## **ABSTRACT**

The growth of information technology in all aspects in life starting from the government to society has encourage rural regions in Indonesia to make an utilization association with information technology that exists. Several villages in Indonesia have been following the use of technology which already exists. Based on the survey obtained in 2017 from KOMINFO (Kementrian Komunikasi dan Informatika) about the use of internet. It says that 32.50% of Indonesian citizen use internet. Even with the escalation of information technology in villages, it can not be denied to access learning platforms available in villages are not as wide as that is available in cities in Indonesia.

This research aims to build a feature and applying artificial intelligence into a social e-learning application. The implementation of artificial intelligence is focused on filtering learning contents as to classifying articles using decision tree algorithm. The result of the articles classifying using decision tree will be measured and evaluated from the accuration result using confusion matrix. The implementation of artificial intelligence will be using prototyping model.

Keywords— Confusion matrix, Learning Application, Prototyping, Social elearning.