

**MOBILE-BASED E-LIBRARY APPLICATION FOR SMAK FRATERAN
MAUMERE
USING FLUTTER FRAMEWORK**

LUDGARDIS AMADEA DIAZ

*Informatics Study Program, Faculty of Science and Technology
University of Technology Yogyakarta
Jl. Ringroad Utara, Jombor, Sleman, Yogyakarta
Email: deadiaz404@gmail.com*

ABSTRACT

In the digital age, the demand for fast and convenient access to information continues to grow, including within the field of library services. A mobile-based e-library serves as a practical solution to provide broader and more flexible access to reading materials. This system is designed to offer a user-friendly platform that allows users to search for, borrow, and read digital books directly from their mobile devices. Equipped with features such as search functionality, book recommendations, and integrated loan and return management, the e-library aims to enhance the reading experience and streamline library administration. The implementation of this mobile e-library is expected to not only simplify access to information but also foster reading interest among the broader community and support digital transformation in library services. The system development follows the System Development Life Cycle (SDLC) methodology, a structured and systematic approach that includes key phases: system planning, requirements analysis, system design, implementation or coding, testing and debugging, and maintenance.

Keywords: *E-Library, Booking, Categories, Search, System Development Life Cycle*