

**UNIVERSITI TEKNOLOGI MARA**

**NLP- BASED FOR PROVIDING MENTAL HEALTH  
SUPPORT IN MOBILE APPLICATION**

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## ABSTRACT

This project focuses on developing a mobile application to provide comprehensive mental health support using advanced Natural Language Processing (NLP) techniques. The app aims to address the limitations of traditional mental health support systems by offering personalized, real-time assistance, educational content, and therapeutic audio meditation. Utilizing the Groq LLM for enhanced NLP capabilities, the AI-powered chatbot delivers relevant and empathetic responses based on user inputs. Personalized educational content ensures users receive up-to-date information, while therapeutic audio features help manage stress. The project demonstrates the effectiveness of combining NLP and mobile technology through careful design and implementation. Future enhancements, such as advanced machine learning algorithms and user interface improvements, are proposed to further enhance functionality. In conclusion, the Mental Health Support Mobile App exemplifies the power of technology in providing effective mental health support. The project demonstrates the effectiveness of combining NLP and mobile technology through careful design, implementation, and evaluation. Usability testing, using the System Usability Scale (SUS), resulted in a high score of 79.08, indicating strong user satisfaction. Performance testing confirmed the app's responsiveness and efficiency. Future enhancements, such as advanced machine learning algorithms and user interface improvements, are proposed to further enhance functionality. In conclusion, the Mental Health Support Mobile App exemplifies the power of technology in providing effective mental health support.

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