ABSTRACT

Money is a legal means of payment or exchange in everyday life. In this modern era, buying and selling transactions are carried out by everyone to meet the needs of everyday life. Some of them have difficulty recognizing the nominal amount of money they use, including blind people who can be cheated in making transactions.

From these problems, this Final Project was made so that it was able to answer as one of the solutions provided. In this Final Project, a Raspberry Pi-based Currency Identification Tool Design and Development Tool for the Blind is created with a system that identifies the nominal value of the Republic of Indonesia's 2016 paper currency with a nominal value of Rp. 20,000, Rp. 50,000 and Rp. 100,000 using the HSV color filtering method and imaged with Raspberry Pi Camera and the use of speakers as a nominal mention of paper currency as system output.

The results of designing a paper currency nominal identification tool using a Raspberry Pi with the HSV color filtering method and the output in the form of mentioning paper currency nominal have an accuracy of 94% with 3 classification classes. The HSV color filtering method in the design of this tool is quite good as an identification of nominal paper currency through the color dimensions taken on each paper currency..

Keywords: *Paper Currency, Blind, Raspberry Pi, Color Filtering HSV*