Software Installation
Lab 01

CMPT 145 Laboratory Overview

- For the remote version of CMPT 145, there are no lab sessions.
- Instead, laboratory material will be covered like a lecture topic.
    - Short readings from slides like these
    - A few exercises to engage with the material
    - Some assignment questions might be related to this material.
    - Some quiz questions will be related to this material.
- Labs are not supposed to be challenging, but practical.

Laboratory 01 Overview

Section 1: Pre-Lab Reading ▸ Slide 5

Section 1

Pre-Lab Reading

Working in Python from Home

- If you have a recent desktop or notebook, PyCharm is still the best option.
  - Recent: less than 5 years old.
- You may not wish to install Python and PyCharm.
  - Use the web-service called REPL.IT

Installing PyCharm

- Only do these steps if you have not installed Anaconda, Python, or PyCharm.
- Use the following order. Do not skip a step.
  1. Install Anaconda 3. Use the Individual Edition. This puts Python and libraries on your computer.
  2. Install PyCharm. Use the Community Edition. It's free and good enough for us.
     - If you already have the professional edition, that's fine. We won't use any of the extras.
  3. Windows users only: Install Git for Windows.
     - Mac users and Linux users already have Git installed! No need to install Git.

REPL.IT

- If your computer is a bit old, or if you only have a tablet.
- Google "REPL.IT" and create a free account.
- It has all the standard Python libraries, it uses UNIX, and it has Git.
    - It might be a bit slower than PyCharm because it's a web service.

PyCharm and Projects

- Students coming from CMPT 141 will be familiar with PyCharm
- Students need to know how to:
  - Start PyCharm
  - Create a new Python 3 Project
  - Run scripts
  - Use the Debugger

REPL.IT and Projects

- REPL.IT is a good alternative.
- It combines Python and UNIX, with a simplified IDE.
- Getting started is easy: create an account (free), and get started.
- The programs you write are not stored on your computer!

REPL.IT and Copyright

- The course material is copyright by the instructor, including:
    - Demo code
    - Code given for assignments.
- You can copy CMPT145 code to REPL.IT, as long as your files are private, not public.

Moodle

- Students coming from CMPT 141 will be familiar with Moodle.
- Students need to know how to submit a document to Moodle for grading.

PyCharm Projects

- Create a folder for CMPT 145 assignments.
- Make a new project for each assignment.
- Don't try to put all your assignments into a single project.
  - Sub-folders in a PyCharm project are considered *packages*, and Python will not run scripts properly.
  - You can fix this, of course, by making changes to you project settings, but the fix is worse than the cause.
- Make a new project for each assignment.