Interactive AI Chatbot for Mental Illness

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Abstract*: In today's increasingly technological world, mental health awareness is paramount, with the intersection of technology and wellness offering innovative solutions to alleviation of depression symptoms, attrition, and loss of follow-up in mental health treatment. To start a good life healthcare is more important. Mental health problems becoming more common, there's a need for easy-to-access support. Our chatbot uses smart technology to understand what users are feeling, offer kind responses. It's built using advanced computer learning to get better at recognizing and dealing with different mental health concerns. In this application implement natural language processing (NLP) and speech recognition. The application includes a robust authentication system for user security, featuring traditional methods like username/password verification, alongside a graphical password authentication system. Users can select a random image during registration, which is then split into shares for secure storage. The chatbot analyzes user queries to recommend tailored stress-relief strategies, including mindfulness exercises, relaxation techniques, and personalized yoga poses displayed with accompanying images and instructions. The backend manages user data, recommendation algorithms, and integration with external services, while the frontend offers intuitive interfaces for seamless user interaction. Thorough testing ensures functionality, usability, and security before deployment, with continuous improvement based on user feedback and technological advancements driving the project evolution.*

Keywords: Chatbot, Mental Illness, Natural Language Processing, Health, Smart Technology

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