

# ***IMPLEMENTATION OF CONTINUOUS INTEGRATION AND CONTINUOUS DEPLOYMENT IN THE DEVELOPMENT OF A COMPUTER LABORATORY- BASED LOAN WEBSITE SYSTEM***

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## ***ABSTRACT***

*The computer laboratory at Bengkalis State Polytechnic has an important role in supporting teaching and learning activities, especially in the Informatics Engineering Department. However, the existing web-based laboratory lending system is still limited to basic features, such as data recap and schedules, so it is less than optimal. This study aims to develop a laboratory lending system by adding features for checking availability, inventory lending, and notifications, as well as implementing Continuous Integration (CI) and Continuous Deployment (CD) to automate the application development process. The implementation of CI/CD helps developers detect and fix problems faster, increasing productivity and application quality. The results of the study show that the developed system is more reliable, efficient, and feasible to use to support optimal laboratory management.*

***Keywords:*** *Continuous Integration, Continuous Deployment, Computer Laboratory*