CSCM23: Designing in Trust, Understanding, and Negotiation — Coursework —

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Due: 11:00am, 28 April 2021

Submit a report on the following tasks via the Canvas assignment link. The report should be approximately 2,000-words in length and is worth 30% of the overall module mark.

By submitting this work, electronically and/or hardcopy, you state that you fully understand and are complying with the university's policy on Academic Integrity and Academic Misconduct. The policy can be found at `https://www.swansea.ac.uk/academic-services/academic-guide/assessment-issues/academic-integrity-academic-misconduct`.

— START OF TASKS —

Consider the following scenario[1].

During the early stages of the Covid pandemic, the online-dating company **BeatLonliNess plc**, based in the UK, saw a huge increase in subscriptions. Therefore, it is planning to launch a Europe-wide service in 2021. The service would use AI-supported algorithms for the following parts of the operation:

- Finding common interests and calculating a match value from a combination of these and the description of the individuals, such as eye colour, hair colour, weight, etc. This will also take user supplied photos and videos into account for calculating the match score;

- Translating descriptions and messages between the languages users prefer to use;

- Allowing voice and video calls between users that have a high match score;

- Giving advice on how to improve the chance of finding a partner via the **BeatLonliNess plc** platform.

In the medium term, the business plan sets out to use machine learning on the logs of messaging conversations between users of the **BeatLonliNess plc** platform and recordings of voice and video conversations to enable the use of generative AI and NLP (natural language processing) in a chatbot that will offer conversations in multiple languages to enable users to communicate with each other that don't speak the same language, while simulating the characteristics of speech the users have shown in previous conversations in their own language.

Longer term, the service will also aim to integrate further lifestyle advice (e.g., workouts, healthy eating, leisure activities) to improve the chances of finding a match.

Task 1: Based on the scenario summarised above and the aspects of responsible design learnt in the lectures, discuss issues (legal, ethical, and technological) with the business proposal of **BeatLonliNess plc**. **(13 Marks)**

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[1]All names an events/practices in this scenario are ficticious. Any similarity with real companies and practices are purely coincidental

Task 2: Summarise relevant examples of related media coverage in the last 5 years. **(7 Marks)**

Task 3: Use the ETHICS GUIDELINES FOR TRUSTWORTHY AI published by AI high-level expert group of the European Commission in April 2019, in particular the TRUSTWORTHY AI ASSESSMENT LIST (p.24 of the report and standalone document), to discuss requirements for the system proposed by **BeatLonliNess plc**. (Links to these documents are posted with the assessment brief.) **(10 Marks)**

— END OF TASKS —

Submission

You should submit **one** document via Canvas: The document has to be a PDF. Other formats are not accepted and will lead to zero marks being awarded.

Submit your work via Canvas before **11:00am, 28 April 2021**.