

ABSTRACT

The "Merdeka Belajar Kampus Merdeka" (MBKM) program plays a crucial role in the development of students in the Information Systems Study Program at Telkom University. MBKM is a government initiative that provides students with opportunities for comprehensive growth by enhancing their creativity, skills, personality, and independence in facing real-world challenges. However, the management of MBKM participants in the Information Systems Study Program, which ranges from 200-300 students each semester, is still done manually. This manual process results in delays and errors in data collection, selection, verification, monitoring, and final grade input.

To address these challenges, this thesis aims to design and implement an application for managing MBKM participants. The application is developed using the Iterative Incremental method and employs technologies such as React JS, Spring Boot, and MySQL. System modeling is conducted through use case diagrams, activity diagrams, sequence diagrams, class diagrams, and Entity Relationship Diagrams (ERD).

The goal of this research is to design an application that can facilitate, accelerate, and improve the process of managing MBKM participants. The application will support the management of MBKM participant data from registration, selection, verification, to final grade input. With functionality testing using User Acceptance Testing and Load Testing, this application is expected to meet the needs of the Information Systems Study Program in managing MBKM effectively and efficiently.

Keywords: MBKM, Information Systems Study Program, Iterative Incremental, React JS, Tailwind CSS, Spring Boot, MySQL, Use Case Diagram, Activity Diagram, Sequence Diagram, Class Diagram, Entity Relationship Diagram (ERD), User Acceptance Testing, Load Testing.