Assignment
Personal Data Analytics

Mark	**100**% of the module mark
Single Student Assessment	You will be working alone in this assignment.
Submission deadline	**Friday 2 December 2022 – 5pm** If you do not adhere to the prescribed submission guidelines below, the lecturer assumes no responsibility if your assignment is overlooked.
How to submit?	Upload your assignment on Loop in PDF format only and as one single file. Be sure to clearly identify your name on the title page of your assignment and in the filename. The name of the PDF file should **respect the following naming template**: SurnameOfStudent_NumberOfStudent_CA4016_Assignment.pdf Example: Gurrin_xxxxxxxx_CA4016_Assignment.pdf
Objectives	Gather some personal data over an extended time period (number of weeks) and analyse it to gather new knowledge about yourself. Identify the potential for this new knowledge to have real-world impact.
Description	For this assignment you will submit **one PDF document** containing the following elements:

- A description of the personal data source(s) that you collected, the types of data gathered (with examples where appropriate) and a rationale for why you choose this data source. Example data sources could include, sleep patterns, diet, activity logs, computer usage (e.g. RescueTime, Loggerman), sports/fitness, timelapse photos, keystrokes, etc… Note that more than one time-aligned data sources will support more interesting analysis. Please also consider how readily available for download the data is, as in some cases, only summary data is made available.
- A short description of any data maintenance/cleaning issues that you needed to engage in
- A review of the analytics that you have performed to engineer new knowledge from this data. What did you do, what approaches used, why were these appropriate? There is a lot of scope here for doing interesting things.
- A description of the types of insights that you have gained from this data analysis. What patterns, trends, biases can you see in the data?
- A presentation of some charts and graphs that communicate important knowledge/learnings.
- A discussion of the potential of this data to provide a new commercial offering. Who are customers and what are the value propositions?
- A short section considering if there are any legal or ethical challenges with this data and analysis?
- A short section reviewing your own learning from this exercise. Did you find anything novel? Will you keep doing this or stop at the end of the assignment?

It is possible to use an existing dataset if you wish to do so. In such situations, please discuss with Cathal directly in advance.

I would expect a 12-15 page report, but I would suggest a limit of 20 pages in total.