ABSTRACT

Human life on earth cannot be separated from buying and selling transactions. One of the tools of buying and selling transactions that are widely used by humans is money, both paper money and coins. However, the use of coins is not friendly enough for the visually impaired. This is because of the physical limitations that the blind have in terms of vision. These limitations make blind people unable to distinguish nominal coins, so they are widely used by some people to deceive the blind.

Currently, there have been several previous studies regarding coin detectors, but these tools are less effective because they have a large size so they cannot be carried anywhere. In this final project, a device is made using a weight sensor (load cell) to get the value of the weight of the coin and distinguish its nominal and a microcontroller as a data processor. The output of the device is in the form of the sound of reciting the nominal coins.

The results of this final project show that the device made is relatively small in size so that it can be carried everywhere by the user. The device that has been made has a length of 19.5 cm, a width of 9 cm, and a height of 9.5 cm. The results of testing coins have been able to distinguish the nominal coins from one another very well. This is evidenced by getting a test accuracy value of 99%.

Keywords: *Coins, Blind, Transactions, Sensor load cells, microcontrollers.*