

# WEIGHING AND PRICING AUTOMATION MECHANISM

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## ABSTRACT

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Recycling is no longer a new topic today; million tons of waste are recycled annually with the purpose of minimizing the landfill of the nations. Recycling is simple yet complicated. It is simple as a household begin with collecting recyclable items and end with sending them to recycling collection center. So, what happens next after recyclable items are collected? Recycling plants will have to carry out complicated pre-recycle processes such as sorting, weighing, vacuuming or cleaning before the recyclable items being re-manufacture.

A “Weighing and Pricing Automation Mechanism for Recycled Items” is aimed to be designed in order to simplify the sorting and weighing processes for the recycling plants. With the aid of Inductive Proximity Sensor, IR sensor, Weight Sensor and PIC16F877A, this mechanism is successful implemented with a practical prototype.

This prototype is functioning with few major specifications where weight and price of recycled items can be calculated and displayed automatically, types of material can be differentiated and messages can be generated when the weighing items go beyond a particular weight.

Progression of each stage to complete this project is explained clearly in this report. Illustrations and photographs of actual results are also attached.