Lab Exercise 1

Getting Started

1. Create a GitHub Account

   You can use your primary email, to use as portfolio for employability.
   Your Mapua email can provide GitHub Education and give you access to GitHub pro. It can be set as secondary email.

2. Install git in your local system

   Visit https://github.com/git-guides/install-git for instructions on how to install.

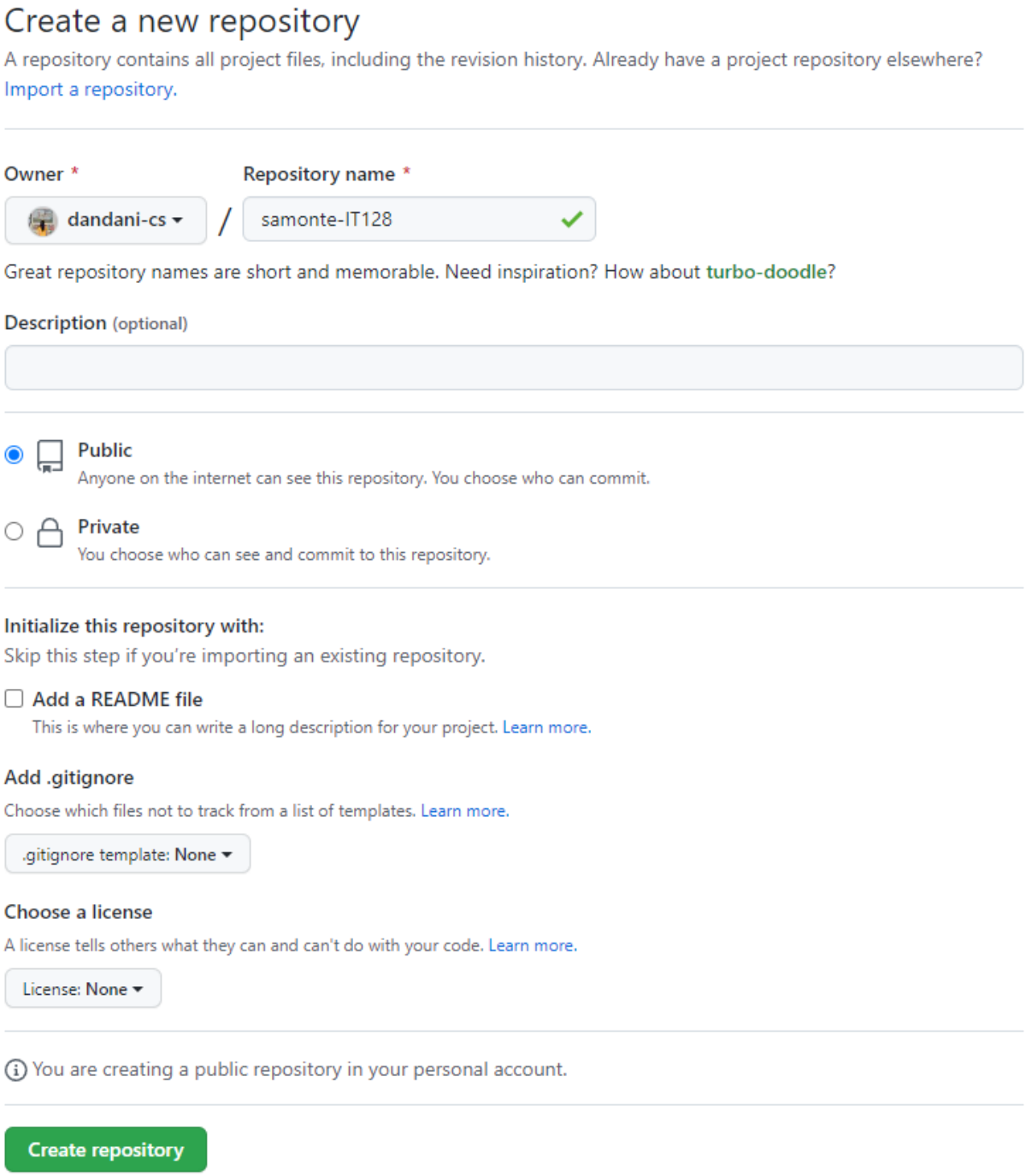
Check whether git was successfully installed

1. Open PowerShell/Command Line/Terminal (hereon will be referred as command line).
2. Type `git --version`
3. Screenshot the result.

Create a GitHub Repository

1. Log in to your GitHub account.
2. Click the + icon on the navigation bar and click New Repository
3. Name the repository as `lastname-IT128.`
4. Choose a Public Repository.

   The following figure should show the settings for the new repository:



5. Click Create Repository.
6. The following should show:

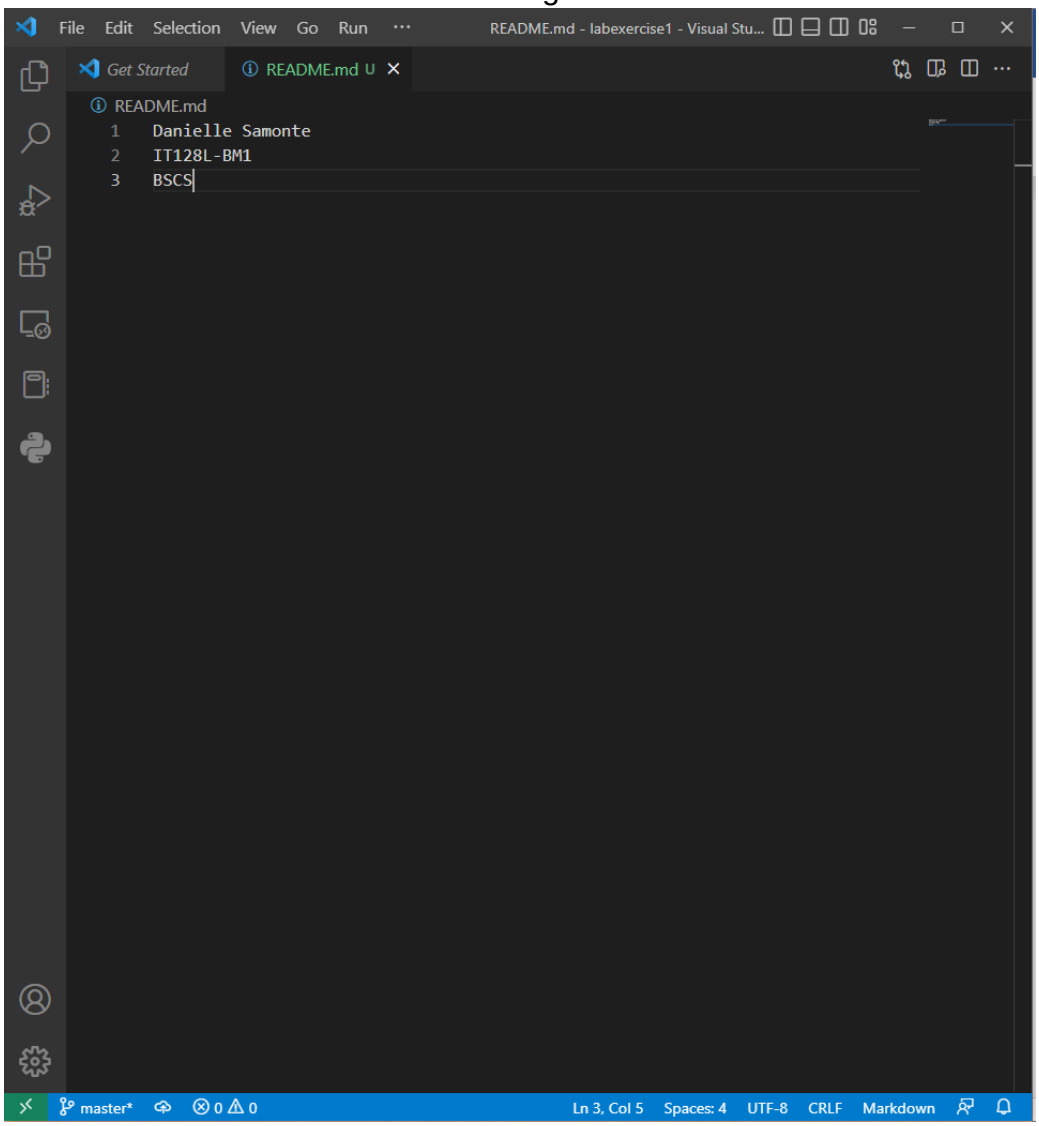
...or create a new repository on the command line

```
echo "# samonte-IT128" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/dandani-cs/samonte-IT128.git
git push -u origin main
```

7. Follow the instructions under a folder and screenshot the command line.

   You may create the README.md with a text editor. Input your name, section, and program.

README.md using Visual Studio



8. Screenshot the result of your push in your GitHub repository.
9. Define the following commands:
    - `git init`
    - `git add <file>`
    - `git add .`
    - `git remote add origin <url>`
    - `git commit`
    - `git push`
10. What is the difference between remote and local repositories?

Create more commits

1. Create a simple HTML file with the name index.html within the folder.

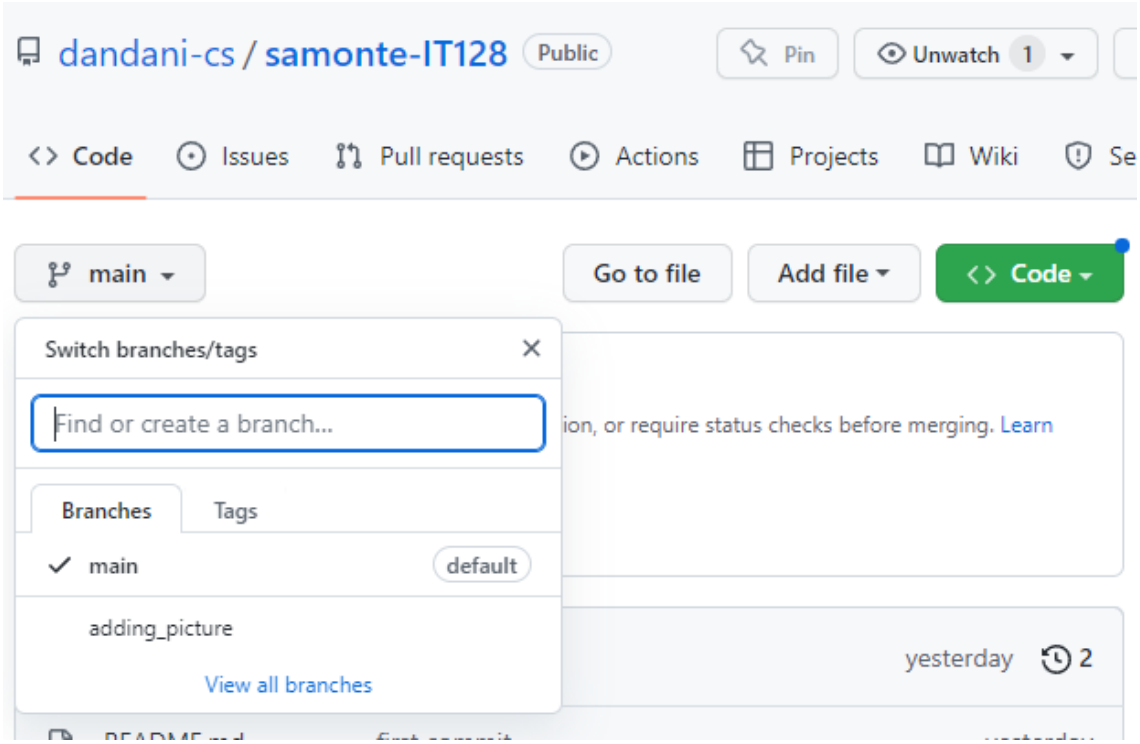
    Minimum requirement: html, head, and body tags. Include your name, section, and program.

2. Open the command line and run `git status`.
3. Add the HTML file to the commit.
4. Commit the changes with the message “adding index.html”
5. Push the changes. It should reflect on the GitHub repository
6. Screenshot the process of Step 2 to 5.

Creating branches

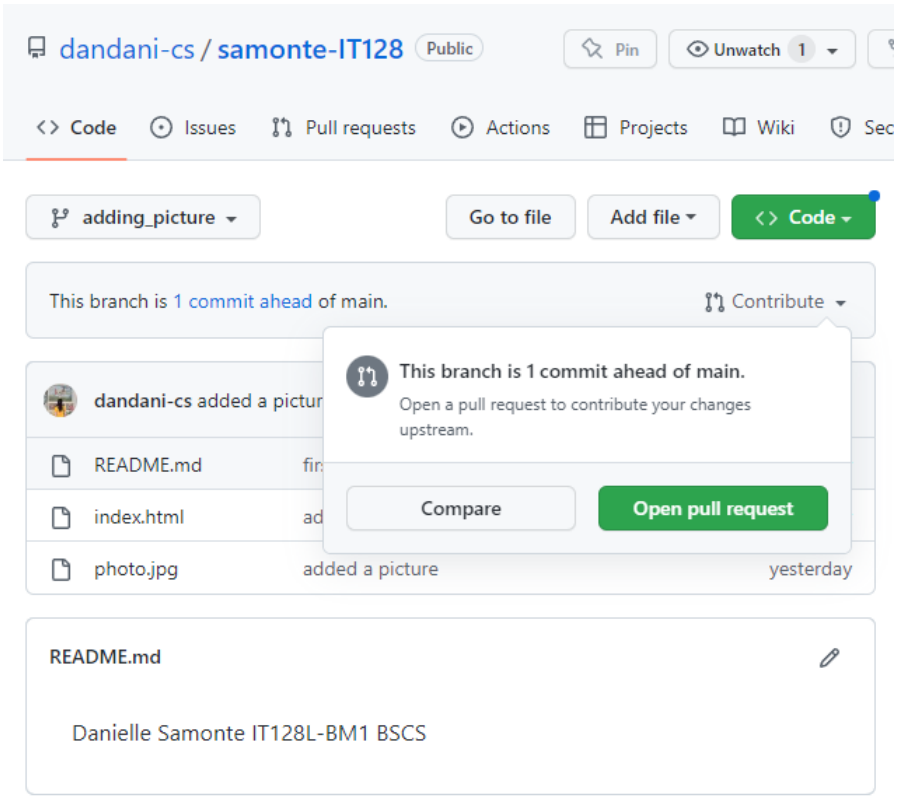
Branches are a way to add new features or implementation in the code without affecting the main branch. Starting step 7 of the Create a GitHub Repository part, you already created the main branch. One of the best practices is to only push to the main branch when the code is fully functional/without errors. Always create a new branch for a new feature or to fix a bug.

1. Open command line. Change directory to your folder.
2. Run git branch adding_picture to create a new branch.
3. Switch to new branch by running git checkout adding_picture
4. Screenshot the previous steps.
5. In your index.html, add a random picture under your details.
6. Add and commit all files.
7. Push by running git push -u origin adding_picture
8. Screenshot steps 6 and 7.
9. In your GitHub repository, you can change branches with a drop down above the list of files, shown below:



10. Open a pull request for the changes in the adding_picture branch.

    You may go to the branch, click the drop down in contribute, and open pull request if an alert does not show.



11. Create the pull request.
12. Screenshot the details of the pull request
13. Merge pull request, and screenshot the list of files in main.

Put all screenshots of this activity with the link of your GitHub repository in a MS Word file and submit it in the Blackboard link provided.