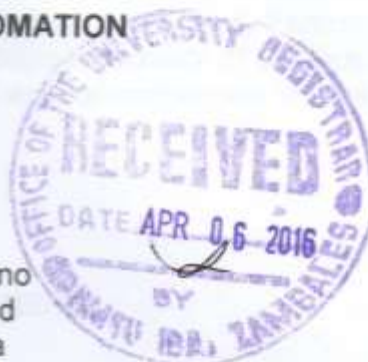




COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

SHOPPING CART AUTOMATION

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Regina F. Amistad
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A Project Design presented to the Faculty of the
College of Communication and Information Technology
In Partial Fulfillment of the Requirements for the degree
Bachelor of Science in Computer Engineering
Ramon Magsaysay Technological University
Iba, Zambales

March 2016

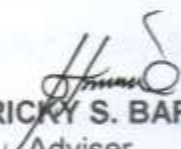




COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

CERTIFICATION

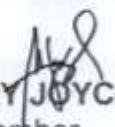
This project design entitled "**SHOPPING CART AUTOMATION**", prepared and submitted by John-Vic E. Faustino, Regina F. Amistad and May Z. Paradeza in partial fulfillment of the requirements for the degree Bachelor of Science in Computer Engineering, has been examined and recommended for Oral Examination.


ENGR. RICKY S. BARRERA
Adviser

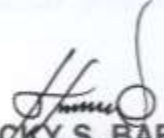
APPROVAL

Approved by the Panel of Examiners on Oral Examination on March 4, 2016.



ENGR. DENNIS A. OLAMIT
Chair


ENGR. MARY JOYCE M. MYERS
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ENGR. BRYAN CARLOS B. ACAIN
Member


ENGR. RICKY S. BARRERA
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Accepted in partial fulfillment of the requirements for the degree **Bachelor of Science in Computer Engineering**.


MENCHIE A. DELACRUZ, MSIT
Dean



Abstract

Shopping cart is a cart supplied by a shop and used by supermarket customers for transport of merchandise to the checkout counter during shopping. Customers can then also use the cart to transport their purchased goods to their cars.

Due to long queue, over spending and troublesome price inquiry in the supermarkets, the researchers have been challenge to innovate a more conventional shopping cart through Shopping Cart Automation (SCAn).

The main objective of this project is to design an automated shopping cart which enhances conventional shopping cart that is capable of setting of budget, price inquiry, over budget notification and alarm for users to monitor the accumulated price of all items in the shopping cart.

In this project, only those scanned item will be included as purchased items. The researchers used a bar code technology which was used widely in almost all supermarkets and have installed an SD card as storage of the price database connected to the Arduino microcontroller, if the scanned item exists in the database the item will be added as purchased item. The researchers also observed that most of the time it is not enough notifying costumers through monitor displays only, that is why a sound alarm is activated to beep once the accumulated price of items in the cart exceeds the allotted budget.