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# IN5480 - Wonder document for group 1

**About us**

Our group consists of the following students; Anh Thy Sandra Nguyen, Sara Løkken, Thanh Thao Thi Tran, Maria Løvland Johansson, Johanne Thunes and Nathalie Dyhr Olimb. We are all master design students from two different educational backgrounds: four with a bachelor's degree in Informatics: Design, Use, Interaction from the University of Oslo, and two with a bachelor's degree in Web Development from the Norwegian University of Science and Technology in Gjøvik.

**Area of interest**

We are interested in the area surrounding mental health and emotional connections between humans and AI. In the earlier days of researching and developing Artificial Intelligence (AI), there was little focus on the human aspect and behaviour, and more on the logic and mathematics surrounding the machines. McCarthy, who first coined the term of Artificial Intelligence, wrote that "[The goal] was to get away from studying human behavior and consider the computer as a tool for solving certain classes of problems. Thus AI was created as a branch of computer science and not as a branch of psychology" (Grudin, 2009, p. 51). But throughout the evolution of AI, there has become more focus on the human aspect of it, and also on the field of Human-Robot-Interaction, as the presence of personal service robots in e.g. the home are expected to grow in the coming years (Thrun, 2004). As we become more used to meeting different versions of AI in our everyday life, the thought of it taking on tasks that previously has been one of humans' has become not that far fetched.

The topic of mental health has become very relevant in today's society, and especially amongst people of our own age group. We therefore find this topic very interesting to explore, as it is something that we all can relate to in some way. Since the topic of the course is AI, we have narrowed down our focus area to the use of chatbots, and peoples experiences and feelings around the use of it. More specifically, we want to explore the subject of emotions in connection with chatbots, with an emphasis on the feelings of loneliness. We have decided that we want our focus to mainly be on students, as this is a group that generally

has experienced a lot of loneliness through these past six months, when a lot of social meeting spots have been closed down as a result of Covid-19.

From this theme, we have chosen two questions that we would like to adress:

1. Can a human establish an emotional bond with an AI chatbot?
2. To what extent could an AI chatbot replace a human psychologist?

**Methods**

To try and address these questions, we have chosen some methods that we found helpful in gathering data. First we would begin with conducting some interviews with people in our user group, both about their relationship with AI and chatbots, as well as their thoughts on mental health. We will then try to construct a prototype of a "mental health chatbot" and conduct user tests to see how users will experience that, as well as what kinds of questions they will ask and information they will give. A method we want to use for testing is having a user walk through the chatbot with us, using the Thinking Aloud technique. We would also want some users to keep a diary where they can write about their experiences when using the chatbot, as the subject of mental health is sensitive to many, and so we believe it might help to note feelings and experiences down more privately.

**References**

Grudin, J. (2009). AI and HCI: Two Fields Divided by a Common Focus. *AI magazine, 30* (4), p. 48-57.

Thrun, S. (2004). Toward a Framework for Human-Robot Interaction. *Human–Computer Interaction, 19,* p. 9-24.