# Abstract

Text based image retrieval system is less effective because of the subjective assessment of the user in representing an image or a discrepancy between the description and pictures. However, the query in *text* form is considered more intuitive and natural for the *user* and the *user* is still difficult to determine visual *query* in content-based retrieval. Therefore, we need a system that can cover those weaknesses by combining text-based and content-based search system.

The combination system of *text* and content retrieval searches the images based on user inputted *text* by using the weighting tf.idf, a color based search which based on the percentage of color appearance with *color descriptor matrix*, and search based on the object boundary shape with *fourier descriptor*. The proximity of each image in the database to the query and user choosen features is calculated using *similarity matching*.

The final result of this final task is a system that can search images by text, content, or the combination, and perform accuracy calculations based on some input parameters such as similarity threshold and option for normalization of *similarity* value.

Keywords : *Text-Based Image Retrieval, Content-Based Image Retrieval, Term Frequency-Inverse Document Frequency, Color Descriptor, Fourier Descriptor*