REVERSE VENDING MACHINE AND CRUSHER INTEGRATION AND IMPROVEMENT

By

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BACHELOR'S DEGREE
In

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is of my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extend has been accepted for any award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

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ABSTRACT

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Waste management is a major issue in most Southeast Asian Countries, with nearly all forms of waste being unsorted. Plastic bottles and cans are one of the major reasons for pollution in Indonesia, these wastes usually go straight to a landfill instead of being recycled. With the Reverse Vending Machine, a user can redeem their deposit money previously paid during the purchase of the beverage, this promotes recycling of plastic bottles and cans, thus reducing the amount of waste in society.

The Crusher system paired with the RVM allows waste to be crushed and thus saves space which allows more waste to be stored in a waste bin before it needs emptying. The crushed waste also makes it easier to recycle into other forms. With this project, I hope to produce a better Reverse Vending Machine that can be implemented in Indonesia and help the waste management in Southeast Asia.

Keywords: Reverse Vending Machine, Crusher, Waste Management, Barcode Processing, Beverage, Pneumatic, Raspberry Pi

DEDICATION

I dedicate this work for God, science and the environment.

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