

Chatbot for Replace A Mentor

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Abstract: Mental disorders are widely spread in countries all over the world. Chat bot is automated computer software that can converse intelligently with people in real time. With the increasing stress in day to day life, every individual is prone to depression and the consequences of depression are disastrous. Chat bots provide a more cost-effective means of communicating with a user and providing helpful emotional support. The aim of this paper is the development of a chat bot for avoids loneliness. Anxiety, depression, attempts at suicide, and post-traumatic stress disorder all raise. A few investigations suggest to the need of utilizing visit bots, which perceives human feelings. The objective is to help people who suffering from loneliness, stress and mental disorders. Chat bot using natural language processing.

Keywords: natural language processing, chatbot, tf-idf, loneliness

I. INTRODUCTION

29% of people worldwide suffer from mental disorders at some point in their lives. Leaving individuals with mental issues untreated can increment self-destruction endeavours and mortality. There is a requirement for offering help and self-improvement between remedial meetings and for patients sitting tight for treatment by psychological wellness specialist co-ops. In recent years, there has been interest in conversational agents, particularly in psych education, behaviour modification, and self-help, as a means of addressing this issue. In this paper, introduce an application of counselling chat bot, which provide conversational service for mental health care based on emotion recognition methods and the chat assistant platform. Mental health issues are at the forefront of healthcare challenges in today's society. These issues are most prevalent among working-age people and have a negative impact on individuals, their families, workplaces, communities, and the economy. One of the main technological solutions to the shortage of mental health professionals is chatbots, which are also referred to as conversational robots, or chatterbots. Through normal language, these frameworks can replicate human conversational abilities. Chatbots are software algorithms that respond to natural language input and are intelligent and conversational.

I. LITERATURE SURVEY

INTISAR SALHI, KAMAL EL GUEMMAT, MOHAMMED QBADOU, KHALIFA MANSOURI, Towards developing a pocket therapist: an intelligent adaptive psychological support chat bot against mental health disorders in a pandemic situation. It is help them to regulate their mood and to reduce distortion of negative thoughts. Disadvantage is implemented chat bot as a tool to assist health care in the COVID pandemic situation. In this paper, to develop a chatbot system based on the sequential attention mechanism based on deep recurrent neural networks for psychological queries, to help people affected by mental health disorders, especially, students in COVID-19 pandemic situation.

KYO-JOONG OH, DONGKUN LEE, BYUNGSOO KO, HO-JIN CHOI, A Chat bot for Psychiatric Counselling in Mental Healthcare Service Based on Emotional Dialogue Analysis and Sentence Generation. It propose a conversational help for mental directing that is adjusted philosophies to comprehend guiding items in light of significant level normal language understanding, and feeling acknowledgment basedon multi-modal approach In order to solve the problem, such the unfair treatment opportunity, self-diagnosis and simple consultation services needs to encourage treatments by specialized medical institutions. In this paper, present a chatbot for mental healthcare; the chatbot assists psychiatric counseling in dialogues. The service communicates with a user through dialogues and conducts psychiatric counseling. Utilizing the conversational help, anybody can undoubtedly available and get viable medicines for mental

guiding administrations. Disadvantage is an intelligent corresponding such as psychiatric case-based reasoning and long-term monitoring, and ethics judgment, etc.

RUYI WANG, YUAN LIAO, JAINKUN WANG, JINYU WANG, Supervised Machine Learning Chatbots for Perinatal Mental Healthcare. PERINATAL MENTAL HEALTH (PMH) problems are types of are a type of mood disorder that affects pregnant women, newborn, and family relationships. They occur during pregnancy and within 24 months of the birth of a child. These issues can arise at any time during a woman's pregnancy. The PMH related services are not only supposed to provide care and treatment for women, including pregnancy preparation and postpartum care, but also to support the development of the relationship between parents and babies. It's only focusing three mental weaknesses, depression, anxiety and hypomania. The model is more and more reliable for the analysis of mental state over time. In addition, the chatbot's dialogue support and medical advice are pre-set, thus the chatbot can provide personalized support language and medical advice according to the user's depression level or anxiety degree. There are many limitations in this design. The main function of this chatbot is to analyse the three main problems of PMH: depression, anxiety and hypomania, which have the greatest impact on maternal and family relations, and also the highest prevalence. However, many psychological problems are possible to arise during the perinatal period. In addition, the mother-child relationship is extremely important, which is not considered in this design.

III. PROPOSED WORK

Nowadays Anxiety, depression rate are at all-time high. Most of people are shy and scared to share their problems to others and also they feel lonely. Mentoring relationships provide a secure environment in which mentees can explore thoughts and develop unafraid of judgment, as well as get consolation from somebody they appreciate. These factors naturally work to increase their confidence in themselves and can really help to tackle mental health issues such as depression. In this case the chat bot replace a mentor. Users can easily talk to mentor with no shyness and scared feeling. Chat bot like as your friend. You can talk about anything with your chat bot friend. Talking to someone openly can solve problems and the mind is also relaxed. Now this Chat bot is more and more reliable.

IV. METHODOLOGY

NLP helps the chatbot to understand text data, comprehend grammar, sentiment and intent. This is primarily due to the wide range of functionalities offered by NLP such as text summarizations, word vectorization. Chatbots learn what they need to do in order to deliver valid responses, since this algorithm essentially relies on the chatbot learning from data, we could potentially determine a way to test how appropriate the data is. If the data is not particularly useful, the chatbot will learn from this and not provide valid responses. Evaluate if the algorithm is able to detect grammatically correct sentences. That is, give the algorithm information organized in various ways - jumble the order of words, make it contain grammatical/spelling/punctuation errors etc. and determine if it can identify which sentences are without error. The preprocessing unit is charged by the NLP which consists of several stages; Data Cleaning, Tokenization, Post Tagging, Lemmatizing, Remove stop-word. TF-IDF can be broken down into two parts *TF* (*term frequency*) and *IDF* (*inverse document frequency*). TF-IDF or (Term Frequency(TF) — Inverse Dense Frequency(IDF)) is a technique which is used to find meaning of sentences consisting of words and cancels out the incapability of Bag of Words technique which is good for text classification or for helping a machine read words in numbers. Term frequency works by looking at the frequency of a *particular term* you are concerned with relative to the document: Number of times the word appears in a document. TF-IDF will transform the text into meaningful representation of integers or numbers which is used to fit machine learning algorithm for predictions.

TF-IDF Vectorizer is a measure of originality of a word by comparing the number of times a word appears in document with the number of documents the word appears in. formula for TF-IDF is: $TF-IDF = TF(t, d) \times IDF(t)$, Where, $TF(t, d)$ = Number of times term "t" appears in a document "d".

$IDF(t)$ = Inverse document frequency of the term t.

V. CONCLUSION

This study proposes Stress is one of the major factors that are capable of influencing the mental state of a person. In this world full of stressful day to day activities, no person is completely healthy because of the day-to-day stress, whether it's stress at work or stress from other personal factors. In a health survey, it was found that 75% of suicide cases arise as early depression episodes. Chat bot having intelligent conversations with people. It is effective way to communicate others. Anxiety, depression rate are at all time high and most of people are shy and scared to share their problems to others and also they feel lonely. In this case the chat bot replace a mentor and analyse user emotions. The objective is to help people who suffering from loneliness, stress and mental disorder. The aim of this chat bot is avoid loneliness. It is simple available and simple to utilize. Users are satisfied by interacting with such systems, indicating that they could provide an extension to psychiatric treatment

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