

## **Abstract**

Scoring responses fairly is mandatory for every person who conduct scoring activity, which is difficult to do, especially when the number of response is relatively larger. One way to achieve fairness in scoring is by using an automatic scoring tool which is consistent and objective.

The purpose of this Final Assignment is the implementation of Vector Space Model (VSM) in combination with Keyphrase Extraction Algorithm (KEA) as scoring tool for restricted-response, also measuring it's effectiveness in conducting scoring. The tool is designed using Object Oriented Method. The user-interface and VSM is implemented using PHP, and KEA used is KEA version 5.0.

The effectiveness of this tool is tested by comparing the output score and the score assigned by human scorer. The result of the test shows that the combination of VSM and KEA is not effective for essay scoring.

**Keywords:** essay scorer, vector space model, keyphrase extraction algorithm