

ABSTRACT

K-MEDOIDS ALGORITHM IMPLEMENTATION FOR *CLUSTERING* OF INFECTED COVID-19 CASE IN JAKARTA

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In early March, Indonesia was hit by an outbreak of the corona virus (COVID-19). Every day the cases of the spread of COVID-19 in Indonesia continue to increase. The public is asked to carry out social distancing to break the chain of the spread of COVID-19 that is spreading in various regions in Indonesia. People can catch COVID-19 from other people who are infected with this virus. The COVID-19 pandemi is a big problem for the people of Indonesia so we need to understand it so that this uncertainty ends soon. Therefore, research is needed on the spread of the COVID-19 virus in DKI Jakarta with an accurate method, namely creating a cluster system to group areas affected by COVID-19 using the K-Medoids Algorithm method. The results of the research can provide mapping results in the form of clusters of affected areas or villages and knowledge can be obtained in the form of information. In the process of the K-Medoids Algorithm to cluster data for the DKI Jakarta City area infected with COVID-19 which was taken through a web portal provided by the DKI Jakarta Government. In implementing the K-Medoids Algorithm, clustering (clusters) of the DKI Jakarta area infected with COVID-19 can be done by using the rapidminer application. From the results of the clusters that have been tried, the optimal DBI value obtained is in the cluster in simulation 4 (5 clusters) and simulation 6 (7 clusters). In both clusters, the scores were 0.263 and 0.292.

Keywords: K-Medoids, DBI, COVID-19, Clustering