# **Github Tutorial**

## **Step 1: Setting Up Your GitHub Account**

If you don't already have a GitHub account, go to <u>GitHub's website</u> and sign up. It's a straightforward process requiring your email, a username, and a password.

#### **Step 2: Create a New Repository**

- 1. Once logged in, locate the "+" icon in the upper-right corner of the GitHub interface and click on it.
- 2. Select "New repository" from the dropdown menu.
- 3. Name your repository according to your assignment requirements, for example, CSE 366(3)-2022-1-60-001 where 2022-1-60-001 is your student ID.
- 4. Choose whether the repository will be public or private. Remember, if your assignment needs to be visible to your instructors or classmates, choose public.
- 5. Initialize the repository with a README file. This file is where you can give an overview of your project.

### **Step 3: Create the Assignment Folder**

- 1. After creating your repository, click on the "Add file" button and select "Create new file."
- To create a folder within the GitHub web interface, you need to type the folder name followed by a /. For this assignment, type Assignment 1/ into the box. GitHub will automatically recognize that you are creating a folder.
- 3. After typing the folder name and /, type the name of a new file to be placed inside this folder, for example, .gitkeep. The .gitkeep file is a placeholder used to commit an otherwise empty folder. Your input should look like Assignment 1/.gitkeep.
- 4. Scroll down, leave a commit message if you wish (the default is fine), and select "Commit new file."

#### Step 4: Adding Files to the Assignment Folder

To add your assignment files (e.g., Jupyter notebook, report, presentation) to the "Assignment 1" folder:

- 1. Open the folder by clicking on it.
- 2. Click on "Add file" and choose "Upload files."
- 3. Drag and drop your files or use the file selector to choose them.
- 4. Commit the files with a message describing the update, e.g., "Added simulation notebook and project report."

## Step 5: Creating a README.md File

- It's good practice to have a README.md file in your repository and each significant folder. To add a README to your "Assignment 1" folder, navigate into the folder and repeat the process used to add the .gitkeep file, but this time name the file README.md.
- In the README.md file, you can use Markdown to format text. Provide an overview of what's inside the folder, instructions for running your code, or any other relevant information. For example:

# Assignment 1: Dynamic Robot Movement Simulation

This folder contains all the deliverables for the "Dynamic Robot Movement Simulation" project.

#### ## Files

- `robot\_simulation.ipynb`: The Jupyter notebook with the simulation implementation.
- `project\_report.pdf`: A detailed report of the project.

## Running the Simulation

To run the simulation, ensure you have Jupyter Notebook installed and open `robot\_simulation.ipynb`.

Commit the README.md file.

## **Step 6: Share Your Repository**

- If your repository is public, you can simply share the URL with anyone you wish to view your project.
- If it's private and you need to share it with specific people, go to your repository's main page, click on "Settings," navigate to "Manage access," and then click on "Invite a collaborator."

#### **Final Notes**

Remember, the above steps are done through the GitHub web interface, which is suitable for smaller projects and assignments. For larger projects or more frequent contributions, you'll want to familiarize yourself with Git commands to manage your repositories locally on your computer and push changes to GitHub. There are many tutorials and resources available online to learn more about using Git and GitHub effectively.