

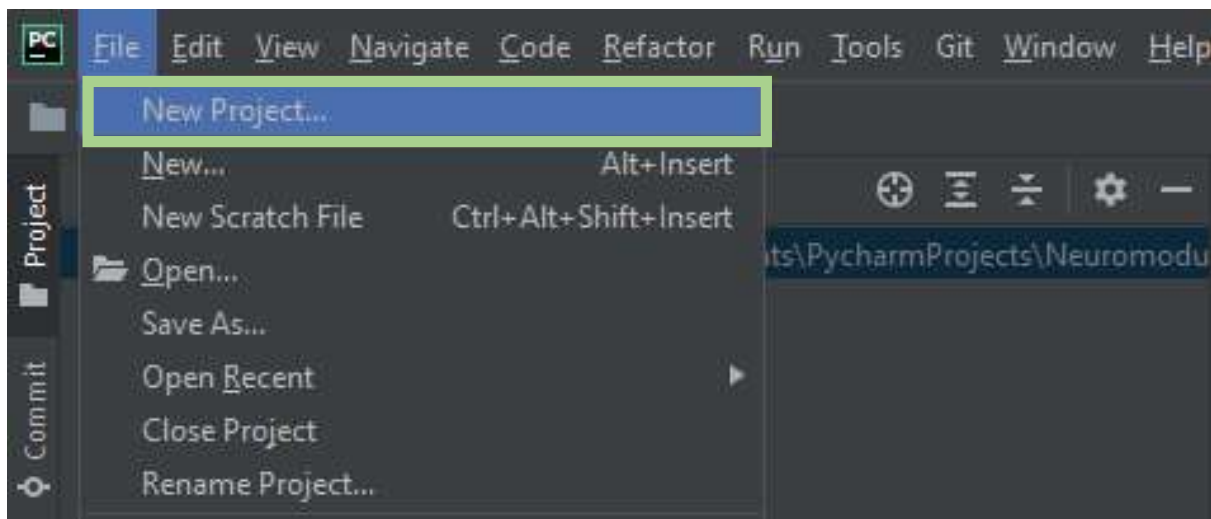
Python Workshop – November 2023

Day 1:

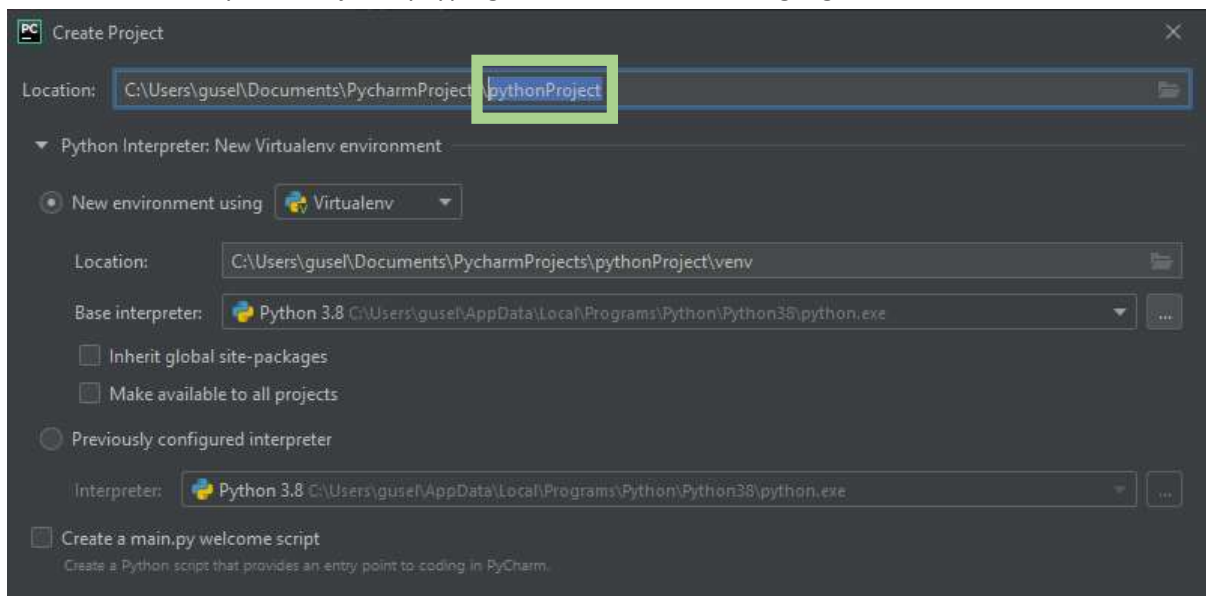
Module 1: PyCharm

PyCharm is an integrated development environment (IDE) for programmers, which can be downloaded and installed from <https://www.jetbrains.com/help/pycharm/installation-guide.html> . There are many other python software packages that can be used to run python scripts, but for this journey we will stick to PyCharm. Start by opening PyCharm Community or Professional App. Then

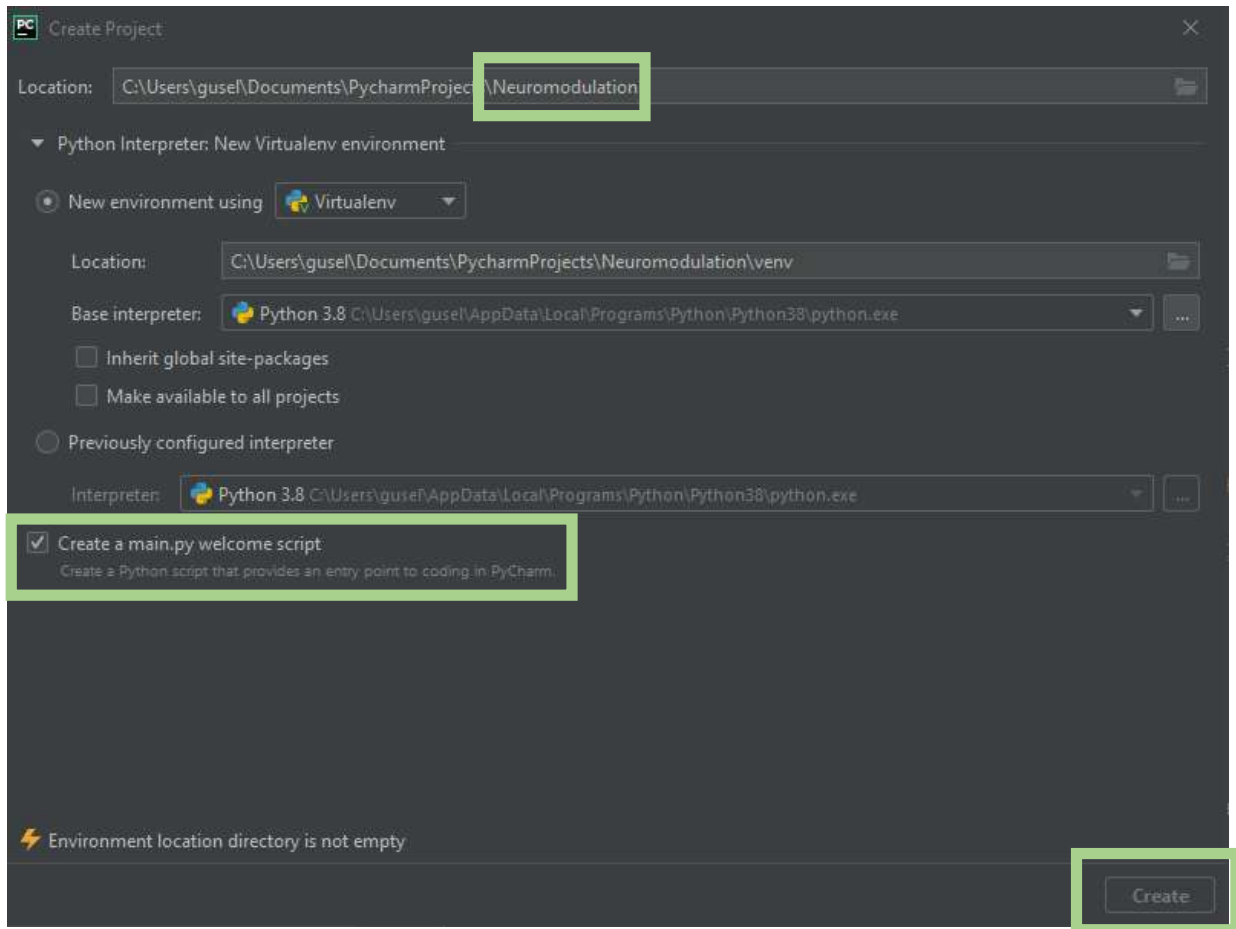
1. Create a new project: File -> New Project...



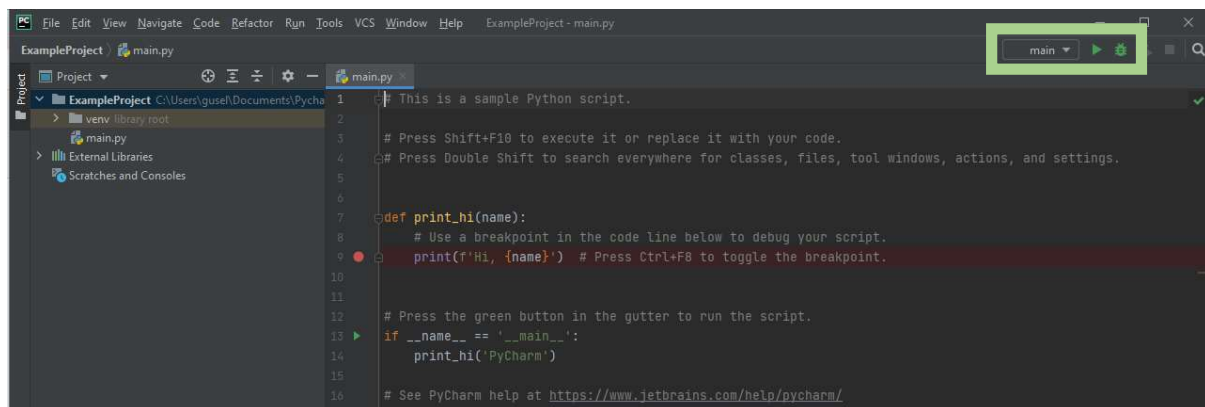
2. Rename Python Project by typing the name where the highlighted font is below.



3. Tick the 'create a main.py welcome script' and select create in the bottom right-hand corner of the dialogue box.

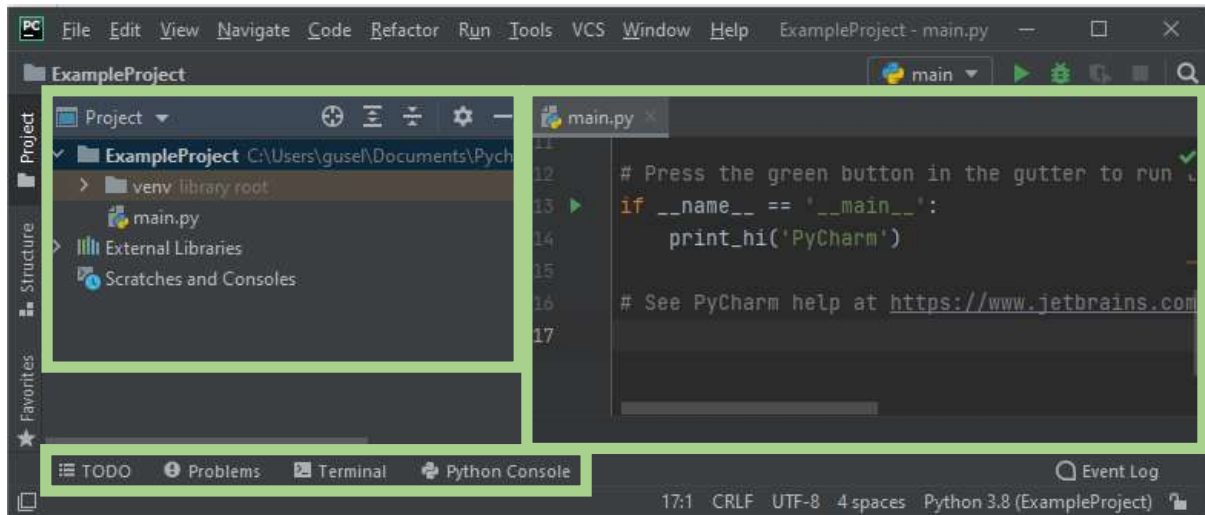


A main.py script should now appear in front of you with some example code as follows. Try running the script by clicking the play button.



Notice that there are different Tabs (see figure below):

- Script/editor tab: where you can edit your code.
- Project tab lists the current project/working directory and files
- Problems: when you run your code problems/warnings will appear here.
- Terminal/console: you can run commands or code directly from the computer terminal or python console (we will not be doing this)
- TODO tab: you can create items for you to complete which will be listed here.



Module 2: GitHub Repository

In the coding sessions we will be following the examples outlined in the GitHub repository:

<https://github.com/guselt98/Neuromodulation> .

Neuromodulation (Public) Pin Unwatch 1

master 1 branch 0 tags Go to file Add file- <> Code

Commit	Message	Author	Date
ffbf394	Update README.md	now	31 commits
	.idea	Initial commit	2 weeks ago
	Other	Merge remote-tracking branch 'origin/master'	3 minutes ago
	Part One	Merge remote-tracking branch 'origin/master'	3 hours ago
	Part Two	Merge remote-tracking branch 'origin/master'	2 hours ago
	venv	Initial commit	2 weeks ago
	README.md	Update README.md	now

README.md

STUDENT RESEARCH SKILLS 3-DAY WORKSHOP IN NEUROMODULATION

Neuromodulation Workshop November 2023

Welcome to the coding section of the Neuromodulation Workshop. In this repository you will find the code required for Part 1 and Part 2 of the workshop along with other examples.

Part One

We explore basic python coding in 'Part One folder'. We learn how to import and export data, as well as learn how to visually represent the data.

Part Two

In this section we will analyse the following image in the 'Part Two Folder'. Rudimentary imaging techniques are used to extract cell bodies