

## **Abstract**

People often learn from experience, remember the past solution to solve a problem. Case-based reasoning method is one of reasoning techniques in artificial intelligent which use this technique. Case-based reasoning works by remembering previous similar situation and reusing information and knowledge of the situation.

This Final Paper apply the method using the exanthema disease as its case study. Exanthema disease is disease which appears as skin lesion eruption. The CBR system (Case-based Reasoning System) is built using object oriented approach and matching process between cases using nearest neighbor algorithm.

The CBR system can be used by doctor as well as non doctor paramedical personnel as an assist tool to diagnose which kind of the exanthema disease that patient's suffered, and then give the relevant treatment information. This CBR system has 84,72% of accuracy from the entire data sets in detecting the type of exanthema disease and give the relevant treatment information.

**Keywords:** case-based reasoning, exanthema, object-oriented, nearest neighbor.