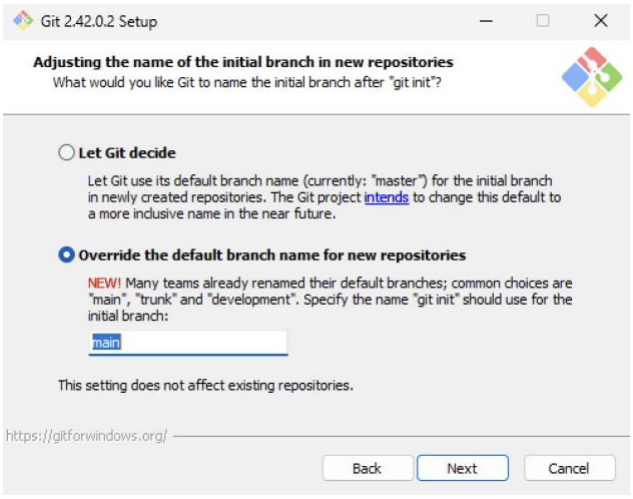
Lab #1:
INTRODUCTION TO GIT AND GITHUB

Topic	Web page development using PHP
Domain of Learning	Psychomotor (P2: Set; P3: Guided Respond; P4: Mechanism)
Learning objective	1. To evaluate the response in order to solve the problem as required. (P2) 2. To evaluate the skill of how the web page is developed whereas using the code/tags correctly. (P3) 3. To evaluate the value added of creativity/knowledge/skill in web page development. (P4)
Lab activity objective	To use the combination of HTML tags and PHP scripting properly based on the suitable requirement of a case study.

Instruction: Follow the steps given.

1. **Registration of GitHub account:**
   1.1 Register GitHub account at https://github.com/

2. **Git installation:**
   2.1 Download Git at https://github.com/git-for-windows/git/releases/download/v2.47.0.windows.1/Git-2.47.0-64-bit.exe
   2.2 For MacOS users, follow the instructions at https://git-scm.com/download/mac
   2.3 **Leave the installation settings as default EXCEPT for the following**:



   2.4 To verify that Git has been successfully installed, open **Command Prompt** and type `git -v`. The output should be as follows:

2.5 Next, type the following command in Command Prompt. Replace `"Your Full Name"` with your actual name.

```
git config --global user.name "Your Full Name"
```

EXAMPLE: `git config --global user.name "John Doe"`

2.6 Then, type the following command to set the email address attached to your commits. Replace `"youremail@example.com"` with your actual email address. **THE EMAIL ADDRESS MUST BE THE SAME AS THE EMAIL ADDRESS YOU REGISTERED WITH GITHUB IN STEP 1.1**

```
git config --global user.email "youremail@example.com"
```

EXAMPLE: `git config --global user.email "johndoe@example.com"`

2.7 You can verify the `user.name` and `user.email` that has been set up by running the following command.

```
git config --get user.name

git config --get user.email
```

3. **Creating a New Folder and Repository**:
   3.1 Create a new folder where you want to store your project. Name it as **webdev_lab_1**.
   3.2 Open this folder in VS Code: **File** -> **Open Folder**.
   3.3 Once the folder is opened, open the Source Control pane  .
   3.4 Click on the **Initialize Repository** button. This sets up a new Git repository in your folder.

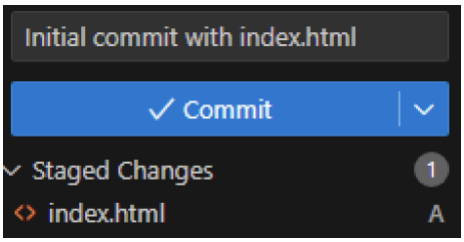
4. **Creating an HTML file**:
   4.1 In VS Code, go to **File** -> **New File** or click the  button.
   4.2 Save this file with the name **index.html** in your project folder.
   4.3 Write a basic HTML code as follows:

```
<!DOCTYPE html>
<html>
<head>
    <title>My Simple HTML Page</title>
</head>
<body>
    <h1>Hello, World!</h1>
</body>
</html>
```

4.4 Make sure to save the file (Ctrl + S).

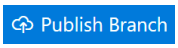
5. **Committing changes to Git**:
   5.1 After saving your HTML file, go back to the Source Control pane.
   5.2 You should see your **index.html** listed under **CHANGES**.
   5.3 Click the + sign next to the file name to stage the changes.

   5.4 Enter a commit message in the text box at the top (e.g., "Initial commit with index.html").

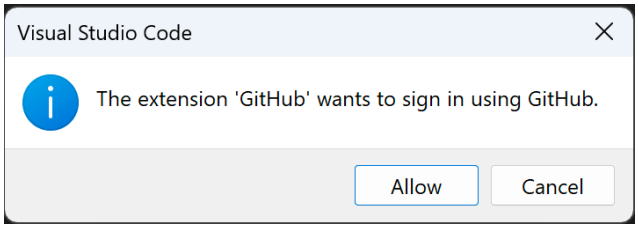


   5.5 Lastly, press the checkmark icon 

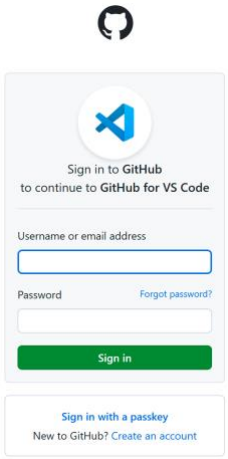
to commit your changes.

6. **Pushing to GitHub**:
   6.1 Click the 

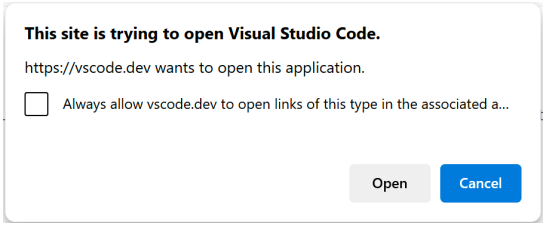
button.
   6.2 Select Allow if the following alert pops out.



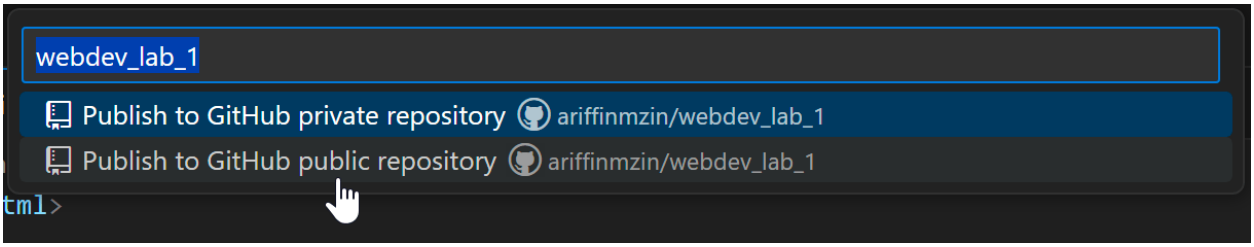
6.3 Then, it will navigate to the GitHub login page. Enter your credentials.



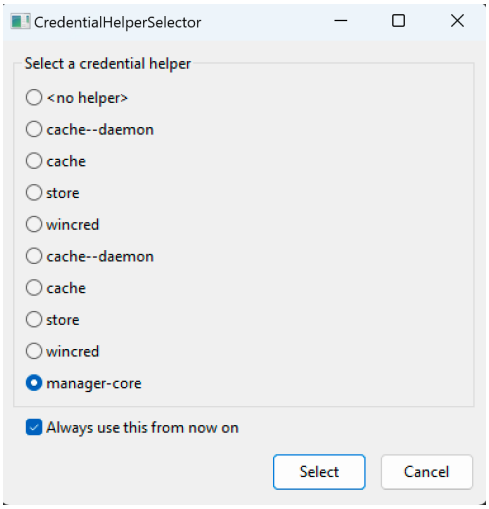
6.4 Choose Open if the following alert appears.



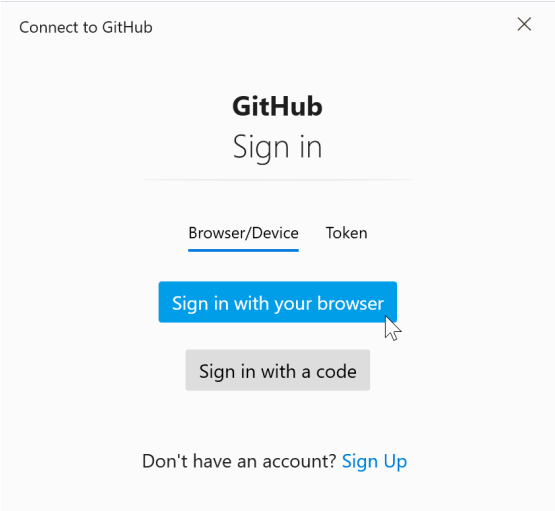
6.5 Make sure you choose Publish to GitHub **public** repository.



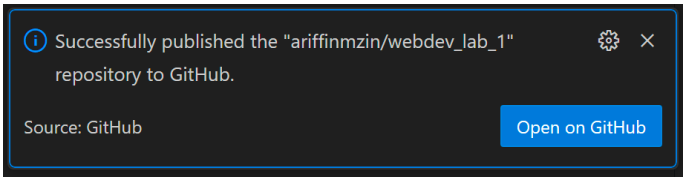
6.6 If the following window pops out, select the following settings then press Select.



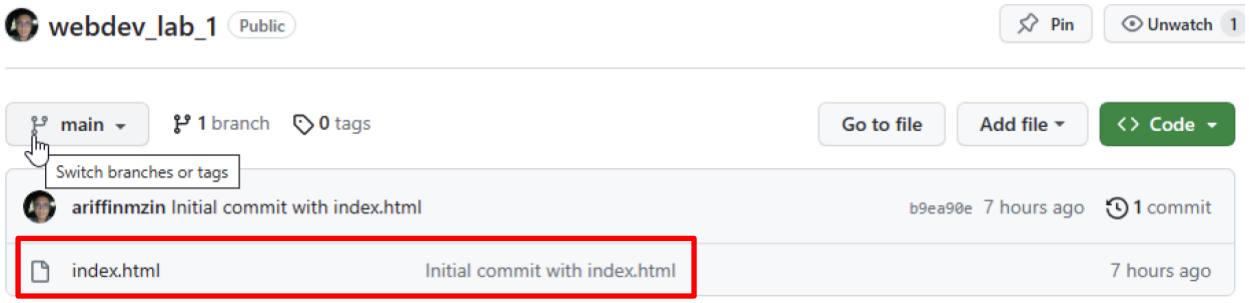
6.7 Choose Sign in with your browser.



6.8 You will get a message indicating that your push was successful. Click Open on GitHub to view the file.



6.9 You should now see your **index.html** file in the repository.



7 Making Changes to the HTML File:

7.1 In VS Code, open your **index.html** file.

7.2 Add a new paragraph below the **<h1>** tag and **save** the changes:

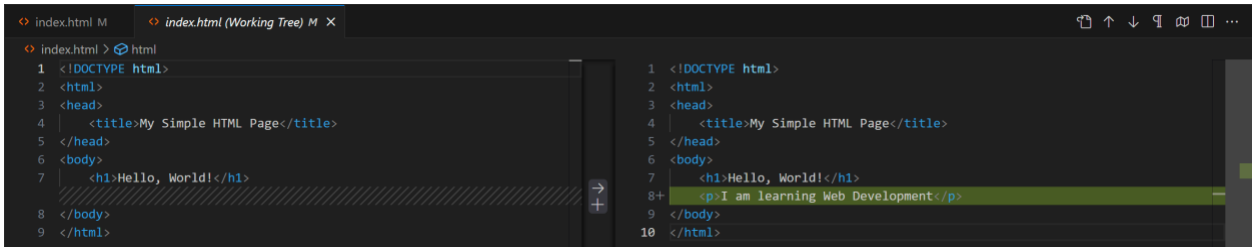
```
<p>I am learning Web Development</p>
```

8 Viewing the Differences:

8.1 Go to the Source Control pane in VS Code.

8.2 Under **CHANGES**, you'll see **index.html**. Click on it.

8.3 A new tab will open, showing the differences between the previous and current (after saved) of the same file. **Added lines will be highlighted in** green and removed (if any) in red.



9. Committing the New Changes:

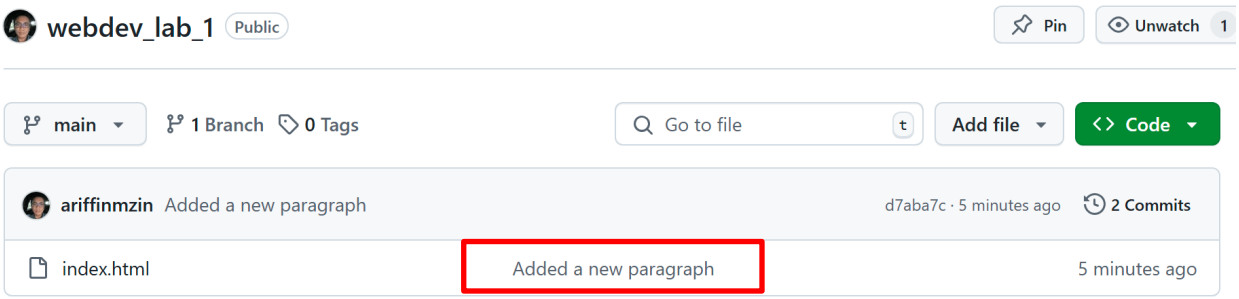
9.1 Stage the changes by clicking the + sign next to the **index.html** under **CHANGES**.

9.2 Enter a commit message (e.g., "Added a new paragraph").

9.3 Press the checkmark icon ✓ Commit to commit your changes.

9.4 Then, press the Sync Changes 1↑ button to pull and push the changes to the GitHub repository.

9.5 Verify the changes on GitHub.



10. Enable GitHub Pages:

10.1Navigate to your GitHub repository in your web browser.

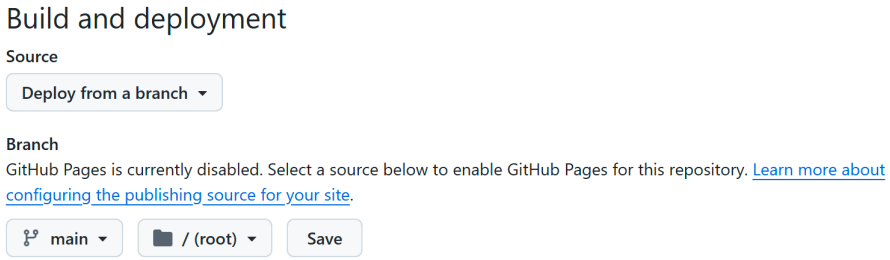
10.2Click on the **Settings** tab (usually located towards the top-right).

10.3Find the **Pages** section (on the left navigation panel).

10.4Under **Source**, make sure to select **Deploy from a branch**.

10.5Under **Branch**, select the **main**. You might also have an option to choose the root or a **/docs** folder, but the **root** is fine for this lab.

10.6Click **Save**.



11. Viewing Your Live Site:

11.1 After enabling GitHub Pages, refresh the **Pages** section until you see a link that says "Your site is live at [link]". Click on that link.

11.2 You'll now see your live **index.html** page! It might take a minute or two for your changes to appear the first time, so if your latest edits aren't showing up, give it a moment and refresh.

11.3 You may try to visit the page from any device since the page is already up and running.

12. AUTHOR submission:

12.1 Upload a **Microsoft Word file (.docx) or PDF (.pdf)** containing the link generated in **Step 11.1 to AUTHOR (INDIVIDUAL ACTIVITIES – LAB 1) BEFORE 10PM 13/10/2024**. Name your text file as **YOURNAME_YOURMATRICNUMBER.docx**.