

# IMPLEMENTING A WEB-BASED ACADEMIC INFORMATION SYSTEM (Case Study: Sariharjo Public Elementary School)

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## ABSTRACT

Sariharjo Public Elementary School currently faces challenges in managing academic data, which is still handled manually using spreadsheets and physical documents. The recording of vital information, such as student data, grades, and attendance, is not centralized but scattered across various archives. This situation results in slow, inefficient administrative processes and poses a high risk of data loss and duplication. Consequently, the delivery of information to parents is delayed and lacks transparency. To address these issues, an integrated web-based academic information system was designed. This system was developed using the Waterfall method, encompassing the stages of needs analysis, design, implementation, and testing. The main functionalities include modules for managing student and teacher data, grades, class schedules, attendance, and school announcements, with three access levels: admin, teacher, and parent. The system was tested using Black-Box Testing to ensure all functions operated as required, along with user trials conducted with government agencies. The test results demonstrated that all system features performed as specified and streamlined the management and distribution of academic information. Thus, the system improved administrative efficiency and enhanced the transparency of academic information at Sariharjo Public Elementary School.

**Keywords:** Academic Information System, Web, Sariharjo State Elementary School, Waterfall, School Administration.