Abstract

The development of Information Retrieval has evolved with many methods that serve to produce a better level of relevance. To be able to produce a high relevance value, so it needs a method to produce good and tested rankings. This Final Project performs Latent Semantic Indexing analysis using QR decompisition with householder transformation, then for measuring document resemblance to query using cosine similarity and parameter of system accuracy using recall and precision in order to prove the ability in latent semantic indexing to find the desired or relevant document Although there is no term in the query and do the time comparison of the document search process.

The test result from this final project shows the latent semantic indexing using QR Decomposition with householder transformation proved able to find the relevant document even if it does not contain the term contained in the query then has the value of recall and precison good system accuracy value and also get the process of searching the relevant documents.

Keywords: *Latent Semantic Indexing (LSI), QR Decomposition, Householder Transformation, Recall, Precision.*