

# Rekomendasi Kelompok Tugas Pelajar Menggunakan *K-Prototype Clustering* pada *Ubiquitous Learning*

ilham Hanif Anjana<sup>1</sup>, Dade Nurjanah<sup>2</sup>

<sup>1,2</sup>Fakultas Informatika, Universitas Telkom, Bandung

<sup>1</sup>ilhamhanif@students.telkomuniversity.ac.id, <sup>2</sup>dadenurjanah@gmail.com

## Abstract

Education paradigm, nowadays, is more well developed because of the advanced technology. Even learning's process now can be online through Ubiquitous Learning system, it's a development from E-Learning with a purpose to increase the learning's quality. Based on that purpose, lot of research claim to increase the learning's quality is to form a student's group so that they can learn cooperatively. Based on research, grouping that determined from student's characteristic can determine group's performance, that grouping has 2 types, that is Homogen and Heterogen. In this research will build a system that can formed groups based on the type and will apply in Ubiquitous Learning. The grouping will use a K-Prototype clustering algorithm, because this algorithm able to *clustering* numerical and categorical data, also able to equalization every cluster. Through this research, homogen's group that had a high degree of membership's value won't always had a member with same characteristic, because every student in a class always had a different characteristic. For heterogen's group, the heterogeneity cannot be measured by just looking *dissimilarity* value.

**Keywords:** *Ubiquitous Learning, Homogen grouping, Heterogen grouping, K-Prototype clustering, Student's grouping*