

**USABILITY MEASUREMENT SYSTEM FOR THE DEPARTMENT  
OF INFORMATION TECHNOLOGY BUILDING THROUGH  
COUNTING NUMBER OF STUDENTS  
BY USING RFID SCANNER**

**THESIS**

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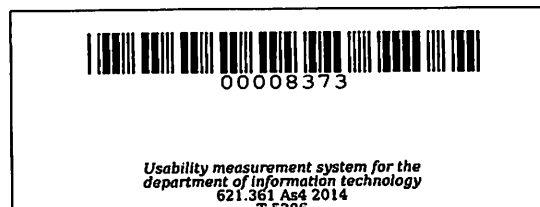
**March 2013**



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**USABILITY MEASUREMENT SYSTEM FOR THE DEPARTMENT  
OF INFORMATION TECHNOLOGY BUILDING THROUGH  
COUNTING NUMBER OF STUDENTS  
BY USING RFID SCANNER**

**Undergraduate Thesis  
Submitted to the Faculty of the  
College of Engineering and Information Technology  
Cavite State University  
Indang, Cavite**

**In partial fulfillment  
of the requirements for the degree  
Bachelor of Science in Computer Science**



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March 2013

## **ABSTRACT**

**ASIS, ALYSSA MEI C. and BARCELO, SHARA F. Usability Measurement System for the Department of Information Technology through Counting Number of Students by Using RFID Scanner.** Undergraduate Thesis. Bachelor of Science in Computer Science. Cavite State University, Indang, Cavite. March 2013. Adviser: Mr. Mark Steve V. Poniente.

The study was conducted to measure how useful the Department of Information Technology (DIT) building can be to its users such as students, faculty and staff and utility personnel. The software monitored the number of users with the corresponding student information and the date and time of every entry.

The Prototyping Methodology was used in developing the software. It has six phases, namely: requirements gathering phase; testing phase I; analysis and design phase; prototyping phase; testing phase II; and evaluation.

The system was developed with the use of the following: Windows 7 Ultimate as the operating system; Microsoft Visual Studio 2010 Ultimate as the programming language; and MS Word 2010 for the documentation.

The software was evaluated based on the given criteria: functionality, reliability, usability, efficiency, maintainability, and portability. Evaluators were composed of Cavite State University Main Campus students, Department of Information Technology staff and utility personnel. The software passed all the given criteria in the evaluation and met all the requirements of the software.

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An undergraduate thesis submitted to the faculty of the Department of Information Technology, College of Engineering and Information Technology, Cavite State University, Indang, Cavite. In partial fulfillment of the requirements for graduation with the degree of Bachelor of Science in Computer Science with Contribution No.\_\_\_\_\_. Prepared under the supervision of Mr. Mark Steve V. Poniente.

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**INTRODUCTION**

Usability measurement is one of the studies in the field of Computer Science that deals with the measurement of the usefulness of a certain entity such as a building. Usability is defined as the effectiveness, efficiency and satisfaction with which a specified set of users can achieve a specified set of goals in a particular environment (ISO 9241). It is therefore used to measure the fitness of the purpose of the building in workplace planning and the user experience of effectiveness, efficiency and satisfaction from buildings-in-use.

Radio Frequency Identification (RFID) scanners read, store and distribute electronic barcode information from packaging and labels. In this study, the proponents used the RFID scanner as an instrument to monitor and record in the database the number of students of Cavite State University Main Campus that will enter the Department of Information Technology (DIT) building using their identification card.