



## Motivation

The goal is to enhance peoples ability to find health resources and assistance through the use of chatbot technology. The ongoing stigma surrounding health often discourages individuals from seeking help, in person especially when there is a shortage of care worldwide. Conversational agents provide a solution by allowing individuals to educate themselves anonymously and expand their understanding of health.

## Methodology and Approach

I can utilise natural language processing techniques to create a chatbot that can engage in discussions, about health disorders. By gathering training data from the DSM 5 manual and real counseling conversations I can ensure that the chatbot provides grounded responses. Additionally incorporating transparency tools will help users understand the capabilities of the chatbot. Through user testing we can ensure that the chatbot is suitable for people, from demographics.

Here is an outline of my approach;

- 🗨️ Natural Language Processing:
  - I will use ChatGPT by OpenAI to enhance intelligence.
- 💻 Chatbot Development:
  - Machine learning tasks will be handled using TensorFlow.
  - For dialog management we will employ the Rasa framework.
  - Streamlined coding is made possible with Visual Studio Code.
- 🔒 Transparency & Ethics:
  - To maintain integrity and enable interpretability audits I'll implement Constitutional AI techniques.
- 🖥️ Web Interface:
  - The ReactJS framework will be utilised to create an responsive user interface.

## Main Aims

Unlike the chatbots that currently exist, which are limited to purposes this system enables conversations, for ongoing learning. Its objective is to enhance well being by facilitating interactions that combine accuracy and empathy.

## Time Plans

- Month 1 (Oct 2023): Gather and get the initial data ready.
- Months 2-4 (Nov 2023 - Jan 2024): Train models, for the prototype.
- Months 5-7 (Feb 2024 - April 2024): Create a framework for the chatbot and tools, for transparency.
- Months 8-9 (May 2024 - June 2024): Conduct thorough testing, evaluation and make improvements.

## Ethical Issues

It is important to consider factors when dealing with misinformation, such, as the need for diagnosis protecting user privacy avoiding reinforcing stigma and being transparent about the limitations of chatbots. Making safety and transparency a priority is crucial, in this regard.

## Product Design Process

