## **ABSTRACT**

## DESIGN AND DEVELOPMENT OF APEN-ID (ASSESSMENT APPLICATION - BASIC INFORMATICS) BASED ON JAVA AND MYSQL USING *RESEARCH & DEVELOPMENT* METHODS (CASE STUDY OF SMP NEGERI 2 SUMBANG)

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Along with the progress of civilization and the rapid development of technology currently affecting learning in schools, technological developments also greatly influence the way material is delivered and assessed in the learning process for teaching in the junior high school education phase. At SMP N 2 Sumbang, assessment of basic informatics subjects still uses manual methods which are less efficient, because teachers still have to write questions on the blackboard repeatedly and students have to bring paper and pens as a medium to work on them. Therefore, the researcher designed a desktopbased assessment application for SMP N 2 Sumbang by utilizing the existing computer laboratory to be used as a medium for assessment. The method used is Research and Development (R&D) where this method uses 10 steps, namely: Potential and problems, data collection, product design, design validation, design revision, product trial, product revision, use trial, product revision and mass production. Using this research method, the researcher designed an APEN-ID or Basic Informatics Assessment Application for SMP N 2 Sumbang on a desktop basis with Java as the programming language and MySQL as the database. The test results of this application showed a percentage of 100% during testing with SMP N 2 Sumbang, represented by Mr. Bayu and Nazarli. The result of this research is an APEN-ID application to simplify assessment activities for basic informatics subjects which were previously manual to digital with a desktop-based application, as well as to improve the quality of assessment at SMP N 2 Sumbang.

Keywords: First secondary school, Research And Development(RND), quiz, Desktop.