Programming Tools for CZ4124/SC4024 (Data Visualisation)

Dear students,

The Data Visualisation course involves plenty of programming exercises in Python, a programming language which I presume you are familiar with since your Year 1 introduction. I have done most of my own visualisation programming using tools available in the WinPython package and suggest that you too download this free tool and all its accompanying packages for your use during this course.

For starters, you can do the following:

- 1. Download the latest version of WinPython from https://winpython.github.io/ and install it on your notebook.
- 2. I am using the <u>Spyder</u> integrated development environment (IDE), which comes with the WinPython package but you are free to use any other programming environment that you are familiar with. However, I will be doing most of my live demonstrations during class using the Spyder IDE.
- 3. In preparing for doing tutorial 1, you can check out some of the following "get started" websites:
- 4. Pandas basics https://geo-python.github.io/2017/lessons/L5/pandas-basics.html
- 5. Basic Plotting with Matplotlib https://geo-python.github.io/2017/lessons/L7/matplotlib.html
- 6. I will also be using the Jupyter Lab when looking at interactive data visualisation in chapter 8 later on in the course. This IDE is also available in WinPython, along with many useful Python data visualisation libraries such as Pandas, Matplotlib, Seaborn, Bokeh, etc.

A/P Goh Wooi Boon (6 Aug 2024)