

## **ABSTRACT**

Sorting process helps to define quality of the product, for instance Chicken eggs. Yet, the sorting system has been performed conventionally which is less efficient as there might be errors within the sorting and counting process. Thus, a sorting and counting tool has been invented to ease up breeders in sorting out the chicken eggs. Using this tool, they can clarify the products with good quality and less good than the other one before distribute them to customers. During this final project, Ardunio as the microcontroller, Load Cell and HX711 can define the weight of eggs, counts the total of eggs using infrared, and adapts the 808 modul to receive the data distribution of the eggs. The result of this project is that this device is able to sort and count the number of eggs and send the data result as an SMS.

Keywords: Sorting, Counting, Arduino, Load Cell, HX711, Infrared, SIM 808