

ABSTRACT

Barunawati Senior High School Surabaya is an “A”-accredited educational institution under the Barunawati Biru Foundation, offering a pleasant and globally-minded learning environment. Located at Jalan Perak Barat No. 173, Surabaya, the school currently manages student academic monitoring—including attendance, academic grades, and disciplinary records—manually through staff. The absence of a web-based information system limits parents’ ability to access real-time academic information, as updates are typically conveyed through the students themselves. To address this issue, the author developed a web-based information system named E-Monitor. The system was built using the Laravel framework for the backend and Vue.js for the frontend. The development process followed the spiral model, which supports iterative and systematic software construction while accommodating changes and reducing costs through early prototyping. Functionality was verified through Black-Box Testing to ensure that the features met the required specifications. This system was successfully implemented at Barunawati High School in Surabaya and tested using 33 test cases, resulting in all features working and no errors. Furthermore, user acceptance testing was conducted and accepted by users, demonstrating that the application is performing as expected.

Keywords: *Monitoring System, School, Laravel, Vue.js, SMA Barunawati Surabaya, Website.*