

Abstract

BAA Telkom University website it is one of the website at the University of Telkom which quite often accessed by students to search for information about academic guidelines and various other information needs lectures and graduation. Web visitor pattern can be used to determine which pages have been visited by the user in a website. It is intended as a reference in the improvement of the quality of the website and ensure user satisfaction in accessing the website to find information in it according to his needs. In this thesis, use web server logs of BAA Telkom University. In addition the website is used because the author has conducted an analysis and found that the appropriate requirements to serve as a case study of this thesis. Web server logs of BAA Telkom University will then be processed by implementing one of the methods on web usage mining namely clustering. The log data is initially processed by preprocessing stage, then the clustering process is carried out using Particle Swarm Optimization algorithm (PSO). The PSO algorithm is used because it has the advantage of having swarm to find the best solution in determining the results of the cluster. In this case PSO algorithm was found the best result is eight cluster and that cluster results can generated recommendations for the BAA Telkom University website.

Keywords: *web usage mining, web log, clustering, preprocessing, swarm, particle swarm optimization.*