

## **MENTAL HEALTH APPLICATION GUIDANCE AMONG STUDENTS IN UITM PERLIS USING ANDROID**

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**ABSTRACT-** This research project aims to address the need for effective measurement of mental health through the development and evaluation of a mobile application. The objectives are two-fold: first, to create a comprehensive mobile application specifically designed for measuring mental health, encompassing indicators for both the presence and absence of mental illness. Second, to assess the effectiveness of mental health measurement using the developed application by employing the Weighted Sum Model (WSM), a well-established multi-criteria decision analysis approach. The WSM will be used to evaluate the level of mental health among students, considering various factors and selecting the best alternative. By combining the development of a mental health measurement mobile application and the application of the Weighted Sum Model, this research aims to advance mental health assessment tools and enhance understanding of mental well-being among students.

**Keywords:** mental health, mobile application, The Weighted Sum Model (WSM).

### **1. INTRODUCTION**

The mental health issues among students, particularly in Malaysia, are prevalent and often go untreated due to negative views and low rates of help-seeking. According to Dr. Praveena Rajendra, one in every three Malaysians, or 29% of the population, suffers from mental health issues, and the figures remain unchanged. Lack of knowledge and understanding about mental health on college campuses acts as a significant barrier to receiving proper care. The Mental Health System is an evolving application that allows users to obtain an early diagnosis based on their symptoms, providing an opportunity for self-awareness before seeking professional help. Overall, raising mental health awareness and addressing barriers to seeking help are crucial in supporting the well-being of college students.

### **2. METHODOLOGY**

The research used a mental health indicators approach that considers both the presence and absence of mental illness. The Weighted Sum Process, was employed to select the best alternative based on various considerations. The approach for measuring mental health is the opposite of the weighted sum model, where higher values indicate worse mental health for students. The sum-weighted technique was used to consolidate multiple goals into a single objective by assigning weights to each goal. However, determining the appropriate weights for each goal presents a challenge and is typically based on the relative importance of the objectives in the specific situation.

### **3. RESULTS AND DISCUSSION**

In Figure 1, the network performance results are displayed. Render FPS represents the smoothness of the app's visuals, indicating the number of frames displayed per second. The CPU executes app instructions, while memory (typically RAM) stores data for multitasking. Network performance relates to internet connectivity, enabling features like real-time updates and data synchronization. These factors play a crucial role in determining the overall performance and user experience of mobile apps.

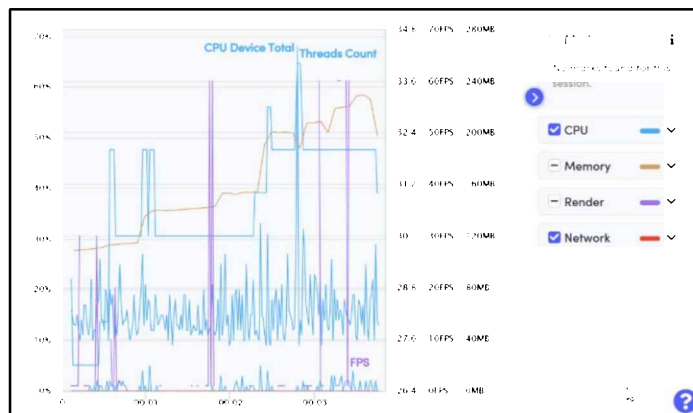


Figure 1 Network Performance

#### 4. NOVELTY OF RESEARCH / PRODUCT

Companion, created in 2013 by psychologist Dr. Robin Hart and product designer Dan Bladon, is a mobile application for mental health. It was developed to help individuals cope with stress and anxiety through Cognitive Behavioral Therapy (CBT). Cove, another mobile app, was designed to enable people of all ages to express and capture their emotions using music. It can be used alongside talking therapies and counseling but is not a substitute for professional therapy and is not suitable for individuals experiencing severe distress or suicidal thoughts. However, Cove does not have plans for an Android version. WorryTree, founded and created by Louise in 2023, is an app specifically designed for individuals with Generalised Anxiety Disorder. It allows users to record and problem-solve their worries in real-time, addressing a gap Louise identified in existing apps. WorryTree was launched on Google Play.

#### 5. CONCLUSION

The investigation suggests that a mobile application will be implemented for the mental health system due to the portability and convenience of mobile phones. The chosen platform for the native application is Android, as it holds a majority market share globally. This decision allows for better application development and builds upon existing related products. The approach for creating the mobile apps will be based on previous works and involve design and implementation.

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