# **Python101: Personal Project Concept and Structure**

Since the start of the second term, you've learned some great skills in Python. It's time to put those skills to use in a Python personal project. This project will take much longer than any of your previous assignments, and will be split into several **deliverables**. You will be allowed groups of up to 4 people maximum.

\*WARNING\*: The number of people in your group will influence how big I expect the project to be. A group of 4 should have a bigger more complex project than someone doing it alone.

Here's what you can expect

## **Phase 1: Project Planning**

This phase of the project is where you come up with the idea behind your application. You need to write up your plan including the following information:

- The name of your project
- What is the goal of your application
- What features will you have
- What will the screen flow be like

You also need to create a Github repository, add your teammates to the repository, and add my email: <a href="mailto:tonynadeau03@gmail.com">tonynadeau03@gmail.com</a>.

# Add the github repository link to your plan

#### Phase 2: UI Design / Basic Mockup

This phase is solely for UI design. I want you to make a design using figma, or MS Paint, or even on paper of what your user interface will look like. Then you need to prepare a powerpoint presentation explaining your project plan and showing your UI mockups.

You will then present to the class your powerpoint.

# Phase 3: UI Building in Python

Here's where the coding begins. You need to develop your UI code in Python. If you have multiple screens (which is better than having only one), your screen connections should be functional.

# Phase 4: Adding Functionality to Your Project

In this phase, you'll develop the "backend" of your application. You're gonna write the code that makes the project actually work. This will also be the longest phase. At the end of this phase, you'll present your project to the class. During the presentations, each person in the class will have to fill out a form where they select one of their classmates' projects, and write 2 features they think would make it better.

## **Phase 5: Open Source Contributions**

At this point, you will no longer work in groups. I will assign you a project that one of your classmates made (most likely the one you included in the form). You'll join the repository as a collaborator and make a new branch from main with your name on it. From there, you'll add 2 features to the application to improve it, and commit/push it to your new branch.

#### Phase 6: Demo

In this final phase, you'll show me the contributions you made to your classmate's project, and explain what you did.

Due to the nature of this project and the deliverable structure, unless given a valid reason I will not offer any extensions.

#### **Tentative Project Timeline**

Phase 1: March 5th to March 12th

Phase 2: March 12th to March 19th (Presentations on March 19th and 26th)

Phase 3: March 19th to April 2nd

Phase 4: April 2nd to April 23rd (Presentations on April 23rd and 30th)

Phase 5: April 23rd to May 14th Phase 6: May 21st to June 11th