

ABSTRACT

DESIGN AND DEVELOPMENT OF A WEB-BASED LIBRARY INFORMATION SYSTEM USING THE RAPID APPLICATION DEVELOPMENT METHOD (Case Study At SMA Negeri 1 Bantarkawung)

A library is a place that provides services and access to a collection of reading materials and information. Libraries are established to grant access to the general public, students, academics, and researchers. Libraries are closely related to education as they serve as centers of knowledge and learning. As a senior high school located in Bantarkawung District, Brebes Regency, SMA Negeri 1 Bantarkawung provides a supportive learning environment for students. However, the school still relies on a manual system for managing library data, which has limitations in accessibility and information management. This results in several issues, such as delays in retrieving information and insufficient data recovery. This study aims to develop an integrated system that simplifies library data management. The system design method follows the Rapid Application Development (RAD) approach, while the testing methods used to evaluate the system include usability testing and black box testing. The findings of this study indicate the development of a system capable of resolving various challenges in library data management at SMA Negeri 1 Bantarkawung. The system was validated using black box testing, which yielded results in line with expectations (successful), and usability testing, which obtained a score of 0.85—considered very high based on Cronbach's alpha reliability scale.

Keywords : *Library Information System, SMA Negeri 1 Bantarkawung, Rapid Application Development, Black Box Testing, Usability Testing*