

ABSTRACT

The manual attendance system at SMA Negeri 3 Purwokerto has limitations in recording time efficiency, potential data errors, and real-time information access with inputs consisting of student attendance data and outputs consisting of attendance recapitulation. This topic is important because attendance is a crucial part of school administration that affects student attendance evaluation, where manual systems cause evaluation delays and make it difficult to make quick decisions with gaps between real-time data access needs and slow manual recording systems. This research develops a web-based attendance system using the Scrum method with Laravel framework, PHP, and MySQL that utilizes QR Code technology for digital recording, with modeling using UML, database design using ERD, data collection through interviews, observations, and questionnaires, and testing using Black Box Testing. The research results show that the digital attendance system successfully improved time efficiency by an average of 93.64% with the highest efficiency in attendance distribution (98.42%), eliminated data errors by 100%, and obtained a System Usability Scale score of 78.82% which indicates good usability and positive user acceptance..

Keywords: *black box testing, efficiency, ERD, questionnaire, laravel, mysql, observation, PHP, attendance, QR code, scrum, SUS, UML, usability, interview, web.*