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STUDENTS' PROJECT MANAGEMENT AND ALLOCATION SYSTEM

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ABSTRACT
The online student project allocation is an emerging technology and a computer system has revolutionized the world thereby making tasks that seem difficult easy by the use of the Internet. Students no longer need to overcrowd Supervisor's office because of project topics or research suggestions as this has been solved by this web application. Students can nowat their comfort proceed with their project work online. What a welcoming development. This research work has emphasized the capabilities and reliabilities of a computer system i.e. accuracy, speed, and timeliness of information that it encompasses. The most important factor from this work is that information is essential and its availability cannot be washed away and the ability to move such information through established networks such as the Internet is the key benefit of the online students' project allocation. In addition, we have conducted a usability study via a website by deploying the web application on a domain for only a few invited developers to test the application to understand usability issues and suggest future improvements.
Keywords: Students, Project, Management, Allocation, Systems, Information, and Web Applications.

1. INTRODUCTION

In many tertiary institutions in the country, students seek a project in a given field of specialty as part of the requirements to obtain their degree program. Usually, a project can be filled by atleast one student, though in some cases a project issuitable form or ethan one student to work on simultaneously. To give students something of a choice, there should be as wide a range of available projects as possible, and in any case, the total number of project places should not be less than the total number of students. Typically, a lecturer will also offer a range of projects but does not necessarily expect that all will be takenup.

In this paper, we consider the ways of allocating student projects in our various institutions. In most cases,a graduate project is, according to Valterde Senna (May2005), “one paper that a student works on for a large portion of the graduate program, especially in his or her final months of the program. This research requires a huge amount of research and may even be ground-breaking for a particular industry”. While there are many definitions and uses for student projects, the basic writing elements are the same. Therefore, students should always research a particular subject and write an academic document with an introduction, body, conclusion, resources, and appendices.

1.1 Statement of Problem

The traditional way of allocating project to students in our higher institution need to be reconsidered since project/research writing is a sensitive aspect of student education in the higher institution. The traditional system creates room for allocating a single topic to more than one student or group of students thereby creating inefficiency in the purpose of student project writing. This system made project writing look less like a class assignment which does not require extra effort to complete but rather an issue of copying also many students can choose the same project without knowing that they doing the same project.

1.2 Aim and Objective

This research is aimed at developing a web-based system (stand-alone which could also be run under a Local Area Network) that manages the activity of "Student Project Management". This system will manage the database and maintain a list of all student groups that have registered in the department along with their project topic. Allocation of the project will be done by lecturers registered in this system through a list of topics in the department data base organized by the department to guide against a repetition of topics by two or more students.

2. LITERATURE REVIEW

Student projects are long academic documents that students write after they research a particular subject in depth. Therefore, student projects are usually assigned once per course, per semester, or only once as part of an academic program (David J. Abraham, 2007). Usually, the project will be graded by a supervisor, but all students in a particular grade might have to work on a project to pass a grade. In most cases, a graduate project is, according to Valter de Sennaeta l(2005), "one paper that a student works on for a large portion of the graduate program, especially in his or her final months of the program. This research requires a huge amount of research and may even be ground breaking for a particular industry". Students will then have to defend their project in front of a panel of judges that are familiar with the subject matter in the project. These panel members may ask the student questions related to his or her research or to the project itself. This sort of graduate project is also often called a graduate school dissertation.

While there are many definitions and uses for student projects, the basic writing elements are the same. Therefore, students should always research a particular subject and write an academic document with an introduction, body, conclusion, resources, and appendices (David J. Abraham, 2007).

3. METHODOLOGY

3.1 Choice of Programming language

Our application package for students' project allocation is realized using P.H.P (Hypertext Preprocessor) as the main scripting language, CSS (Cascading Style Sheet) to style the interface, MySQL server as the database server, and Wamp as the web server. The application can be accessed using any web browser.

3.2 Research Layout

This research work is aimed at developing a web-based system (stand-alone which could also be run under a Local Area Network) that manages the activity of "Student Project Management". This system will manage the database and maintain a list of all student groups that have registered in the department. Allocation of the project will be done by lecturers registered in this system through a list of topics in the department database organized by the department board. We have three roles in this system, an Administrator, a Supervisor/Lecturer, and a Student. An Administrator logs into this system and can register a supervisor who belongs to the department. Students register in this system and get a user ID (similar to a website like Yahoo). A student should register; provide his information (technologies familiar with, prior project experience, etc.). This is saved in a database.

The department shortlist students for supervisors.

The Lecturer/Supervisor assigns project topics in his profile page to students/groups under him/her

3.2.1 Facility for password changing

There is a facility for changing the password for the student as well as the lecturer.

3.2.2 Notification sent to students

Notification is being sent to students or groups that are under him or her that a project topic has been assigned to them. The data entered by the student like name, matric number, phone number,etc. Should be validated appropriately. This feature will improve the robustness of the application; also this feature is a must as it prevents incorrect data from being entered in the database.

3.3 Evaluation of Forms

The system design is based on a three-tier architecture. The three-tier (layer) is a client-server architecture in which the user interface, registration process, and data storage and data access are developed and maintained as independent modules or most often on separate platforms.

The three logical tiers are

i. Presentation Tier – Dreamweaver, web forms, Master Pages, Images

ii. Middle Tier – webmodule

iii. Data Tier –Database.

3.4 System Flow Chart

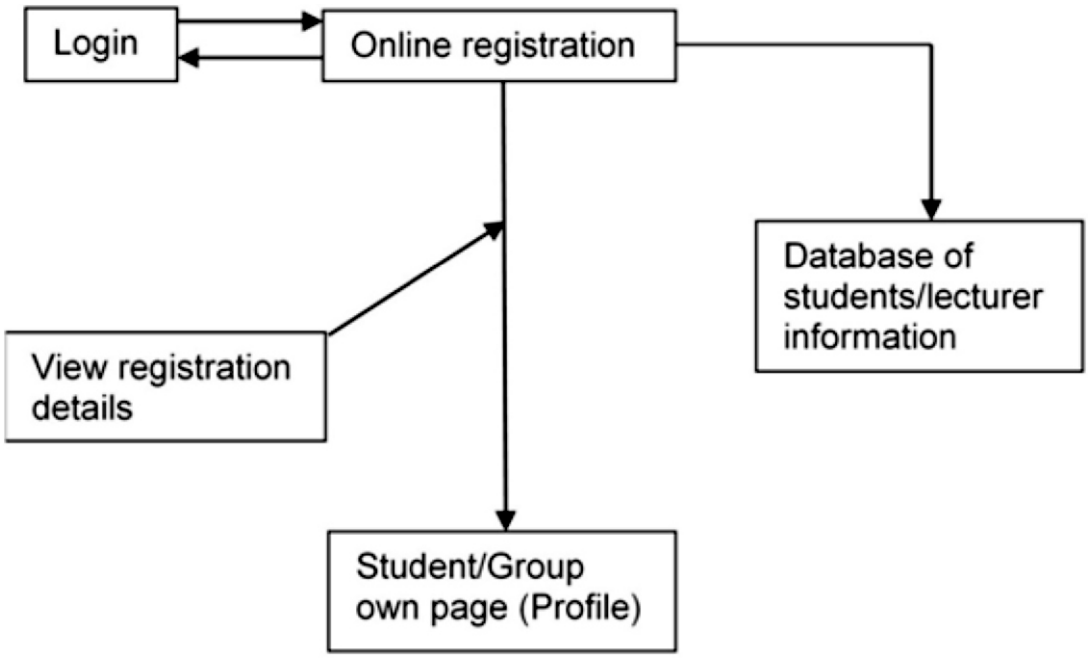


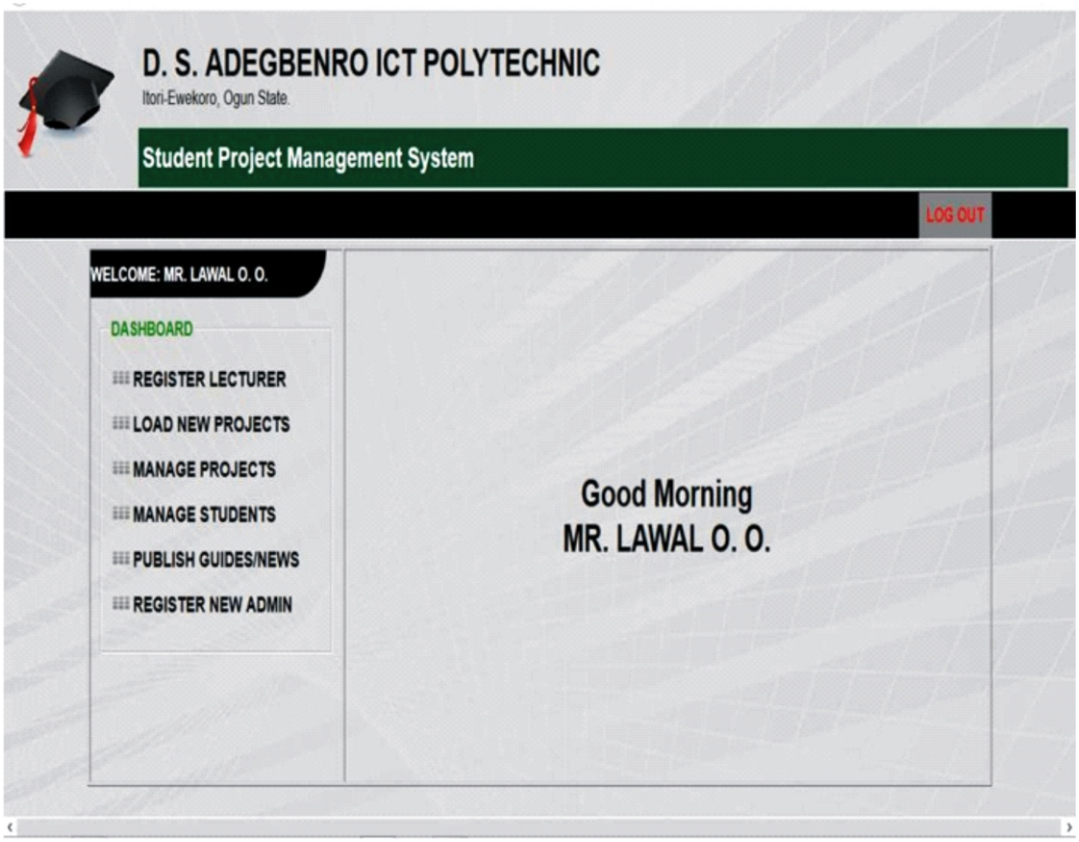
Fig. 1: System Flowchart

1.1 System Implementation

Implementation of the new system involves:

(I) Training of staff
(2) System testing
(3) System changeover
(4) System review and maintenance

3.6 . Database Table Structure



3.7 SystemImplementation

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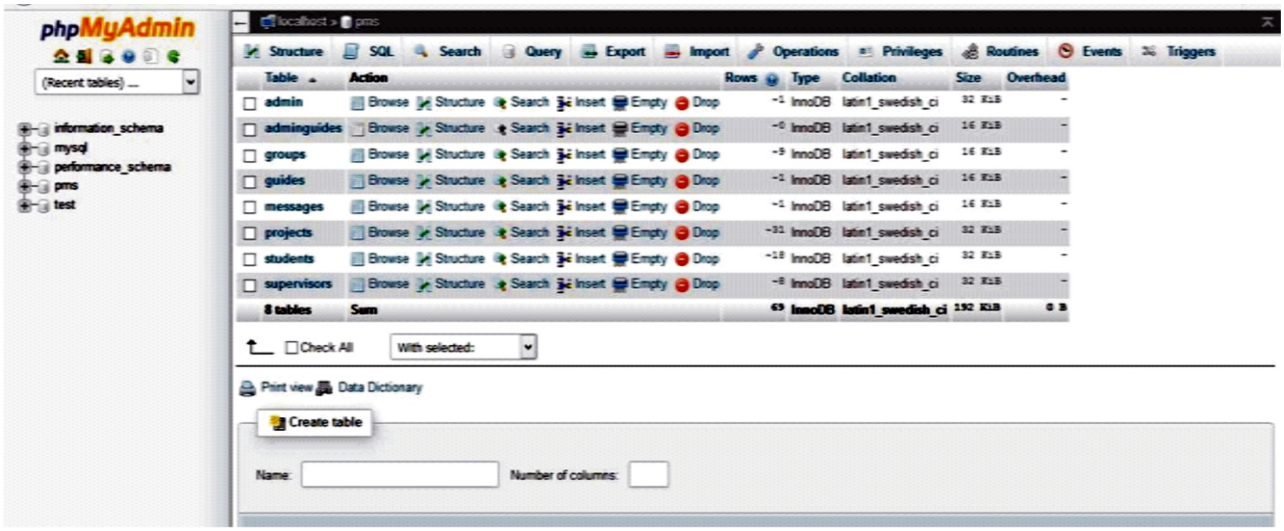

Fig. 2 Administrative Control Platform

1. DOCUMENTATION

The administrator controls the logging-in process in such a way that unauthorized users do not log in, add new lecturer/supervisor to the list, update lecturer/supervisor's profile, determine if a student should be given project supervisor after students' assessment, add and delete student or supervisor below requirement.

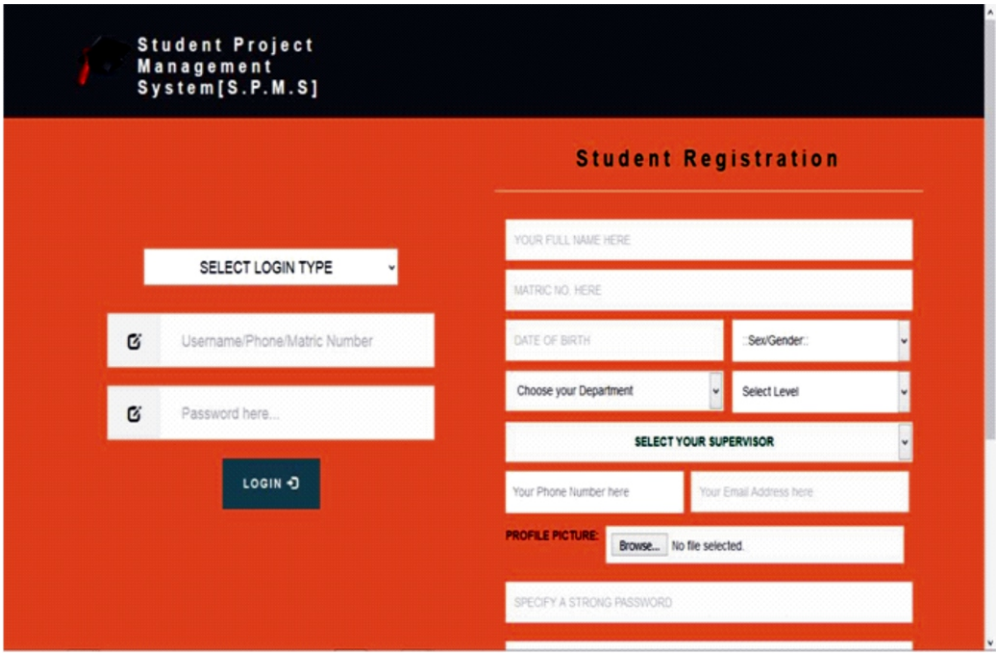

Fig 3: Login/RegistrationPlatform

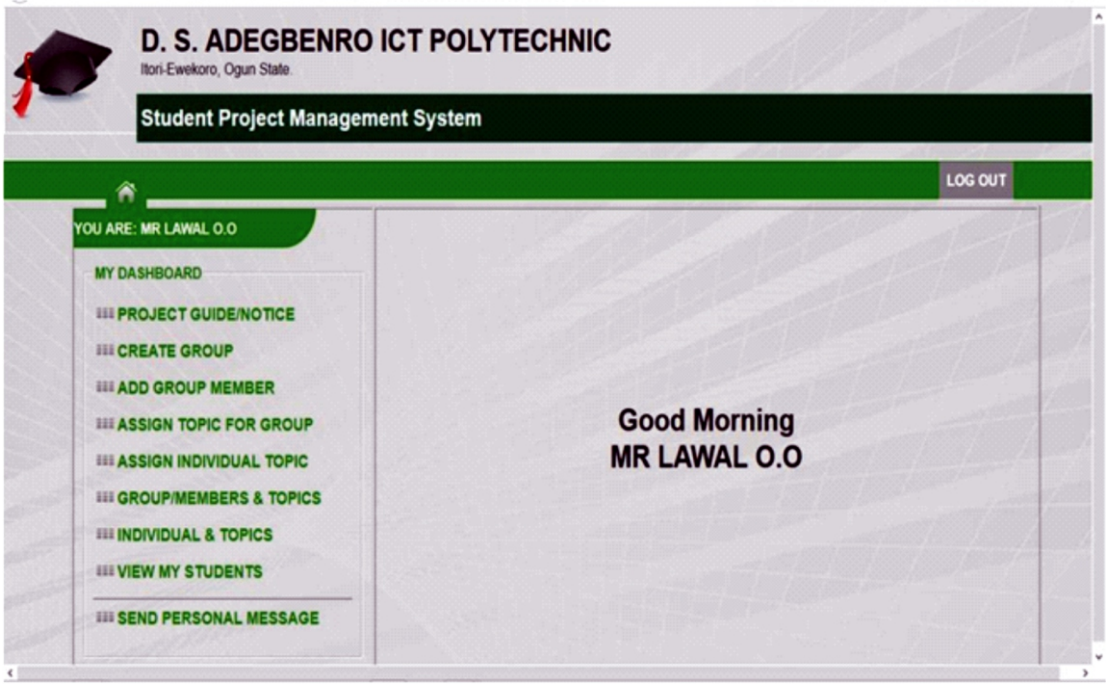

Fig 3: Supervisor Control Platform

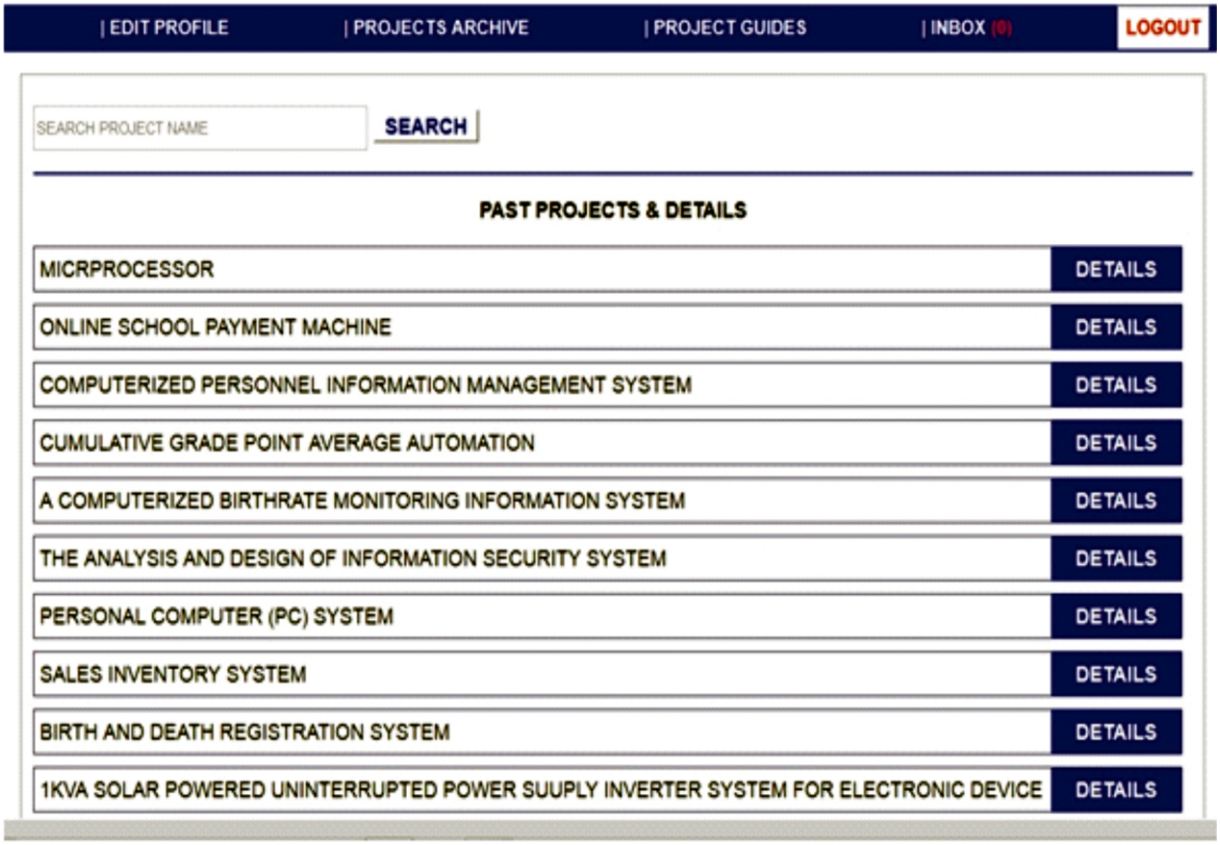

Fig 4: Project Archive

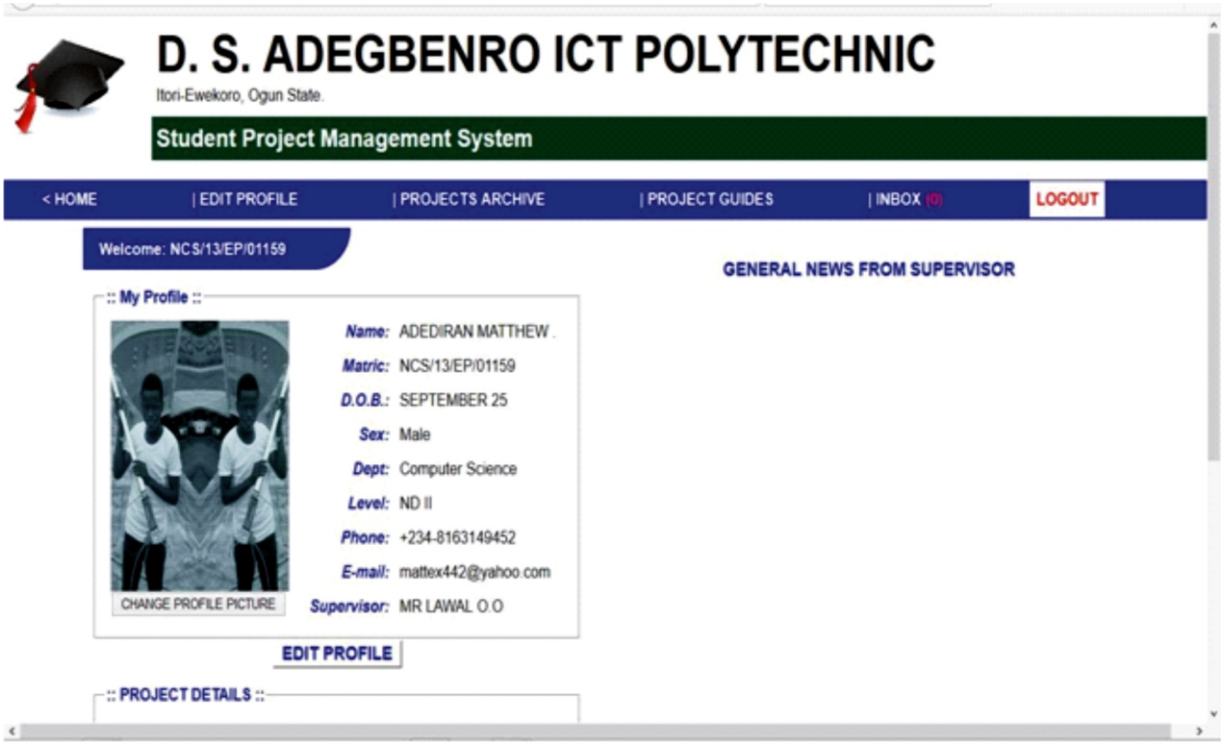

Fig. 5: Student Profile



Fig. 6: Edit Student Profile

1. CONCLUSION

Thetraditionalwayofallocatingprojectsisassociatedwithsomanyproblemsrangingfromovercrowdingofstudentson one project topic to the departmental record of the history of the project topic. However, we have been able to research and develop measures through which this shortcoming can be overcome with fewerproblems.

Therefore, we have been able to develop a solution, if this system is adopted this problem can be addressed. The development of a web application that can administer student projects should be a welcoming development in our institution of various learning.

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