

ABSTRACT

In modern times, technological developments are increasingly sophisticated and more tools make it easier for humans to do work such as automatic trolleys on supermarkets that make it very easy to transport and move goods, but among these sophistication there are still some shortcomings, some of which are often too far with the trolley and the load that is on the trolley is often too heavy because the user does not know the amount of load carried by the trolley and makes the trolley unable to run optimally, for this final project will be made a system and application to monitor the distance and weight on the trolley the application uses AppInventor and the system uses Arduino, the system used to connect between Arduino and the application uses the Bluetooth module HC-05, to see the distance of the user with the trolley using PING ultrasonic and using a heavy sensor (loadcell) to find out t load on the trolley, the way the system works is the Heavy sensor and PING ultrasonic reading input then processed on Arduino and sent to the android application connected to the bluetooth module then the android application held by the user displays the distance and weight of the trolley so that the trolley can work maximum because the user can know the maximum distance and load of the trolley.

Keywords: trolley, Arduino, Android, distance, weight