International Journal of Leading Research Publication
IJLRP

© IJLRP | ISSN (O) - 2582-8010
July 2020 | Vol. 1 Issue. 1
www.ijlrp.com

Design and Implementation of Computerized Students Registration System for Allover Central Polytechnic (AKURE CAMPUS) Nigeria

[1]Akinbo Shade Racheal, [2]Agboola Kayode Samuel

Assistant Professor

[1]Federal University of Technology Akure Nigeria, [2]Noida Allover Central Polytechnic Akure, Nigeria

ABSTRACT

The advent of information technology has brought about a huge effect on the entire education system and also has made the student to shift from manual systems to computerised systems. Most of the system that involves manual work has been automated efficiently. Student registration process in Allover Central Polytechnic Akure involves filling registration forms manually, getting it signed by respective lecturers and then getting the documents acknowledged from the concerned head of departments, Deans and Accounts Officers respectively, then the registration forms are submitted in the Administrative office. This process is very laborious and time consuming. An Online Student Registration System is therefore enveloped to simplify the manual procedure. The methodology involves using PHP, Apache and MySQL while front-end is designed with PHP, the back-end is managed with MySQL. The system is more secured and user-friendly.

Keyword: *Online, Course, Registration, Student, Database*

1. INTRODUCTION

The registration of students in session and for semester happened to be a compulsory part of work for the higher institution. Traditionally, the work was done by artificial management. The registration of the corresponding classes was responsible by administration, account officers, registrar and the lecturers from the school. In the process of registration, the administrations staff should will stay in his office all day, waiting for the students to come for registration. The whole process of registration was not easy and it is time consuming for the student. This process was closed information, manual operation and low efficiency. To sum up, there may be several errors generated during the registration process. Therefore the efficiency of the registration is very low, and some mistakes might be made when the number of the students that came for registration is large. There was no record for the specific time of student registration in the entire process, and if the registration was record manually, the time for each student might be much longer.

1.1 On-Line Registration overview

An on-line registration is a secure website that allows student to enter their details and indicate that they will attend classes as at when due. (Strauss, 2000). In this case, students can access electronic registration site remotely with internet connection. Pena-Lopez (2007) stated that web portal act as a point of access to information on World Wide Web (www) and it allows information from diverse sources. According to Brake (2003), several terms in library information science and information technology that have their origin borrowed from other disciplines. The inspiration behind this project comes from the problems, complexities and frustrations of manual routine student registration at the Allover Central Polytechnic at the Akure Study Centre, which affects not only the student but also most of the institutions countrywide and worldwide. Students were free to select their courses with some restrictions, pre-requisites and opt to offer courses according to demands from the students. In course registrations and scheduling, online application promotes flexible access to the system globally and the physical presence of student is not required, this will make the time taken for process completion to be largely reduced.

1.2 Objectives

The specific objectives of the on-line student registration system are:

- To computerise student database
- To automate the registration process.
- To make the process of registration accessible to the student regardless of their location.

1.3 Significant of the study

1.3.1 To the Students

The system will enable students to use the online registration portal effectively for their online registration process especially for registering their personal

© IJLRP | ISSN (O) - 2582-8010
July 2020 | Vol. 1 Issue. 1
www.ijlrp.com

information, courses registration and exam registration. It will also promote easy access to information resources, materials etc.

1.3.2 To the Faculty Members

Through this system, the faculty members can provide all the necessary information and resource material to their students and to get the students information from the website.

1.3.3 Scope of the Study

In this study, online course registration portal for Allover Central Polytechnic Akure Study Centre is to be developed. The study intends to provide an online registration portal home page that will contain the description, brief overview about the students, courses and exam registration processes. The scopes of the study are: Online registration portal for student information, courses registration, examination registration and room allocations.

2. LITERATURE REVIEW

Rattan et.al (2016) developed three tier architecture for the application development of course registration of student. The motivation comes from the manual system that student uses, which makes them to face different challenges as to maintaining data of each student manually. The Objectives is to reduce the workload of all entities involved in the registration procedures. The current manual system face different challenges as to maintaining the data of each student manually. Development of Student registration system simplified previously complex tasks. Manual work is reduced to a large extent. At the initial stage the system was hectic for both faculty and the students and the limitation is that the system can only cater for the course registrations alone.

Patel et.al (2014) developed a system that needs less paper work, save time and secured data. The motivation comes from existing system that is slow, time consuming, complex, uses more clerical works, take too much cost to perform procedure and use more man power. The objective is to provide information regarding the school and how to get admission. The methodology involves: front end tool visual studio 2010 (Asp.net), and the back end tool is SQL server 2008. The performance level of users improved and this makes the Admin to work very quickly. The project is meant for the admission process only and there are many student registration entities that should be addressed as well.

Tolstoy et al, (2009) developed an online course registration system. The motivation arises from the need for structured storage, modification and maintenance of huge amounts of data. The objective was to develop an online registration system with real time database management system. The project works well and it reduces the workload of the student. The registration is also made for just one purpose within the several registration for student activities in school.

Eludire (2011) developed a student academic record system. The motivation comes from the facts that the data generated by academic institutions are usually created in non-delineated files for use by different departments/units within the institutions with the same data appearing on several of these files. The objective is to design and implement an online student registration and course management database application using Microsoft Access 2003. The application was of tremendous help in solving some of the identified problems in administering student and course registration in tertiary academic institutions. The developed system can be packaged and improved upon to become a generic one deployed for commercial use. There is need to carry out activities such as data test, user acceptance testing, system review and deployment.

Abdullah et.al, (2015) developed a system for the registration and management coursework. The motivation is as a result of registration and management of courses being carried out manually. The development of registration and management system for coursework, named e-PRM, was built in respect of the postgraduate students in the department of electrical and Electronic Engineering (JKEES), FKAB. The system is user-friendly and offers flexibility for supervisors to choose students. It offers flexibility to students because they were able to suggest their project topics to a specific supervisor. The online assessment system can further simplify the grading process and less time consuming compared to the manual system. There should be notification through emails and extended to other current technology.

3. METHODOLOGY

The registration application involves hardware device and software that is installed on the device. It consist of web based system by users, administrators and students of the university. It helps to record students' personal detail, publish time table, preview student result and select subjects for the semester. Therefore, the web based section will run on various operating system platforms.

© IJLRP | ISSN (O) - 2582-8010
July 2020 | Vol. 1 Issue. 1
www.ijlrp.com

The application will run on the web server connected to the database server.

3.1 The Software Design

LAMP (Linux-Apache-MySQL-PHP), HTML, CSS, Hardware and Software Environment.

The Online Registration Portal website can be implemented on any micro-computer configuration with the following capacities:

- An hard disk of at least 40GB
- 256 RAM memory.
- Pentium IV 1.0 MHz
- Window 7 operating system.
- Macromedia Dreamweaver CS5.
- Wamp server.
- Microsoft Office suite

3.2 Modules of the System

The web application system consist of five modules: Admin, Masters, Transactions, Reports and Utilities

3.2.1 Admin Module

It is managed by an administrator. The Admin will be responsible for:

- Creating
- Managing
- Authenticating
- Authorizing different users of the system.

3.2.2 Master's Module

It manages the database entries of all tables from the front-end. The Master's database is permanent and modified at session start; it support the following tables: category, state, course, course-category, credit-load, department, designation, faculty, gender, qualification, session and student registration.

3.2.3 Transactions Module

It facilitates the entry of programme of work (POW) for student registration from the application front-end. The POW is created on student first enrolment with the school. Registration is done at the beginning of every semester; it contain the details of all courses offered by the student during his/her degree. The portal for registration cater for the student courses during the current semester. List of registered courses is obtained from the programme of work database.

3.2.4 Report Module

Report Module comprises the view of entries which is made up of Admin, Masters and Transactions Modules. Every information in the report module is not visible to all which helps to maintain security, integrity and consistency of data. Availability information is according to the different type of users that logged-in to the system. In this module the reports of admin, masters and transaction are kept.

3.3 Utilities

Utilities menu has backup and documentation entries which offer options to back up the database tables in SQL format can be saved in the root directory. As the need arises, the user can retrieve some or all tables at any time. Documentation contains the project detailed system requirements, analysis and future scope of the system.

3.4 The database representations

The database model system is presented. The MySQL data model is adopted which is of the family RDBM. The data are organized into table structures. It is composed of 6 relations. The set of relations supported in the applications are given as:

- Admin [id: admin: admin_capabilities: login_name: password: full_name]
- Classes [id: class: course: course_Lecturer: day: session]
- Courses [id: course: course_name: course_code: course_lecturer: course_title: course_presquisite: course_limit: total_course: level_id: session_id]
- Registration [id: reg_id: student_id: course_code: reg_date: reg_status]
- Semester [id: semester_id]
- Student Registration [id: student_id: student_dept: Student_Mat_no: student_age: full_name: level_id: login_password]

4. IMPLEMENTATION

The figure below shows the implementation of the computerised system:

© IJLRP | ISSN (O) - 2582-8010
July 2020 | Vol. 1 Issue. 1
www.ijlrp.com

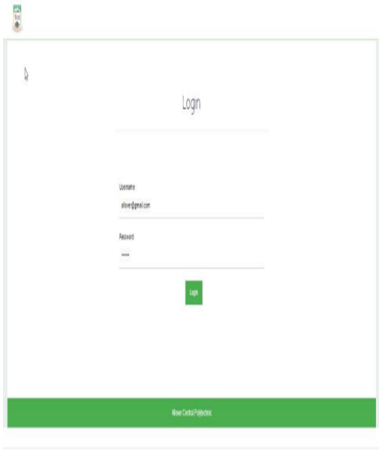

Figure 1: The Login Module

Figure 2: The landing page

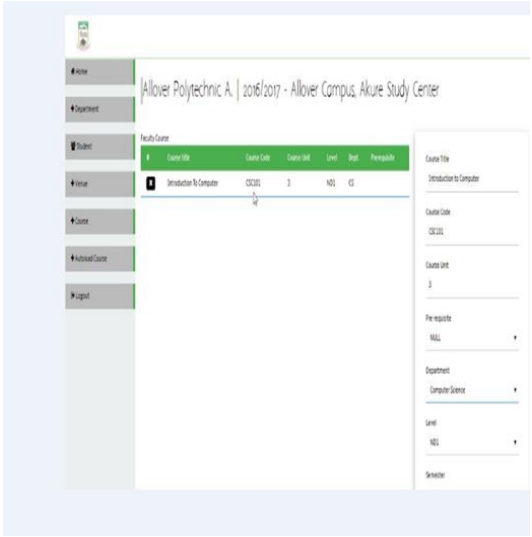

Figure 3: Registration of Course

Figure 4: Course registered

Figure 5: Course-Code title, Unit

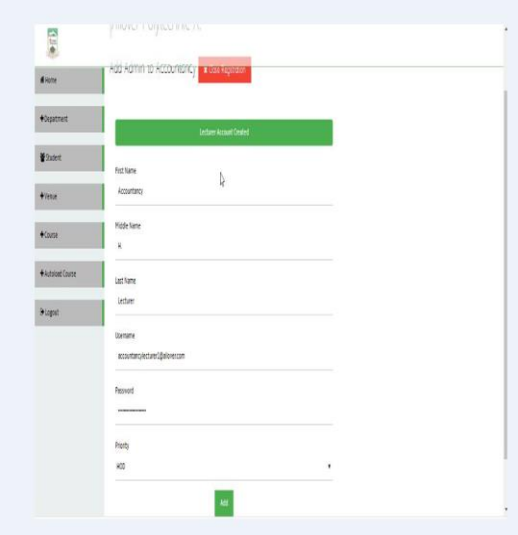

Figure 6: Accounting Dept. Registration

© IJLRP | ISSN (O) - 2582-8010
July 2020 | Vol. 1 Issue. 1
www.ijlrp.com

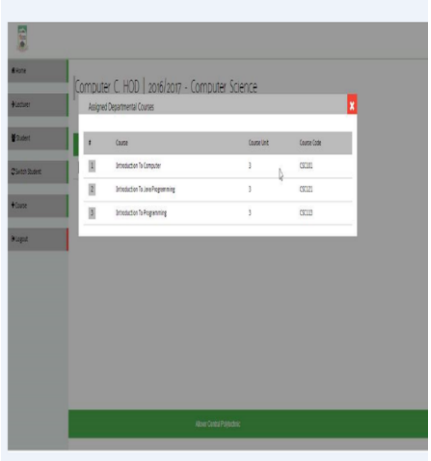

Figure 7: Computer Science Dept. Registration

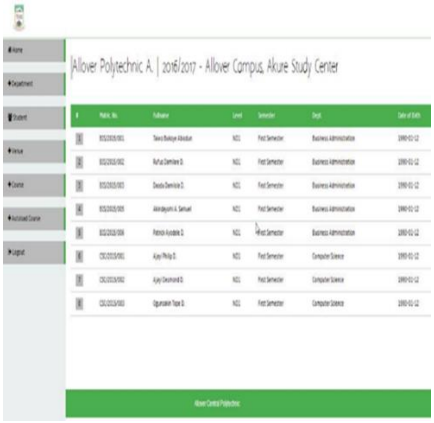

Figure 8: Registrations of all modules

5. CONCLUSION

The project is designed for the use of on- line student registration at the Allover Central Polytechnics Akure Study Centre, Nigeria. The results obtained shows that the use of on-line registration by students has made more time available to them other than wasting so much time on manual registrations.

REFERENCES

1. Crawford, J. (2004), the use of electronic information services by students at Glasgow Caledonian University. Emerald Group Publishing Limited. Vine, volume 34, issue 3, pp. 113-118.
2. Daniel, J.S. (1996). Mega-Universities and Knowledge Media – Technology Strategies for Higher Education. Kogan Page: London.
3. De Alva, J.K. (2000). Remaking the Academy: Twenty-First Century Challenges to Higher Education in the Age of Information. Educause Review 35.2.
4. JISC (2008) Richmond Adult Community College: Using Technology to make a step in business efficiency and responsiveness. Regional Support Centres, London. LAUTECH Information Manual, 2008. LAUTECH, Ogbomoso.
5. Katz, R. N. (2002) About Web Portals: A home page doth not make a portal. Jossey-Bass, A Wiley Company.
6. Looney, M. and Lyman, P., (2000). Portals in higher education. Educause Review 35.4.
7. Matovu, M. (2009) Availability, accessibility and use of ICT in management of students 'academic affairs in Makerere University, Makerere University.
8. http://hdl.handle.net/123456789/909
9. Pena-Lopez, I. (2007) The Personal Research Portal: Web 2.0 Driven Individual commitment with open access development, Knowledge Management for Development Journal, Amsterdam. 3 (1) 35-48.
10. Strauss, Howard (2000) Tech Talk Event CNI Spring Task Force Meeting, March 27-28.
11. www.cren.net/know/techtalk/events/portals.html
12. Tarn, M., Razi, M. A., Wiley, N., and Hsu, J. (2007). Exploring user perception of wireless
13. Campus International Journal of Mobile Communications. Volume 5, Number 6 pp. 710- 730.
14. Looney, M. and Lyman, P., (2000). Portals in higher education. Educause Review 35.4. Matovu, M. (2009) Availability, accessibility and use of ICT in management of students'
15. Shelly, B. G., Cashman, J. T. and Vermaat, M., E. (2006). Discovering Computers 2006: A Gateway to Information, Web Enhanced Complete. Thomson Course Technology. USA
16. Development of Online Student Course Registration System by Rattan Singh, Ravinder Singh, Harpreet Kaur and O.P Gupta , 2016
17. Online Admission System for School by, 2014 Patel Payal B. (11032211193) Patel Rinkal B,2014
18. Online Course Registration System by Tolstoy Newtonraja et al., 2009.
19. Development of Online Project Registration and Management System for Master Coursework by Abdullah et.al, 2015.
20. Pena-Lopez, I. (2007) The Personal Research Portal: Web 2.0 Driven Individual commitment with open access development, Knowledge Management for Development Journal, Amsterdam. 3 (1) 35-48.
21. Strauss, Howard (2000) Tech Talk Event CNI Spring Task Force Meeting, March 27-28.
22. www.cren.net/know/techtalk/events/portals.html
23. Katz, R. N. (2002) About Web Portals: A home page doth not make a portal. Jossey-Bass, A Wiley Company.