**QUIZ SHEETS ROUND 1: Manipulation/nudging**

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

In 2014 Facebook undertook a massive experiment (in collaboration with researchers) where they manipulated the newsfeed of nearly 700,000 users. Some individuals were only shown positive emotional content from others in their social network whereas others were shown only negative posts. What do you think happened? (Just guess the following answers if you don’t know):

1. The results of this experiment were…….. (1 POINT).

2. How do you think the researchers measured what happened? In other words – what would have been the ‘main thing’ that they looked at to see whether their manipulation of showing positive or negative news feeds had any effect on the FB users? Select from following (1 POINT)

* Asked the users to report how sad/happy they felt.
* Analysed the number of positive vs. negative posts by users.
* Analysed the type of websites the users browsed afterwards.

3. This study raised some important ethical issues – can you think what they were? (2 points).

**QUIZ SHEETS ROUND 2: Emotional Robots**

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Emotions help people decide what is important and make our decision-making more complex (we are not purely rational). So it might be useful to try to make a robot that has emotions too. However understanding human emotions is actually very difficult.

1. Watch the short clips of the two robots. Which one do you think most people have the most pleasant emotional response to? Why is this important? (2 POINTS)
2. How would we go about getting robots to perceive human emotions? What do you think are some of the key markers of human emotion that a robot could learn to pick up on? (2 POINTS)

**QUIZ SHEETS ROUND 3: Filters, bias and AI**

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

It’s great that algorithms can learn our patterns of behavior and likes and dislikes because it means that our internet searches are tailored for us, our social media newsfeeds are tailored for us and we can rely on AI to do basic tasks – like scanning a whole pile of job applications and picking the one we would like best – right? Well actually, there are some downsides to the application of machine learning to real life contexts.

1. Can you think of situations where watching a video on YouTube once and then having similar suggestions constantly appear might be a problem? (1 POINT for each answer, max 2 points)
2. Does your team think it matters whether different people get different results when they google search the same search terms? Why? (1 point).
3. In 2018 Amazon scrapped development of an AI algorithm that would learn patterns and words from job applications (CVs) of previous successful software engineer hires and then applying those characteristics to new job applications that they received. What do you think was a major problem here? (1 POINT).

**QUIZ SHEETS ROUND 4: Attentional Distraction by reward**

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Watch the demonstration.

1. Can you think of a real life example (involving technology) where this sort of attentional distraction by reward happens? (1 POINT)
2. Why might this be a problem? (2 POINTS)
3. What do you think would happen if participants in this experiment were offered $100 for good performance? (i.e. correctly identifying the rotated image on most trials). Select from the following (1 POINT).
   * Perform better
   * Perform the same
   * Perform even worse
4. What do you think would happen if people practiced this task many times? Select from the following (1 POINT).
   * Perform better
   * Perform the same
   * Perform even worse

**QUIZ SHEETS ROUND 5: Gaming/Internet Addiction**

TEAM NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Internet gaming disorder is a ‘condition for further study’ in the official handbook of psychological disorders (The Diagnostic and Statistical Manual for mental disorders; DSM). This means that although it is not yet recognized as an official mental disorder, it may well be included in the future alongside alcohol and substance use addiction. Many doctors are pushing for the inclusion of this in the DSM, because they see so many cases of gaming/internet addiction.

1. Why do you think it is important to have gaming/internet addiction officially recognized in the DSM? (1 POINT)
2. What is one major difference between an addiction such as alcohol or substance use addiction and a gaming/internet addiction? (1 POINT)
3. There are specific criteria in the DSM that are used to identify those who are addicted to gaming versus those who just really enjoy playing but are not addicted. Can you think of what they might be? [max 5 POINTS]