## **Abstract**

In this study, a mind map generator has been built. The branches of mind map are filled with keywords that produced by using word co-occurrence statistical information. This study presents the results of a comparison between the mind map produced by system with sentence weighting and the mind map produced by system without sentence weighting. The use of sentence weighing is to see its effect on keywords as branches of mind map.

The system managed to perform weighting sentences for sentence extraction and the combinations of the best features in sentence weighting is the 30%, 60%, and 10% sequentially to sentence's position feature, the sentence similarity with titles feature, and the occurrence of cue words feature. System extracts sentences 50% of the total number of sentences in document. In addition, the system also managed to extract keywords based on word co-occurrence statistical information. And, its parameters of its sub-module also been obtained.

The system is able to generate a mind map of a document, either with or without sentence weighting. System without sentence weighting generates a mind map with the average number of important keywords as main branch by 75% and the average number of important keywords as children branches and relevant to the main branch by 37.52%. Whereas, system with sentence weighting generates mind maps with the average number of important keywords main branches by 70.83% and the average number of important keywords as children branch and relevant to the main branch by 34.61%.

**Keyword :** mind map, word co-occurrence, sentence weighting, keyword extraction