

# **WEB-BASED LIBRARY APPLICATION TO IMPROVE BOOK PACKAGE LOAN SERVICES**

*(Case Study: STATE SENIOR HIGH SCHOOL 1 SEYEGAN)*

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## **ABSTRACT**

*SMA Negeri 1 Seyegan is a state-owned high school run by the government in the field of education. SMA Negeri 1 Seyegan has a library called the Mangesthi Pustaka Library. Based on the results of research conducted at the Mangesthi Pustaka Library, there are problems related to borrowing books, where borrowing textbooks such as modules cannot be done on the Slims system and still uses a recording system in the ledger. The Slims system can only be used to borrow non-module books. With the ledger recording system, borrowing transactions become less effective and efficient and take a long time because recording is done manually by handwriting in the ledger and forms. The purpose of this study is to provide a solution to this problem, by developing a web-based library application to facilitate and improve the service of borrowing textbooks at the Mangesthi Pustaka Library. The research method used is descriptive analysis and the system development method is the Waterfall Model approach. Where the design uses DFD, MySQL database, interface design, and system implementation uses the PHP MySQLi programming language. The results obtained are in the form of a web-based library application used by 2 users, namely admin and members. Admin can process book data, members, view borrowing history, and print borrowing reports. Members can borrow independently by inputting the appropriate borrowing data. This application has been tested with black box testing. The test results were obtained from the calculation of effectiveness of 98.2% which shows that the application has succeeded in meeting some of the functional requirements and is able to provide quite good performance.*

*Keywords: Information System, Book Borrowing, Web, Library.*

