

ABSTRACT

Hand, Foot and Mouth Disease is a common infectious disease caused by enterovirus. This disease has early symptoms and followed by physical symptoms of vesicles that often appear in the palm of the hand. Based on the problem, built an Android-based applications with expert system Naïve Bayes method and feature extraction Gray Level Coocurrence Matrix (GLCM) method is able to detect symptoms of HFMD on the palm of the user's hand and processing Symptoms . From the results of tests that have been done Naive Bayes method gets the best performance on partition data 70%: 30% with an accuracy value of 100%, feature extraction Gray Level Co-Occurance (GLCM) gets the highest accuracy of 73,3 % on 0 degree of angle GLCM with value of k equal to 1 and obtained the highest level of accuracy of application performance at a distance of 20 cm with an angle of 0° and 15° at light intensity 600-1100 LUX with an accuracy value of 70%.

Keywords: *Hand, Foot and Mouth Disease (HFMD), Naïve Bayes, Gray Level Co-ocurence Matrix (GLCM)*