

ABSTRACT

This study aims to develop a mobile application for measuring depression, anxiety, and stress, as well as providing online consultation services for students using an iterative incremental approach. The background of this research is the urgent need for a more structured and efficient mental health early detection system, given the challenges faced by students such as difficulty accessing professional help, limitations of conventional screening methods, and the lack of a bridge between early detection results and counseling services.

This mobile application is designed to help students monitor their mental health independently and gain access to professional services. Key features of the app include self-administered testing using the Depression Anxiety Stress Scales-21 (DASS-21) instrument, storage and visualization of test history, and an online appointment booking system with professional consultants. This system, which integrates test results with counseling services, enables students to take faster and more targeted follow-up actions after learning about their psychological condition.

Testing results indicate that the app successfully meets the functional requirements designed. Black Box Testing revealed that all system functions operate as specified without any critical bugs. In the System Usability Scale (SUS) testing, the application scored 76,75. The students involved could use the system easily, demonstrating ease of navigation, clarity of information, and efficiency in accessing test and consultation features.

Keywords — Mobile Application, Mental Health, DASS-21, Online Consultation, Iterative Incremental.