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WEB APPLICATION DEVELOPMENT TO CLASSIFICATE THE SPREADING INFORMATION OF INDONESIAN RED CROSS TWITTER ACCOUNT Yefta Christian, Amir Faculty of Computer Science, Universitas Internasional Batam {vefta@uib.ac.id, amiruibbtm@gmail.com}

Abstract

Blood scarcity can be one of the main factors of life and death for patients who need blood. Therefore, organizations working in blood management Indonesian Red Cross try to spread information to invite people to donate blood. The spreading of information about blood donation is often done through social media. Twitter is one of the social media used in spreading this information. The method used to complete the system is waterfall by doing requirements analysis, design, development, testing and implementation. The information spreaded has very large amount. Each information can be classified into several data groups. There are many ways to classify information data, one type of classification used in making the system is unsupervised classification where the classification is carried out without supervision or often called clustering. The clustering method used is the k-means method. This technique can classify large amounts of data relatively quickly and efficiently. In clustering k-means method, the optimal number of clusters is needed so the results of clustering are better. To determine the optimal number of clusters, the Elbow method is used to obtain the best cluster value. The results of data grouping are presented in the form of visualizations, so that information becomes easier to understand quickly because it is supported by graphs and tables as well as responsive colors. The output of this research is a web-based analysis system that can classify the spreading of information obtained from the Indonesian Red Cross twitter account and visualize it in the form of diagrams.

Keywords: Clustering, K-Means, Elbow, Visualization.