ABSTRACT

**MOBILE-BASED STUDENT LICENSING APPLICATION USING
EXTREME PROGRAMMING METHOD
(CASE STUDY: AL QUR'AN AL AMIN PABUWARAN ISLAMIC BOARDING SCHOOL)**

By
Septiyani Puji Lestari
NIM 20102167

The permit system for students at Islamic boarding schools has an important role in monitoring the incoming and outgoing students. By using a licensing system that is still manual, it causes difficulties for caregivers and administrators of Islamic boarding schools in monitoring the irderliness of the students. In addition, the manual licensing system requires books and stationery, where books that are already full will only become archives because it is difficul to find data on students who are classified as violating regulations. From these dificiencies, the author has the idea to create a student licensing mobile that utilizes location detection mapping to minimize fraud in student licensing. The method used in making this licensing application is the Extreme Programming (XP) method which uses an agile method approach. This method is effective for increasing efficiency and flexibility of a software development project. The making of this application went through four stages, including planning stage, designing by making various models, the coding stage using the dart programming language and Flutter framework, as well as system testing stages. The data used in this study is data on female students at the Al Qur'an Al Amin Pabuwaran Islamic Boarding School in 2023. The result of black box testing obtained a valid value of 100% and UAT testing with percentation 89,73% means that the application can function according to the objective and expected results.

Keywords: Mobile Application, Licensing, Islamic students, Flutter, Extreme Programming (XP).