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DEVELOPMENT OF AUTOMATED STUDENT INFORMATION AND ENROLLMENT SYSTEM OF CALINGATNAN NATIONAL HIGH

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Abstract: The Calingatnan National High School is a secondary school with high morale in all aspect of academic. The school has vision to have an automated system that can help the process of enrollment, student's information, and file security. It has a total enrolment of 580 and 22 employees.

The Automated Student Information and Enrollment System focus on the data efficiency, processing reliable data of information, and securing files. A good student Information and Enrollment System is not just for the process of recording, retrieving and tracking but also to increase the school's productivity, service, quality and competitiveness.

The development of the system employed, Microsoft Visual Basic 6.0 was used in developing GUI and My System Query Language or MySQL as database of the system. Program coding was done in Visual Studio. Reliability, and Usability were strongly agreed that they were attributes on the system. The Efficiency geared the highest average weighted of 4.90, described as strongly agree.

Recommendations are: to install network connectivity, just a local connectivity for monitoring and facilitations; rigid training for the end users should be undertaken, to include the maintenance of supplementary hardware and software facility; and alternative action when electricity interruption may occur.

Keywords: automated system, Automated Student Information and Enrollment System, Graphical user Interface or GUI.

1. INTRODUCTION:

The Calingatnan National High School is a secondary school with high morale in all aspect of academic. The school has vision to have an automated system that can help the process of enrollment, student's information, and file security. It has a total enrolment of 580 and 22 employees.

According to Besel, (2000) data processing is divided into two kinds of processing: database processing and transaction processing. A database is a collection of common records that can be searched, accessed, and modified, such as bank account records, school transcripts, and income tax data. In database processing, a computerized database is used as the central source of reference data for the computations. Transaction processing refers to interaction between two computers in which one computer initiates a transaction and another computer provides the first with the data or computation required for that function.

The Automated Student Information and Enrollment System focus on the data efficiency, processing reliable data of information, and securing files. A good student Information and Enrollment System is not just for the process of recording, retrieving and tracking but also to increase the school's productivity, service, quality and competitiveness.

2. OBJECTIVES:

Determine the performance level of the automated enrollment system in terms of:

- a. Reliability;
- b. Usability; and
- Efficiency

3. INSTRUMENT

SOFTWARE QUALITY EVALUATION TOOL (BASED ON ISO 9126 SOFTWARE QUALITY STANDARD)

Title of System: DEVELOPMENT OF AUTOMATED STUDENT INFORMATION AND ENROLLMENT SYSTEM OF CALINGATNAN NATIONAL HIGH

Direction: In all the identified software quality metrics below, please check the appropriate column stating your approval or disapproval on the degree of accomplishment per requirements identified.

5-Strongly Agree, 4 – Agree, 3 - Slightly Agree, 2 – Slightly Disagree, 1-Strongly Disagree

ISO SOFTWARE METRICS	Rating				
	5	4	3	2	1
Reliability					
The system is free from errors.					
The system validates user inputs.					
Data is recoverable after system network failures with minimal operator					
assistance.					
Usability					
The system is user-friendly (texts are visible; buttons and textboxes are of exact					
size)					
The system is easy to learn and operate.					
The system works at all workstations available at the CNHS.					
Efficiency					
The system displays all requested data promptly.					
The system processes the test results and print at a reasonable time.					
The system adhere to standards or conventions relating to efficiency					

Software Employed

Microsoft Visual Basic 6.0 was used developing Graphical user Interface or GUI and My System Query Language or My SQL as database of the system. Program coding was done in Visual Studio.

Respondents

The study was conducted in Calingatnan National High School in Borongan City, Eastern Samar. Alpha test was conducted by 15 Employees.

4. METHODS:

Statistical Tool

Average weighted mean was used on determining the extent of applicability of ISO software characteristics.

The mean values and qualitative descriptions were employed to determine its extent of applicability of ISO 9126 software characteristics:

Mean Value Qualitative Description

4.10 - 5.00	Strongly Agree	1.10 - 2.00	Slightly Not Disagree
3.10 - 4.00	Agree	0.00 - 1.00	Strongly Disagree
2.10 - 3.00	Slightly Agree		

5. RESULTS:

Table -1: Frequency Distribution of Respondents' Perception on the Quality of the Software Based on ISO 9126

Characteristic	naracteristic Level of Agreement					Weig hted	Interp re	
	(SA) 5	(A) 4	(S L A	(S L N	(S N A)	Mean	tation	
Reliability								
The system is free from errors.	12	3	0	0	0	4.8	Strongly Agreed	
The system validates user inputs.								
							Strongly	
	13	1	1	0	0	4.8	Agreed	
Data is recoverable after system network failures							Strongly	
with minimal operator assistance.	10	3	1	1	0	4.8	Agreed	
Usability								

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The system is user-friendly (texts are visible; buttons							Strongly
and textboxes are of exact size)	13	2	0	0	0	4.86	Agreed
The existencia easy to learn and energia							Strongly
The system is easy to learn and operate.		2	0	0	0	4.86	Agreed
The system works at all workstations available at the							Strongly
CNHS.	9	2	2	2	0	4.2	Agreed
Efficiency							
The system displays all requested data promptly.	10	5	0	0	0	4.66	
The system processes the test results and print at a							Strongly
reasonable time.	12	3	0	0	0	4.8	Agreed
The system adhere to standards or conventions							Strongly
relating to efficiency	11	2	2	0	0	4.6	Agreed

Legend: (SA)=Strongly Agree; (A)=Agree; (SLA)=Slightly Agree; (SLN)=Slightly Not Agree; (SNA)=Strongly not Agree

Table -2: Average Weighted Mean of Respondent's Perception on the Attributes of the Developed Automated Enrolment System of SFNHS

Theorem Attributes	Average Weighted	Interpretation
	Mean	
Reliability	4.82	Strongly Agreed
Usability	4.68	Strongly Agreed
Efficiency	4.68	Strongly Agreed

Reliability, and usability were strongly agreed that they were attributes on the system. The Efficiency geared the highest average weighted of 4.90, described as strongly agree.

6. CONCLUSION AND RECOMMENDATIONS:

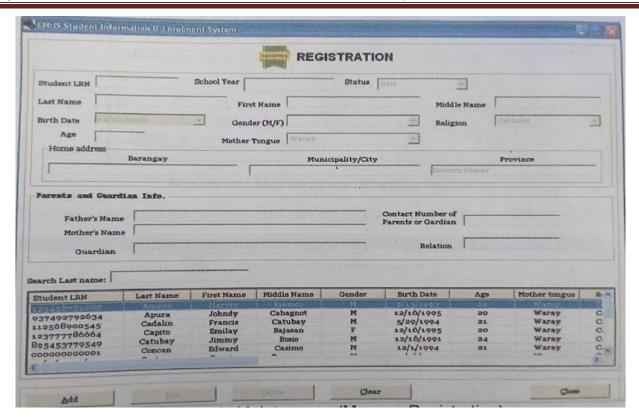
The developed automated enrolment system was very efficient for a small size school like Calingatnan National High School, very helpful to the stakeholders and the workers of the institution. Very useful for a growing school as a starting benchmark.

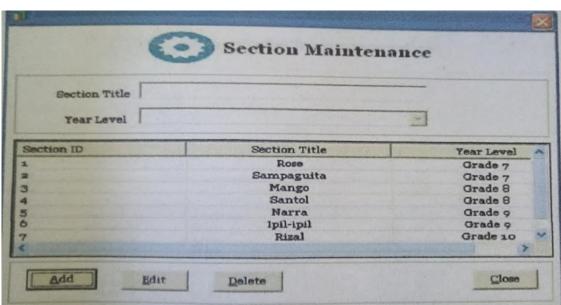
It was recommended to install a network of connectivity, even a local connectivity for monitoring and facilitations. Rigid training for the end users should be undertaken, to include the maintenance of supplementary hardware and software facility, as well as alternative action when electricity interruption may occur.

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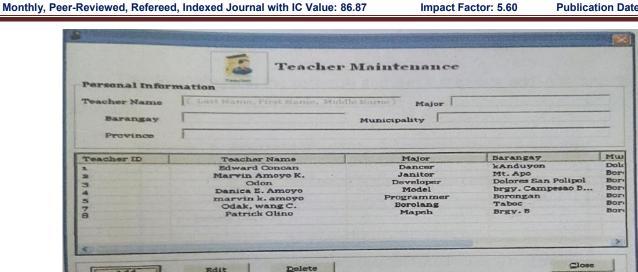
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SCREEN INTERFACE:

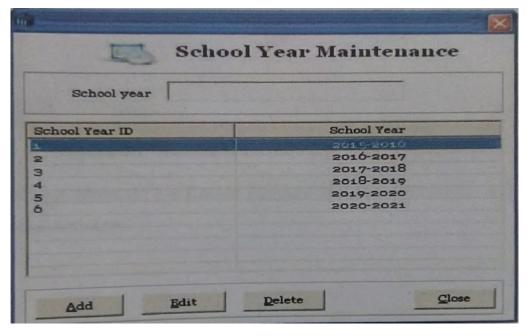




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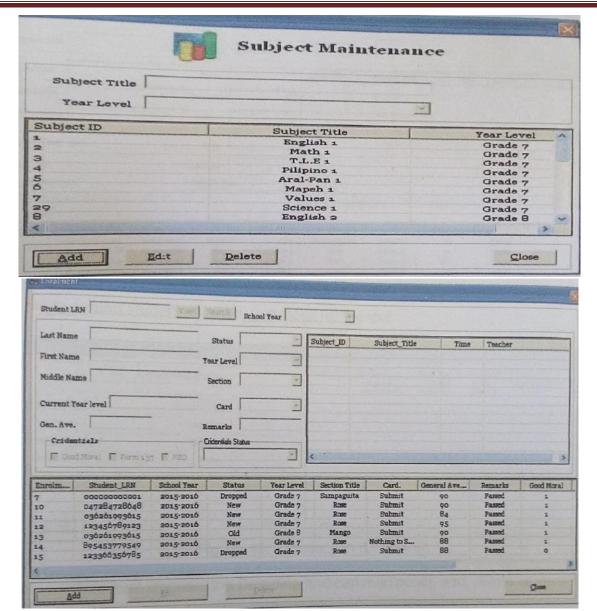






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Impact Factor: 5.60



Monthly, Peer-Reviewed, Refereed, Indexed Journal with IC Value: 86.87

Close

Impact Factor: 5.60

CNHS Student Information & Enrolment System

LIST OF HONORS
(TOP 10)

School Year Section Year Level
TOP 10

LAN Name Total Ave.

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