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COMPUTER AIDED INSTRUCTION ON COMPUTER ARCHITECTURE WITH /  
ASSEMBLY LANGUAGE

**SPECIAL PROBLEM**

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# **COMPUTER AIDED INSTRUCTION ON COMPUTER ARCHITECTURE WITH ASSEMBLY LANGUAGE**

**Undergraduate Special Problem  
Submitted to the Faculty of the  
Cavite State University  
Indang, Cavite**

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



*Computer aided instruction on computer  
architecture with assembly language  
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**JEROME B. NAZARENO**  
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## **ABSTRACT**

**NAZARENO, JEROME B. Computer Aided Instruction on Computer Architecture with Assembly Language.** Undergraduate Design Project. Bachelor of Science in Computer Science. Cavite State University, Indang, Cavite. April 2002. Adviser. Mr. Marlon A. Diloy.

The study was all about a Computer Aided Instruction on Computer Architecture with Assembly Language. It covers the topics on Design Methodology, Processor Organization, Input-Output Systems, Introduction to Assembly Language and i80x86 Family of Microprocessor. A randomized set of questions was provided in each chapter to evaluate student's comprehension regarding the topics. It also automatically stores the result of the examination into the student database.

The researcher found out that the use of interview is one of the most important data gathering tools. The researcher also used the library materials like books, magazine, and thesis.

The programming language used for the software development was Visual Basic Version 6.0. The study followed the paper prototyping paradigm in developing the software. It included steps such as creating the product's quick design, documenting the products specification based on the requirements, planning the software process, describing the project modules and how each module works, translating the detailed design modules into code, combining the modules, testing if the whole program functions correctly, and preparing the documentation to aid future developers toward maintenance or enhancement of the software.

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# **COMPUTER AIDED INSTRUCTION ON COMPUTER ARCHITECTURE WITH ASSEMBLY LANGUAGE<sup>1/</sup>**

**Jerome B. Nazareno**

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<sup>1/</sup>An undergraduate special problem manuscript 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. CoS 2001-2002-434-40. Prepared under the supervision of Mr. Marlon A. Diloy.

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## **INTRODUCTION**

Computer is said to be a computing device used mainly in computation. But in the present day, it is used for very large scale of business and contributing innovation to science and technology. It can perform diagnosis about a specific problem, offers real image, present animation and graphics, and unique method of sharing data and information.

When time flies, the life of man shortens but the computer's appearance and innovation are still evolving and continuing into a more sophisticated and powerful tool that man ever created. The modern and high technology computers that make a daily routine of person become more fascinating and advantageous to this present times. Like a Computer Aided Instruction, a software that serves not only as an educational program design but also as a teaching tool. CAI programs used tutorial, drills, and question-and-