

DESIGN AND IMPLEMENTATION OF MHESTI APP  
(MENTAL HEALTH STABILITY IDENTIFIER)  
FOR STRESS MANAGEMENT AND  
MENTAL HEALTH MONITORING

UNDERGRADUATE THESIS  
Submitted as one of the requirements to obtain  
Sarjana Komputer (S.Kom)

By:

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FACULTY OF COMPUTING  
INFORMATION SYSTEM STUDY PROGRAM  
CIKARANG  
MAY, 2024

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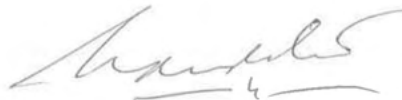
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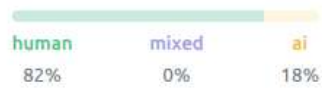
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## **ABSTRACT**

Stress is a prevalent phenomenon in everyday life that significantly impacts an individual's mental health and quality of life. As a natural response to pressure, poorly managed stress can develop into severe mental health disorders, such as anxiety and depression. Given the importance of understanding and managing stress effectively, this research utilizes the prototype development method in designing and implementing an application that aims to aid stress management and mental health monitoring.

The research process was conducted through an iterative cycle, including planning, design, implementation, testing, evaluation, and refinement based on user feedback. The developed app, MHeStI, is designed to provide comprehensive support in managing users' mental health. The app integrates three main functions: Mood Update, Mood Analysis, and Musical Meditation.

The Mood Update function allows users to record their emotional fluctuations regularly, providing valuable data for further analysis. The Mood Analysis function utilizes the data to identify trends and patterns, which can help detect potential mental health issues early. Meanwhile, Musical Meditation offers meditation sessions with music designed to reduce stress and improve mood, providing a practical approach to daily stress management.

MHeStI successfully combines technology and mental health knowledge to create a tool that helps users monitor and manage their emotional fluctuations effectively. The app not only aims to prevent the development of more serious mental health conditions but also increases users' awareness of the importance of mental health. Furthermore, the tool facilitates early intervention by analyzing collected emotional data, allowing users to take preventive measures before problems become more severe.

Overall, the MHeStI app demonstrates great potential in using technology to support mental health management. Through continuous development and refinement, the app hopes to become a valuable resource for individuals seeking practical solutions to manage stress and promote overall mental health. By utilizing user feedback, MHeStI continues to adapt and refine its features to meet the dynamic needs of its user base, making it an invaluable tool in the modern stress management arsenal.

**Keywords :** stress management, mental health, prototype development, mental health app, MHeStI, musical meditation, mood analysis.

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