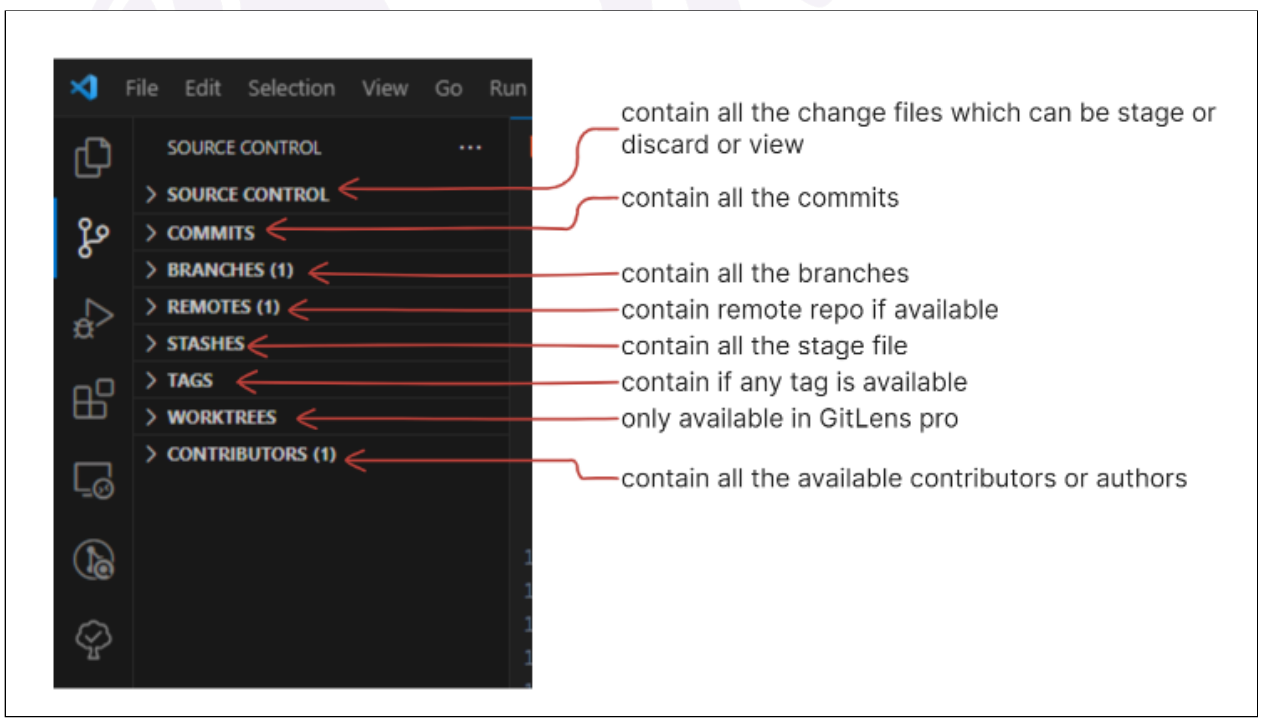
First look at the source control section when the VS code is open with no project folder open. In this case, you can either open a project from your local system or clone a repo.



VS code source control view when it is open along with the project folder or file, you will be asked to initialize Repository or publish to GitHub as shown below.



An overview of the content of the Source control in VS Code is shown below -



Handling all the git operations using the VS code source control section

Now, let us handle all the git operations using the VS code source control section creating a simple project.

Create Project

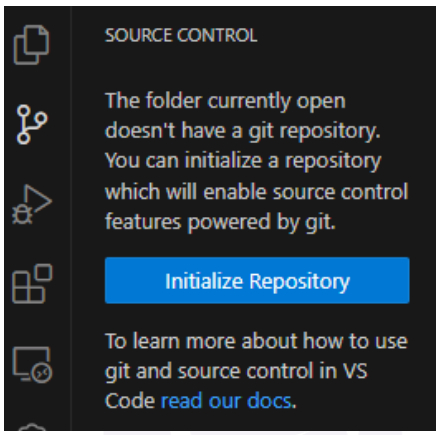
If you have an existing project, open it in VS Code otherwise, run the command below to create a new project

```
# create folder
mkdir git-tutorial

# create HTML file
touch index.hmtl
```

Initialize Project

Click on the Souce Control button on the left sidebar of the VS Code to initialize the project as shown below



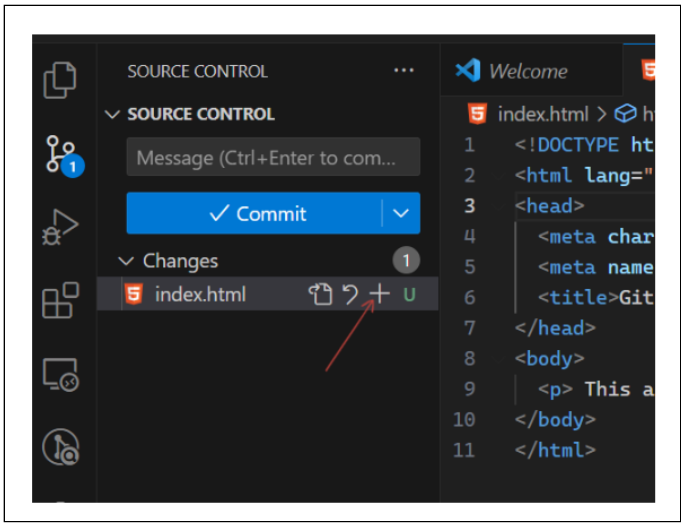
Stage and commit changes

Now that the local repository is initialized, modify or add some code to the “index.html” as shown below

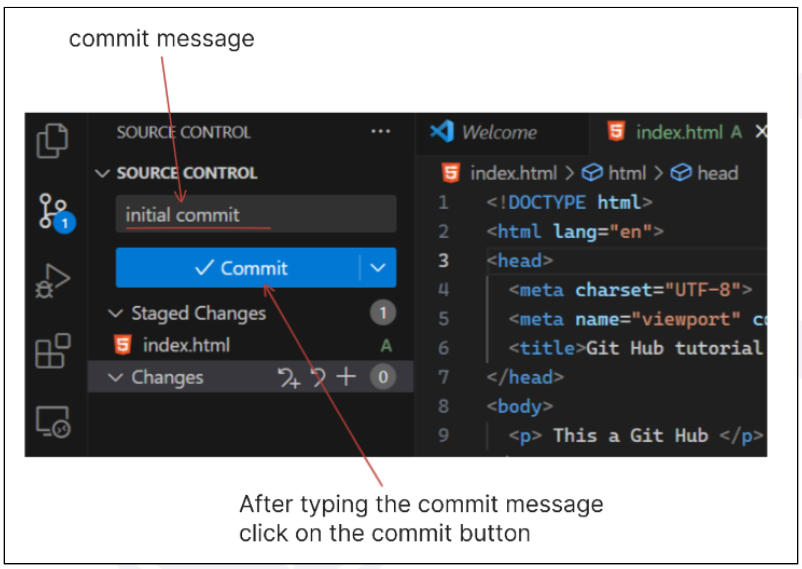
Index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Git Hub tutorial </title>
</head>
<body>
  <p> This a Git Hub </p>
</body>
</html>
```

After adding the **index.html** file, the file changes will be displayed in the source control section where we can open the file, see the changes, or discard the changes, or stage the changes. For this demo will stage the changes by clicking on the plus icon as shown below -

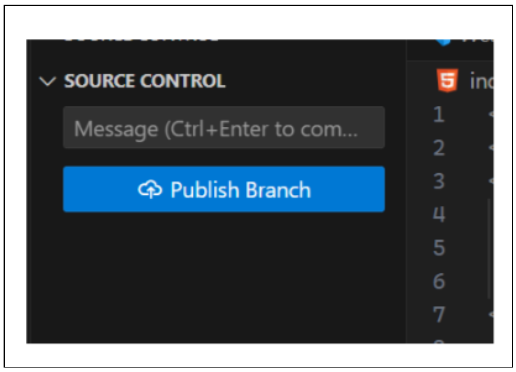


After staging the changes, add the commit message and press on the commit button to make a commit as shown below -

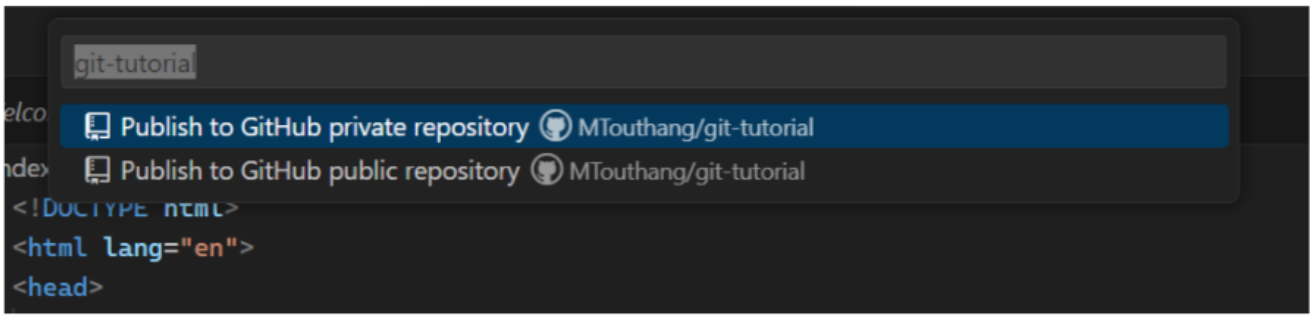


Publish Project

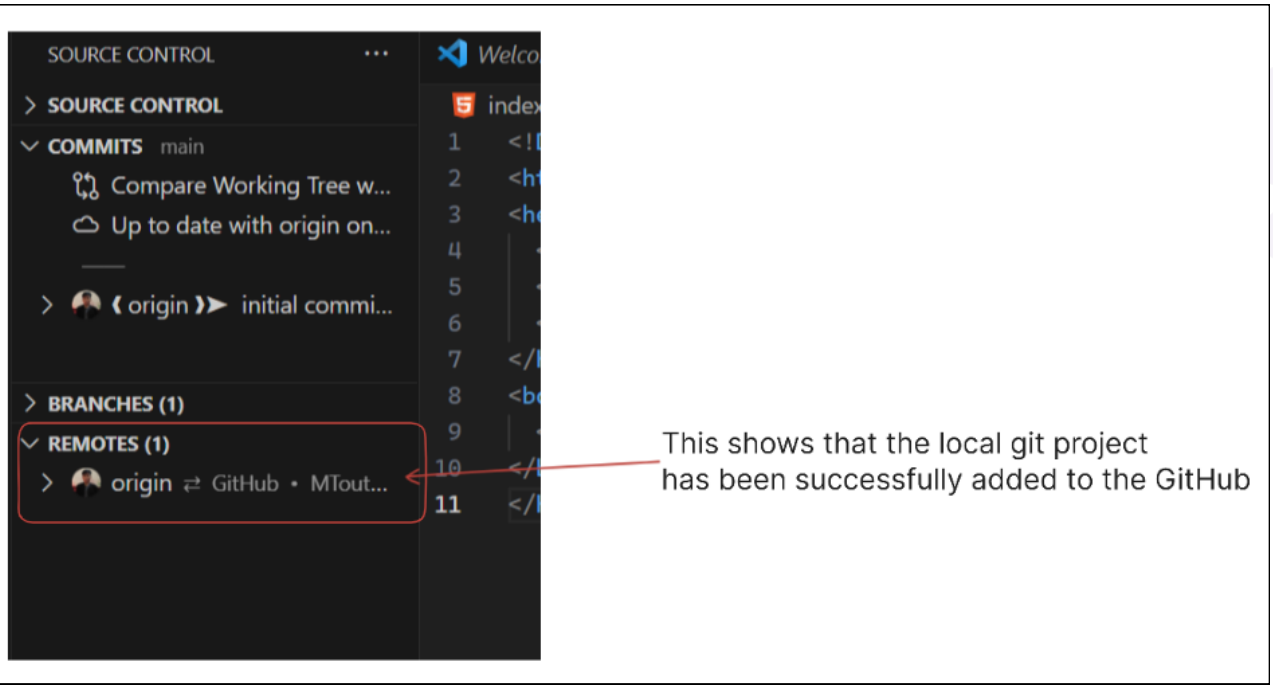
After the project has been committed successfully, you will be prompted with the **Publish Branch** button, where on clicking, the local repository will be added to GitHub.



You will be asked to authenticate or login with GitHub, after which you will be ask to choose the repo types that is to make it a private or public repo



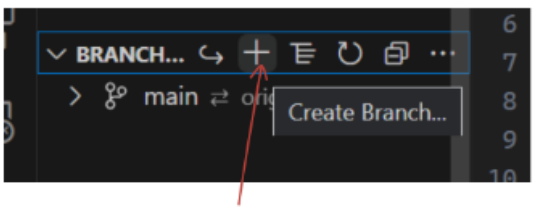
To confirm your project is successfully added to your GitHub, click on the remotes section in the source control section



or you can log in to your GitHub account and see if it is available in the repository section.

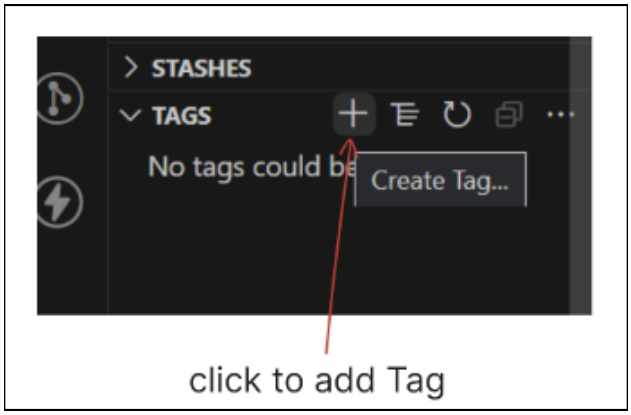
Some other Git operations can be -

Create branch - a branch can be created by clicking on the plus icon inside the branch section of the source control section as shown below.



Switching of branch can be done by clicking on the arrow icon next to the create branch icon.

Create Tags - a tag can be also created by clicking on the plus icon inside the Tags sections of the source control section as shown below



Add contributors - contributors can be added by clicking on the "add co-authors" plus button inside the contributor's sections of the source control section as shown below