

Online Enrollment System of Liceo de Cagayan University

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ABSTRACT

The Online Enrollment System was proposed for the enhancement of the current enrollment system of Liceo de Cagayan University. The study aimed at creating a system that would provide another option for enrolling and that would compensate for the school's lack of manpower and time-consuming system. The database of the system is the dbEnrollment. It contains many tables and stores information such as student's academic records, secretary's files and records, class schedules, pre-requisites, subjects, curricula and other essential data needed in the system. The proposed system caters to old, freshmen, transferees and shiftees with the following services: subject evaluation, posting of grades, viewing of curriculum, add and update profile. The system lessens the enrollment time, speeds up file management, and minimizes inaccuracies and errors.

KEYWORDS

Enrollment, Evaluation, Interface, Online, Academic load

INTRODUCTION

Advancements in modern technology are at their highest peak. Along these advancements, the Internet has emerged as a powerful tool in dealing with information management. Nowadays, Web-based applications are widely used due to their ubiquity. "The Internet is neither an extraordinary communications tool nor revolutionary. It simply represents the current stage in the development of human capabilities through written language, which itself derived from the spoken form" (Holmes, 2006). Given its current and potential growth, the Internet has become an avenue for e-commerce, offering transaction convenience and service efficiency.

According to Forman (2007) in his article "New Research Perspectives on Mobility, Organizations, Systems and Technologies," continuing innovation in technologies can lead to organizational changes that range from improvement of day-to-day operation and for easy access it provides for the end users. Many schools today have adapted this innovation in the offering of their services. Among the Web-based services are Online Class Scheduling and Online Course System offered by the Western Mindanao State University (<http://www.wmsu.edu.ph/>) and Online Enrollment System of Cavite Maritime Institute and of Far Eastern University (http://online.feu.edu.ph/FEU_OESF/).

Inspired by these online services, the researchers came up with an online enrollment system for the Liceo de Cagayan University. The study considered the prevailing process of the school and how this process can be modified for a more efficient and effective enrollment system.

One of the factors considered in designing the proposed system is the lack of manpower to accommodate all enrollees. Also considered are the tedious task of filling out the application form and the inaccuracies of information provided by the students. These factors cause enrollment delay, which is disadvantageous to the enrolment personnel and the enrollees.

Since the study involves proper records handling, tracing the constraints and evaluation of the manual system is essential. Thus, the researchers gathered data necessary in the enrollment system, which is designed to benefit the employees because they can access and manage information directly and conveniently.

FRAMEWORK

This study describes the design and development of the system as an initial step toward building a comprehensive and integrated system. The researchers used the Pattern Recognition Approach and the Negotiation Approach. Pattern recognition is becoming increasingly important in the age of automation and information handling and retrieval. The Pattern Recognition Approach is the act of taking in raw data and taking an action based on the category of the pattern. The design of a pattern recognition system essentially involves the following three aspects: data acquisition and pre-processing, data representation, and decision making (Jain, 2006). The researchers applied the structural pattern recognition, which is intuitively appealing, because this approach provides a description of how the given pattern is constructed from the primitives. This paradigm has been used in situations where the patterns have a definite structure, which can be captured in terms of a set of rules. Negotiation approach focuses on the interests of the parties and emphasizes conflict management and conflict resolution. Analysis of qualitative differences between integrative and distributive negotiation types provided a basis for further descriptive studies of negotiation processes. It eventually led to the formulation of a number of prescriptions regarding strategies and tactics in distributive and integrative negotiations, their informational requirements, and even possible solutions.

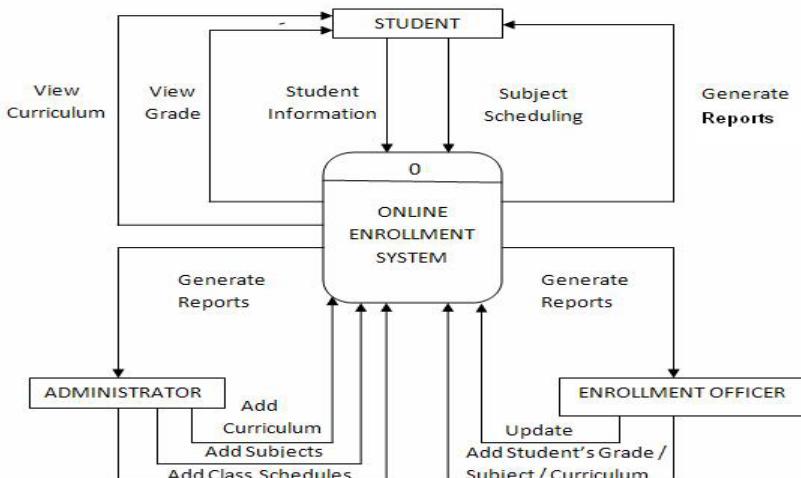


Figure 1. Context Diagram of Online Enrollment System

Figure 1 illustrates the context diagram of the developed Online Enrollment System. It shows the relation of the students, secretary, and administrator in the flow of the system. The system automatically generates arranged schedules for the subjects to be enrolled by the student. If the student approves the recommended schedule, then patterned recognition approach is applied in the system. On the other hand, if the student declines the recommended schedule, then he can choose another schedule for every subject. In this way, negotiation approach is applied between the system and the student.

OBJECTIVES OF THE STUDY

General Objectives

The study aimed at creating a system that would provide another option for enrolling and that would compensate for the school's lack of manpower and time-consuming system.

Specific Objectives

The study sought to develop an Online Enrollment System that would enable the students, faculty, and administrators of the institution to gain access to the proposed system via client computer and to synthesize the different functions and solutions needed for the current enrollment system with the proposed system by constantly evaluating and revising the prototype to meet the requirements of the institution.

Scope and Limitation of the Study

The online enrollment system is a portal type that covers the major processes in the enrollment system, namely registration of the new students, enrollment of old and new students, files maintenance such as list of enrolled students in a specific department, and generation of reports. The proposed system caters to old, freshmen, transferees, and shiftees with the following services: subject evaluation, posting of grades, viewing of curriculum, adding and updating profile.

The designed system covers selected colleges for enrollment procedure and is accessible only by users with their own account at different access level. Students with no back accounts can only enroll, and this system cannot

generate assessment of fees since this is an independent system that is not connected to the accounting department and other departments. Students can view the evaluated subjects that can be enrolled and choose their respective schedules. Administrators have total access to the system, which include viewing of student grades, adding curriculum, department, enrollment officers, subjects and schedules, and setting enrollment deadline. Enrollment Officers of respective departments can modify and add student grades, activate new student account and set their curriculum, deactivate student accounts with back accounts in the cashier department, add faculty for scheduling purposes, and shift student account into a new curriculum or course. The developed system can only accommodate one main prerequisite per subject. The designed system is intended for the no-down-payment enrollment promo of the university; therefore, online payments are not acceptable. The system does not cover the computation of student's grades, class scheduling, and assessment of fees.

Output

The output of the study is the Online Enrollment System of Liceo de Cagayan University. The developed software will be installed in the Web server and will be uploaded on the Web. The developed software will store all the data that are inputted in the user interface digitally into the database and will generate reports for the end users such as the unofficial enrollment form for the enrollees and a ready-to- print reports for the administrator. The developed software includes a complete Program Structure, Database Specifications and Design, and System User Manual. A complete documentation of all program source codes is also compiled along with the complete documentation of the study.

MATERIALS AND METHODS

Developing an online system requires a series of tests and revision to ensure that the system effectively works. To illustrate the development of the system, a simplified version of the spiral life-cycle model was used.

The spiral model combines the iterative nature of rapid prototyping in which the researchers established an understanding of the system and its objectives as well as its functionality, ability to accommodate change, constraints, and other alternatives in achieving those objectives. In the specification phase,

the researchers defined the system requirements, conducted cost analysis, and defined some theories and concepts such as the Patterned Recognition Approach and Negotiation Approach. Following the specification phase was the design phase in which the researchers made a blueprint of the system to make the implementation phase much easier. The implementation phase is the actual development of the system. After implementing the system, the post delivery maintenance phase followed. The researchers distributed a copy of the system to the enrollment officers for them to test the functionality of the system. For any changed requirements, the specification phase up to the post delivery maintenance phase was repeated. When all requirements were fully satisfied, the researchers proceeded to the retirement phase.

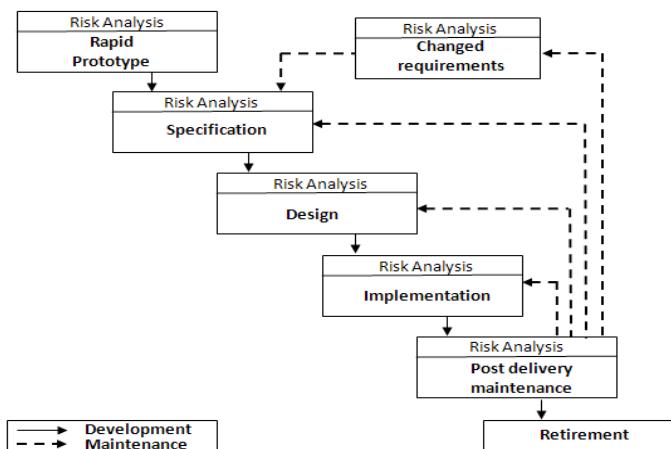


Figure 2. A Simplified Version of the Spiral Life – Cycle Model

In the study, the researchers used the Data Flow Diagram, which is a diagrammatic representation of the information flows within a system showing how information enters the system and leaves the system, what changes the information and where information is stored. Data Flow Diagrams show the passage of data through the system by using 5 basic constructs: Data Flows, Processes, Data Stores, External Entities, and Physical Resources, [Kendall, 2005]. The diagram would easily show the processes that would be done by the system and the other elements or entities that are involved.

7.1 The Current System

Context Diagram

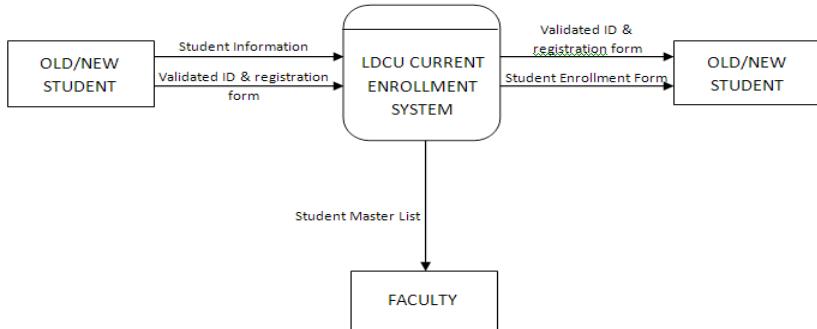


Figure 3. Context Diagram of the Current System

Old and new students need to fill up application forms like pre-enrollment form, EPIF and will input validated ID and registration forms to the department enrollment officers. The current enrollment system needs those information to process the enrollment of the students. Then, the system will generate validated ID number and registration forms and will also generate the official enrollment form to the enrollees. On the administrator side, the current system will generate student master list of a specific schedule to the faculty assigned.

The Proposed System

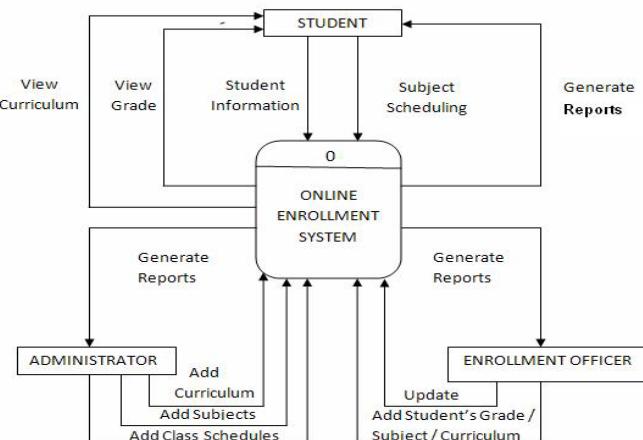


Figure 4. Context Diagram of the Proposed System

New students need to sign up by filling out the personal information page with their unique ID number to be activated by the secretary. The system recognizes the valid user ID. The secretary can add grades of the students. Thus, the students can view their grades online.

The proposed system evaluates the subjects previously taken by the students and generates a list of subjects that the students can enroll. After the students have selected the subjects to be enrolled, the proposed system shows the different schedules of each subject. Finally, the system generates the enrollment form that contains the financial statement and schedules of subject. The administrator can add curriculum, subjects, and schedules. He can also view the students' profile and the list of students enrolled in every subject and in every department.

Project Design Description, Requirement, and Specifications

Database Functional Description

Basic functions apply to all database tables.

Add

Process Narrative

The add function allows the administrator to enter a new record into the system. The administrator can add subjects, curriculum, department, enrollment officer per department, and subject schedules. The enrollment officer can add new entry of a student into the system, add student grades, and add faculty in the department. The inputted information is saved directly in the database. In special cases, key fields are automatically generated by the system (e.g. offer no.). MYSQL commands will handle the insertion of the details in their corresponding tables in the database.

Restriction/Limitation

The system rejects inputted records that do not match the correct formats. There are different formats for every entry. Formats can be alphabets, numeric, or alphanumeric.

Performance Requirements

The ADD function saves record in the database. When the administrator enters data already stored in the database, the system will indicate that the

data inputted exist or duplication of data occurs. The administrator can then modify the existing data.

Design Constraints

All inputs can be in lower or upper cases.

The system will not re-use any offer_no, even if the record has been deleted. The system generates the dept_id and will randomly assign it to the newly added department.

Edit/Update

Process Narrative

The function allows the administrator to modify records such as the allocated number per offer_no. The administrator searches the record to be edited on a table, clicks on the linked text, then enters the desired correction or updates.

Restriction/Limitation

The restriction of the ADD function applies also to the UPDATE function. In addition to that, while updating a subject schedule, the offer_no field must be protected since it is a non-editable field and a primary key.

Performance Requirements

The function provides an option that would cancel all the details being modified before saving them. To update the allocation being set on a particular subject schedule, the administrator must locate the file on the list of schedules and then simply click on the subject code to modify the allocation data. Pressing the subject code hyperlink will automatically display the form and the information, which will be enabled and become editable especially on the allocation textbox. After finishing the modifications, the administrator clicks the UPDATE button to save the modifications.

Search

Process Narrative

The SEARCH function allows the administrator to search in the database information of a student, faculty, enrollment officer, and curriculum. The administrator can search for details of the subject schedule.

Restrictions/Limitations

The administrator can use this function. The string is the student's name while the ID number is set into integer form.

Performance Requirements

The SEARCH function locates the correctly entered file name when matched.

Design Constraints

Any other type of research requested after the implementation will demand a modification of the implemented system.

Delete

Process Narrative

This function allows the administrator to delete a record from the database permanently. When the DELETE button is clicked, the system asks for a confirmation. When the administrator confirms the deletion, the data will be deleted from the database.

Performance Requirements

Only the administrator can use this function. The administrator can delete list of records or information from the database.

Design Constraints

Deleting a record does not affect the student's idno field of the remaining records since student account cannot be deleted from the system. Deletion of subject schedules is also not included in the system for archiving purposes.

Print

Process Narrative

The system is capable of generating unofficial enrollment form containing all the subject schedules enrolled. The system can also generate a student curriculum, list of students enrolled, and list of schedules.

Restriction/ Limitation

The administrator can only print the schedules and list of students enrolled in a specific offer number from a form that is predefined by the system

developers. Somehow, the student or the enrollee is capable of printing his own unofficial enrollment form and his curriculum.

Performance Requirements

This function should be able to print particular data such as generated unofficial enrollment form, list of schedules, and list of students enrolled in a specific schedule.

Design Features and User Interfaces



Figure 5. System Login Page



Figure 6. Administrator's Main Page

This screenshot shows the 'Add Department and Enrollment Officer' page. It features a header with navigation links: [View Curriculum], [Student Info], [Department], [Home], and [Logout]. Below the header are two tables. The first table, titled 'List of Department', contains columns for 'Department' and 'Enrollment Officer'. The second table, titled 'List of Enrollment Officer', contains columns for 'User' and 'Department'. Both tables have 'Add' buttons at the bottom right.

List of Department	
Department	Enrollment Officer
CIT	Enrollment Officer
Criminology	Enrollment Officer
BSN	Enrollment Officer
College of Pharmacy	Enrollment Officer
College of RadTech	Enrollment Officer
CAS	Enrollment Officer

User	Department
xawe	Criminology
tina	CIT
222	222
jenny	College of Peke
x	peke
jenz	College of Pharmacy
UUUU	UUUU
novalyn	BSN
ee	ee
jehar	CAS

Figure 7. Administrator's Add Department and Enrollment Officer

SubjectCode	Description	Units	Subject Type
IT 410	Network Administration	3	Major
IT 409a	Free Elective	3	Major
IT 408a	Field Trips and Seminars on IT	3	Major
IT 406	Software Project	6	Major
IT 405a	System Resource Management	3	Major
SO 4	Board Exam/Job Placement	2	Minor
Human 1	Humanities Arts & Society	3	Minor
IT 405	Computer System and Data Security	3	Major
IT 404a	Free Elective	3	Major
IT 403	Data Communication & Comp Networks	3	Major
IT 402	On the job training	3	Major
Soc Sci 4	Intro to Econ(w/ Taxation)	3	Minor
Soc Sci 11	Phil History & Government (w/Const)	3	Minor
IT 401a	Free Elective	3	Major
IT 307	Relational Database Management Systems	3	Major
IT 306	Computer Systems Organization	3	Major

Figure 8. Administrator's Add and View Curriculum

Offer No.	Instructor	Subject Code	Section	Start Time	End Time	Room	Day	Enrolled	Slot	# Allocation
10058	brobo brobo	Defense 1B	32	1:00:PM	2:00:PM	303	m	1	24	25
10057	brobo brobo	Socio 2	31	1:00:PM	2:00:PM	404	m	2	8	10
10056	cindy agno	Soc Sci 13	30	9:00:AM	10:00:AM	202	t/w		10	10
10055	cindy agno	IT 306	29	1:00:PM	2:00:PM	505	t/w		10	10
10054	cindy agno	IT 402	28	9:00:AM	10:00:AM	303	m/t		15	15
10053	sheila dimesuhid	Eng 4C	27	1:00:AM	2:00:AM	202	t/f		12	12
10052	sheila dimesuhid	IT 305a	25	3:00:PM	4:00:PM	404	t/w	1	24	25
10051	sheila dimesuhid	IT 404a	24	4:00:PM	5:00:PM	303	t/th		25	25

Figure 9. View Schedule Page



Figure 10. Add Schedule Page

The screenshot shows the Liceo de Cagayan University Online Enrollment website. At the top, there is a red header bar with the university's logo, name, and motto: "COMMITTED TO TOTAL HUMAN FORMATION". Below the header, there are three images: a large building with arched windows, a pink multi-story building, and an interior hallway with a mural. A navigation menu on the left side includes buttons for CURRICULUM, DEPARTMENT, STUDENT, and SCHEDULE. On the right, there are four buttons: [Add Schedule], [View Schedule], [Set Deadline], and [Search Instructor]. Below these buttons is a search form with dropdown menus for "Department" (set to "Instructor") and "SY" (set to "SY"), and a "Go" button. A table titled "sheila dimasubid" displays course information:

Offer No.	Subject Handled	Subject Description	No. Of Student Enrolled
10051	IT 404a	Free Elective	0
10052	IT 305a	Entrepreneurship	0
10053	Eng 4C	Technical Writing & Police Report	0

Figure 11. Search Faculty Load

The screenshot shows the Liceo de Cagayan University website. At the top, the university's name and logo are displayed. Below the logo, there is a banner with three images: a yellow building, a pink building, and an interior hallway with a mural. On the left side, there is a vertical navigation bar with buttons for CURRICULUM, DEPARTMENT, STUDENT, and SCHEDULE. The main content area is titled "Student Archive Curriculum". It features a search bar with options for "Search by ID" or "Last Name" and a "Search" button. Below the search bar is a table titled "Search By ID" with columns for Curriculum Code, Name, and Department. The table contains five rows of data. A vertical scrollbar is visible on the right side of the page.

Curriculum Code	Name	Department
SY 2007-2008	rtyr E. palr	Criminology
SY 2010-2011	rtyr E. palr	CIT
SY 2006-2007	rtyr E. palr	CIT
SY 2010-2011	rtyr E. palr	Criminology

Figure 12. Student Archive Curriculum

The screenshot shows the Liceo de Cagayan University website. At the top, the university's name and logo are displayed. Below the logo, there is a banner with three images: a yellow building, a pink building, and an interior hallway with a mural. On the left side, there is a vertical navigation bar with buttons for CURRICULUM, DEPARTMENT, STUDENT, and SCHEDULE. The main content area is titled "Student Archive Curriculum". It features a search bar with options for "Search by ID" or "Last Name" and a "Search" button. Below the search bar is a table with columns for ID, Name, Status, and Action. The table contains ten rows of data. A vertical scrollbar is visible on the right side of the page.

ID	Name	Status	Action
432	Rahabee Jane Leonar Tiu	Not Enroll	Deactivate
789	rtyr E. palr	Enrolled	Deactivate
234	hghj ghgjhg hgjhj	Enrolled	Deactivate
676		Enrolled	Deactivate
2008004251	Krishna T Binayao	Not Enroll	Deactivate
999	hghj hgjhg hgjhg	Enrolled	Deactivate
333	agg osq osq	Enrolled	Deactivate
1111	pipz x ttt	Enrolled	Deactivate
11111	xbiu pp tt	Enrolled	Deactivate
22222		Not Enroll	Deactivate

Figure 13. Student Button

The screenshot shows a web browser window with a search bar at the top. Below it is a table of student records and a detailed student profile window.

Table of Student Records:

ID	Name	Action	Status
432	Rahanee Jane Leonar Tiu	Edit Grades	Not Enroll
789	rtr E. palr	Edit Grades	Enrolled
224			Enrolled
676			Enrolled
2006004291			Not Enroll
555			Enrolled
233			Enrolled
1111			Enrolled
11111			Enrolled
55555			Not Enroll

Student Profile Information Window:

Student Profile Information

ID Number:	432
Name:	Rahanee Jane Leonar Tiu
Address:	CDO
Contact Number:	1234
Email:	xtr@yahoo.com
Gender:	Female
Religion:	CATHOLIC
Status:	SINGLE
Birth Place:	CDOC
Nationality:	FILIPINO

Figure 14. View Student Profile

The screenshot shows the homepage of the Liceo de Cagayan University enrollment system. It features a red header with the university's name and logo, followed by a banner image of the university's buildings and a welcome message for enrollment officers.

Online Enrollment
LICEO DE CAGAYAN UNIVERSITY
COMMITTED TO TOTAL HUMAN FORMATION

WELCOME ENROLLMENT OFFICER!!

MENU:
CURRICULUM
STUDENT
GRADE
FACULTY

Figure 15. Enrollment Officer Page



CURRICULUM

GRADE

STUDENT

FACULTY

[Grade Entry] [Update Grade] [Grade Summary]

Student ID: (** Try Auto Drop Down)

Search: ID Last Name Search (** Try Simple Search)

ID	Name	Action	Action
432	Rahanee Jane Leonar Tiu	Edit Grades	View Grade Summary
789	try E. palr	Edit Grades	View Grade Summary
234	hghj ghjghj ghjghj	Edit Grades	View Grade Summary
676		Edit Grades	View Grade Summary
2006004251	Kriha T Binayao	Edit Grades	View Grade Summary
999	hghjg hghjg hghjg	Edit Grades	View Grade Summary
333	zgg ggg ggg	Edit Grades	View Grade Summary
1111	pizx tttt	Edit Grades	View Grade Summary
11111	xtiu pp tt	Edit Grades	View Grade Summary
55555		Edit Grades	View Grade Summary

Figure 16. Student View Grades



CURRICULUM

GRADE

STUDENT

FACULTY

[Registered Student] [Shift Student] [Transfer Curriculum] [Add Student]

Student No:	<input type="text"/>
Password:	<input type="text"/>
SY Code:	<input type="text"/> Curriculum <input type="button" value="Save"/>

ID	Student Name
432	Rahanee Jane Leonar Tiu
789	try E. palr
234	hghj ghjghj ghjghj
676	
2006004251	Kriha T Binayao
999	hghjg hghjg hghjg
333	zgg ggg ggg
1111	pizx tttt
11111	xtiu pp tt
55555	

Figure 17. Add Student

Online Enrollment
LICEO DE CAGAYAN UNIVERSITY
COMMITTED TO TOTAL HUMAN FORMATION



CURRICULUM
GRADE
STUDENT
FACULTY

[Registered Student] [Shift Student] [Transfer Curriculum] [Add Student]

Search: ID Last Name

ID	Name	Status	Action
422	Rahanee Jane Leonar Tiu	Not Enroll	Deactivate
729	ityr E. palr	Enrolled	Deactivate
234	hghj ghgjhi ghjgh	Enrolled	Deactivate
676		Enrolled	Deactivate
2006004251	Krishna T Binayao	Not Enroll	Deactivate
999	hghjhg hghjhg	Enrolled	Deactivate
323	#gg ggg ggg	Enrolled	Deactivate
1111	pipa x tttt	Enrolled	Deactivate
11111	xblu pp tt	Enrolled	Deactivate
55555		Not Enroll	Deactivate

Figure 18. Student Button Page

Online Enrollment
LICEO DE CAGAYAN UNIVERSITY
COMMITTED TO TOTAL HUMAN FORMATION



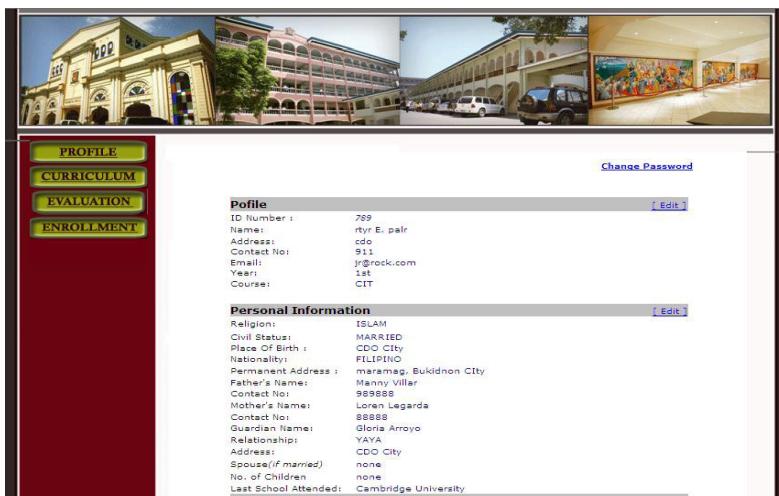
PROFILE
CURRICULUM
EVALUATION
ENROLLMENT



WELCOME STUDENT!!

[HOME](#) | [ABOUT US](#) | [CONTACT US](#) | [LOGOUT](#)

Figure 19. Student Page



PROFILE

CURRICULUM

EVALUATION

ENROLLMENT

[Change Password](#)

Profile

ID Number :	789
Name:	Jrty E. pair
Address:	CCD City
Contact No:	911
Email:	jr@rock.com
Year:	1st
Course:	CIT

Personal Information

Religion:	ISLAM
Civil Status:	MARRIED
Place Of Birth :	CCD City
Nationality:	FILIPINO
Permanent Address :	maramag, Bukidnon City
Father's Name:	Manly Villar
Contact No:	88888
Mother's Name:	Loren Legarda
Contact No:	88888
Guardian Name:	Gloria Arroyo
Relationship:	YAYA
Address:	CCD City
Spouse(if married)	none
No. of Children:	none
Last School Attended:	Cambridge University

Figure 20. Student View Profile



PROFILE

CURRICULUM

EVALUATION

ENROLLMENT

SY 2006-2007

Subject Code	Description	First Year	Pre-Requisite	Units	Grade
NSTP 12	National Service Training Program	NSTP 11	3		
PE 2	Rhythmic Activities	PE 1	2	1.0	
IT 103	Internet and Web Page Design	None	3		
IT 102	Fund of Prob.Solving & Prog 1 & 2	IT 103	6	2,3	
Math 2b	Plane Trigonometry	Math 1	3		
Fil 2	Pagbase at Pagsulat sa ibab ibang Disciplina	Fil 1	3	1.2	
Eng 2	Writing in the Discipline	Eng 1	3	1.0	
NSTP 11	National Service Training Program	None	3	1.0	
PE 1	Physical Fitness	None	2	1.2	
SO 1	LDCU Mission/Vision & Culture	None	2	2.0	
Soc Sci 7	Philosophy of Man	None	3	2.4	
IT 102a	Office Automation	None	3	2.3	
IT 101	Comp Concepts and IT Fundamentals	None	3	2.8	
Math 1	College Algebra	None	3	3.0	
Eng 1	Study and Thinking skills	None	3	2.3	
Second Year					
PE 4	Recreational Activities	PE 3	2		
IT 204	System Quality Assurance	None	3		
IT 203	Operating System	IT 102	3		

Figure 21. Student View Curriculum

PROFILE

CURRICULUM

ENROLLMENT

Subject Code	Description	Pre-Requisite	Units
NSTP 12	National Service Training Program	NSTP 11	3
Math 2b	Plane Trigonometry	Math 1	3
SO 2	Leadership	SO 1	2
IT 201	Data Structure & Algorithms	IT 102	3
Math 17	Mathematical Logic	Math 1	3
Eng 3	Speech Communications	Eng 2	3
PE 4	Recreational Activities	PE 3	2
IT 203	Operating System	IT 102	3
Math 13	Probabilities and Statistics	Math 1	3
Eng 10	Literature of the World(Survey of WL)	None	3
IT 204	System Quality Assurance	None	3
Socio 2	Society & Ctr w/ Fam Ping(Gen Socio)	None	3
Actng 1 IT	Accounting	None	3
IT 103	Internet and Web Page Design	None	3
Soc Sci 1	General Psychology	None	3
Soc Sci 13	Rizal	None	3
Val Ed 1	General and Professional Ethics	None	3
Soc Sci 11	Phil History & Government(w/Const)	None	3
Soc Sci 4	Intro to Econ(w/ Taxation)	None	3
Human 1	Humanities Arts & Society	None	3

Proceed To Enroll

Figure 22. Student Academic Records Evaluation

START **1** **2** **3** **END**

INSTRUCTIONS:

- The Following are the subject you are allowed to enroll.
- To choose the subject, click the checkbox
- Total units of subjects chosen should not exceed the maximum allowable units required.
- Then click next to proceed to the next step.

Allowable Units 23

Subject Code	Description	Pre-Requisite	Units
Math 2b	Plane Trigonometry	Math 1	3 <input type="checkbox"/>
SO 2	Leadership	SO 1	2 <input checked="" type="checkbox"/>
PE 4	Recreational Activities	PE 3	2 <input type="checkbox"/>
IT 203	Operating System	IT 102	3 <input type="checkbox"/>
Math 13	Probabilities and Statistics	Math 1	3 <input type="checkbox"/>
Eng 10	Literature of the World(Survey of WL)	None	3 <input type="checkbox"/>
IT 204	System Quality Assurance	None	3 <input checked="" type="checkbox"/>
Socio 2	Society & Ctr w/ Fam Ping(Gen Socio)	None	3 <input checked="" type="checkbox"/>
IT 103	Internet and Web Page Design	None	3 <input type="checkbox"/>
Soc Sci 13	Rizal	None	3 <input checked="" type="checkbox"/>
Val Ed 1	General and Professional Ethics	None	3 <input type="checkbox"/>
Soc Sci 4	Intro to Econ(w/ Taxation)	None	3 <input type="checkbox"/>
Human 1	Humanities Arts & Society	None	3 <input checked="" type="checkbox"/>

Next **Total Units 14**

Figure 23. Step-1 Enrollment Procedure

PROFILE

CURRICULUM

EVALUATION

INSTRUCTIONS:

- To view list of schedule, click on the subject code or the subject description.
- Click on the offer number to choose your respective schedules.
- Click next to proceed to the next step.

Subject Code	Units
IT 204	3
Socio 2	3
SO 2	2
Human 1	3

List of Subject Schedule

Offer No.	Subject Code	Description	Sec	Room	Day	Time	Units
10025	SO 2	9:00AM - 10:30AM	m/w				

Offer No.	Subject Code	Description	Sec	Room	Day	Time	Units
10057	IT 204	System Quality Assurance					3
	Socio 2	Society & Ctr w/ Fam Plng(Gen Socio)	Socio 2/31	404	Mon	1:00PM-2:00PM	3
	SO 2	Leadership					2
	Human 1	Humanities Arts & Society					3
4							Total Units 11

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Figure 24. Step-2 Enrollment Procedure

PROFILE

CURRICULUM

ENROLLMENT

INSTRUCTIONS:

- To view list of schedule, click on the subject code or the subject description.
- Click on the offer number to choose your respective schedules.
- Click next to proceed to the next step.

Subject Code	Units
Math 13	3
IT 204	3
IT 203	3
SO 2	2
Math 2b	3

Conflict with Offer [Choose Another Schedule Below](#)

Offer No.	Subject Code	Description	Sec	Room	Day	Time	Units
10025	SO 2	9:00AM - 10:30AM	m/w				

Offer No.	Subject Code	Description	Sec	Room	Day	Time	Units
10038	Math 13	Probabilities and Statistics	13/15	101	m/w	9:00AM-10:30AM	3
	IT 204	System Quality Assurance					3
	IT 203	Operating System					3
	SO 2	Leadership					2
	Math 2b	Plane Trigonometry					3
5							Total Units 14

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Figure 25. Step-3 Enrollment Procedure



Figure 26. Enrollment Procedure with Conflict

Online Enrollment
LICEO DE CAGAYAN UNIVERSITY
 COMMITTED TO TOTAL HUMAN FORMATION

Student ID:		789	Course & Year:		1st -CIT			
Name:		rtyr E. palr	Date Enrolled:		2010-2011-2nd Semester			
Offer#	Subject Code	Description	Units	Section	Days	Time	Room	Fee
10057	Socio 2	Society & Ctr w/ Fam Ping(Gen Socio)	3	Socio 2/31	m	1:00:PM-2:00:PM	404	1746.00
	1		3					

P 1746.00

Prelim: 1489	Midterm: 1489	Semi: 1489	Final: 1489
Miscellaneous: 4,210.00		Total Current Fees:	P 5956.00

Print This Form

Figure 27. Ready to print Unofficial Enrollment Form

Special Considerations

To ensure that the Online Enrollment System works efficiently, the researchers added the following special considerations:

1. Non-editable fields for offer_no and subject_code and personal student number
2. Confirmation or cancel option for update and delete function
3. A facility for the enrollee to go back to the previous step upon finishing the student or to the main menu screen to access directly the choices given with links

Audit Trail and Transaction Facility

In developing a complex system, database security and data integrity must be properly considered. Such considerations are addressed by using access code like username and password with different user type levels. All the interaction of data is saved in the database and can be retrieved anytime by authorized persons.

Run-Time, Testing, Debugging

The following are the findings obtained during the initial testing of the Online Enrollment System:

1. The system generates a list of evaluated subjects that are not arranged.
2. Run-time error occurred sometimes.
3. On the enrollment process, the system did not filter those evaluated subjects that don't have schedules being offered during the enrollment phase.

However, after the initial findings, the system was debugged to address the problems that occurred. Consequently, the system worked as designed and recommended. The following were observed and done:

1. Using order by () function in MySQL Query helped categorized the evaluated subjects according to subject type.
2. The subjects were filtered according to the subject code as foreign key on the subject schedules table.
3. Work productivity in terms of serving and delivering the system was increased.

CONCLUSION

The Online Enrollment System works as designed and proposed. The system provides for fast and easy way of enrolling students, a convenient way of accessing the student academic records, and a quick way of generating reports such as list of enrolled students in a specific subject schedule. For safety measures, the main server in which this system will be uploaded must have a proxy server.

RECOMMENDATIONS

Based on the findings and conclusions of the study, these are the following recommendations for the future researchers:

1. The design of the developed system must be enhanced and modified.
2. The developed system must be added with some features such as class scheduling and generation of fees to be more complex and functional.
3. The resolution of the interface must be flexible.
4. The system must be put online.

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