

ABSTRACT

APPLICATION OF GENERATIVE AI IN CHATBOT IMPLEMENTATION FOR MENTAL HEALTH ASSISTANCE

By

Nazwa Aulia Rakhma 21102015

Mental health has become an increasingly important concern over time, especially with the significant increase in technological development following the COVID-19 pandemic. It affects the mindset and behavior of every individual. One of the most notable topics is suicide due to stress, depression, mental illness, academic pressure and lack of communication. So it is necessary to handle mental health through intense communication. This research aims to develop a chatbot to provide information about personal treatment and a means of reducing depression experienced by Generation Z, especially for students by utilizing Generative AI technology and Architecture Transformers. The chatbot is developed using Generative AI technology such as Gemini which has the ability to generate realistic text and can understand context so that the chatbot is able to provide relevant and useful responses to users. In addition, this method is also used for data learning so as to improve the quality of interaction and user experience. The results of this study show that the chatbot is able to provide appropriate responses in the context of mental health as evidenced by the evaluation results using Semantics Cosine Similarity with 5 sample experiments giving an average value of 89% with the highest value reaching 95%. Based on this evaluation, "Soulbot" shows good ability to understand and respond to questions related to mental health with varying similarity presentations. With this chatbot, it is hoped that public awareness about the importance of maintaining mental health among students can increase, both in the world of education and the family environment.

Keywords: Architecture transformers, Gemini, Generative AI, mental health.