Supervision 2: Data Science

Date: Tuesday 21st January.

Excellence: the priority of this session is to go over any questions they might have on their work/ and the feedback they have received for Lab 1. The second part of the supervision will introduce the students to data science, from the perspective of Al.

Pre-knowledge required: ideally they should come to the session confident enough in their Python skills that they can complete the next Lab.

Preparatory work required: Lab 1 (original).

Material needed:

- Prepare PowerPoint slides for introduction and activity 2.
- Mark their homework and take notes on who managed to do what to better lead activity 1.

Plan

Session Start and Introduction (5min)

Remember to take attendance and ask for colour blindness, or to tell me about any disability they may have.

Small ice-breaker question: give one resolution you have for the new year, and if you don't have one, give one thing you'd like to learn or do this year. *Go around the room, each person that goes names the person to go next.*

Activity 1: Homework Review (15-25min)

- Ask them to pull up their feedback if they have not already. Give them a quiet moment to read the feedback, and think of any questions they might want to ask. (5min)
- Share my screen with an empty notebook and depending on:
 - 1. If they speak up, either answer their questions soliciting students that successfully managed relevant sections. If not, go through the notebook together focusing on specific sections.
 - 2. If they all seem confident, move on to the rest of the supervision.

Activity 2: Powerpoint (10min)

Share the presentation on my screen.

- Define Data Science and ask students to give an example of data that they have encountered before.
- Present some applications of data science:
 - 1. Ask the students: what kind of data do you think each of these applications need?

- 2. Present the self-driving car example.
- Transition to the topic of Lab 2.

Activity 3: Lab 2 (5-15min)

- Tell them to access the Lab 2 on Google Drive, and start working through it (it will also be their homework).
- If time allows, start working through the matplotlib exercises together after giving them time to read the first part.

Summary: Question Time (5min)

Any questions?

Set the work for the following supervision: mention that they should submit by **Monday 10th February, 5pm** (~24h before the next supervision) if they want me to mark their work.

Buffer (5min)