**DESIGN AND IMPLEMENTATION OF COMPUTERIZED HOSTEL MANAGEMENT SYSTEM**

A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF COMPUTER SCIENCE AND INFORMATION

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**CERTIFICATION**

This is to certify that this work ’’Design and Implementation of Computerized Hostel Management System’’ a case study of Enugu State University of Science and Technology is the original work of **XXXXX** and has not been submitted elsewhere for the award of degree.

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**ABSTRACT**

This project is aimed at the design and implementation of a computerized hostel management system in Enugu State University of Science and Technology (ESUT). It takes into consideration the change from manual to a computerized system, seeing the problems encountered in the process of hostel allocation manually in the Institution. This project gives an overview of computerized hostel management system, its uses and techniques. The project made use of structured system analysis development method methodology (SSADM). With the use of computer-based method, the allocation of hostel in this institution will be easy for both students and staff involved as this computerized system will bring efficiency in data processing, effectiveness in record keeping and good database to capture and store the students’ population seeking for hostel accommodation.

**CHAPTER ONE**

* 1. **INTRODUCTION**
  2. **BACKGROUND OF THE STUDY**

In Nigeria today and other countries, hostel management has been sophisticated than it used to be years ago. The hostel, however, has been developed to solve the problem of accommodation for students, visitors and for reservation purposes.

Hundreds of students travel from their schools to other schools during any reputable sports competition, visitation and school purposes. They always become anxious of where to lodge or sleep within the period. Hence, man’s quest for solving this problem resulted in the development of hostel in order to eradicate or control the problem of student accommodation.

Hostels allocation system has for rear been done manually such that one may wonder how to cope with recent development and increase in students population. Hence, there is need for hostel perspective to change from manual system, which is time consuming and labour intensive to computerized method, hence, its design and implementation in the universities and other higher institutions of learning. it is safe to say that most activities such as hostel allocation carried out in most universities in Nigeria is done manually. Therefore, there is a lot of strain on the individual running the hostels, the design and implementation of a computerized hostel management system which is user friendly and GUI-oriented can significantly reduce overall costs of an educational institutions and as well offers a full-feature hostel management solution to manage the residential facilities in the institution, and also seamlessly integrates with other key modules such as academics, finance, and purchase to give a fully-rounded insight into the workings of the hostel, and in turn, allows the hostel administrator to control and reduce cost of operations and error free.

Thus, this research is aimed at finding system approach to computerize the hostel management system to reduce problems associated with the manual hostel management; and as well, enable students to fill their hostel accommodation form online and check their allocation result online so that it can be processed at a high speed. This research work uses Enugu state university of science and Technology [ESUT] as a case study.

**1.2 STATEMENT OF THE PROBLEM**

One of the major problems that have been facing the institutions in Nigeria is lack of adequate accommodation for students. The universities are meant to provide all the necessary facilities needed to create a good and conducive learning environment; but some institutions are not able to provide hostel accommodations for their students even the ones that have, do not have adequate number to accommodate all the students.

The situation is the same in Enugu State University of Science and Technology, Enugu. This therefore, constitutes much trouble to students at the beginning of every new session. It gives the students headache because many of them leave their homes both far and near to come to school to process their accommodation which takes several days or even weeks, and unfortunately, It happens that after all the struggles at the students affairs office, some students may not be allocated to any room. Moreover, the money paid may not be refunded.

The staffs also pass through many difficulties trying to settle the students. Most times, many fraudulent activities go on during the process, Favouritism becomes the order of the day and any student that cannot pave his or her way in, loses out. Therefore, it has to be noted that those problems are as a result of the type of system used which is a manual system. This system is inefficient, slow and unsatisfactory in the processing of hostel allocation.

**1.3 OBJECTIVES OF THE PROJECT**

The objective of this project is to design and develop system that can:

1. Capture and store the records of students’ population seeking hostel accommodation
2. Store and classify the population
3. Produce an allocation algorithm for allocating available rooms to applicants
4. Produce relevant report for decision making.
   1. **SIGNIFICANCE OF THE PROJECT**

The significance of this study is that it will provide the institute with an opportunity to introduce this new technology, which will ease the duty of the student welfare unit.

* 1. **PROJECT SCOPE**

This research covered areas as identified and grouped into:

* Data capturing,
* Information Processing, and
* Reporting.

This project will not consider how facilities in the hostels are managed and maintained. The topic will not cover the payments made to get the accommodation.

**1.6 LIMITATIONS**

During the research process, some difficulties and limitations were encountered. They include;

* Inadequate funds,
* Limited time in the gathering of facts and findings,
* Insufficient Local literature and/or resources.

**1.6 DEFINITION OF TERMS**

In developing this research project, various terminologies are used which are mainly in the web database development. Most of the terms may be confusing for novice and some users of information system hence, are well defined below.

* ALLOCATION SYSTEM: This is a set methodology of assigning hostel rooms to students.
* CLIENT: A computer program that submits request to a web server for processing.
* DATA: These are new facts and figures sent into the computer for processing
* DATABASE: A collection of data organized for storage in a computer memory and designed for easy access, sharing and manipulation by authorized users.
* DBMS: This is an abbreviation for database management system which is computer software used to create, access, store, manipulate and share information in the database.
* FILE: A collection of related records in the database. In this case, a file is complete information in a table of a relational database.
* HTML: This means Hypertext Markup Language and is a standard used in creating documents on the World Wide Web.
* HTTP: Hypertext transfer protocols the protocol that defines how message are formatted, transmitted and rendered on the World Wide Web.
* IMPLEMENTATION: This is the act or process of adopting a new system for use.
* INFORMATION: This is the result of data or information that has been processed.
* MONITORING: The action of allocating or assigning something to somebody with effective record keeping for control and performance measurement.
* PROCESS: The action of converting data into information by a computer for easy presentation, storage, retrieval, understanding and interpretation.
* RECORD: A collection of related fields in a database, which is complete information, stored in a given row of a database.
* RELATION: This is the linking trend that exists between two or more subjects(tables) in a database
* SOFTWARE: A set of instructions given to the computer in order to carry out a task or different tasks.
* STORAGE: the storing of information or data on computer storage media
* SYSTEM: The collection of interrelated components, which interact regularly to perform a task.
* WEB BROWSER: The tool (program) that allows you to surf the web. It is used to locate web pages (e.g.) Microsoft internet explorer, Mozilla Firefox, Netscape etc.
* WEB PAGE: A document connected to the World Wide Web and viewable by anyone connected to the internet that has a web browser.
* XML: Extensible Mark up Language, text format, commonly known as XML, created to structure, store, and send electronic information, especially on the World Wide Web.
* XSL: Extensible style language for defining the format of document on a World Wide Web.