

ABSTRACT

Teaching and learning activities in Bimbel currently still running on conventional. Through the observation and interview, it is known that many obstacles in the process of teaching and student learning, among others, such as difficulty in getting materials and subject matter if absent when the lessons take place and the limited time in the teaching-learning process.

Therefore, through the use of students' learning system software features instant messaging, is expected to become more effective learning process. Existing problems can be solved through the features, such as uploading and downloading material and about the lessons, as well as discussion forums. In addition, this system also provides the facility of instant messaging so users can discuss in realtime.

The software will be built by applying software engineering, will use a waterfall model (Waterfall Life-Cycle) and the structured paradigm. Development starts from the analysis of systems using modeling in the form, Context Diagram, DFD, process specifications, data dictionary and ERD, design, implementation, and testing the system. All the stages passed through, except the installation stage and maintenance. Implmentasi using web-based programming language, namely PHP and MySQL database server. Tests conducted only limited to the functional system of just using black-box testing.

Keywords: learning system, the waterfall model, ERD, DFD, PHP and MySQL, the black-box testing