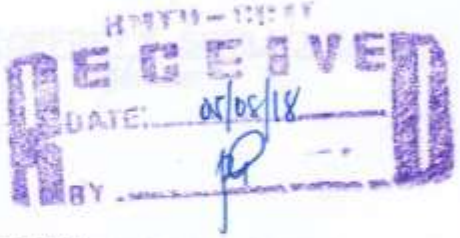
COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

DIGITAL NUMBER SYSTEM SIMULATOR

A Thesis
Presented to the Faculty of the
College of Communication and Information Technology
Ramon Magsaysay Technological University
Main Campus, Iba, Zambales

In Partial Fulfillment
Of the Requirements for the Degree
Bachelor of Science in Computer Science



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CERTIFICATION

This thesis entitled "**Digital Number System Simulator**", prepared and submitted by **Rose Ann D. Paradeza, Liezl May Atienza** and **Kimberly Egana** in partial fulfillment of the requirements for the degree of **Bachelor of Science in Computer Science**, has been examined and recommended for Oral Examination.

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ABSTRACT

Digital Number System Simulator is a study that generate conversion of digital number system such as binary, decimal, octal and hexadecimal value that consists of algorithmsthat will help user learn the solution. If complete information is being feed to the user resulted to a wide range of understanding.The researchers sought to answer the software quality and level of acceptability of the proposed application through the use of questionnaire and statistical tools such frequency and percentage distribution, weighted mean and Slovin's formula for the computation of number of respondents.

The respondents of the Digital Number System Simulator was faculty members and students of the Ramon Magsaysay Technological University. There were a total of 100 respondents. The results of evaluation was Excellent in software quality in terms of functional suitability, performance efficiency, compatibility, usability, reliability, accuracy, maintainability and portability and Highly Acceptable in the level of acceptability in the perception of system experts and user respondents in terms of level of acceptability in functionality, performance and timeliness.

The researchers recommended some areas to enhance the Digital Number System Simulator such the system may be implemented in the university for use, may have an input of decimal numbers, may be extend more than 32 bits, may be access online and used through mobile phones and tablets and may have retrieval of instructions.