

Year 3 - Software Development – 2022/23 Academic Year

Web and Cloud Development

Assignment 1 - Building a Flask-based Webapp with Jinja2

Worth: 20%

Due: 5:00pm, Friday November 4th, 2023

Rational: To provide students with an opportunity to gain experience building a multi-page dynamic webapp using Python's web technologies (specifically Flask and Jinja2).

Requirements:

You are to build a multi-page webapp using Flask/Jinja2 which provides details on you, your interests, and the computing technologies you love. The following pages are **required**:

- A home page providing links to the various sections of your website.
- A personal page providing all the usual details.
- A CV page providing details of interest to potential employers.
- A computing technologies page which has 3 sub-pages providing details on your favourite computing technologies.
- An interests page which provides details on your interests outside of your course and computers.

You should provide a mechanism which lets a visitor to your site return to your home page from any other page on your site. Provide links to external sites on the web. External links need to open in a new tab.

The platform within which your site operates is Python's Flask micro web-framework. You must use the Jinja2 templating system to build your webapp's pages, taking full advantage of the **{% extends %}** tags (and others) as discussed in class. Additionally, you need to successfully demonstrate you're using GIT to manage your app's code, and you also need to format your code with the **black** code formatter, too.

Submission: a ZIPPED folder of your webapp shared with **paul.barry@setu.ie** on OneDrive. Your ZIPPED folder needs to include your hidden **.git** folder.

When marking your submitted assignment, I'll unzip your file, open a terminal in the extracted top-level folder, then issue the **git status** and **git log** commands to determine if you are using GIT correctly. Your code should also conform to the **black** code-formatting standards, so I'll issue the **black** command on your code to check that it does – see the lecture recordings for more details on using this tool. If all is well, I'll then run your webapp with **flask run**, then surf to your site to check all the required functionality exists. I'll assume your site opens when I surf to <http://127.0.0.1:5000>.

Note: Name your zip after your Login ID, e.g., C01234567.zip.

This is an individual assignment. You must declare if you have conferred with another student on this assignment activity.