# NLP Based ChatBot for Mental Health Counseling

In recent days, we have encountered an unprecedented situation in our generation to be compelled to sit at home, maintain social distance and avoid social gatherings due to the Covid-19 pandemic. We have seen that various mental problems such as depression, anxiety, frustration, mood swings, etc., are more frequently seen in many people worldwide. These circumstances encouraged us to design a ChatBot to help people cope with their emotional needs and provide suggestions and counseling to those suffering. As far as our ChatBot is concerned, we want to implement natural language processing and natural language understanding to train our model to make ethical judgments on different moods and mental states. This counseling Bot will provide primary care to those who encounter sudden mood changes, depression, and anxiety. As there are many ChatBots designed for various purposes, we took a different path. We took the initiative of organizing a ChatBot with the sole purpose of giving care and suggestions to those in need of mental support. We have included text, audio, video sharing to describe their problems and implemented them.

CNN, RNN, attention neural network to adapt the Bot to understand and decode these messages. We implemented NLP, NLG methods, i.e., Point Network model, to better adapt it. Bot to understand the semantics and information in a text message. We aim to build a ChatBot that can guide our users to overcome their mental problems.

16101072, S. M. Bayazid Hossain,
17101149, Salman Mostafiz Chowdhury,
17101361, Ali Ahammed Rohid,
17301108, Md. Shamiul Islam,
17301124, Md. Nazmur Sakib,
17301137, Md. Sadiqul Islam Sakif

Group No: 9

References:

1. Kazdin, Alan & Rabbitt, Sarah. (2013). Novel Models for Delivering Mental Health Services and Reducing the Burdens of Mental Illness. Clinical Psychological Science. 1. 170-191. 10.1177/2167702612463566.

2. Inkster, Becky & Sarda, Shubhankar & Subramanian, Vinod. (2018). A Real-World Mixed Methods Data Evaluation of an Empathy-Driven, Conversational Artificial Intelligence Agent for Digital Mental Wellbeing. (Preprint). JMIR mHealth and uHealth. 6. 10.2196/12106.