**Final Project Phase 2 (FP-2):**

**Project Requirements and Final Deliverables**

**Out Class 11**

**Due Class 14**

**25 points**

This document describes requirements for your Final Project. This includes your project Python code and data, your desktop project video, final "elevator speech" presentation, and your one-page bibliography. You will submit your project code and data, along with your bibliography to the FP-2 Canvas link.

You will be graded on this Phase 2 at the end of the course, based on how closely you fulfill the following requirements and on the overall quality of your work as judged by the professor. FP-3's Project Video and FP-4's "Elevator Speech" will have separate grades, with specific requirements described in their separate handouts.

**Project Requirements**

* Your project should involve Python in some way. You should write at least some original Python code; depending upon your project, the amount will vary. If you use code and/or data not original with you, be sure to document its original source in your bibliography (details below).
* Individuals will create a 10- to 15-minute desktop video that presents your project work, demonstrating running Python code and data and describing how it works and discussing how you developed it. Teams of two will create a 20- to 30-minute video, and teams of three a 30- to 45-minute video. A link to your video and to your bibliography (described below) will be posted on a Canvas site for all to view after the course ends. The FP-3 Phase 3 Project Video handout describes these requirements in greater detail and suggests tools for creating your video and submitting it.
* Create a short one-page bibliography (**.docx** or **.pdf** formats, please), listing your sources for non-original data and code, and tools. (No special bibliography format is required.) Name it ***NAME*.docx**, where ***NAME*** is the first initial of your first name, followed by your last name. For teams, any team member's name will do. Thus, keep track of your sources for outside code and data. ***Submit your bibliography as a separate document to the FP-2 Canvas link***.
* Use PyCharm's Community Edition IDE or any other Python IDE for developing, running, debugging, and testing Python code, as well as demonstrating your running code in your video. This includes using IPython/Jupyter Notebooks within your video as part of your demonstrations.
* All team members should participate equally in project work, though different members can specialize in different tasks (coding, documenting, video, elevator speech). ***If you're part of a team, a confidential peer evaluation is required at the end of the project from each team member, to be sent to the professor via email***. In it, describe and compare the contributions of each project team member.
* All team members will participate in giving their **FP-4** "Elevator Speech" on Class 14. Details are given in in the separate **FP-4** handout.

**Python Deliverables**

* Create a folder named **603\_project\_*NAME***, where ***NAME*** is the first initial of your first name, followed by your last name. (Mine would be **elevel**.) Teams can use any one of the team member names.
* Put all of your project's Python code and data into this folder, then start PyCharm and open this folder as a project.
* Within PyCharm, add a **README.txt** text file to your project that briefly describes what's in your project, and how to run your code. I should be able to duplicate your running code and data as demonstrated in your video, by following these instructions.
* Note that you may have created and demonstrated a Jupyter Notebook containing both your code and data, so you don't use PyCharm in your video. But I still want you to put your Notebook into your **603\_project\_NAME** folder, then open it with PyCharm and add the **README.txt** file as above. In this case, you should describe how to start and use the notebook in your **README.txt** file.
* Exit PyCharm, then zip your project folder to **603\_project\_*NAME*.zip.**
* ***Submit this .zip file to the FP-2 Canvas link***. Add a submission comment giving the names of all team members.

Summarizing your required submissions to the FP-2 Canvas link:

* Bibliography
* Zipped PyCharm project folder named **603\_project\_*NAME*.zip** containing **README.txt** file

You must also email the professor with your confidential peer review of other team members - if applicable.