

## ABSTRACT

*A Learning management system is a system that supports student learning with several components. Telkom University is an institution that has an LMS called CeLOE LMS (Center for e-Learning and Open Education Learning Management System). Using LMS is to support students' learning process, and lecturers can monitor what activities are carried out by their students. The pattern of learning by students can affect the success of learning in certain situations. The influence of these learning patterns makes lecturers need to pay attention to differences in student learning patterns. The data used in this research are Website Application Development and Systems Enterprise courses. This modeling process uses fuzzy mining algorithms to overcome the "spaghetti-like" process model into an easier-to-understand and straightforward form. The resulting process model will then be analyzed using the process graph simplification method to obtain an accurate process model that describes the event log. The Website Application Development shows the best conformance result of 99.93%, while the Enterprise System shows the best conformance result of 100%. Both models show that the resulting model has a close alignment between the fuzzy model and the event log to reflect the behavior observed in the event log.*

*Keywords : LMS, Process Mining, Fuzzy Mining Algorithm*