

ABSTRACT

The main task of the Question Answering System (QAS) is to get relevant answers according to the questions asked by users. To obtain the relevant answer, this study uses the concept of reformulation in question sentences carried out by previous research to obtain relevant answers. However, the reformulations carried out were not very specific, so the answers produced were still too broad. To solve this problem. This study, developed the Expansion Query using Question Rule to find answers based on relevant questions. In general, QAS consists built of two processes: Question Processing and Answer Selection. The proposed method in this QAS is located in the question processing, namely using the rule on the Expansion Question to find the headword of the question. The proposed method was tested using the 4W1H (What, Who, Where, When and How). Selecting answer process based on the similarity between the appropriate questions, using cosine similarity. The results show that added process of finding the headword of the question is useful during the answer selecting. The QAS test results in the process using this rule obtain the highest accuracy value for "What" by 90%. In the selecting answer process, the results were 86% for MAP and 91% for recall.

Keywords: Question Answering System, Query Expansion, Question Rule