

**DEVELOPMENT OF HOSPITAL MANAGEMENT  
APPLICATION USING FLUTTER TECHNOLOGY:  
ENHANCING HEALTHCARE EFFICIENCY AND  
ACCESSIBILITY**

**Tugas Akhir**

**Diajukan untuk Memenuhi Salah Satu Persyaratan Mencapai Derajat  
Sarjana Komputer**



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## **ABSTRACT**

This thesis investigates the development of a hospital application aimed at improving patient experience. Recognizing the significance of patient-centric healthcare services, the research addresses the need for accessible and user-friendly digital platforms in the healthcare domain. The study aims to develop a comprehensive hospital application using Flutter, integrating features such as consultation services, appointment scheduling, and emergency assistance, to enhance patient satisfaction and streamline healthcare delivery processes.

The methodology employed involves a systematic approach to conceptualization, implementation, and testing of the hospital application. Leveraging Dart programming language, MongoDB for database management, and Node JS for backend support, the research applies a structured development framework to ensure robustness and scalability. Black-box testing and unit test case analysis are utilized to evaluate the application's functionality, performance, and user experience, ensuring alignment with specified requirements and industry standards.

The findings of this research highlight the feasibility and effectiveness of developing a hospital application using Flutter to enhance patient experience. Through rigorous testing and analysis, the application demonstrates promising outcomes in terms of functionality, usability, and data integrity. Future directions for application refinement include authentication enhancement, integration of online payment features, and expansion of functionalities to encompass medication procurement and comprehensive medical record management.

**Keywords:** Hospital application, flutter development, consultation services, appointment scheduling, emergency assistance, healthcare technology.

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