

ABSTRACT

PT. Javan IT Services's e – learning web application use Model – View – Controller (MVC) in its design. However, this pattern has a weakness. There is a close connection between each component (model, view, and controller). This makes development of the application, including PT. Javan IT Services's e – learning which using it, become harder. Hierarchical - Model - View - Controller (HMVC) is variation of the MVC pattern. HMVC developed to overcome the shortcomings that are owned by the MVC. Cohesion and coupling are the attributes of an application that can indicate the quality of the application. Maintenance, testing, and application development will be easier to do if the application has good cohesion and coupling.

Two design of the web application has been made. One of it use HMVC pattern and the other use MVC pattern. Then coupling and cohesion of each pattern analyzed. The result shows that the design which use HMVC is better than the other. Hopefully web application developers, especially PT. Javan IT Services's e – learning developers, seen HMVC as alternative pattern in developing web applications.

Keyword : cohesion, coupling, HMVC, MVC, web application.