SWE 103 INTRODUCTION TO SOFTWARE ENGINEERING
PROJECT 2: GitHub Experience

Due date: 21.10.2025 Tuesday, in class.

Goal: Learn the basics of Git, GitHub, and VS Code through a hands-on experiment using C or C++ (or another language if preferred).

Checklist of tasks and workload (each student will show 1-4):

1) Each student must have a GitHub account:

    a) Go to https://github.com/
    b) Sign up for a new account if they don't already have one.
    c) Choose a clear username (use real name or university ID if required).
    d) Optional: Add a profile picture and bio.

2) Download and install VS Code:

    a) Download VS Code: https://code.visualstudio.com/
    b) Install it on Windows or Linux side.

3) Configure VS Code for C++:

    a) Open VS Code → Go to Extensions (or press Ctrl+Shift+X)
    b) Search for C/C++ by Microsoft
    c) Click "Install"
    Help: C++ Setup Guide https://code.visualstudio.com/docs/languages/cpp.
    PS: If you wish to use other programming languages, they are acceptable as well.

4) Write sample code (see below) and save it as "main.cpp" in a new folder, e.g. "pro2" on Desktop:

```cpp
#include <iostream>
using namespace std;

int main() {
    cout << "Hello, SWE 103!" << endl;
    return 0;
}
```

5) Git and GitHub Operations **(one person per group will do this part)**:

    a) Create a local Git repository, stage (add) your code and then commit it.

```
> git init
> git add main.cpp
> git commit -m "Initial commit: Hello SWE 103"
```

    b) Push code to GitHub:

        - Go to GitHub and click "New Repository"
        - Name: "swe103-pro2" , keep it public
        - Link local repository with GitHub:

```
> git remote add origin https://github.com/yourusername/swe103-pro2.git
```

        - Push your code:

```
> git push -u origin master
```

        - Go to GitHub and confirm the file appears.

    c) Clone the repository elsewhere:

        - Choose another location on your computer (e.g., Desktop/test)
        - Open terminal and run:

```
> git clone https://github.com/yourusername/swe103-pro2.git
```

Note: Practice before coming, all tasks in item 5 must end in 5-10 minutes.