ECON 611

REQUIRED TOOLS FOR CLASS

INSTALL

- Anaconda - We will be using Anaconda as our primary development environment. Installing Anaconda:
    - MAC users only:

    Follow the installation instructions for the Python 3.7 version under the macOS tab.

    Test that Anaconda and Python were installed correctly by opening a Terminal window and type: ipython notebook OR jupyter notebook. In a few moments, your browser should open to a window titled Jupyter. If this works, you may close window, and shutdown the notebook server using Control+C.

    - PC users only:

    Follow the Graphical Installer installation instructions for the Python 3.7 for your system (either Windows or Linux). Follow the directions for the graphical installer you chose, it should be straight-forward, just like installing any other software, **keep any default options**.

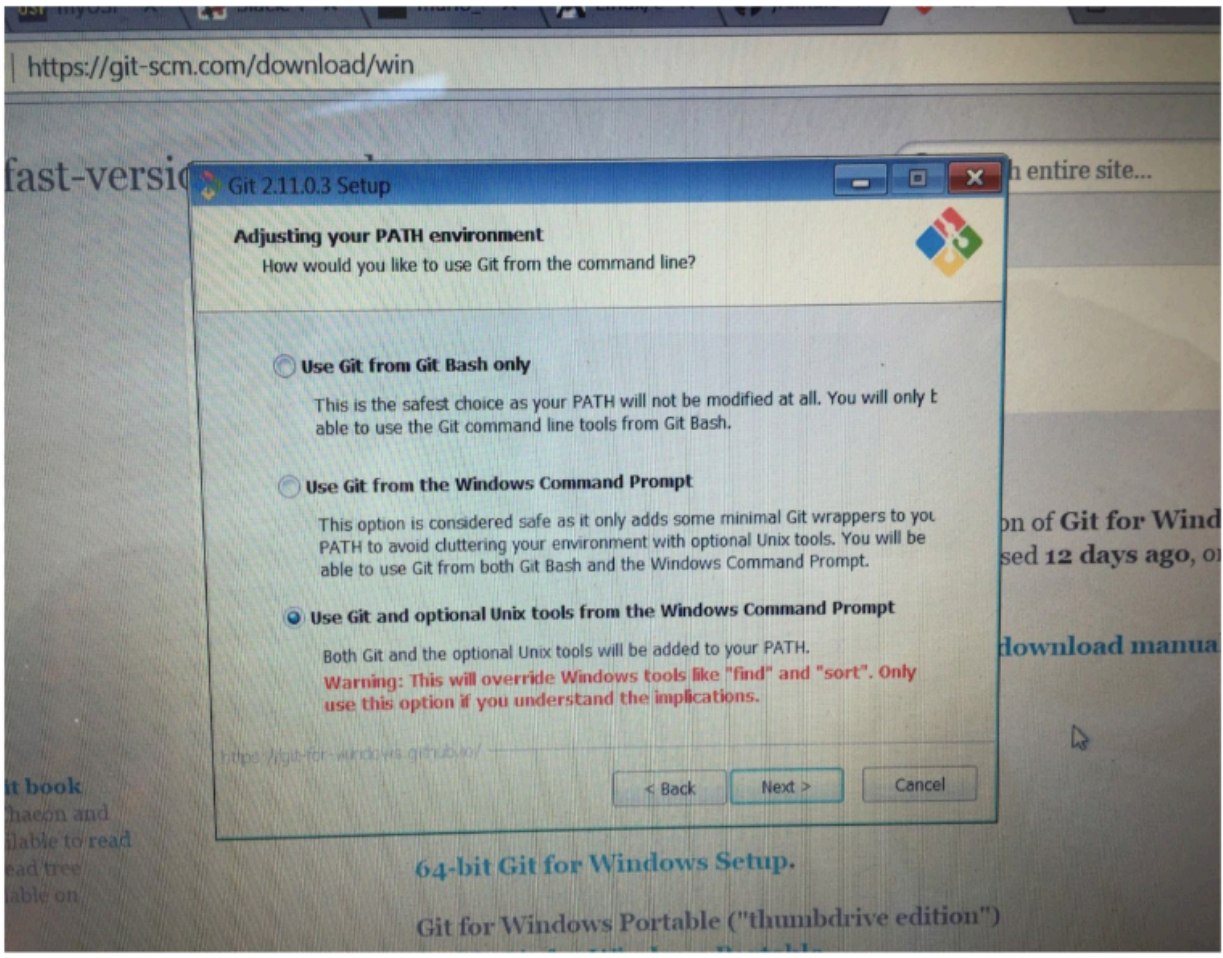
    NOTE:

    Anaconda bundles many of the Python packages we'll be using, including:

    - *Python*.
    - *Ipython* / *Jupyter* / *Pandas*: Required tools for creating notebooks.
    - *Matplotlib*: The king of all python plotting packages.
    - *Gensim*: A framework for vector modeling.
    - *NLTK & Spacy*: Used for natural language processing.
    - *NumPy*: Fundamental array processing tool.
    - *Scikit-learn*: Modules for machine learning & data modeling.
    - *SciPy*: Scientific library for python.
    - *Seaborn*: Statistical data visualizer.
    - *Pip & Setuptools*: package installer & version manager (Mac only).
    - *Sqlite*: Standalone, lightweight SQL database engine.
    - *Statsmodels*: Simple statistical computation (used with SciPy).

- GitHub – We will be using GitHub to store and share code and class content. Please create an account (free or paid account => this is your choice).
- Git (mac) - Students should install command line tools for Git.

- Git (pc) - Open a web browser and go to: https://git-scm.com/download/win this will download git.
    - During the installation, keep the default selections, BUT => during the “Adjusting your PATH environment” , make sure you select the last option => User Git and optical Unix.....(see picture below)



    - In the last setup step make sure you “enable experimental use of diff tool”
    - Once everything is re-installed, restart your computer.

- Text Editors – Pick the one you like (see this list). I use Visual Studio Code.
- Slack – Download the application.

HARDWARE SPECIFICATIONS

Mac Users

We will be teaching the course using Macs, compare your machine against the following hardware needs (if you have newer or better hardware than the list below, you are ok):

- *1.6GHz dual-core Intel Core i5 processor*
- *Turbo Boost up to 2.7GHz*
- *Intel HD Graphics 6000*
- *8GB RAM*
- *128GB flash storage*
- *10+ GB of free disk space*

PC Users

While you can be great at using python with *any* machine, unfortunately, there are a number of compatibility issues with Python libraries and older versions of Windows. For example, Python and Anaconda users have identified multiple issues with *Windows 7 x64* machines.

We **strongly recommend** that PC users adopt the latest version of Windows ("Windows 10"). PC users on older machines may consider installing a Virtual Machine like Oracle's Virtualbox and running Anaconda in a Linux environment via Ubuntu Desktop.

Please note that we will be conducting the course using Macs and may not be able to help PC or Linux users troubleshoot any issues you might encounter. If you choose to use a PC or Linux machine, ***you will need to provide your own IT support*.**