

Abstract

With the development of information and technologies, many developed various search method based on the content of images or commonly called CBIR (Content Based Image Retrieval) system. This system is a mechanism of image search queries which was developed because images search text-based system is no longer effective. In this final project had been implemented CBIR system with color feature.

CBIR system has been implemented to obtain the image feature. In this final project Daubechies 4 Wavelet is used as transformation method. To get the image feature the first step is user inputting a query image. Then do the extraction process on the query image and image databases. Cutting analysis is then used to the certain level of decomposition, that is at the level 1, 3, and 5 of decomposition. To get the similarity value is used Euclidean Distance method which is functioning as distance similarity measurement between the query image and image database. While for testing the accuracy of system is used Recall and Precision method.

The result from this final project is CBIR system can be used in the image search process and can give maximum analysis of retrieval result. The best analysis is derived from analysis of decomposition level 3 which is obtained precision value of 97,458% and recall value of 89,45%. With the average time of simulation over 11 seconds.