ABSTRACT

DESIGN AND BUILD OF ELECTRONIC LEARNING USING RAPID APPLICATION DEVELOPMENT (STUDI KASUS: BIMBINGAN BELAJAR JUPITER)

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Digitalization in the learning system in Indonesia has not been widely implemented in some education which is carried out both formally and nonformally. One of them is Jupiter Tutoring, which is a place to provide additional education outside of formal education. The learning system carried out in Jupiter tutoring still utilizes print media. The use of this learning system creates several obstacles, such as a decrease in the level of effectiveness due to frequent changes in modules that follow the curriculum in Indonesia and the costs required are quite large in the module printing process. The solution to the obstacles experienced is to implement digitalization in the learning system at Jupiter Tutoring. This digitalization can be done by designing a Learning Management System (LMS) utilizing the Rapid Application Development (RAD) method and by implementing the Laravel framework. Apart from overcoming existing obstacles, the LMS can be used as a facility that can increase students' interest in acquiring knowledge and make it easier for students to review material anywhere and anytime. The results of black box testing obtained a value of 100%, which means that the system design has run as needed and expected so that it can be implemented in Jupiter Tutoring. Apart from that, the results of the average system usability scale (SUS) score based on effectiveness is 72.5% with the criteria "Agree/Good/Like". As well as the results of obtaining the average value of the system usability scale (SUS) obtained value of 83.57 so that the acceptability range results include acceptable criteria, the grade scale includes grade A with Excellent criteria, and the adjective rating includes Excellent criteria.

Keywords: Laravel, LMS, RAD, Information Systems, Web.