## COMPUTERIZED WAREHOUSE INVENTORY TRACKING SYSTEM

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By:

Adame, Zarel D. Balitanas Jr, Eduardo G. Gamo Jr,Larry N. Libo-on,Gerriebee J. Nacor, Nastassja C. Quimba,Rone Jan A.



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## ABSTRACT

NACES Appliance Sales Corporation currently uses a manual inventory system. From the process of determining the stock in and out of products, NACES has encountered problems using their manual system. This study was conducted to develop a computerized warehouse inventory tracking system which enables the user to track down the stock-in and out of supplies using the barcode reader. This system will be deployed in NACES Appliance Sales Corporation at Delgado Street, Iloilo City, Philippines. With the Computerized Warehouse Inventory Tracking System (CWITS), NACES will be able to have more efficient and accurate inventory management. The study covers the entire inventory process which includes stocking in and stocking out, preparing the purchase order, identifying the location of the products in the warehouse and the reordering point of stocks and generating inventory reports. The system does not include the placing of order of customers and the delivery of stocks from the shop to the customer. It excludes the inventory in the shop and other processes not related to inventory in the warehouse. The systems compared to other inventory systems in related literature, are WITS Warehouse system, Warehouse System for BPCS, Inter-Ocean Container Lines Inc, RT System Inc. and FedEx which have unique features of the interface map of the warehouse where the items must be stored. The interface will also show if the items are full or empty and lacking or exceeding. The light bulb in the locator will turn on in the interface if the items have reached their re-order point. In developing the entire system, the group used modified waterfall with iterative method. The steps are the requirements and definition, analysis, design, development, and integration and testing.

The CWITS System is capable of tracking supplies both in and out using a barcode reader. One of the many features of this system is to help warehouse personnel maintain their stocks in an ideal level. Before a user can appropriately use the system a summary of all products under the minimum level will be prompted to alert the personnel. To aid strict product monitoring CWITS was designed to have an interactive reordering point features that immediately trigger the User / Owner that the stocks reached their minimum level. The system has undergone several modifications until a stable and reliable system was developed. Visual Basic was used in connecting front end and MySQL to the back end. The system was tested using a client server architecture that has two computers in order to access both the stock in and out of the products.

Being a lead study, this could also be implemented in bigger warehouses. Parts of future enhancements that can be applied for CWITS System will be a network or client-server environment for later expansion. Which is a necessary additional section inside the warehouse, and will trigger additional hardware interface to handle additional data from external environment. The CWITS System can also be integrated with the Point-Of-Sale system to realize total automation and can utilize the web as part of the system for remote access and inquiry of the authorized user.