## ABSTRACT

## WEB-BASED INFORMATION SYSTEM OF BORROWING SPACE AND LABORATORY EQUIPMENT USING AGILE METHOD (CASE STUDY TELKOM PURWOKERTO INSTITUTE OF TECHNOLOGY)

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The laboratory is usually used as a place for learning practicum courses. In the Faculty of Informatics, Telkom Purwokerto Institute of Technology there are many laboratories. Laboratories at the Faculty of Informatics can be borrowed by the academic community. The borrowing of space and laboratory equipment is still done manually, the borrower must fill out a loan form provided by the lab manager and must be approved by many parties. Other problems that arise are, loan forms are often lost or do not reach the Head of Laboratory Affairs, information on the availability of laboratory equipment and space that can be borrowed is not yet available. So to solve these problems, in this research, a website-based Information System on Loan Space and Laboratory Equipment was developed. The software development method used in this study is the Agile method, where this development method is based on principles and can be a short-term system that requires rapid adaptation from the developer's side. The Agile method consists of 6 stages, namely Requirements, Design, Develop, Test, Deploy, Review. Testing on the development of this information system uses the BlackBox Testing method, this method is very suitable for testing on the functionality side of existing features. User satisfaction in this information system uses the SUS (System Usability Scale) method, this method has 10 questions to measure user satisfaction. As for the expected results in the development of the Information System for Borrowing Space and Laboratory Equipment, it can help in the borrowing process at the Laboratory of the Faculty of Informatics, Telkom Institute of Technology, Purwokerto. Based on the results of the system that has been designed, built, tested, and analyzed, it can be concluded that the information system for borrowing space and web-based laboratory tools using blackbox testing has obtained results that are in accordance with what is expected and for usability evaluation results using SUS obtain acceptable results by the civitas and recommend the system.

Keywords : Information System, Agile, BlakBoxTesting, Laboratory, ITTP