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Development of Students Result Management System: A case study of University of Uyo

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Abstract

In this paper, an automated platform for managing result of all categories of students in a seamless and interactive manner is presented. The system was developed using PHP, CSS, HTML, MYSQL and was hosted locally using Apache web server. The software development methodology adopted is a participatory incremental process model (PIP Model). The data used were obtained from the Department of Electrical/Electronic and Computer Engineering, University of Uyo. Functional decomposition of the system and its key modules are provided to explain the major functionalities proffered by the system. Also, use case diagram is presented to show the different categories of the system users and the various functionalities associated the different system user. Screen shots of various system functionalities are presented from the test run of the functional system.

Keywords: Result Management System; Participatory Incremental Process Model; Functional Decomposition; User Access Management System; User Access Privilege

1 Introduction

As universities in developing countries like Nigeria embrace information and communication technologies, they employ it in transforming their record keeping and information management operations. Particularly, students result management system (RMS) is one of the key information systems that readily attracts the attention of most universities [1,2,3,4]. While the universities in the developed countries already have well established students result management systems, their counterparts in the developing countries are having series of adhoc and standalone result management systems that provide only some basic elements of students result management system. Equally, majority of the students RMS do not have web interfaces and others do not integrate well with the other university-wide information system. The major challenge is that the universities outsource the development of such RMS without proper understanding of the essential functionalities and compatibility issues the RMS should afford to the university [5,6,7,8].

In this paper, a sample student RMS design is presented. In the system, the department of Electrical/Electronic and Computer Engineering University of Uyo is used as a case study. A detailed functional decomposition of the system is presented along with use case diagram. Also, the participatory software development methodology [9,10,11,12,13] used in the system development is presented. Such development approach will afford the system stakeholders in the university to participate effectively in the design process even when the software is outsourced. Finally, numerous screenshots of the developed student RMS are presented to further demonstrate the possible interface features the need to be built into such RMS.

2 Methodology

2.1 Participatory Incremental Process Model

The thrust of this paper is the development of Student Result Management System (SRMS) tailored to organize and manage students' result and transcript in the various departments in the University of Uyo, using Electrical/Electronic and Computer Engineering department as a case study. Participatory incremental process model (PIP Model) in Figure 2.1 is used in the system development.

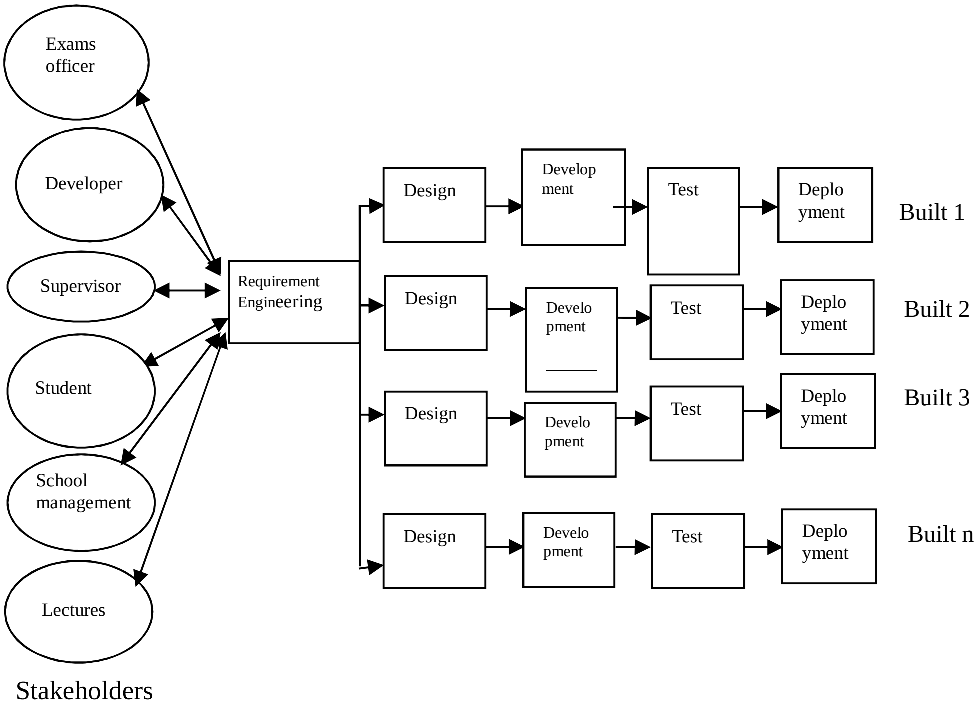


Figure 2.1: Participatory incremental process model (PIP Model)

The system stakeholders' include, the Software developer, supervisor, students, exam officers, school management and lecturers. The PIP model begins with requirement engineering which embodies all activities carried out by the developer in understanding, analyzing, validating and properly replicating the user's mental model of the system. The activities in requirement engineering stage include analysis of existing system, requirement elicitation, requirement analysis, requirement validation and verification, as well as requirement specification, which gives rise to requirement documentation and requirement management. Interviews, questionnaire, stakeholders' group discussion, social analysis, evaluation and inspection of documents are used to elicit the user and system requirements. The requirements are analyzed to ensure that the requirement specification is free of inconsistencies, omissions, redundancy, ambiguity etc. Stakeholder's feedback and comments are sought for at each stage of the requirement engineering process to facilitate a complete requirement specification that meet stakeholders' needs. Every conflict in the requirement specification is reconciled through the process of negotiation. Also, measures are put in place to identify, control and track requirements and requirement changes at any time in the system lifecycle.

2.2 Functional Decomposition of RMS

The functional decomposition [14,15,16,17] of the result and transcript management system is presented in Figure 2.2 and the modules are further decomposed into its respective sub-modules as shown in the subsequent figures.

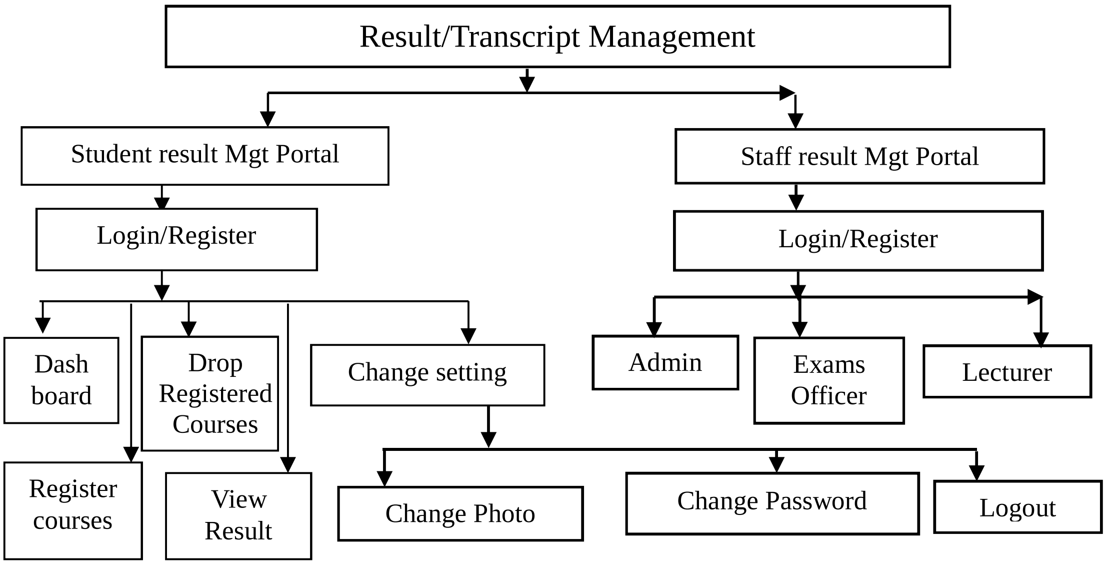


Figure 2.2 Functional Decomposition of the system

The system can be accessed by both students and staff. The staff can play three different roles in the system, namely, the system administrator, as the exam officer or as the course lecturer. Each of these roles constitute system module that is further decomposed into sub-modules. The staff must 'registered on the RMS platform and then login with the staff username and password. The staff access privileges depend on the role the staff plays in the system. The the system administrator role has the highest access privileges.

Also, the students can access he system as 'student'. The student must 'registered on the RMS platform and then login with the student username and password. In the system , the student will have student privileges which will enable the student to register for course, drop registered course if required, view the result pertaining to the student alone, change the student's settings like the photo, password and student's contact address a, email and phone number.

2.3 Registration and Login Module

Whether a student or staff, the system policy requires that every user should register to create user account and then use the user account to login each time the user want to access the system functionalities. Using the students' module as an example, the registration process is done by obtaining a registration code from the department and filling a form of personal information shown in the "user registration" page of the result/transcript management module of the portal. If the user already has an account, the user can login using the user username and password. Figure 2.3 shows the registration and login process. For security reasons, a registration code is used during the registration process. This code is an automated code integrated by the system developer and can be generated by the portal administrator to ensure that only authorized persons can register in the portal.

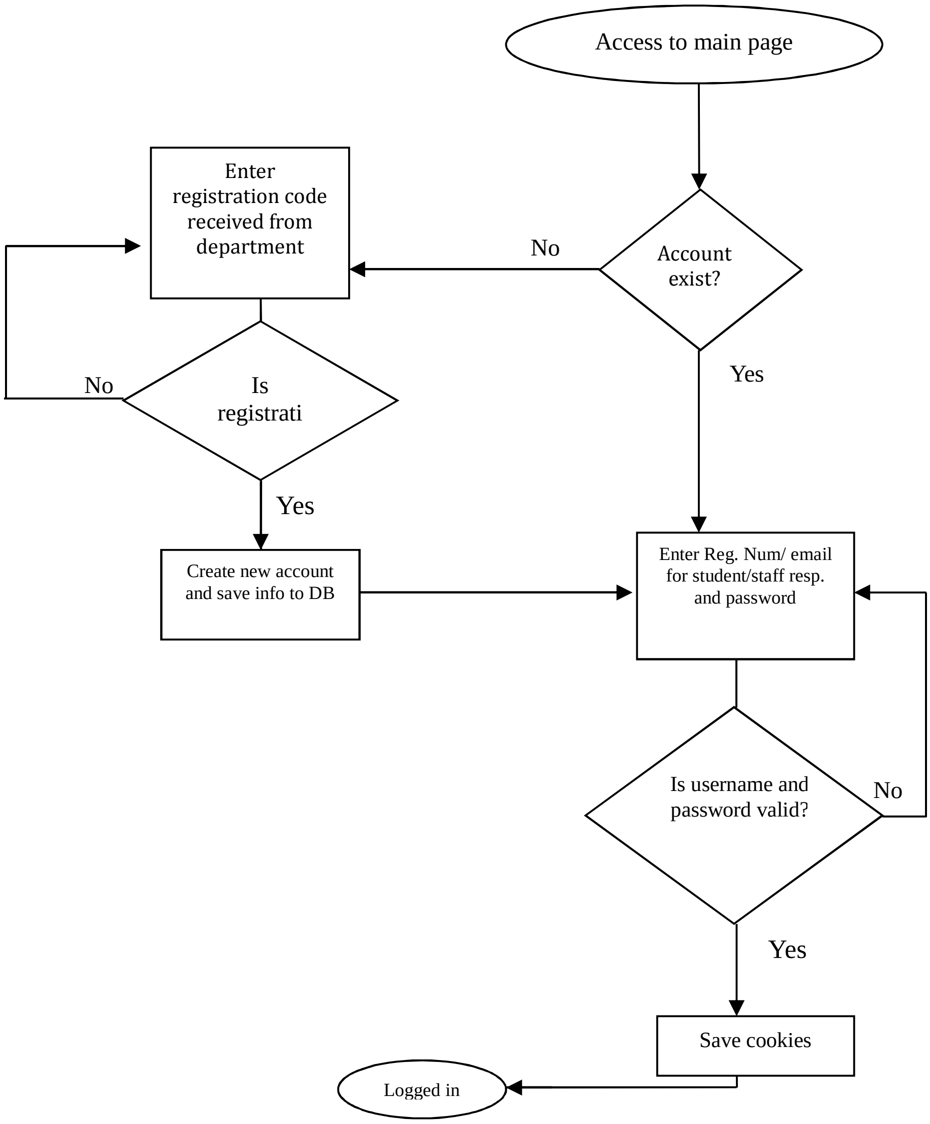

Access to main page
Enter registration code received from department
No
Account exist?
No
Is registrati
Yes
Yes
Create new account and save info to DB
Enter Reg. Num/ email for student/staff resp. and password
Is username and password valid?
No
Yes
Save cookies
Logged in

Figure 2.3 Registration and Login Module

2.4 Administrator Module

The administrator module (Figure 2.4), also referred to as the admin module, is the module meant for the back-end system administrator that manages the control panel of the software. The admin module has functionality for generating and managing the registration code which is used to ensure that only bonafide students and staff can register in the system. The admin module also manages the courses, semesters, academic session and other key things the users can access on the system.

Apart from the admin module the staff can play the role of the course lecturer and the exam or result officer. Each of the roles has different user privileges. The functionalities associated with the course lecturer module and the exam officer module are shown in Figure 2.5 and Figure 2.6.

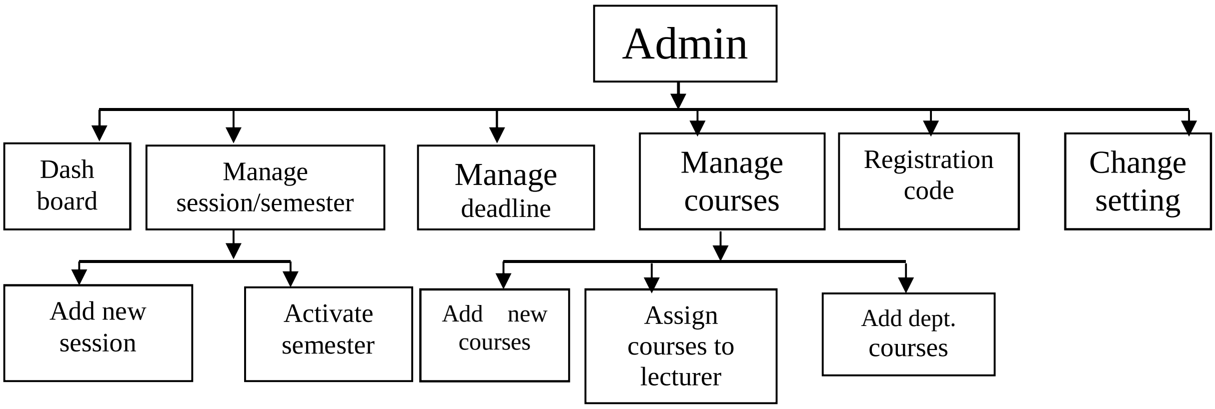


Figure 2.4 Admin sub-module

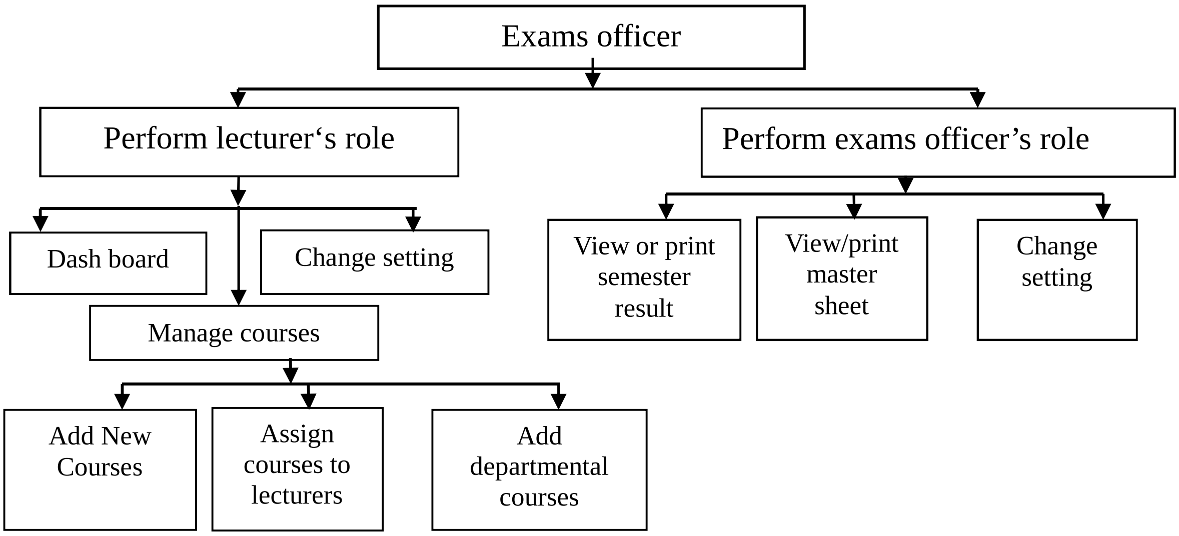


Figure 2.5 The Exam Officers Module

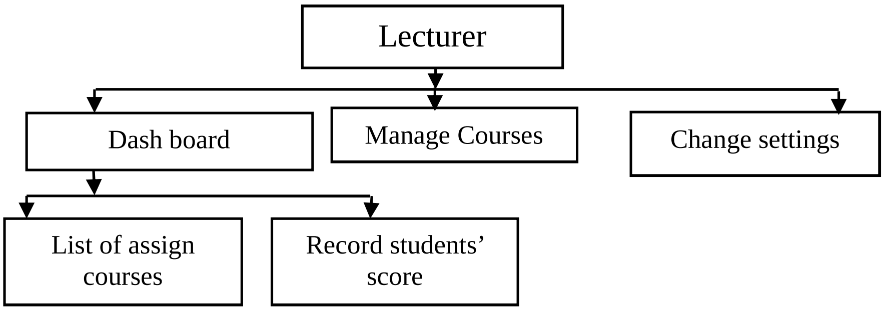


Figure 2.6 The Lecturers’ Module

2.5 Use case Diagram

The use cases of the system are identified to be “Registration”, “Register Courses”, “Generate/Print Transcript”, “Record Test/Exams scores”, “Generate/Print

Mastersheet", "Manage Semester/Sessions", "Manage courses" "View/PrintResult", "ManageDeadline", and "GenerateRegistrationCode". The use case diagram of the system is depicted in Figure 2.7.

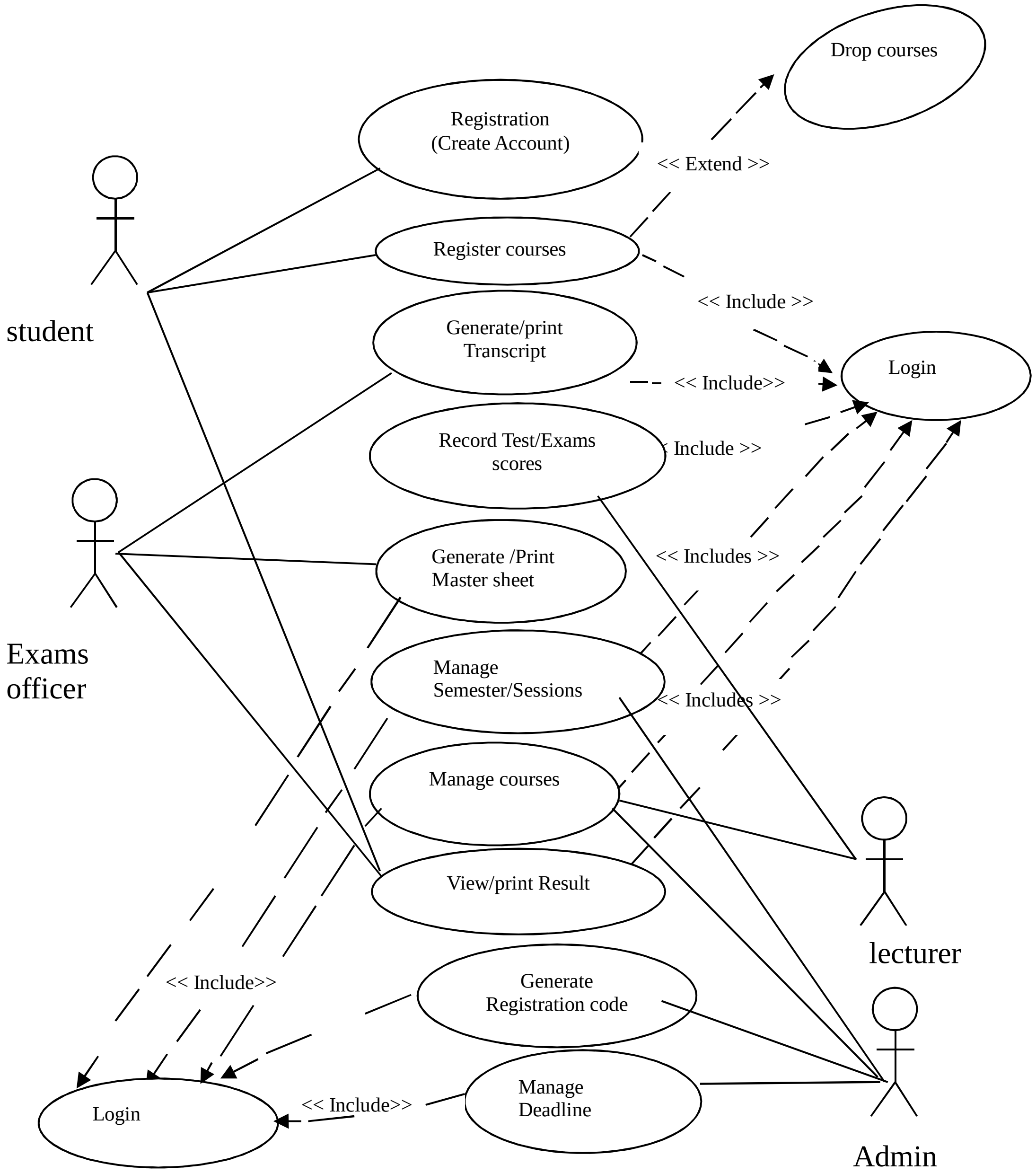


Figure 2.7 Use case diagram

3 Result and Discussion

A functional result management system was developed using PHP and MYSQL as the side-server and HTML and CSS as the client-side. The database used in the RMS was designed with MYSQL Database Management System (DBMS). All the information pertaining to the RMS are stored in the system database. The sample output/ results are shown in the various screen shots presented in this section. Figure 3.1 shows the student registration and login page.

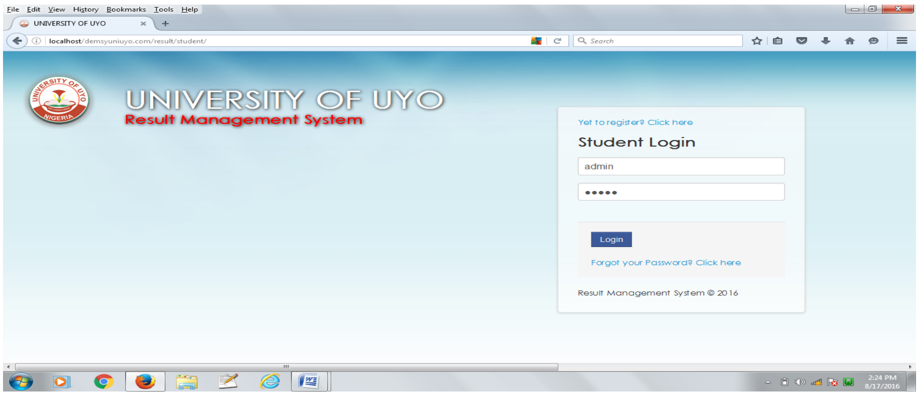

localhost/demsyuniuyo.com/result/student/
UNIVERSITY OF UYO
Result Management System
Yet to register? Click here
Student Login
admin
•••••
Login
Forgot your Password? Click here
Result Management System © 2016

Figure 3.1 Student registration/login page

Figure 3.2 shows the registration module. For student or staff to register on the portal, the user must first enter a registration code given to the user by the portal administrative officer as shown in Figure 3.2.

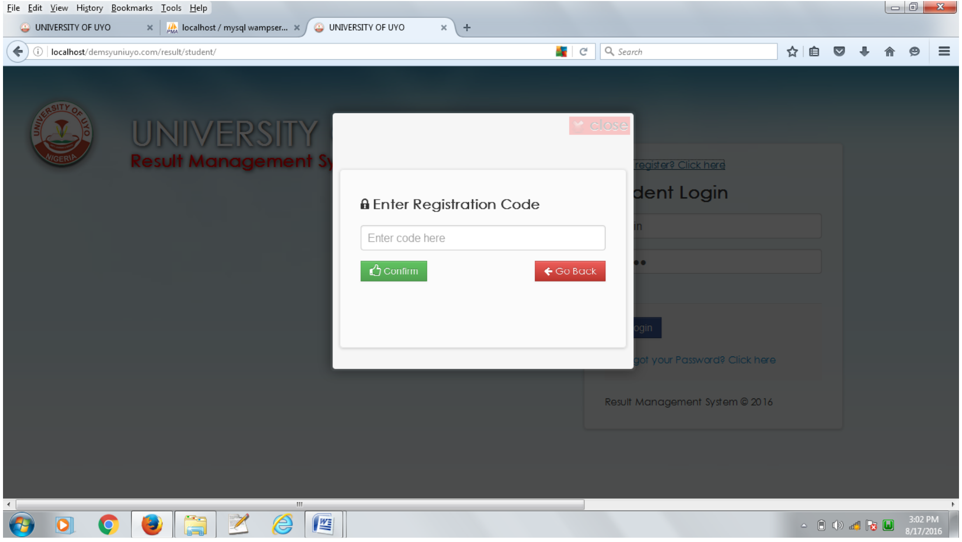


Figure 3.2 Registration module

Student registration form is presented in Figure 3.3. A student must fill the form to be registered on the system.

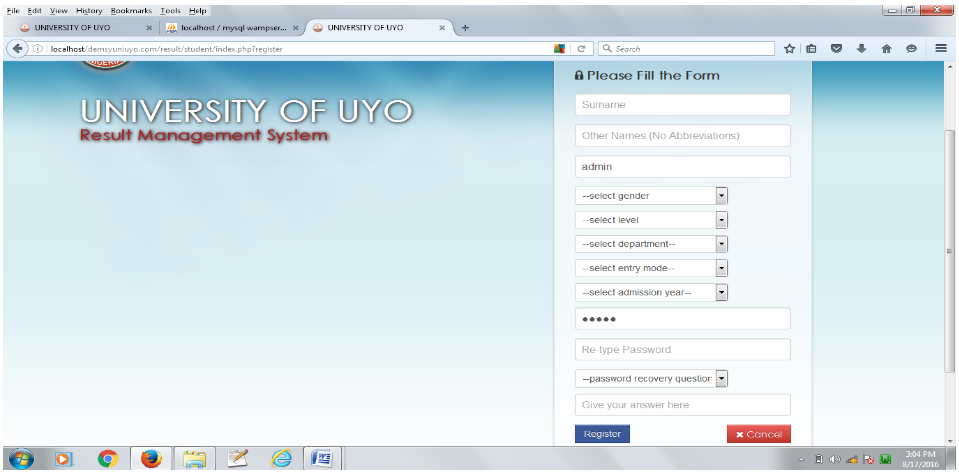
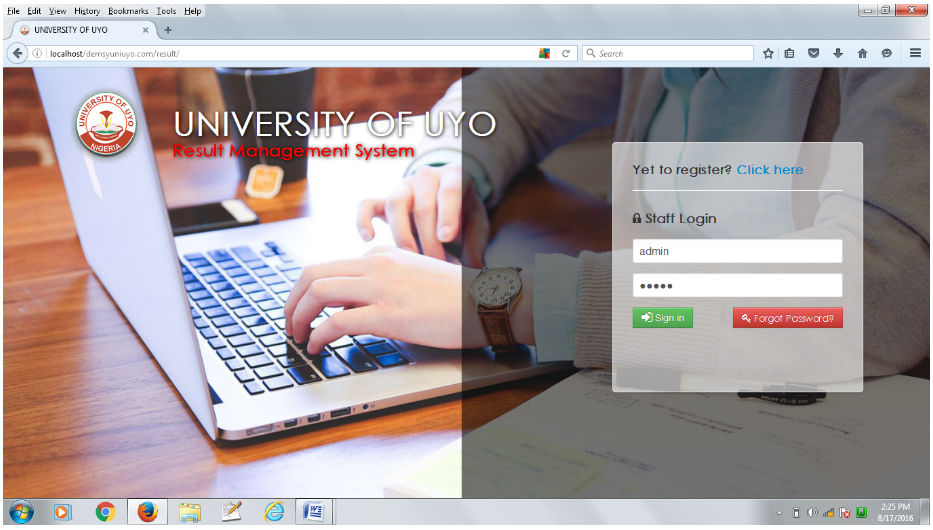


Figure 3.3 Student registration form

Figure 3.4 shows staff registration/ login page



Yet to register? Click here

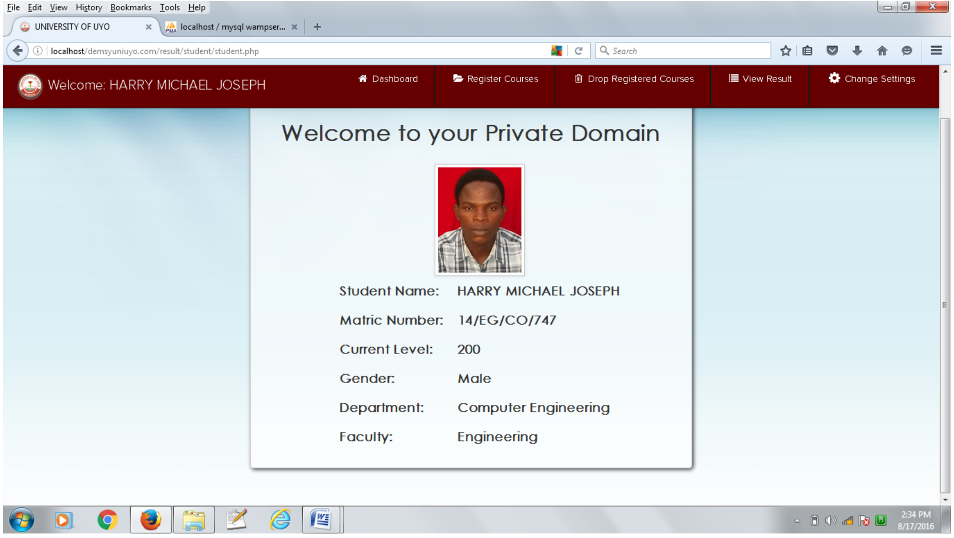
Staff Login

admin

•••••

Figure 3.4 Staff registration/ login page

Figure 3.5 shows student dashboard after login

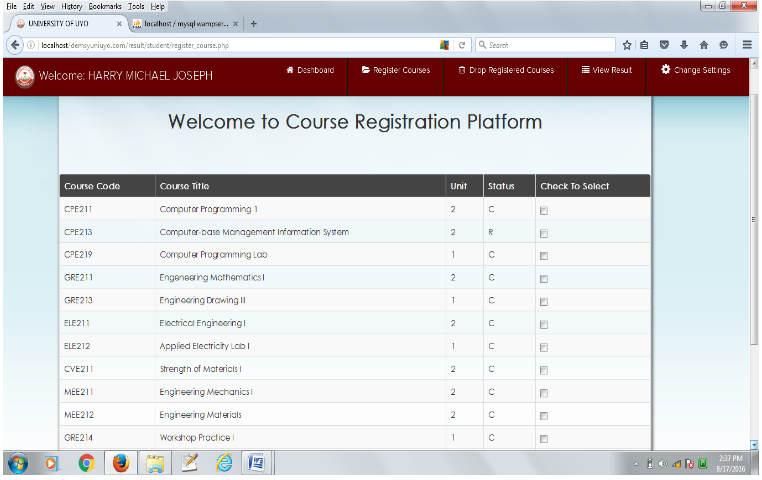

File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/student/student.php
Search
Welcome: HARRY MICHAEL JOSEPH
Dashboard
Register Courses
Drop Registered Courses
View Result
Change Settings
2:34 PM
8/17/2016

Welcome to your Private Domain

Student Name:	HARRY MICHAEL JOSEPH
Matric Number:	14/EG/CO/747
Current Level:	200
Gender:	Male
Department:	Computer Engineering
Faculty:	Engineering

Figure 3.5 Student dashboard

Figure 3.6 shows student course registration module.

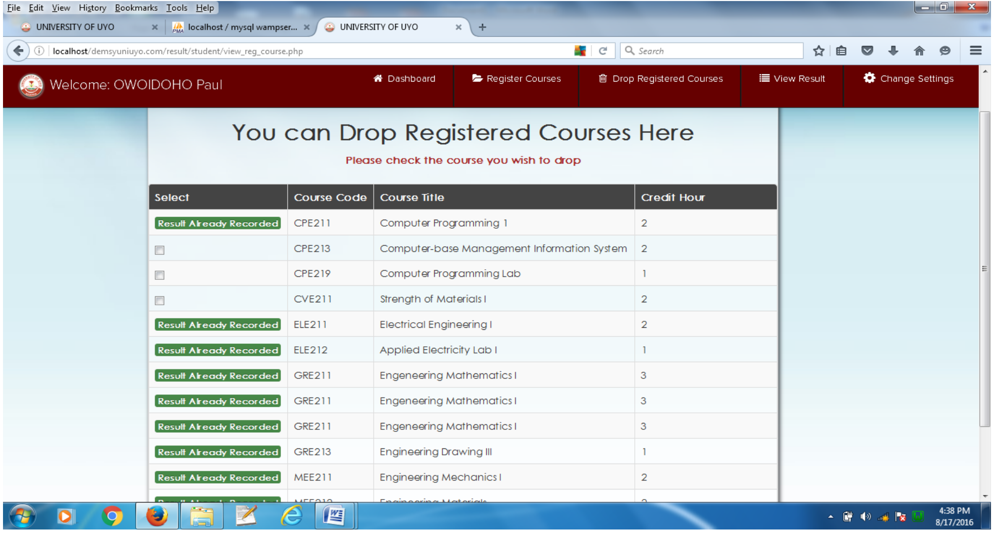

File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/student/register_course.php
Search
Welcome: HARRY MICHAEL JOSEPH
Dashboard
Register Courses
Drop Registered Courses
View Result
Change Settings
2:37 PM
8/17/2016

Welcome to Course Registration Platform

Course Code	Course Title	Unit	Status	Check To Select
CPE211	Computer Programming 1	2	C	□
CPE213	Computer-base Management Information System	2	R	□
CPE219	Computer Programming Lab	1	C	□
GRE211	Engeneering Mathematics I	2	C	□
GRE213	Engineering Drawing III	1	C	□
ELE211	Electrical Engineering I	2	C	□
ELE212	Applied Electricity Lab I	1	C	□
CVE211	Strength of Materials I	2	C	□
MEE211	Engineering Mechanics I	2	C	□
MEE212	Engineering Materials	2	C	□
GRE214	Workshop Practice I	1	C	□

Figure 3.6 Student Course registrations

Figure 3.7 shows the “drop registered courses” module. Student can drop registered courses here but if result has been recorded by the lecturer for that course then the student cannot drop the course anymore.



You can Drop Registered Courses Here

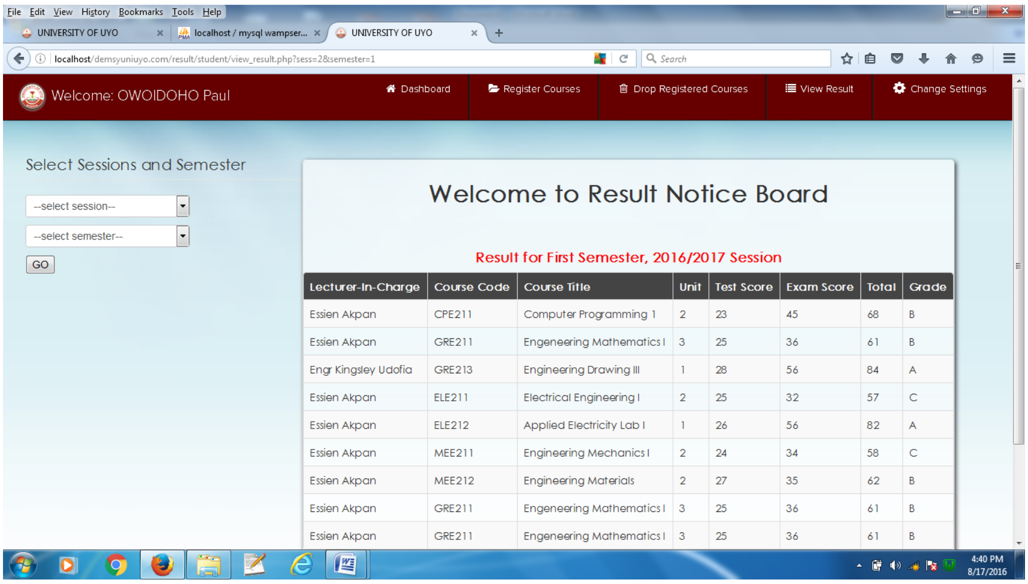
Please check the course you wish to drop

Select	Course Code	Course Title	Credit Hour
Result Already Recorded	CPE211	Computer Programming 1	2
□	CPE213	Computer-base Management Information System	2
□	CPE219	Computer Programming Lab	1
□	CVE211	Strength of Materials I	2
Result Already Recorded	ELE211	Electrical Engineering I	2
Result Already Recorded	ELE212	Applied Electricity Lab I	1
Result Already Recorded	GRE211	Engeneering Mathematics I	3
Result Already Recorded	GRE211	Engeneering Mathematics I	3
Result Already Recorded	GRE211	Engeneering Mathematics I	3
Result Already Recorded	GRE213	Engineering Drawing III	1
Result Already Recorded	MEE211	Engineering Mechanics I	2

Figure 3.7 Student drop courses module

Figure 3.8 shows “view result” module. Student can view result by selecting the session and semester and clicking the go button. Student can only view the result but cannot print as the print, right click, ctrl+x, print screen, ctrl+A, highlight and ctrl+p option has been disabled for the page.

Figure 3.9 present the functionalities of the administrative module. It shows the administrative dash board which provides information such as the total number of registered users, faculties, departments and courses.



Select Sessions and Semester

--select session--

--select semester--

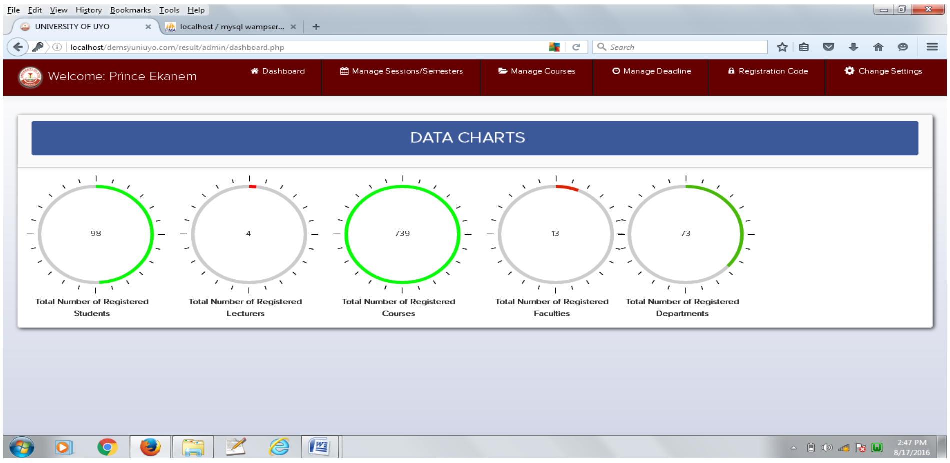
GO

Welcome to Result Notice Board

Result for First Semester, 2016/2017 Session

Lecturer-In-Charge	Course Code	Course Title	Unit	Test Score	Exam Score	Total	Grade
Essien Akpan	CPE211	Computer Programming 1	2	23	45	68	B
Essien Akpan	GRE211	Engeneering Mathematics I	3	25	36	61	B
Engr Kingsley Udofia	GRE213	Engineering Drawing III	1	28	56	84	A
Essien Akpan	ELE211	Electrical Engineering I	2	25	32	57	C
Essien Akpan	ELE212	Applied Electricity Lab I	1	26	56	82	A
Essien Akpan	MEE211	Engineering Mechanics I	2	24	34	58	C
Essien Akpan	MEE212	Engineering Materials	2	27	35	62	B
Essien Akpan	GRE211	Engeneering Mathematics I	3	25	36	61	B
Essien Akpan	GRE211	Engeneering Mathematics I	3	25	36	61	B

Figure 3.8 Student view result module

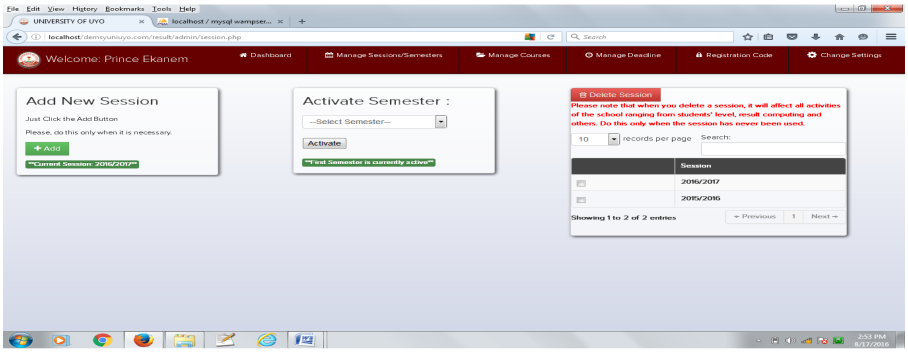

File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/admin/dashboard.php
Search
Welcome: Prince Ekanem
Dashboard
Manage Sessions/Semesters
Manage Courses
Manage Deadline
Registration Code
Change Settings
2:47 PM
8/17/2016

DATA CHARTS

Total Number of Registered Students	Total Number of Registered Lecturers	Total Number of Registered Courses	Total Number of Registered Faculties	Total Number of Registered Departments
98	4	739	13	73

Figure 3.9 Administrative dashboard module

Figure 3.10 manage session/semester module on the administrative panel. As shown in the diagram below, the administrative can add new session and activate new semester. Also, deleting a session would affect all activities of the university ranging from students' level, result computing and others. Deleting a session should only be done when the session has not been used.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/admin/session.php
Search
Welcome: Prince Ekanem
Dashboard
Manage Sessions/Semesters
Manage Courses
Manage Deadline
Registration Code
Change Settings
2:53 PM
8/17/2016

Add New Session

Just Click the Add Button

Please, do this only when it is necessary.

+ Add

Current Session: 2016/2017

Activate Semester :

--Select Semester--

Activate

First Semester is currently active

Delete Session

Please note that when you delete a session, it will affect all activities of the school ranging from students' level, result computing and others. Do this only when the session has never been used.

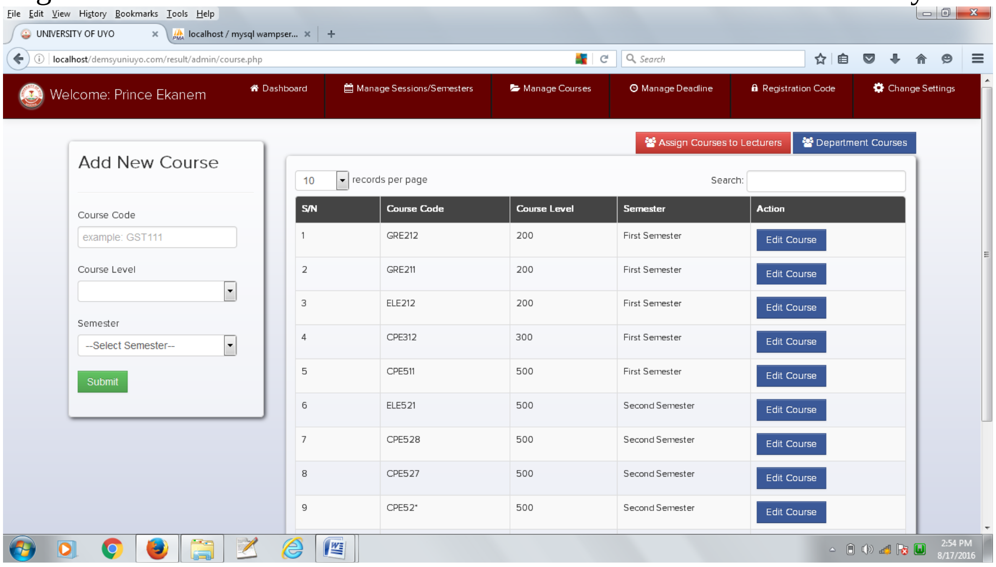
10 records per page Search:

	Session
□	2016/2017
□	2015/2016

Showing 1 to 2 of 2 entries ← Previous 1 Next →

Figure 3.10 Manage session/semester module

Figure 3.11 Shows how the administrator can add new courses to the system


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/admin/course.php
Search
Welcome: Prince Ekanem
Dashboard
Manage Sessions/Semesters
Manage Courses
Manage Deadline
Registration Code
Change Settings
Assign Courses to Lecturers
Department Courses
2:54 PM
8/17/2016

Add New Course

Course Code

example: GST111

Course Level

Semester

--Select Semester--

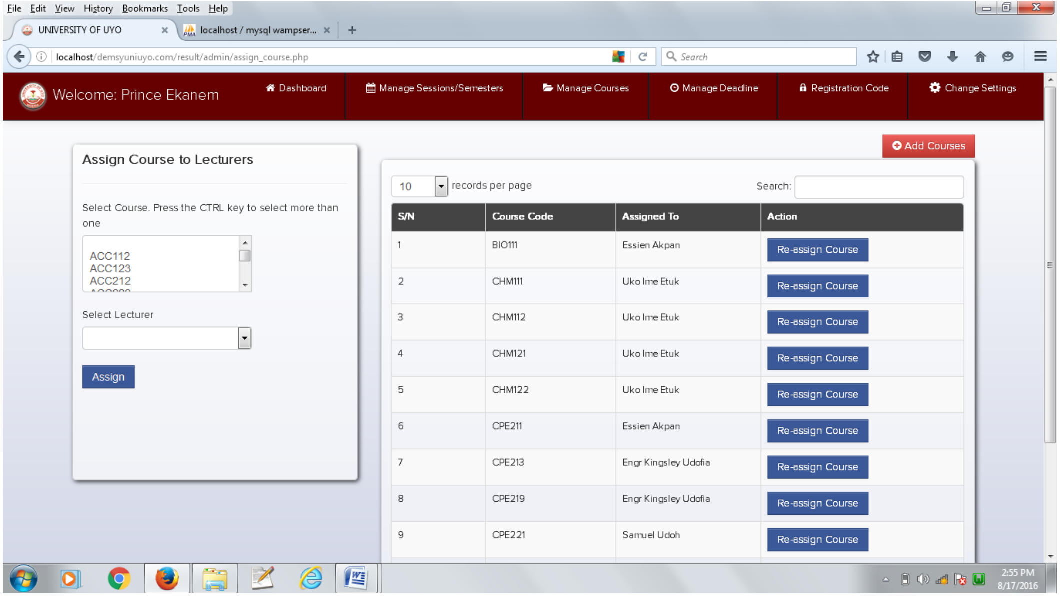
Submit

10 records per page Search:

S/N	Course Code	Course Level	Semester	Action
1	GRE212	200	First Semester	Edit Course
2	GRE211	200	First Semester	Edit Course
3	ELE212	200	First Semester	Edit Course
4	CPE312	300	First Semester	Edit Course
5	CPE511	500	First Semester	Edit Course
6	ELE521	500	Second Semester	Edit Course
7	CPE528	500	Second Semester	Edit Course
8	CPE527	500	Second Semester	Edit Course
9	CPE52'	500	Second Semester	Edit Course

Figure 3.11 Manage courses module

Assigning of courses to lecturers is presented in Figure 3.12. Courses assigned to a lecturer maybe re-assigned if the lecturer is not around.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/admin/assign_course.php
Search
Welcome: Prince Ekanem
Dashboard
Manage Sessions/Semesters
Manage Courses
Manage Deadline
Registration Code
Change Settings
Add Courses
Assign
2:55 PM
8/17/2016

Assign Course to Lecturers

Select Course. Press the CTRL key to select more than one

ACC112
ACC123
ACC212

Select Lecturer

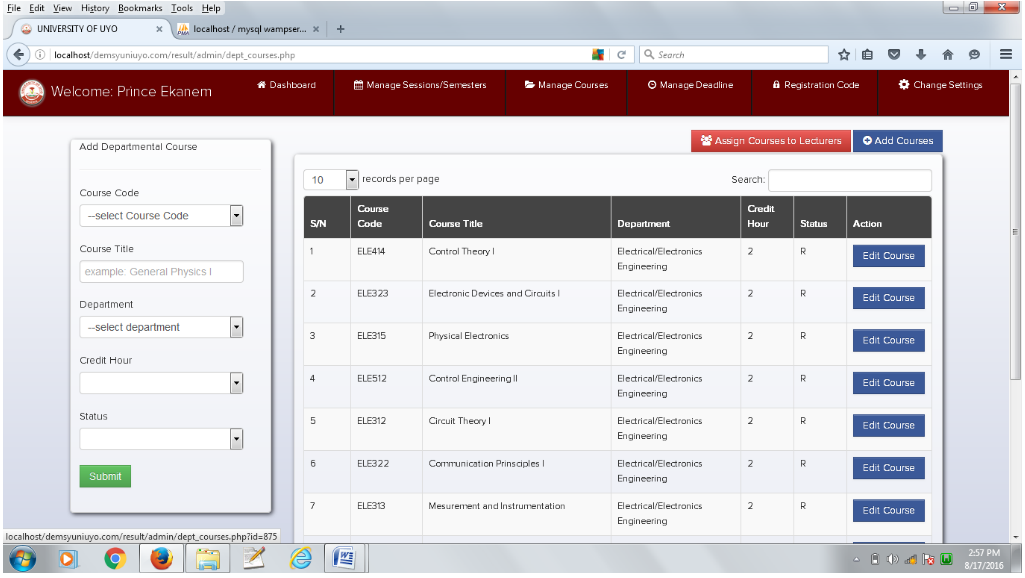
10 records per page

Search:

S/N	Course Code	Assigned To	Action
1	BIO111	Essien Akpan	Re-assign Course
2	CHM111	Uko Ime Etuk	Re-assign Course
3	CHM112	Uko Ime Etuk	Re-assign Course
4	CHM121	Uko Ime Etuk	Re-assign Course
5	CHM122	Uko Ime Etuk	Re-assign Course
6	CPE211	Essien Akpan	Re-assign Course
7	CPE213	Engr Kingsley Udofia	Re-assign Course
8	CPE219	Engr Kingsley Udofia	Re-assign Course
9	CPE221	Samuel Udoh	Re-assign Course

Figure 3.12 Assign courses to lecturer module

Figure 3.13 shows how to add departmental courses on RMS.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/admin/dept_courses.php
Search
Welcome: Prince Ekanem
Dashboard
Manage Sessions/Semesters
Manage Courses
Manage Deadline
Registration Code
Change Settings
Assign Courses to Lecturers
Add Courses
Submit
localhost/demsyuniuyo.com/result/admin/dept_courses.php?id=875
2:57 PM
8/17/2016

Add Departmental Course

Course Code: --select Course Code

Course Title: example: General Physics I

Department: --select department

Credit Hour

Status

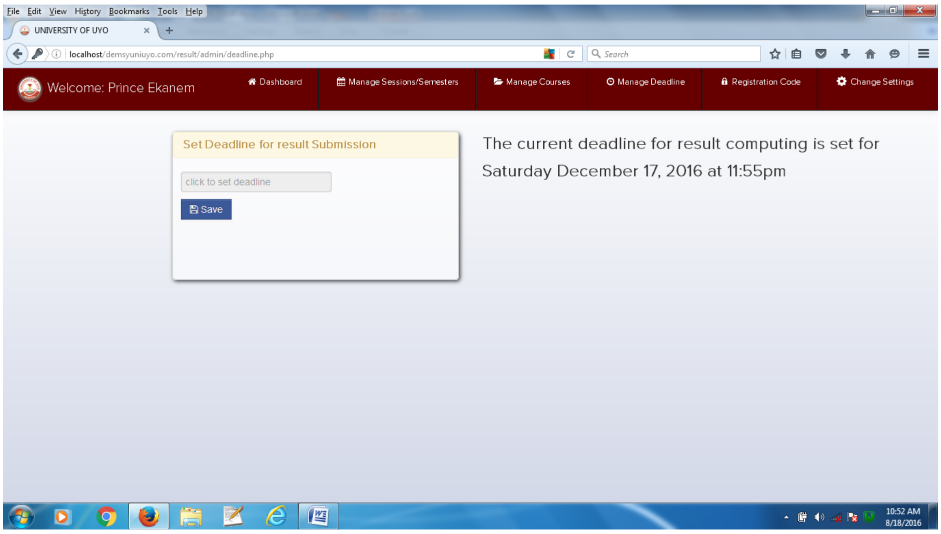
10 records per page

Search:

S/N	Course Code	Course Title	Department	Credit Hour	Status	Action
1	ELE414	Control Theory I	Electrical/Electronics Engineering	2	R	Edit Course
2	ELE323	Electronic Devices and Circuits I	Electrical/Electronics Engineering	2	R	Edit Course
3	ELE315	Physical Electronics	Electrical/Electronics Engineering	2	R	Edit Course
4	ELE512	Control Engineering II	Electrical/Electronics Engineering	2	R	Edit Course
5	ELE312	Circuit Theory I	Electrical/Electronics Engineering	2	R	Edit Course
6	ELE322	Communication Prinsciples I	Electrical/Electronics Engineering	2	R	Edit Course
7	ELE313	Mesurement and Instrumentation	Electrical/Electronics Engineering	2	R	Edit Course

Figure 3.13 Add departmental courses module

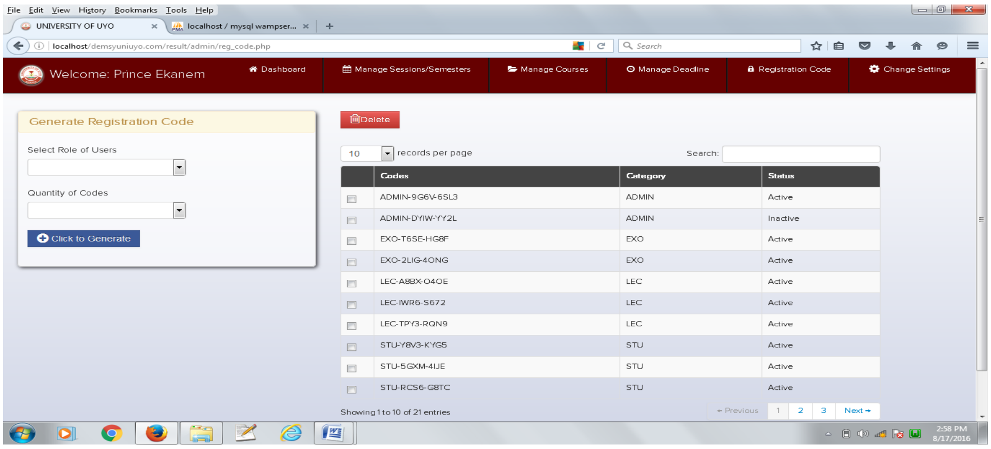
Figure 3.14 shows how the administrative can manage deadline for result computing.



The current deadline for result computing is set for Saturday December 17, 2016 at 11:55pm

Figure 3.14 Manage deadline module

Figure 3.15 shows how the administrator generates registration code for users of the system. The system users include Administrator, exams officer, lecturers and students. Users are to enter the registration code as the pre-condition for registering on the portal.

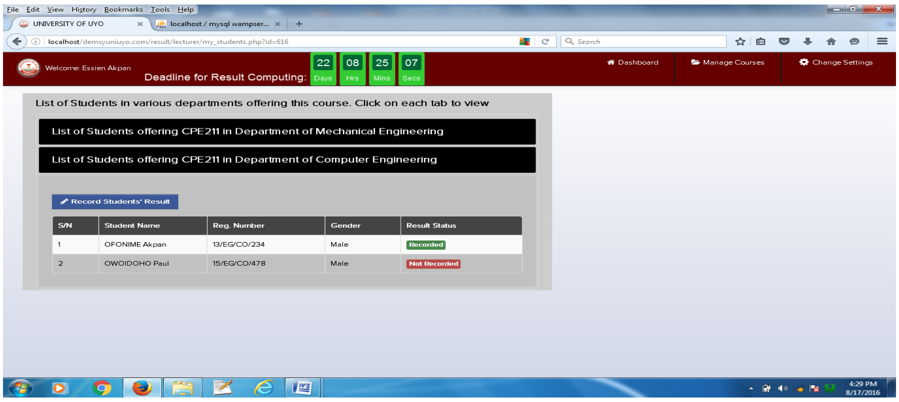


	Codes	Category	Status
□	ADMIN-9G6V-6SL3	ADMIN	Active
□	ADMIN-DYIW-YY2L	ADMIN	Inactive
□	EXO-T6SE-HG8F	EXO	Active
□	EXO-2LIG-4ONG	EXO	Active
□	LEC-A8BX-O4OE	LEC	Active
□	LEC-IWR6-S672	LEC	Active
□	LEC-TPY3-RQN9	LEC	Active
□	STU-Y8V3-KYG5	STU	Active
□	STU-5GXM-4IJE	STU	Active
□	STU-RCS6-G8TC	STU	Active

Showing 1 to 10 of 21 entries

Figure 3.15 Registration code module

Figure 3.16 shows Record students' result module. From the figure, the deadline for computing result is shown on the lecturer's dash board, list of departments offering his/her course. The lecturer will click on each department to view the list of students' who have registered for the course. The record result button is also shown where lecturers can click and record students' result.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/lecturer/my_students.php?id=616
Search
Welcome: Essien Akpan
Dashboard
Manage Courses
Change Settings
Record Students' Result
4:29 PM
8/17/2016

Deadline for Result Computing: 22 Days 08 Hrs 25 Mins 07 Secs

List of Students in various departments offering this course. Click on each tab to view

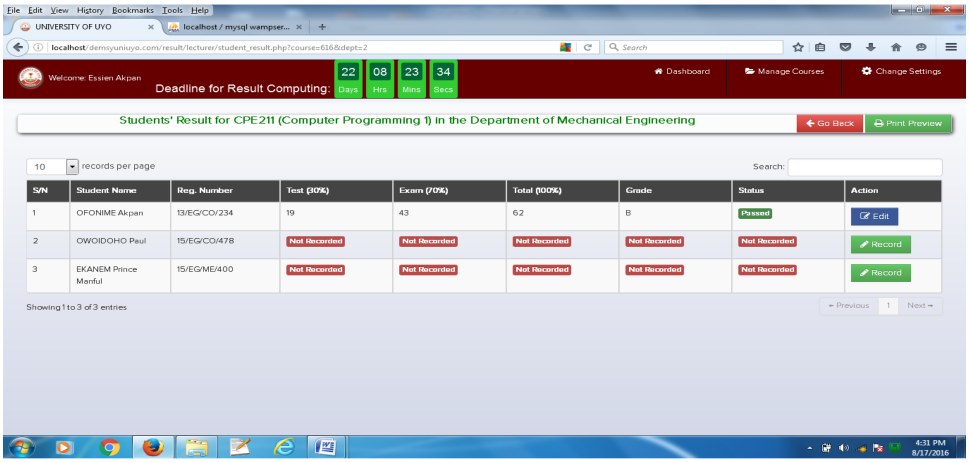
List of Students offering CPE211 in Department of Mechanical Engineering

List of Students offering CPE211 in Department of Computer Engineering

S/N	Student Name	Reg. Number	Gender	Result Status
1	OFONIME Akpan	13/EG/CO/234	Male	Recorded
2	OWOIDOHO Paul	15/EG/CO/478	Male	Not Recorded

Figure 3.16 Record student's result module 1

According to Figure 3.16, a lecturer has clicks on the “record students’ result” button shown in Figure 3.16 and he is taken to the page found in Figure 3.17 where he can record students’ result.



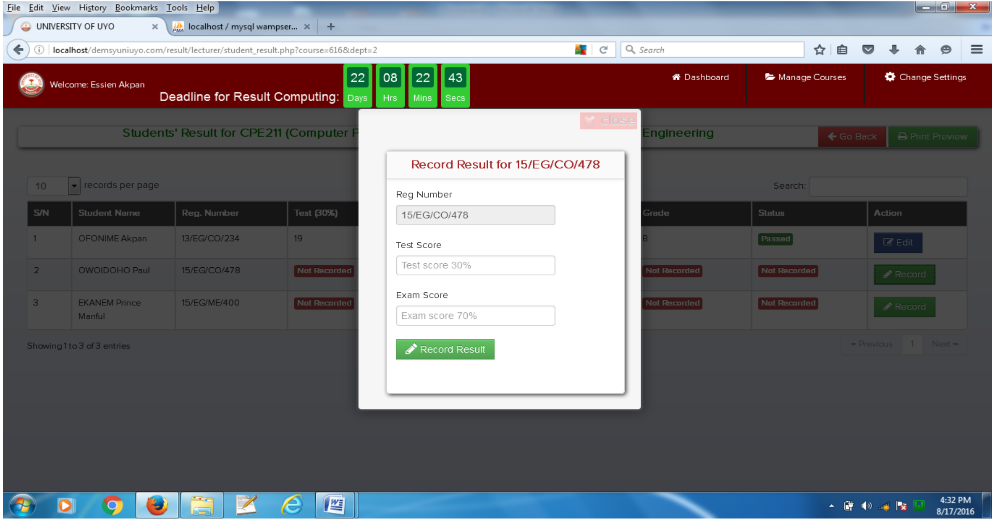
Students' Result for CPE211 (Computer Programming 1) in the Department of Mechanical Engineering

S/N	Student Name	Reg. Number	Test (30%)	Exam (70%)	Total (100%)	Grade	Status	Action
1	OFONIME Akpan	13/EG/CO/234	19	43	62	B	Passed	Edit
2	OWOIDOHO Paul	15/EG/CO/478	Not Recorded	Not Recorded	Not Recorded	Not Recorded	Not Recorded	Record
3	EKANEM Prince Manful	15/EG/ME/400	Not Recorded	Not Recorded	Not Recorded	Not Recorded	Not Recorded	Record

Showing 1 to 3 of 3 entries

Figure 3.17 Record student’s result module 2

Upon clicking on the “Record” button of Figure 3.17, a pop up window seen in Figure 3.18 will appear and the lecturer will be able to record the student test/exams score and the site will compute the total score and grade. However, if the student did not take the test, he will fail the course even when exams scores have been recorded because it is an incomplete result.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
localhost/demsyuniuyo.com/result/lecturer/student_result.php?course=616&dept=2
Search
Welcome: Essien Akpan
Deadline for Result Computing:
22 Days
08 Hrs
22 Mins
43 Secs
Dashboard
Manage Courses
Change Settings
close
Go Back
Print Preview
4:32 PM
8/17/2016

Record Result for 15/EG/CO/478

Reg Number
15/EG/CO/478

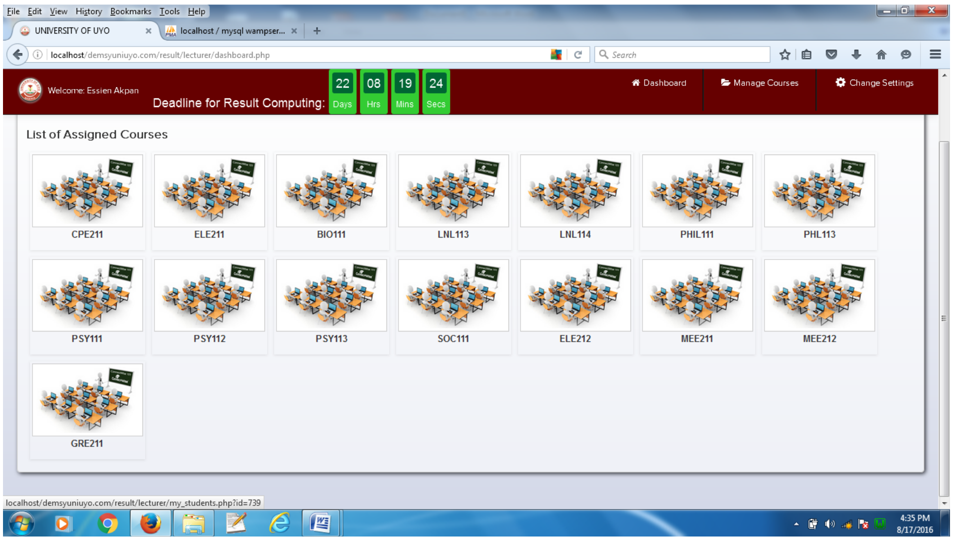
Test Score
Test score 30%

Exam Score
Exam score 70%

Record Result

Figure 3.18 Record student’s result module 3

Figure 3.19 shows the lecturers dashboard displaying all the courses assigned to the lecturer.



localhost/demsyuniuyo.com/result/lecturer/dashboard.php

Welcome: Essien Akpan

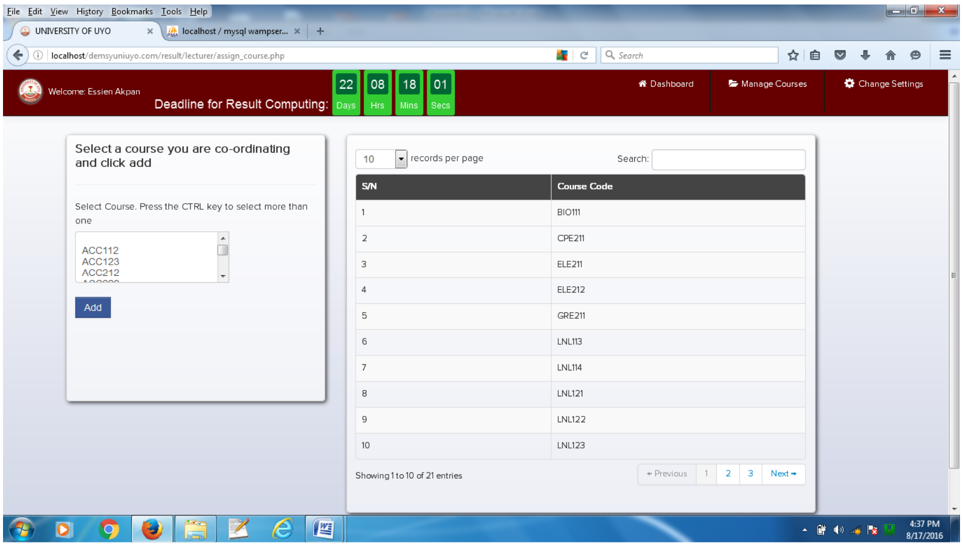
Deadline for Result Computing: 22 Days 08 Hrs 19 Mins 24 Secs

List of Assigned Courses

CPE211, ELE211, BIO111, LNL113, LNL114, PHIL111, PHL113, PSY111, PSY112, PSY113, SOC111, ELE212, MEE211, MEE212, GRE211

Figure 3.19 Lecturer’s dashboard

Figure 3.20 shows manage course module on the lecturer’s panel. Here, the lecturer can assign himself the courses he is coordinating.



localhost/demsyuniuyo.com/result/lecturer/assign_course.php

Welcome: Essien Akpan

Deadline for Result Computing: 22 Days 08 Hrs 18 Mins 01 Secs

Select a course you are co-ordinating and click add

Select Course. Press the CTRL key to select more than one

ACC112
ACC123
ACC212

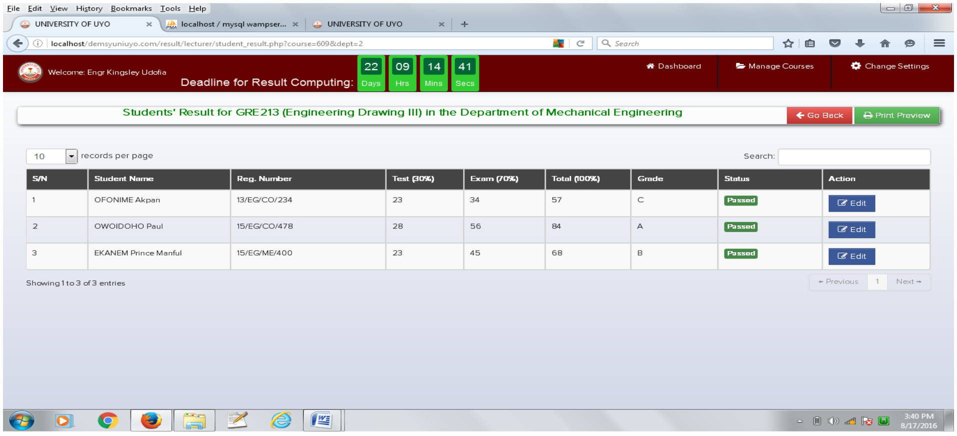
10 records per page Search:

S/N	Course Code
1	BIO111
2	CPE211
3	ELE211
4	ELE212
5	GRE211
6	LNL113
7	LNL114
8	LNL121
9	LNL122
10	LNL123

Showing 1 to 10 of 21 entries

Figure 3.20 Manage courses module on the lecturer’s panel

Figure 3.21 shows a page where the lecturer can view student result. If there is any error on the student result, the lecturer can edit and correct the error.



localhost/demsyuniuyo.com/result/lecturer/student_result.php?course=609&dept=2

Welcome: Engr Kingsley Udofia

Deadline for Result Computing: 22 Days 09 Hrs 14 Mins 41 Secs

Students' Result for GRE213 (Engineering Drawing III) in the Department of Mechanical Engineering

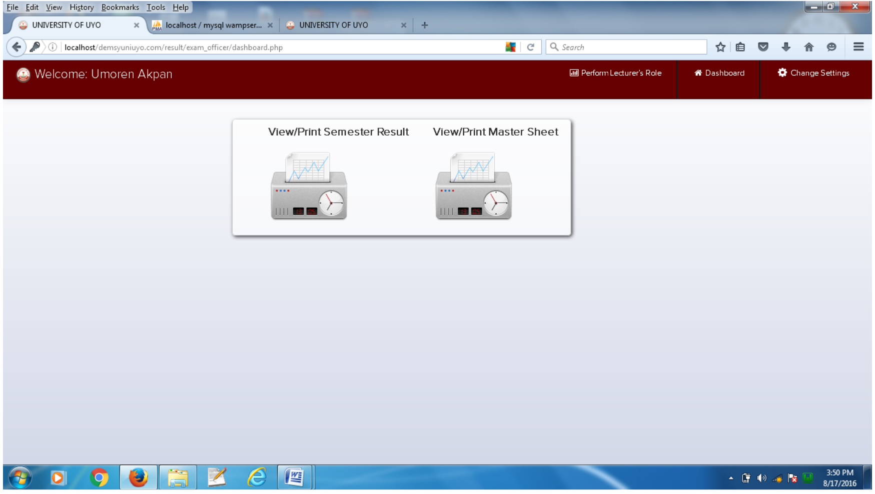
10 records per page Search:

S/N	Student Name	Reg. Number	Test (30%)	Exam (70%)	Total (100%)	Grade	Status	Action
1	OFONIME Akpan	13/EG/CO/234	23	34	57	C	Passed	Edit
2	OWOIDOHO Paul	15/EG/CO/478	28	56	84	A	Passed	Edit
3	EKANEM Prince Manful	15/EG/ME/400	23	45	68	B	Passed	Edit

Showing 1 to 3 of 3 entries

Figure 3.21 Lecturers view result page

Figure 3.22 shows Exams officer’s dash board where he can view and print students’ semester and session result. Also the exams officer can also perform lecturer’s role by clicking on “perform lecturer’s role on the exams officer’s panel.



localhost/demsyuniuyo.com/result/exam_officer/dashboard.php

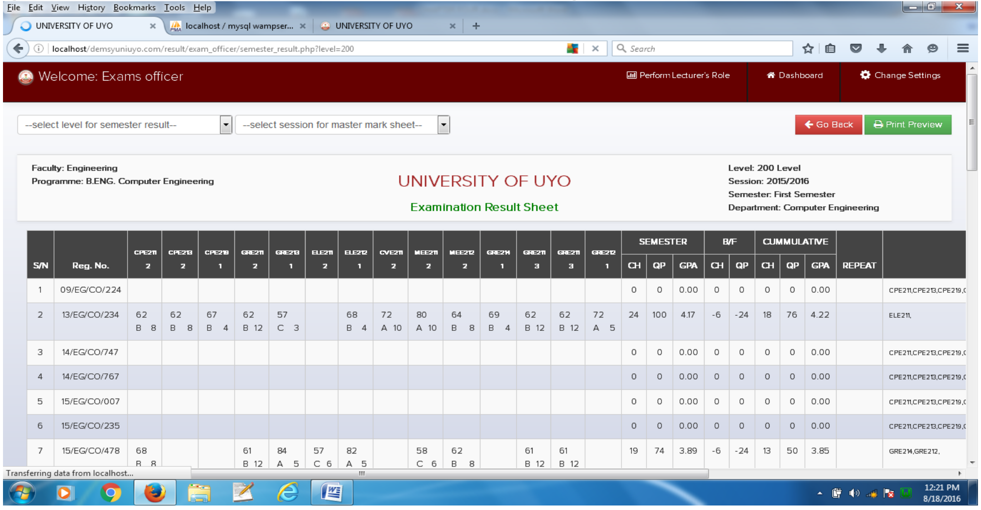
Welcome: Umoren Akpan

View/Print Semester Result

View/Print Master Sheet

Figure 3.22 Exams officer dashboard

Figure 3.23 is exams officer’s module showing result master sheet.


File Edit View History Bookmarks Tools Help
UNIVERSITY OF UYO
localhost / mysql wampser...
UNIVERSITY OF UYO
Search
Perform Lecturer's Role
Dashboard
Change Settings
--select level for semester result--
--select session for master mark sheet--
Go Back
Print Preview
Transferring data from localhost...
12:21 PM
8/18/2016

localhost/demsyuniuyo.com/result/exam_officer/semester_result.php?level=200

Welcome: Exams officer

Faculty: Engineering
Programme: B.ENG. Computer Engineering

UNIVERSITY OF UYO

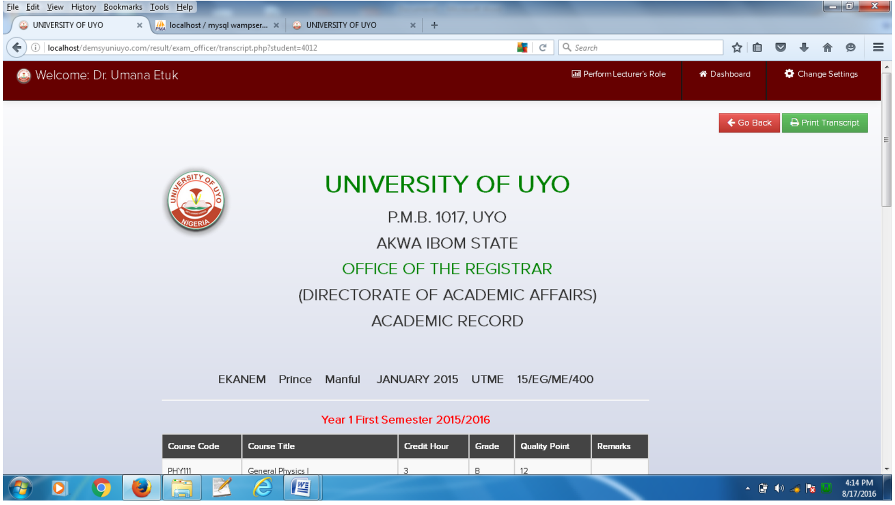
Examination Result Sheet

Level: 200 Level
Session: 2015/2016
Semester: First Semester
Department: Computer Engineering

S/N	Reg. No.	CPE211	CPE213	CPE219	GRE211	GRE213	ELE211	ELE212	CVE211	MEE211	MEE212	GRE214	GRE211	GRE211	GRE212	SEMESTER			B/F		CUMMULATIVE			REPEAT	
		2	2	1	2	1	2	1	2	2	2	1	3	3	1	CH	QP	GPA	CH	QP	CH	QP	GPA		
1	09/EG/CO/224															0	0	0.00	0	0	0	0	0.00		CPE211,CPE213,CPE219,C
2	13/EG/CO/234	62 B 8	62 B 8	67 B 4	62 B 12	57 C 3		68 B 4	72 A 10	80 A 10	64 B 8	69 B 4	62 B 12	62 B 12	72 A 5	24	100	4.17	-6	-24	18	76	4.22		ELE211,
3	14/EG/CO/747															0	0	0.00	0	0	0	0	0.00		CPE211,CPE213,CPE219,C
4	14/EG/CO/767															0	0	0.00	0	0	0	0	0.00		CPE211,CPE213,CPE219,C
5	15/EG/CO/007															0	0	0.00	0	0	0	0	0.00		CPE211,CPE213,CPE219,C
6	15/EG/CO/235															0	0	0.00	0	0	0	0	0.00		CPE211,CPE213,CPE219,C
7	15/EG/CO/478	68 B 8			61 B 12	84 A 5	57 C 6	82 A 5		58 C 6	62 B 8		61 B 12	61 B 12		19	74	3.89	-6	-24	13	50	3.85		GRE214,GRE212,

Figure 3.23 Session result module

Figure 3.24 shows exams officer generating student transcript.



localhost/demsyuniuyo.com/result/exam_officer/transcript.php?student=4012

Welcome: Dr. Umana Etuk

UNIVERSITY OF UYO

P.M.B. 1017, UYO

AKWA IBOM STATE

OFFICE OF THE REGISTRAR

(DIRECTORATE OF ACADEMIC AFFAIRS)

ACADEMIC RECORD

EKANEM Prince Manful JANUARY 2015 UTME 15/EG/ME/400

Year 1 First Semester 2015/2016

Course Code	Course Title	Credit Hour	Grade	Quality Point	Remarks
PHY111	General Physics I	3	B	12	

Figure 3.24 Transcript module

4 Conclusion

In this paper, development of students' result management system (RMS) is presented. The software is meant to address the challenges facing students' records management in the University of Uyo. The RMS is developed using PHP, MYSQL, HTML, CSS, JAVASCRIPT and was hosted locally with Apache web server. Also, a Participatory Incremental Process Model (PIP Model) is used as the software development methodology. Functional decomposition of the system and its key modules are provided to explain the major functionalities proffered by the system. Also, use case diagram is presented to show the different categories of the system users and the various functionalities associated the different system user.

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