PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE (PENRO) BENGUET PAYROLL SYSTEM

An IT Project Presented to the Faculty Of the Math-Physics-Statistics College of Arts and Sciences Benguet State University

In Partial Fulfillment of the Requirements of the Degree Course Bachelor of Science in Information Technology

Submitted by:

Anas, Leo Mar L. Chumacog, Melody S. Copatan, Rigi May B. Lutong, Germain C. Sabino, Daisy I.

ABSTRACT

The Payroll System aims to study the preparation and generation of payroll forms of PENRO-Benguet. Solutions were drawn to meet the problems and to provide a system for preparation and generation of payroll forms as well as processing of reports.

Based on interviews and data collections that were conducted by the proponents the system was developed. Data were obtained as a basis in determining the problems encountered as well as the proposed solutions. Gathered data was also used in identifying which system model in the development of the system is accurate to use.

Rapid Application Development (RAD) served as the system model since it adjoined to the steps the proponents have undergone during the development of the system starting from the requirements gathering, to the system designing, construction up to the project implementation.

This study provides a payroll system solution to the problems related to all current problems encountered during the process. This had required answers and solutions to the problems related to data recovery, multi-user limitation and transparency of records. The development of this payroll system provides faster generation of forms and reports as well as easier manipulation of data.



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CHAPTER I

INTRODUCTION

This chapter discusses the background of the study, statement of the problem, objective of the study, significance of the study, scope and delimitation, and definition of terms.

Background of the Study

As technology advances rapidly, business sectors cope up by constantly upgrading their system to take advantage of what the current technology offers and to stay competitive.

Computers, calculators and other technological by product progressively became economical through the years as new and more powerful tools were developed. Importance of these tools became evident as they were integrated into business operations and processes.

A lot of business establishments today utilize automated machines, computers, and specialized software to aid their everyday operations. Computational power, speed, and ease of use became the prevalent reasons for



integrating automation and computer software into an establishment. As technology grows, it simply becomes one invaluable asset that an establishment can acquire. (Aquisan, C. et.al, 2011)

Historically, records on salary or money matters are done in simple ways. The first implementation of payroll activities was done during the Egyptian times where in writing of data and information are done in paperus reeds. Time passes before payroll activities were done in papers. (Agnaya, M. et.al, 2008)

Today payroll is the sum of all financial records of salaries for employees, wages, bonuses and deductions. In accounting, payroll refers to the amount paid to employees for services they provided during a certain period of time. (Payroll, 2011)

Payroll systems include any and all types of financial statements that involve the payment of an employer's employees, as well as any statements that relate to the filing of employment taxes. Not only statements are included withinthese types of systems but the actual functions of printing, delivering or electronic transfer of employees' funds are also included. Among payroll systems statements are records of the amount of hours an employee has worked, any taxes that have been withheld from an employee's payroll check, any voluntary tax deductions, and printed copies of checks that have been delivered and all records of taxes that have been paid to the government. (Surepayroll, 2011)



A payroll system on computer will also allow maintenance of files for all human resources needs. This is where employees' contact information education work history and other details that are needed to be check at some point are kept. The importance of payroll system cannot be stressed enough. This is the most important wayto communicate to the employees that their welfare matters to the employer. (The Magazine, 2011)

The Minister of Public Service of Uganda, Henry Kajura, has launched the Integrated Personnel and Payroll System (IPPS).IPPS is an enterprise-wide integrated, computerized and efficient human resource management information system that will be used by ministries, departments, agencies and local governments to undertake human resource management from recruitment to separation, including payroll and pension processing.(IPPS, n.d.)

Sage Accpac Canadian Payroll is the system used by the SAC for payroll-related processes. The system is capable of automatic calculations, importing timecards, entering of after-the-fact pay checks. The payroll also handles all pay frequencies, multiple work states, unlimited earnings, deductions, benefits and taxes; and other pay factors such as expense reimbursements, accruals and advances. (Sage Accpac Canadian Payroll, Sage Accpac Canada, n.d.)

Payroll Systems of Nevada was established in 1991. The company was founded on the premise that a quality, local payroll service was needed in



Northern Nevada. Businesses with one to several hundred employees did not have a good option for payroll processing, tax services and other employer services. Since 1991, Payroll Systems has grown and now provides payroll services to over 1000 businesses primarily in Nevada, Arizona and California. (Payroll System, 2011)

Internationally, the information systems have already been used. To cite, the Massachusetts Institute of Technology uses a Payroll System whose objectives are to release the salaries of their employees accurately and in a timely manner, and to provide customer service to individuals on payroll related matters. (MIT, 2011)

Oregon State University Finance & Administration leaders are implementing a new digital payroll system that will eliminate paper transactions, reduce the existing system's already low error rate and save nearly a half-million dollars in staff time for data entry each year.

The system, provided by Workforce Software of Michigan, provides for online submission of time and leave reports, electronic supervisor approvals and extensive tracking of OSU's more than 200 different employee codes. (Michigan, 2011)

Best Possible Retail, a company based on Australia, engaged in an onlinebased payroll software system which considerably supported their in-house



payroll officers in creating their payroll. (Online-based Payroll Software System, Talent2, 1993)

JeonSoft Payroll Suite 2006 is a Client-Server based Integrated Personnel and Complete Payroll System specifically designed for Philippine use. It is composed of three major modules namely; the time attendance system, payroll system and HRIS systemall rolled into one complete system. The system automates payroll computation while making recording and retrieval of employee records fast and easy. (JeonSoft, 2005)

With office in Pasig City, Metro Manila, West Capitol System Technologies, Inc., provides superior IT Solutions for managing and implementation of Information Management Systems. West Capitol System Technologies, Inc. brings a fresh and innovative approach to IT Solution services. Its' goal is to exceed the expectations of every client by offering outstanding customer service, increased flexibility and greater value. Thus optimizing system functionality and improving operation efficiency. (Philippine Companies, 2010)

The Cagayan de Oro City Hall also employed a computerized payroll system. According to the City Accountant Wilma Polley-Rugay "This project, which was conceived two years ago, basically aims to improve our services particularly in the processing of payrolls for permanent employees. Employees who handle payroll preparation and processing can now attend to other office needs and concerns as the new payroll system will lessen their workload." Under



the new payroll system, preparation and processing of payroll, which reflects the accrued, amount payable every 15th and 30th day of the month, done only once. Unlike the time consuming old payroll system, preparation and processing of payroll is done twice a month covering the first half and second half of the month. (Cagayan de Oro City Hall's Computerized Payroll System, Sunstar, 2009)

Benguet State University Payroll System is a system which generates necessary and precise reports concerning payroll. It is capable of storing and retrieving integrated data. It also presents accurate and detailed salary computation. It provides faster process of payroll preparation and manipulation of the payroll of the institution. (Banos, A. et.al, 2009)

According to Banos, the main advantages of using a computerized payroll system are: faster means for data processing, report generation, computation, and reduced overall processing; durable and centralized storage of data and information; consistency of data across all users; and accessibility of records.

With the increasing application and benefit of a computerized payroll system, the proponents see fit that PENRO-BENGUET should implement their own payroll system to improve the overall process and operation in the agency's payroll generation.



Statement of the Problem

The study aims to develop aPayroll System for Provincial Environment and Natural Resources Office (PENRO) Benguet and its Community Environment and Natural Resources Office (CENRO) in La Trinidad, Baguio and Buguias. Specially, this study answers the following questions:

- 1. What are the information requirements in the existing system for the preparation of the payroll for the PENRO Benguet and CENRO La Trinidad, Baguio and Buguias?
- 2. What are the problems encountered in the current payroll system?
- 3. What are the information and processes needed to be computerized in the existing payroll system of PENRO Benguet and CENRO La Trinidad, Baguio and Buguias?
- 4. What security and control measures are appropriate in managing the payroll system of PENRO Benguet and CENRO La Trinidad, Baguio and Buguias?
- 5. What benefits can be drawn once automation is implemented by the:
 - a. PENRO Benguet and CENRO (La Trinidad, Baguio, Buguias);
 - b. Other researches; and
 - c. Proponents?



Objective of the study

The main objective of the study is to design and developa Payroll System for PENRO Benguet and CENRO La Trinidad, Baguio and Buguias.

The following state the objective of the study.

- Identify the information requirements in the existing system for the preparation of the payroll for the PENRO Benguet and CENRO La Trinidad, Baguio and Buguias.
- 2. Identify the problems encountered in the existing payroll system.
- Determine the information and processes needed to be computerized in the existing payroll system of PENRO Benguet and CENRO La Trinidad, Baguio and Buguias.
- 4. Identify the security and control measures that are appropriate in managing the payroll system of PENRO Benguet and CENRO La Trinidad, Baguio and Buguias.
- 5. Identify the benefits as perceived by the following:
 - a. PENRO Benguet and CENRO (La Trinidad, Baguio, Buguias);
 - b. Other researches; and
 - c. Proponents?



Significance of the Study

The project study intended to provide an effective ways to manage the employee payroll system that will benefit the following:

<u>PENRO</u> <u>Benguet</u> <u>and</u> <u>CENRO</u> (<u>La Trinidad</u>, <u>Baguio</u>, <u>Buguias</u>). Theinstitution will have an efficient and productive system by having a faster means for preparing and generating their payroll. The system helps the Payroll Officer accelerates report generation, computations and payroll preparation processes as well as reduces the effort required to do the tasks. The Administrative Officer will have an easy access to the payroll forms. Instead of checking printed payroll forms, he/she will be checking it using the computer. It also lessens paper crammed on her desk. PENRO employees' salaries will be determined accurately and will be released on time. In addition, the employees will be able to easily know the updates of their record.

Other Researchers. This literature will serve as a basis for them conducting their own study.

<u>Proponents.</u> This study enhanced their programming aptitude and designing skills in the field of Information Technology. They had the opportunity to apply the knowledge and skills in software development and other related fields of expertise.



Scope and Delimitation

This study was designed to develop a Payroll System for Provincial Environment and Natural Resources (PENRO) Benguet and Community Environment and Natural Resources (CENRO) La Trinidad, Baguio and Buguias.

The project covered the computation of salary of regular, casual and job order employees. It included the report lists of employees such as Basic Monthly Salary, Incentives (Acapera, RATA), Withholding Tax, Life and Retirement, Loans from different Banks and organizations /or Cooperative, PhilHealth,Pagibig/HDMF,MOWELL.

The project was expected to generate payroll reports such as monthly (15th and 30th), pay slip of employee, loan reports and employee reports.

Reports given to accredited agencies such as GSIS, BIR, PhilHealth and PAG-IBIG/HDMF were also incorporated in the system. Moreover, computation of Leave Credits earned by an employee and payroll for bonuses was also covered in the system.

The proposed system did not include Honoraria Payroll Forms, reports regarding the increase of amortization requested by en employee to the loaning agency, releasing of budget, "over-the-counter" transactions such as reimbursement of employee's expenses and cash advance.



<u>Definition of Terms</u>

The following terms presents an operational definition that would aid readers or other researchers with a better understanding about the study.

<u>Basic Monthly Salary</u>. The employee's salary for the month based on the employee's Salary Grade.

General Payroll. The payroll of the Regular Employees.

Gross Salary. Wage of an employee which is subject to deductions.

<u>Incentive</u>. A benefit added to salary of employees.

<u>Leave</u>. Permission to be absent from work or duty.

<u>Loan</u>. One of the deductions subtracted from an employee's salary. It is an amount paid by an employee computed from borrowed amount.

<u>Net Salary</u>. The computed amount to be received by an employee for the period.

Non-regular Employees. This consists of the Casual and Job Order employees.

<u>Payroll</u>. This contains the list of employees with their corresponding salaries, incentives and deductions.

<u>Pay Slip.</u> A form that contains the breakdown of the Net Salary of an employee and other deductions.

<u>Personal Economic Relief Allowance(PERA).</u> An incentive added to the employees' salary.

<u>Premium.</u> One of the deductions subtracted from an employee's salary. It is the personal share that an employee is obliged to pay as a basis for loaning.



Query. A form of questioning in a line of inquiry.

<u>Regular Employees</u>. Permanent employees in the company that are given more incentives than casual and job order employees.

Remittance. The transferred funds and reports from the Accounting and Finance Department to the participating agencies.

Salary Grade. This is the basis for the employees' basic salary.

Withholding Tax. This is remitted to the government and deducted from the basic salary of an employee.



CHAPTER II

METHODOLOGY

This chapter discusses the methodology used in designing and developing the proposed system. It also includes the different instruments and procedures used in data gathering and the different sources of data.

Software Development Methodology

The proponents used the Rapid Application Development (RAD). RAD is a methodology that is used for developing higher-quality and cost-efficient software in a fraction of time. It is a dynamic process that emphasizes throughput while de-emphasizing control. It provides both a framework and the functional tools for achieving successful and accelerated software development. (CASEMaker Inc. 1997-2000)

Rapid Application Development Methodology was used to encourage early user-developer interaction in the software development by means of prototyping. RAD uses Computer-Assisted Software Engineering (CASE) tools to speed up the development process and quickly generates screen layouts, database tables and reports. It is an approach to building computer systems which



combined the CASE tools and techniques, user-driven prototyping, and stringent project delivery time limits into a potent, tested, reliable formula for better quality and productivity. (Clifford Kettemborough)

Figure 1 presents the Rapid Application Development Methodology.

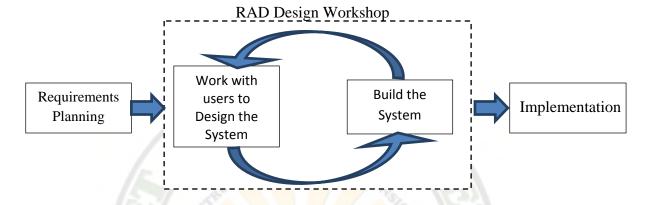


Figure 1: Rapid Application Design Phases (Kendall and Kendall, 2005)

Rapid Application Development Methodology has three (3) broad phases.

1. Requirements Planning Phase

The Requirements Planning Stage consists of a review of the areas immediately associated with the proposed system. This review produces a broad definition of the system requirements in terms of the function the system would support. The deliverables from the requirements planning include an outline system. Area model (entity and process models) of the area under study is a definition of the system's scope, and a cost justification for the new system.



In this phase the proponents met up with the PENRO payroll officer (Clerk) and Administrative Officer to discuss and clearly identify the requirements of the system. The proponents conducted interviews and brainstorming with the employee involved in the current payroll system. Data gathered were documented. This documentation included the scope, the background profile of the company, and the problem with the company's current state. The proponents discussed what appropriate system to propose as well as the system requirements in the terms of functionalities and features that the system will support.

2. RAD Design Workshop

The RAD Design Workshop phase is design and refine phase that can best be characterize as a workshop that is typically hands on. RAD design workshops can take place over a series of days, but extended blocks of time are useful. During the RAD design workshop, users respond to actual working prototypes and analysts refine modules based on user responses.

The proponents started building the project based on the plan agreed upon during the first phase. Using the agreed tools and interfaces, the proponents started to create different programs based on the company's needwhich was tested and refined. Feedback and suggestions from the clientswere entertained, as this was the basis of the refinement and the additional software processes and commands. The proponents



conducted detailed review of all the transactions, reports, displayed inquiries and forms that was supported by the database. Necessary correction of errors or failures took place when there were functions that did not matched the requirements.

3. Implementation Phase

The implementation stage involves implementing the system and managing the change from the old system environment to the new one. This included implementing bridges between existing and new consisting data and training users. User's acceptance was the end point of the implementing stage.

As soon as the proposed system was built and refined, the proponent tested its functionalities and determined if it gives the desired output. Then, it was introduced to the PENRO. The organization will then have the decision whether to adopt it or not.

Data Gathering Instrument

<u>Interview.</u>Direct conversation was done with the concerned employee in the preparation and accomplishment of the payroll to correctly determine the processes and procedures of the current payroll system.

<u>Researching.</u>Researching was done by browsing the internet for related articles and reading books that provide information useful for the proponents,



especially in the development methodology and in the programming language that was used.

<u>Document Analysis.</u> This covers analysis of the documents and forms gathered and presented by the Provincial Environment and Natural Resources Office which included the sample payroll form, covering voucher, LACE book and other files related to the study.

<u>Brainstorming.</u>Brainstorming was done by having a group interaction of the proponents and the PENRO employee concerned in the current payroll system. This provided a lot of ideas for the proponents for the solution of the problems in the company and in formulating the appropriate system to propose.

Sources of Data

The data were gathered from the interviews together with the PENRO clerks, accountant and other staffs to clearly asses the processes of the current payroll system. The clerk provided sample forms used in the current system, which includes the payroll form, covering voucher and the LACE book.

Books also provided information and ideas regarding databases, programming and methodologies. Internet surfing was another aid in providing related information to the proponents instantly.

Other data were gathered from the brainstorming, analysis and discussions of the proponents and the PENRO employees.



CHAPTER III

DISCUSSION OF FINDINGS

This chapter discusses the processes and problems in the current system, security and control measures to be adopted and the use of diagrams like Entity-Relationship Diagram (ERD) and Use Case Diagram which graphically explain the processes in the current and proposed system.

Processes in the Existing System

The Provincial Environment and Natural Resources Office (PENRO) islocated at Wangal, La Trinidad, Benguet and its Community Environment and Natural Resources Offices (CENRO) are placed in Baguio, Bugias and La Trinidad. Employees report to work from 8:00 AM until 5:00 PM from Mondays to Fridays. Working hours of employees are tracked using a log book where they login their time of arrival and departure. An employee works for eight (8) hours duration daily with one (1) hour lunch break without pay.

The Payroll of the Provincial Environment and Natural Resources Office (PENRO) and its Community Environment and Natural Resources Offices (CENRO) in Baguio, Bugias and La Trinidad are prepared by the respective



clerkof each office. The generation of payroll is being done twice a month, every fifteenth (15th) of the month for the first generation and every thirtieth (30th) of the month for the second generation. On the other hand, computation of payroll is done once a month.

The Payroll of the PENRO and the CENRO's cover only the regular employees. Casual and Job Order employees were excluded from the Payroll instead their salaries were computed in separate vouchers. Regular employees receive a basic monthly salary which is being determined by their position in the office, Personal Economic Relief Allowance (PERA), and Representation Allowance (RA) for the head or OIC of the offices.

On the other hand regular employees have deductions such as Withholding Tax, Premiums and Loans. The net salary, gross salary less all deductions of the employees is being divided into two in which they will receive in each pay period. That means deductions are done at the first preparation of payroll.

Withholding Tax Computation. The Withholding tax of the Regular employees is computed by obtaining the Annual Income of the employee. Add all allowances or incentives. The sum will then be deducted to the Threshold Allowance amounting to Php 30,000.00. The excess amount if any will become the Taxable Allowance which will be added to the Annual Income to obtain the Taxable Income. The Taxable Income will be deducted by the sum of the Non-Taxable Income (Government Service Insurance System (GSIS), PAG-



IBIG/Home Development Mutual Fund (HDMF), Medicare/Philippine Health Insurance (PHIC) and Social Security Services (SSS). The result will become the Total Taxable Income.

The Total Taxable Income will automatically be deducted by the Personal Exemption amounting to Php 50,000.00 regardless of the status. In addition, the Total Taxable Income will be deducted to Php 25,000.00, multiplied by the number of qualified dependents that the employee has but not exceeding four (4) dependents. The difference will become the Net Taxable Income. If the Personal Exemption exceeds the value of the Taxable Income, the employee will no longer pay for Withholding Tax.

The Net Taxable Income will then be classified according to the range of the values in the Income Tax Table. In the corresponding Tax Due, the Net Taxable Income is subtracted by the maximum amount. The difference will be multiplied to the corresponding percentage and added with the constant amount. The result will become the Total Tax Due or the Withholding Tax. Figure 2 shows the taxes of the range of Taxable Income.

				DEPARTME	THE PHILIPP NT OF FINAN ITERNAL REV	CE			
			REVISED V	VITHHOLDI	NG TAX TAE	BLES			Annex "C"
			Effec	tive JANUA	RY 1, 2009				
DAILY		4	2	3	4	5	8	7.	8
Exemption Status	('000P)	0.00 +0% over	0.00 +5% over	1.65 +10% over	8.25 +15% over	28.05 +20% over	74.28 +25% over	165.02 +30% over	412.54 +32% over
A: Table for emplo	years without	dualified de	pendent						
1. Z 2. S/ME	0.0 50.0	1	165	33 198	99 264	231 396	462 627	825 990	1,650 1,815
B. Table for single	married em	ployee with a	ualified dep	endent child	(ren)				
1, ME1 / S1 2, ME2 / S2 3, ME3 / S3 4, ME4 / S4	75.0 100.0 125.0 150.0	1 1 1 1 3	248 330 413 495	281 363 446 528	347 429 512 594	479 581 844 726	710 792 875 957	1,073 1,155 1,238 1,320	1,980
WEEKLY		-1	2	3	4	5	- 6	Ŧ	- 8
Exemption Status		0.00 +0% over	5.00 +5% over	9.82 +10% over		163.46 +20% over	432.69 +25% over	961.54 +30% over	
A. Table for emplo		Loualified be							
1, Z 2, S/ME	0.0 50.0	1	0 962	192 5,154	1,538	1.346	2,692 3,654	4,808 5,769	
B. Table for single		ployee with a							-
1. ME1 / S1 2. ME2 / S2 3. ME3 / S3	75.0 100.0 125.0	1	1,442 1,923 2,404	1,835 2,115 2,596	2,019 2,500 2,981	2,788 3,269 3,750	4,135 4.615 5.098	6,250 6,731 7,212	11,538
4. ME4 / S4	150.0	1	2,885	3,077	3,462	4,231	5,577	7,692	



SEMI-MONTHLY			2	3	4	5	- Area	7	8
Exemption		0.00	0.00	20.83	104.17	354.17	937.50	2,083.33	5,208.33
Status		+0% over	+5% over	+10% aver	+15% over	+20% over	+25% over	+30% over	+32% over
A. Table for eniplaye	es without	t qualified de	oenoent.	2000					-
1, Z	0.0	1	10	417	1,250	2,917	5,833	10,417	20,833
2. S/ME	50.0	-4	2,083	2,500	3,333	5,000	7,917	12,500	22,917
B. Table for single in	arried emp	playee with a	ualified dep	entient child	ren)				
1. ME1 / S1	75.0	1	3,125	3.542	4,375	0,042	8,958	13,542	23,958
2. ME2 / S2	100.0	1	4,167	4,583	5,417	7,083	10,000	14,583	25,000
3. ME3 / S3	125.0	. 4	5,208	5,625	6,458	8,125	11,042	15,625	26,042
4. ME4 / S4	150.0	1	8,250	6,667	7,500	9,187	12,083	16,887	27,083
MONTHLY		1	2	3	4	ő	В	7	8
Exemption		0.00	D.00	41.67	208.33	708.33	1,875.00	4,166.67	10,416.67
Status		+0% over	+5% over	+10% over	+15% over	+20% over	+25% over	+30% over	+32% over
A. Table for employe	es withou	qualified ge	genbent						
1. Z	0,0	- 4	0	833	2,500	5,833	11,687	20,833	41,687
2. S/ME	50.0	. 1	4,167	5,000	5,667	10,000	15,833	25,000	45,833
B. Table for single in	arried emi	ployes with o	ual flea dep	endent child	1911 (-		-	-744
1. ME1 / S1	75.0	1	6,250	7.083	8,750	12.093	17.917	27,083	47,917
2, ME2 / S2	100.0		8,333	9,167	10,833	14,167	20.000	29,187	50,000
3. ME3 / S3	125.0	1	10,417	11,250	12,917	16,250	22,083	31,250	52,083
4. ME4 / S4	150.0	1	12,500	13.333	15,000	18,333	24,167	33,333	54,167

Figure 2.Income Tax Table for Individuals

GSIS Premium Computation. The employee's share is being computed by taking the 9% of the basic monthly salary of the employee. The 12% of the employee's basic monthly salary will become the employer's share.

<u>PAG-IBIG/HDMF Premium Computation.</u> The employee's share will depend on how much the employee would want to share ranging from Php 100.00 to Php 2,000.00. The employer's share is Php 100.00.

<u>PHIC Premium Computation.</u> The employee and employer's share are determined by using the PhilHealth Table, refer to Figure 3.



Monthly Salary Bracket	Monthly S	alary Range	Salary Base	Employee Share	Employer Share	Total Monthly Contribution
1	000000 01	004999 99	004000 00	0050 00	0050 00	000100 00
2	005000 00	005999 99	005000 00	0062 50	0062 50	000125 00
3	006000 00	006999 99	006000 00	0075 00	0075 00	000150 00
4	007000 00	007999 99	007000 00	0087 50	0087 50	000175 00
5	008000 00	008999 99	008000 00	0100 00	0100 00	000200 00
6	009000 00	009999 99	009000 00	0112 50	0112 50	000225 00
7	010000 00	010999 99	010000 00	0125 00	0125 00	000250 00
8	011000 00	011999 99	011000 00	0137 50	0137 50	000275 00
9	012000 00	012999 99	012000 00	0150 00	0150 00	000300 00
10	013000 00	013999 99	013000 00	0162 50	0162 50	000325 00
11	014000 00	014999 99	014000 00	0175 00	0175 00	000350 00
12	015000 00	015999 99	015000 00	0187 50	0187 50	000375 00
13	016000 00	016999 99	016000 00	0200 00	0200 00	000400 00
14	017000 00	017999 99	017000 00	0212 50	0212 50	000425 00
15	018000 00	018999 99	018000 00	0225 00	0225 00	000450 00
16	019000 00	019999 99	019000 00	0237 50	0237 50	000475 00
17	020000 00	020999 99	020000 00	0250 00	0250 00	000500 00
18	021000 00	021999 99	021000 00	0262 50	0262 50	000525 00
19	022000 00	022999 99	022000 00	0275 00	0275 00	000550 00
20	023000 00	023999 99	023000 00	0287 50	0287 50	000575 00
21	024000 00	024999 99	024000 00	0300 00	0300 00	000600 00
22	025000 00	025999 99	025000 00	0312 50	0312 50	000625 00
23	026000 00	026999 99	026000 00	0325 00	0325 00	000650 00
24	027000 00	027999 99	027000 00	0337 50	0337 50	000675 00
25	028000 00	028999 99	028000 00	0350 00	0350 00	000700 00
26	029000 00	029999 99	029000 00	0362 50	0362 50	000725 00
27	030000 00	UP	030000 00	0375 00	0375 00	000750 00

Figure 3.PhilHealth Table

<u>Computation of Loans.</u> The computation of loans like Conso-Loan, Policy Loan, and HDMF Loan comes from the involved organization and the values are forwarded to the PENRO or the CENRO's for deduction from the payroll and subsequent remittance.

<u>Leaves, Absences and Tardiness.</u> Computations of vacation and sick leave are made on the basis of one and 25 hundredths (1.25) vacation leave and one and



25 hundredths (1.25)sick leave for every twenty two (22) days of actual service. An employee who applies for vacation leave must apply two (2) to three (3) days before the date of leave. While an employee who applies for sick leave must submit application form within a day after the sick leave and with a medical certificate by a government physician if sick leave is more than five (5) days. Leavenot in excess of the allowable leave credits, is granted leave with pay the basis of whichthe salary he received last. All absences of an employee in excess of the vacation or sick leave allowable shall be considered leave without pay. Figure 4 shows the computation of earned leave credits.

TABLE COMPUTATION									
LEA	LEAVE WITH PAY VACATION LEAVE WITH PA								
DAY		MONTH	UNITS EARNED	ABS (WOP)	LEAVE EARNED				
1.	0.042	1 mo.	1.25	0.50	1.229				
2.	0.083	2 mos.	2.50	1.00	1.208				
3.	0.125	3 mos.	3.75	1.50	1.188				
4.	0.167	4 mos.	5.00	2.00	1.167				
5.	0.208	5 mos.	6.25	2.50	1.146				
6.	0.250	6 mos.	7.50	3.00	1.125				
7.	0.292	7 mos.	8.75	3.50	1.104				
8.	0.333	8 mos.	10.00	4.00	1.083				
9.	0.375	9 mos.	11.25	4.50	1.063				
10.	0.417	10 mos.	12.50	5.00	1.042				
11.	0.458	11 mos.	13.75	5.50	1.021				
12.	0.500	12 mos.	15.00	6.00	1.000				
13.	0.542	[1year]		6.50	0.979				
14.	0.583			7.00	0.958				
15.	0.625			7.50	0.938				
16.	0.667			8.00	0.917				
17.	0.708			8.50	0.896				
18.	0.750			9.00	0.875				
19.	0.792			9.50	0.854				
20.	0.833			10.00	0.833				
21.	0.875			10.50	0.813				
22.	0.917			11.00	0.792				
23.	0.958			11.50	0.771				
24.	1.000			12.00	0.750				

Figure 4. Computation of Leave Credit Earned



Tardiness and under time are deducted from vacation leave and they cannot be charged against the sick leave credits unless, the under time is for health reasons supported by medical certificate and application for leave. Figure 5 shows the conversion of hours/minutes for tardiness and under time.

CONVERSION OF WORKING HOURS/MINUTES INTO FRACTIONS OF A DAY								
MINUTES	EQUIV. DAY	MINUTES	EQUIV. DAY					
1	0.002	31	0.065					
2 3	0.004	32	0.067					
3	0.006	33	0.069					
4	0.008	34	0.071					
5	0.010	35	0.073					
6 7	0.012	36	0.075					
7	0.015	37	0.077					
8	0.017	38	0.079					
9	0.019	39	0.081					
10	0.021	40	0.083					
11	0.023	41	0.085					
12	0.025	42	0.087					
13	0.027	43	0.090					
14	0.029	44	0.092					
15	0.031	45	0.094					
16	0.033	46	0.096					
17	0.035	47	0.098					
18	0.037	48	0.100					
19	0.040	49	0.102					
20	0.042	50	0.104					
21	0.044	51	0.106					
22	0.046	52	0.108					
23	0.048	53	0.110					
24	0.050	54	0.112					
25	0.052	55	0.115					
26	0.054	56	0.117					
27	0.056	57	0.119					
28	0.058	58	0.121					
29	0.060	59	0.123					
30	0.062	60	0.125					

Figure 5. Conversion of Minutes to Fraction of Days

<u>Remittances.</u> Remittances are deducted on the first preparation of payroll, every fifteenth of the month and are remitted as one account to the respective agencies.



Figure 6.(List of Figures Folder)



Figure 7



Figure 8



<u>Problems Encountered in the Existing System</u>

The encountered problems in the existing payroll system of Provincial Environment and Natural Resources Office are the following:

<u>Multi-user Limitation.</u> The payroll system, excel based, do not support multiple, concurrent end users thus making the payroll to be in a queue between the users leading to a slower data processing.

<u>Data Recovery</u>. Payroll is done using excel which has a high risk of losing data in case of system failures. And if by any chance an accidental save is done and there is a need to restore the data in previous state the data cannot be recovered.

<u>Transparency of Records</u>. Employees querying for their records in the current system has a high possibility of overlooking into other employees' records which should not be allowed.



Process of the Proposed System

The proposed Payroll System was designed to make processing of Payroll Forms a lot faster and well-organized.

There are five (5) types of accounts that could access the system namely: System Administrator, Payroll Administrator, Head Administrator, Super Administrator and Member. By default, administrator accounts are automatically registered. Member accounts are registered by the Payroll Administrator.

To start, the system will provide a Log-in form where the user can enter username, password and the corresponding security code. Once the username, password and security code are valid, the user will be directed to their respective Home page.

Users can only view the Home page (Announcement page), their profiles, and payroll tables. The Payroll Administrator can access the whole system except the database. The Payroll Administrator can also edit user's profile, add new employee, add new position/s, update system tables, post/view announcement and generate payrolls and remittances. The proposed system has three types of payroll to be generated: General Payroll, Job Order Payroll and Bonus Payroll (Mid-year and End-Year Bonus).

The System Administrator can only access the system's database and is incharge of handling it through making and restoring back-ups. The Head Administrator can access the system for verification and approval of payroll.



The Member account has a limited access to the system and can only view their personal and user information on their profile. Members can also view their own payroll tables such as GSIS table, HDMF table, Tax table and Salary Table. Super Administrator is the one in charge in editing, viewing user accounts of all employees. Super Admin is responsible in adding new loans and premiums to be used. He/She can delete an account if the user is inactive already.

Generation of General (Regular and Casual). General Payroll is composed of all regular and casual PENRO and CENRO employees. It is automatically generated with their respective payroll information base on the data entered by the Payroll Administration. The generated General Payroll will be saved for checking and approval by the Head Administrator.

Generation of Job-Order Payroll. General Payroll is composed of all active Job-Order employees. It is automatically generated with their respective payroll information base on the data entered by the Payroll Administration. The payroll will be saved for checking and approval by the Head Administrator.

Generation of Bonus Payroll. The Payroll Administrator can generate bonus payroll, mid-year bonus and end-year bonus, only every month of May and November respectively.

Approving and Rejecting a Payroll. All generated payroll are needed to be approved by the Head Administrator. If a payroll is erroneous, the Head Administrator can reject it and list the corrections for the rejected payroll. If a



payroll is accurate, the Head Administrator can approve it to enable the print feature and make pay slip feature of the payroll.

Making a Pay Slip. Pay slips for employees can only be generated and printed once the payrolls are approved.

Generation of Reports. The Payroll Administrator can print a payroll once it is approved. If a payroll is rejected, the Payroll Administrator can generate the payroll again incorporating the corrections made by the Head Administrator.





Figure 9.Entity Relationship Diagram



























Figure 10 Use case diagram



Figure 11 Use case diagram



Security and Control Measures to be adopted

<u>Password Protection.</u> All users are required to log-in first before using the system. The log-in requires the user to enter their respective username and password. If the user's input is wrong, an error message will be displayed.

<u>Freeze/Idle Mode</u>. The system will automatically freeze if it is in an idle mode within five (5) minutes.

<u>User Type Detection.</u> The proposed system can detect the type of user that is accessing the system and redirected to their respective page. This ensures that no Member can access any administrator pages.

- a. Payroll Administrator(Clerk Officer). The proposed system allows the payroll administrative officer to access the whole systemwell as viewing and editing profile of all the employeesbut he/she is not allowed to access the database and make a pay slip.
- b. System Administrator (Super Admin). The system administrator can make back-up databases as well as update and restore databases.
 He/she can view his/her profile.
- c. Head Administrator (PENRO OIC). The head administrator is only allowed to access the system for approval of a generated payroll form as well as viewing their respective profile.
- d. Super Administrator. The super admin is in charge of viewing, editing and deleting a user account. He/she is responsible in adding new loans and premiums to be used by employees.



e. Members. The proposed system limits the functionality of the Members account. They can only view announcements, their own profile and payroll tables. They are not allowed to view and search other users and perform other actions beyond what is given.

<u>System Log.</u> The system provides system log where you can monitor the actions in the system and who did the certain action.

Perceived Benefits Once the Proposed System is Implemented

The project study intended to provide an effective tool in payroll system that would benefit the following:

Benguet and CENRO (La Trinidad. PENRO Вадию. Buguias). Theinstitution will have an efficient and productive system by having a faster means for preparing and generating their payroll. The system helps the clerk or payroll officer accelerates report generation, computations and payroll preparation processes as well as reduces the effort required to do the tasks. The Administrative Officer will have an easy access to the payroll forms. Instead of checking printed payroll forms he/she will be checking it using the computer. It also lessens paper crammed on her desk. PENRO employees' salaries will be determined accurately and will be released on time. In addition, the employees will be able to know easily the updates of their record.

<u>Other Researchers</u>. This will serve as basis for them to have related literature in conducting their own study.



<u>Proponents.</u> This study enhanced their programming aptitude and designing skills in the field of Information Technology. They had the opportunity to apply the knowledge and skills in software development and other related fields of expertise.





CHAPTER IV

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The study aimed to develop a Web Based Payroll System for Provincial and Environmental Natural Resources (PENRO) Benguet.

Adding, updating and searching of employee's records, creation of payroll forms, record keeping, salary computation and computation and monitoring of leave credits for each employee are expected in the system. In addition, preparing of pay slips and generation of reports for accredited agencies are the process to be included in the system.

The study aimed to provide an effective tool in Payroll System that would benefit PENRO- Benguet employees and other researchers.

The methodology used in developing the system is the Rapid Application Development (RAD). The RAD consists of three phases namely: Requirement Planning, RAD Design Workshop, and Implementation.



Conclusions

The proponents come up with the answers of the statement of the problems and concluded that:

- The existing system for the preparation of the payroll for the PENRO
 Benguet and CENRO La Trinidad, Baguio and Buguias are done through
 the use of Spreadsheet. The information needed for generating the
 employees' payroll comes from their personal data stored in the file
 cabinets.
- 2. The payroll officers involved in generating payroll encounter problems due to the fact that spreadsheetdoes not support multiple and concurrent end users,data recovery is at high risk and transparency of all record are allowed.
- 3. The information or processes needed to be computerized in the existing payroll system of PENRO Benguet and CENRO La Trinidad, Baguio and Buguias are the manipulation of data such as adding, updating, editing, searching of employees, as well as creating payroll forms, preparation of pay slips, computation of salary and earned leaves for each employee, monitoring of leaves credits, record keeping and report generation.
- 4. To ensure client that the system is secured from any illegal access of unauthorized personnel, the proposed system adopted some of the security



and control measures which include password protection, freeze/idle mode, user type detection, and system log.

5. The benefits that were drawnwhen implemented by the PENRO Benguet and CENRO (La Trinidad, Baguio, Buguias), other researches, and proponents are stated in the perceived benefits in the previous chapter.

Recommendations

The proponents would like to recommend the implementation of the developed system to speed up the processes in the generation of payroll.

It is also recommended for the PENRO Benguet to have a network of computers for the maximum implementation or success of the developed system. Moreover, inclusion of queries, input forms and other lacking functionalities (if any) that are not included by the proponents in the developed system are also recommended in case of change or update of processes in the generation of payroll.



LITERATURE CITED

A. BOOKS

Kendall K., 2005. Rapid Application Development Model

B. UNPUBLISHED

Aquisan, C et. al. 2011. Computerized Payroll System of National Irrigation

Administration- CAR Benguet. IT Project. Benguet State University

Banoset. al. 2009.BSU Payroll System. IT Project. Benguet State University

C. WEBSITES

IPPS, n.d.Integrated Personnel and Payroll System. Retrieved from

www.allafrica.com

Payroll, 2011.Payroll. Retrieved from www.payrolldoneright.com

Sage Accpac Canada, n.d.Sage Accpac Canadian Payroll System. Retrieved

fromwww.accounttech.ca/accpc.com

Surepayroll, 2011.Payroll System. Retrieved from www.surepayroll.com



TABLES	ATTRIBUTES
EMPLOYEE	'emp_id' varchar (20) NOT NULL PRIMARY KEYS,
	'Iname' char(25) NOT NULL,
	'fname' char(25) NOT NULL,
	'mname' char(25) NOT NULL,
	'age' int(2) NOTNULL,
	'address' varchar(50) NOT NULL,
	'email_a <mark>dd' varchar</mark> (30) NOT NULL,
	'civil_status' char(7) NOT NULL,
	'sex' char(6) NOT NULL,
	'dependents' int(1) NOT NULL,
	'TIN' varchar(16) NULL,
1	'phil_health' varchar(14) NULL,
	'GSIS' varchar(20) NULL,
	'HDMF' varchar (20) NULL,
	'bday' varchar (10) NOT NULL,
	'emp_type' char (20) NOT NULL,
	'salary_id' int (10) NULL FOREIGN KEY,
	'position' char (20) NOT NULL,

	'pos_start_date' varchar (10) NOT NULL,
	'status' char(15) NOT NULL,
	'date_hired' varchar(10) NOT NULL,
	'branch' varchar (50) NOT NULL,
	'daily_wage' double NULL,
	'monthly_salary' double NULL,
	'date_contract' varchar(20) NULL,
16	'end_date' varchar(20) NULL.
ATTENDANCE	'att_id' int(10) NOT NULL PRIMARY KEY,
	'type' char(20) NOT NULL,
	'days' float DEFAULT NULL ,
	'date' varchar(17) DEFAULT NULL,
	'deducted_to' char(20) NULL,
	'pay_id' int (10) NOT NULL.
LEAVE CREDIT	'credit_id' int (10) NOT NULL PRIMARY KEY,
	'Vacation_Credits' float NOT NULL,
	'Sick_Credits' float NOT NULL,
	'emp_id' varchar (20) NULL FOREIGN KEY,
	'ben_id' int (10) NULL FOREIGN KEY.
LEAVE WITHOUT PAY	'ded_id' varchar(10) NOT NULL PRIMARY KEY,

	'pay_id' int(10) NOT NULL PRIMARY KEY,
	pay_ia mi(10) NOT NOTE I minimum KET,
	'ded_amt' float NOT NULL PRIMARY KEY,
	'no_days' float DEFAULT NULL.
SALARY GRADE	'salary_id' int(10) NOT NULL PRIMARY KEY,
	'sgrade' int(10) NOT NULL,
	'step' int(2) NOT NULL,
	'sdate' varchar(10) NOT NULL,
16	'basic_pay' int(10) NOT NULL,
(5-1	'pay_id' int(10) NOT NULL PRIMARY KEY.
BENEFITS	'ben_id' int(10) NOT NULL PRIMARY KEY,
	'type' char(20) NOT NULL,
	'amount' float NOT NULL,
1:31	'pay_id' int(10) NOT NULL.
DEDUCTION	'ded_id' varchar(10) NOT NULL PRIMARY KEY,
	'pay_id' int(10) NOT NULL,
	'ded_amt' float NOT NULL.
EMPLOYEE ATTENDANCE	'emp_id' varchar (20) NOT NULL PRIMARY KEY,
	'att_id' int(10) NOT NULL PRIMARY KEY.
EMPLOYEE BENEFIT	'emp_id' varchar (20) NOT NULL PRIMARY KEY,

	'ben_id' int(10) NOT NULL PRIMARY KEY.
EMPLOYEE DEDUCTION	'emp_id' varchar (20) NOT NULL PRIMARY KEY,
	'ded_id' varchar(10) NOT NULL PRIMARY KEY.
LEAVE WITHOUT PAY	'credit_id' int(10) NOT NULL PRIMARY KEY,
CREDIT	'ded_id' varchar(10) NOT NULL PRIMARY KEY.
LOAN	'ded_id' varchar(10) NOT NULL PRIMARY KEY,
/9	'ded_amt' float NOT NULL PRIMARY KEY,
	'pay_id' int(10) NOT NULL PRIMARY KEY,
	'company' char(20) DEFAULT NULL,
	'no_pays' int(2) DEFAULT NULL,
	'total_amt' float DEFAULT NULL,
	'status' char(10) DEFAULT NULL,
	'start_date' varchar(10) DEFAULT NULL,
	'amt_paid' float DEFAULT NULL,
	'no_paid' int (2) NOT NULL,
	'parent_company' varchar (25) NOT NULL.
PAYROLL	'pay_id' int(10) NOT NULL PRIMARY KEY,
	'pay_period' varchar(17) NULL,
	'first_release' varchar(10) NULL,

	'second_release' varhcar(10) NOT NULL.
	'pay_status' char(15) NOT NULL,
	'description' varchar (200) DEFAULT NULL.
PREMIUM	'ded_id' varchar(10) NOT NULL PRIMARY KEY,
	'ded_amt' float NOT NULL PRIMARY KEY,
	'pay_id' int(10) NOT NULL PRIMARY KEY,
	'company' char(25) NULL,
	'total_amt' float NULL.
	Things of Same State 1
TAX	'ded_id' varchar(10) NOT NULL PRIMARY KEY,
	'ded_amt' float NOT NULL PRIMARY KEY,
	'pay_id' int(10) NOT NULL PRIMARY KEY,
	'hon <mark>oraria'</mark> float NULL,
	'date_earned' varchar(17) NULL,
	'TWT' float NULL.

DATABASE: PENRO_TABLE;

TABLES	ATTRIBUTES
GSIS	'gsis_id' int (3) NOT NULL PRIMARY KEY,
	'employee_share'double(10,2) NOTNULL,
	'employee_share'share'double(10,2)NOTNULL.
HDMF	'hdmf_id' int (2) NOT NULL PRIMARY KEY,
	'gross_pay_range' varchar (30) NOT NULL,
19	'employee_share' double(10,2)NOT NULL,
THE TRUCK	'employee_share' double(10,2)NOT NULL.
PhilHealth	'phil_id' int (3) NOT NULL PRIMARY_KEY
7	AUTO_INCREMENT,
15 1 th	'range_from' double (10,2) NOT NULL,
Tell M	'range_to' double (10,2) NOT NULL,
1.60	'salary_base' double (10,2) NOT NULL,
	'monthly_premium' double (10,2) NOT NULL,
	'employee_share' double (10,2) NOT NULL,
	' employer_share' double (10,2) NOT NULL.
Тах	'tax_id' int(3) NOT NULL PRIMARY KEY,
	'taxable_income' varchar (50) NOT NULL,
	'tax_due' varchar (55) NOT NULL.



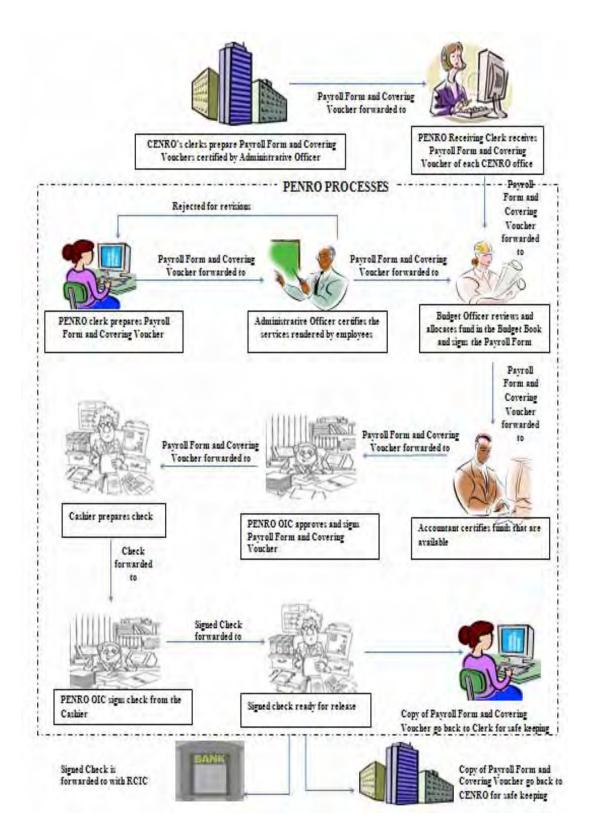


Figure 6. Graphical Representation of existing Payroll System

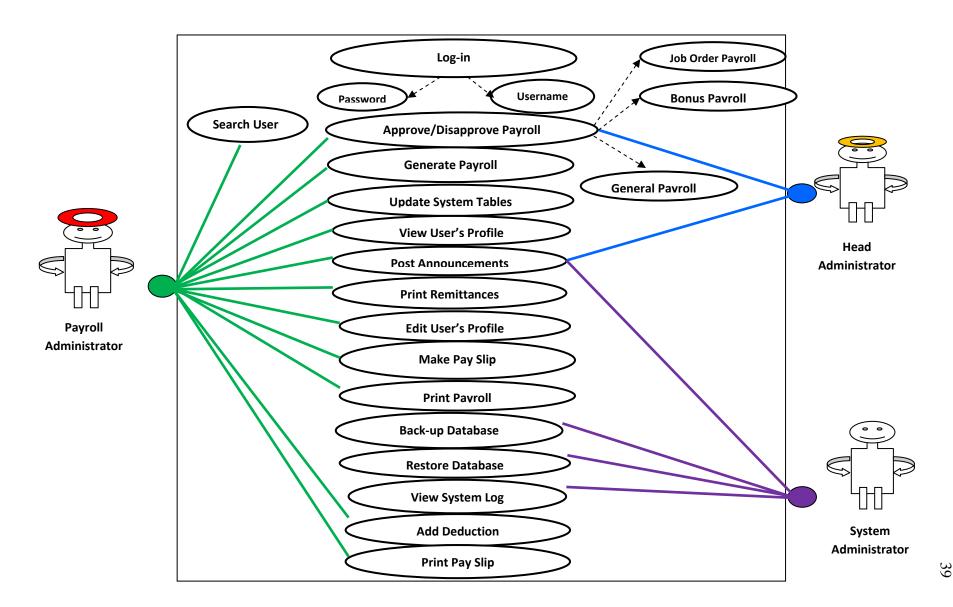


Figure 10. Use Case Diagram of the Proposed Payroll System (Administrators)

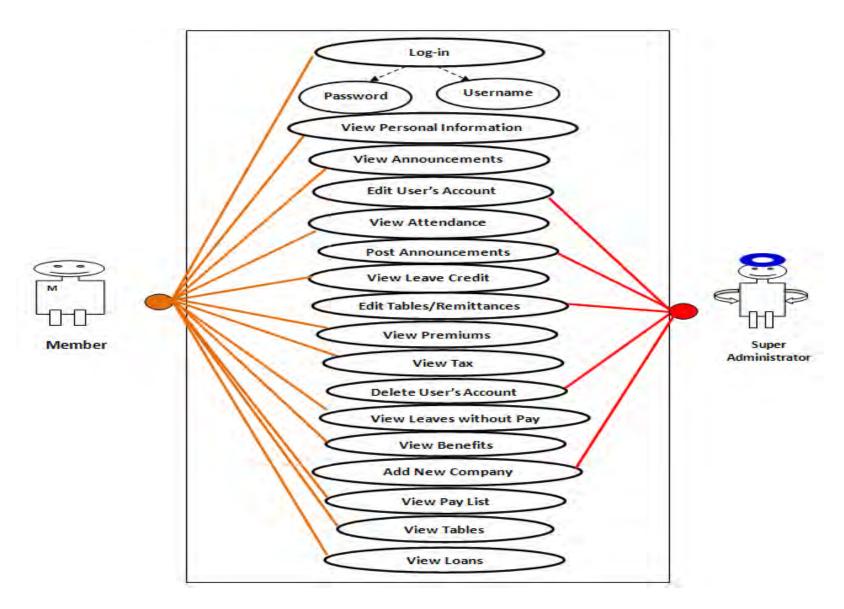


Figure 10. Use Case Diagram of the Proposed Payroll System (Administrators)

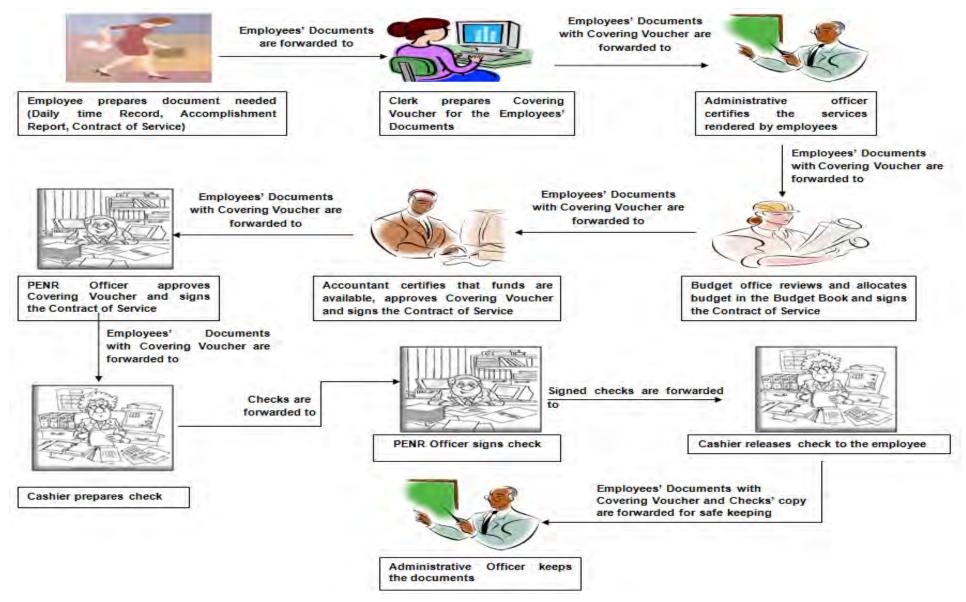


Figure 7. Graphical Representation of the existing Job Order Employees' Payroll

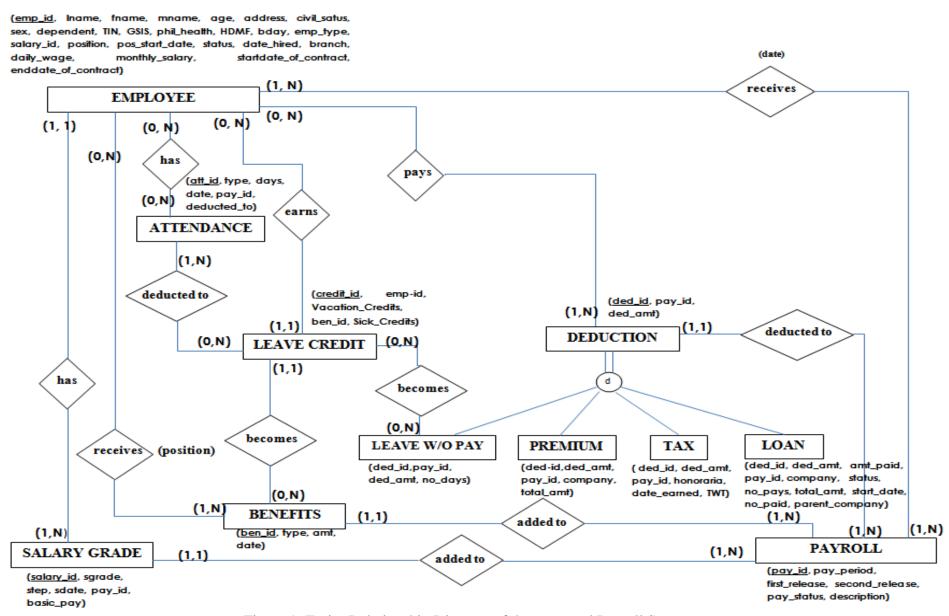


Figure 9. Entity Relationship Diagram of the proposed Payroll System

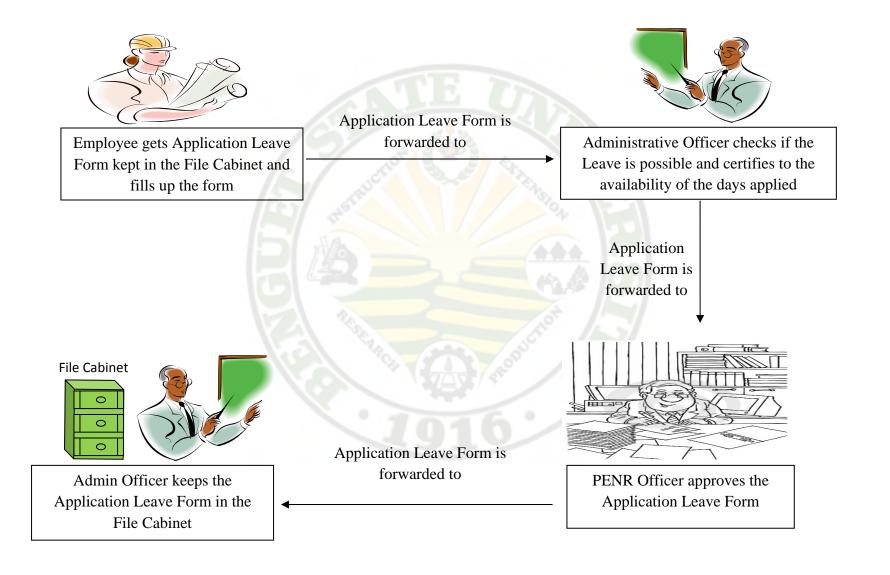


Figure 8.Graphical Representation for Application of Leave

Appendix A Company Profile



History

E.O 192 – Reorganizing the Ministry of Natural Resources into Department of Environmental and Natural Resources (DENR) with its Regional, Provincial and Community field offices.

PENRO Benguet is the Provincial Environment and Natural Resources Office of DENR in Cordillera Administrative Region. It is a government office undertaking public service in line with the environment. It was established under the Republic Act No. 7160 otherwise known as the Local Government Code of 1991 where in forest management functions were devolved to Local Government Units (LGU's).

Department of Environment and Natural Resources (DENR) issued Department Administrative Order No. 92-30 entitled "Guidelines for the Transfer and Implementation of DENR Functions Devolved to the Local Government Units. It aims to bring the services closer to the people and LGU's have the power and authority to perform specific functions and responsibilities transferred from the National Government.

The DENR devolved to the Local Government Units the implementation of the community-based forestry projects like the Integrated Social Forestry Program (ISFP) and similar projects, management and control of communal forests at the same time enforcement of forestry laws limited to community based

forestry projects, pollution control law, small-scale mining law and other laws on the protection of the environment.

Mandate

The DENR is the primary government agency responsible for the conservation, management, development and proper use of the country's environment and natural resources.

Vision

A nation enjoying and sustaining its natural resources and a clean and healthy environment.

Mission

The Provincial and Community Natural Resources Offices shall be the driving forces in the province in the pursuit of a sustainable development, enabling stakeholder, participation in the protection, conservation and management of environment and natural resources for the present and future generation.

Appendix B

Letter to the Company





Appendix C

Reports and Forms





Appendix D

Certification







Users Manual

INTRODUCTION

The PENRO - Benguet Payroll System is a payroll solution designed to ease payroll computation and generation.

GETTING STARTED

Minimum Hardware Requirements

Intel Pentium IV 1.6 GHz

512 RAM

10 MB free disk for the PENRO Payroll System

50 MB (or more) free disk for data storage

Minimum Software Requirements

PHP 5.4

WAMPSERVER 2.3

MySQL 5.5.16

Adobe Reader

Mozilla Firefox or Google Chrome web browser

Installing the system

- Insert the PENRO-Benguet Payroll System CD into your CD/DVD-ROM
 Drive
- 2. Open your CD/DVD-ROM drive

- 3. Install WampServer2.2a-x32 or WampServer2.3-beta-x32 in drive C
- 4. Open the Wamp folder found in the CD, copy data folder to:

 C:\wamp\bin\mysql\mysql5.5.16
- 5. Click ok/yes if prompt

*note: C: can be changed by the directory of Wamp server make sure Wampserver is not running in the taskbar

- 6. Open the Wamp folder found in the CD, copy the PENRO-Benguet
 Payroll System folder then paste it into your www folder located in your
 Wamp folder: C:/wamp/www
- 7. Open Firefox or Google Chrome
- 8. In the address bar, type C:/localhost//PENRO Payroll System

Log-in Security

There are five (5) types of accounts that can access the system. The accounts are Payroll Administrator, System Administrator, Super Administrator, Head Administrator and the Employees of PENRO-Benguet.

The Log-in form requires the user to enter their respective usernames followed by their unique password which had registered by the Payroll Administrator.

After entering username, password and security code click the Log-in button. If one does have an account registered in the system, it will be possible for the person to gain access to the system.



USING THE SYSTEM

After successfully logging in to the system, the Announcement page of the payroll administrator will appear. For the Payroll Administrator, there are five (5) menus namely: Announcement, Tables, Payroll Form, Reports, and Employees.

Working with the Menus



 Announcement Menu. This page serves as the main home page of the system. This page also contains the vision and mission of PENRO-Benguet.



- a. Post new Announcement . Enable the user to post an announcement.
- 2. <u>Tables</u>. The table form allows the user to view and edit the employees' PhilHealth Table, GSIS table, HDMF Table and Salary Table.



a. <u>PhilHealth Table</u>. This table will show the PhilHealth information such
as the Salary Bracket, Ranges, Salary Bases, Employee and Employer
Share and the Total Monthly Premium.



- i. Show 10 entries

 The dropdown list (consisting 10, 25, 50,100) allows the user to select how many entries to appear in the table.
- This textbox allows the user to search information from the PhilHealth

Table.

- iii. Edit . This button allows the user to edit the contents of the table.
- iv. First . When this button is clicked, the content of the first list on the table will be shown.
- v. Previous . When this button is clicked, the previous list on the table will be shown.
- vi. This buttons represents the number of pages of the table's content. If any of these numbers is clicked, the corresponding page number will appear.
- vii. Next / Last . When this button is clicked, the next page or last page list on the table will be shown.

b. <u>GSIS Table</u>. This table shows the GSIS information, the employee and employer's share.



c. <u>HDMF Table</u>. This table shows the HDMF information, the gross pay range, employee and employer's share.



d. <u>Salary Table</u>. This table contains the Salary Grade and the corresponding Step increment value.



3. <u>Payroll Form Menu</u>. The Payroll Form menu allows the Payroll Administrator to view and generate General and Job Order payrolls.



- a. <u>View Payroll</u>. This page will show a list of all generated General (Regular and Casual) and Job Order Payrolls.
- i. Choose in the dropdown list to select the type of payroll to view. To view a payroll, click on the "View Link".
- ii. <u>Print Preview</u>. After clicking the View Link the content of the payroll will be shown. Print preview button will show the whole content of the generated payroll ready for printing.
- b. <u>Make General Payroll</u>. This page will show the Generated Payroll that is already computed according to the information entered by the Payroll Administrator.

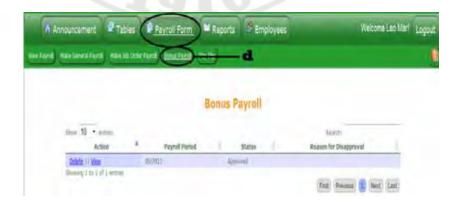


- i. Save Payroll For Approval

 Click this button to save a payroll for approval and it will save in the Head Administrators account for verification and approval.
 - c. <u>Make Job Order Payroll</u>. This page will show payroll of Job Order employees that is already computed according to the information entered by the Payroll Administrator.



d. <u>Bonus Payroll.</u> Payroll for bonuses such as the midyear bonus and year-end bonus are generated before the 15th of the month of May and November respectively.

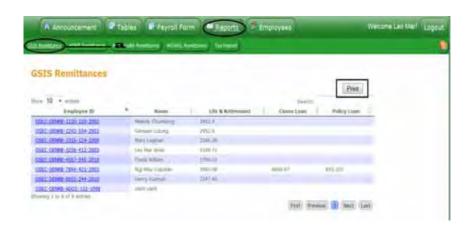


e. <u>Pay Slip</u>. This tab allows the Payroll Administrator to view and print pay slips. To view, click the No. Link.

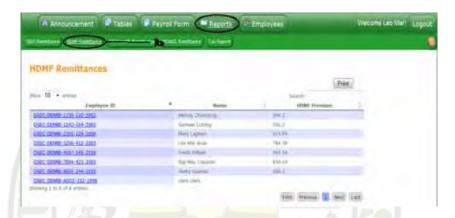
When No. link is clicked, the pay slip of all employees will be saved as a PDF file ready for printing.

GENERAL PAYROLL PAYSUP (For the Month of May, 2012)		GENERAL PAYROLL PAYSLIP (For the Month; of Way, 2012)		PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES OFFICE GENERAL PAYROLL PAYSLIP (For the Month of May, 2012)	
Welody Chumacog	0.00	Germain Cuton		Mary Light	
Basic Pay		Banic Pay		Basic Pay	26,292.00
ACAPERA		ACAPERA		ACAPERA	2:00
RATA	2,000,00		2.74	RATA	0.00
Total Salary	34,810,00	Total Salary		Total Salary	34,392.00
Wending fai	9.884.77	INtenuiong Tax	4,634.67	Withham Tax	3,905.75
00t0 Life & Retirement		SSIS Life & Refrement	2,952.90	GSIS Life & Retirement	2,366.28
Philippath Therium	375.00	Philhipph Premium	575.00	Phillipp Person	325.00
HOMF Fremium	696.20	HOMF Premium	656.20	HOMF Premum	525.64
WOWEL FLND	75.00	MOWEL FUND	75.00	MOWER, FUND	75.00
Loans	0.00	Loans	0.00	Loans	0.00
Total Deduction	9,963.67	Total Deduction	8,690,77	Total Deduction	7,366.67
Net Salary	24,826.13	Net Salary	26,116,23	Net Salary	19.631.13
1/2 Net Salary	12,413,07	12 Net Salary	12,038.12	1/2 Net Salary	9,313.57
PROVINCIAL ENVIRONMENT AND NATURAL RESOL	PROES OFFICE	PROVINCIAL ENVIRONMENT AND NATU	RAL RESOURCES OFFICE	PROVINCIAL ENVIRONMENT AND NA	TURAL RESOURCES OFFICE
PROVINCIAL ENVIRONMENT AND NATURAL RESOL GENERAL PAYSUP (For the Month of May 2012) Lee Mar Asias	POES OFFICE	PROVINGAL ENVIRONMENT AND NATU GENERAL, PAYROLL II (For the Month of May Frends Milliam	ALYSLP (. 2012)	GENERAL PANROLI For the Month of M	L PAYSLIP lay, 2012)
GENERAL PAYROLL PAYSLIP (For the Worth of May, 2012)		GENERAL PAYROLL F (For the Month of May	PALYSLIP (. 2012)	GENERAL PAYROL	L PAYSLIP lay, 2012)
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GENERAL PAYROLL PAYRLP (For the Month of May, 2012) Leto Mar Anas Basic Pay ACAPERA ANTA	36.219.00 2.000.00 2.000.00 36,319.66	GRIERAL, PAYROLL F (For the Month of May Freda William Basis Pay ACAPERA RATA	19,658.00 0.00 0.00	GENERAL PANROLI For the Month of M Rigi May Cop Basic Pay ACAPERA RATA Total Salary	(PAYSLIP lay, 2012) ellan 37,812.00 2,000.00 2,000.00
GENERAL PAYROLL PAYRUP (For the North of May, 2012) Les Mar Anae ACAPERA ACAPERA RATA Total Salary Wesholding Tax	36.219.00 2.000.00 2.000.00 36,319.60 6.607.47	GENERAL, PAYROLL F (For the Month of May Freda William ACAPERA RATA Total Salary	19,658.00 (2012) 19,658.00 (0.00 (19,658.66 (2,631.25	GENERAL PANROLI For the Month of M Rigi May Cop Basic Pay ACAPERA RATA Total Salary	L PAYSLIP lay, 2012) stan 37,812.00 2,000.00 2,000.00 41,812.00
GENERAL PAYROLL PAYRLEP (For the Norm of May, 2012) Less Mar Anas Sans Pay ACAPERA ACAT Total Sarry Welvolving Tax GGIG Life & Barament	36.218.00 2.000.00 2.000.00 36,219.00 6,007.47 3,160.71	GENERAL, PAYROLL II (For the Month of May Freda William ACAPEKA RATA Total Salary (Reholding Tax	19,658.00 (2012) 19,658.00 (0.00 (19,658.66 (2,631.25	GENERAL, PANROLL For the Motion of M Rigil May Cop. RACAPERA RALTA Total Salary Witholding Tax GGGL Life & Retrement	(PAYSLP lay 2012) silan 27.812.00 1.000.00 1.000.00 41.812.00 6.00 6.00 6.00 6.00 6.00 6.00 6.00
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GENERAL PAYROLL PAYRUP (For the North of May, 2012) Lee Mar Anas ACAPERA ACAPE	36.218.00 2.000.00 2.000.00 36.319.00 6.607.47 3,160.71 376.00 784.38	GENERAL PAYROLL P (For the Month of big Freda William RACAPERA RATA Total Salary Mithodolog Tax GSS Life & Ratement Publish Premium HOMF Premium MOWEL PURD	18,698 00 0.00 0.00 18,698 00 18,698 00 18,698 00 1,790 22 237.50 389 16	GENERAL PAYROLI For the Motion of M Rigit May Cop ACA/PEIA RATA Total Salary Wend of A Systematic Politicals Personnel Politicals Personnel MOREL FUND MOREL FUND MOREL FUND	, PAYSL P tay 2012) after 37.512.00 2.000.00 45.912.00 65.912.20 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00 5.000.00
GENERAL PAYROLL PAYRUP (For the North of May, 2012) Lee Man Anna ACAPERA RATA Total Salary Welholding Tax (0.03 Like Sharement PANHASAN PANHASAN MORE LIKED MORE Premuzes MORE LIKED Listen	36.218.00 2.000.00 2.000.00 36.219.00 6.007.47 3.160.71 376.00 764.38 Til.00	GENERAL, PAYROLL P For the Month of May Frieda William ACAPERA RATA Tatal Salary Withholding Tax GIGL List & Retrement HOME Premium HOME PLAN HOME PLAN Loors	PAYSUP (2012) 19,698.00 (.00 (.00 (19,698.00 (.00) 2,691.25 (.790.25 (.790.25 (.790.25 (.790.25 (.700.25) (.700.25 (.700.25) (.700.25 (.700.25) (.700.25 (.700.25) (.7	GENERAL PAYROLI For the Motion of M Rigit May Cop ACA/PEIA RATA Total Salary Wend of A Systematic Politicals Personnel Politicals Personnel MOREL FUND MOREL FUND MOREL FUND	C PAYSL P to 2012) silan 37.812.00 2.000.00 2.000.00 4.5912.00 8.5912.71 2.491.00 578.00 588.24 71.00
GENERAL PAYROLL PAYRUP (For the Norm of May, 2012) Les Mar Anas Basis Pay ACA/PERA ACAT Total Salary Webnolong Tax GGIG Life & Basiment Pashasain Headin MOREL Purior MOREL PUDO	36.218.00 2:000.00 2:000.00 36;319.60 6:607.47 3,160.71 376.00 784.38 78.00 0:00	GENERAL, PAYROLL P For the Month of May Frieda William ACAPERA RATA Tatal Salary Withholding Tax GIGL List & Retrement HOME Premium HOME PLAN HOME PLAN Loors	78(15), P (2012) 19,699.00 (0.00 (15,696.00 2,811, 21 1,790.22 227.50 399.16 (10,00 0.00 5,366.13	GRAPAL PAYROLI For the Morte of M Righ May Cop ACAPENA RATA Total Salary Wendding Tot GGG Us Retrement Publisher Premium MOREL PUND Lame	C PAYSL P 20 2012) selan 37.512.00 2.000.00 2.000.00 41.512.00 60.027 2.401.00 60.24 711.00 7.500.00

- 4. <u>Reports</u>. This page contains the GSIS, HDMF, Phil Health, MOWELL, Tax Reports other individual remittances.
 - a. <u>GSIS Remittances</u>. It will show the GSIS Remittances forms of regular and casual employees of PENRO for a certain period of payroll.



- i. Print . When this button is clicked, the GSIS Remittances will be saved as a PDF file ready for printing.
 - b. <u>HDMF Remittances</u>. It will show the HDMF Remittances forms for the regular and casual employees for a certain period of payroll.



c. <u>Phil Health Remittances</u>. It will show the Phil Health Remittances forms for the regular and casual employees of PENRO for a certain period of payroll period.



 d. Mowel Remittances. This tab will show the Mowel Remittances for regular and casual employees of PENRO.



e. Tax Report. This tab will show the Tax Report of permanent and casual employees.

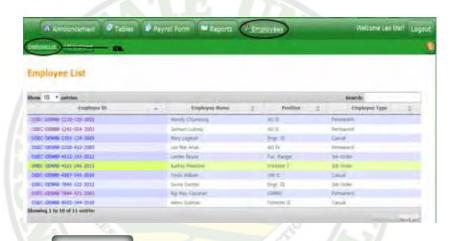


5. <u>Employees</u>. In the Employees' Menu, the Payroll Administrator can view/edit Employee List, Add Employee and Search Employee.

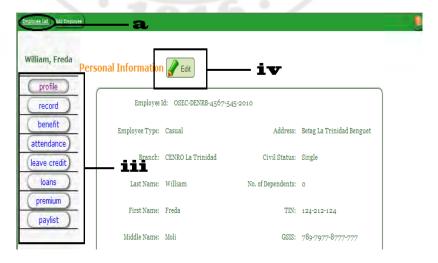


 a. <u>Employee List</u>. This tab will show the list of employees. It allows the Payroll Administrator to edit the profile of the employees.

- i. <u>Employee ID link</u>. The Employee ID link allows the Payroll
 Administrator to view and edit an employees' profile information.
- ii. . This textbox allows the user to search an employee by his/her ID, last name, position and type.
- iii. <u>Employee List Menus</u>. This menus links the user to edit the profile of an employee.



iv. This button enables the user to edit the profile of an employee. It will be automatically change to save after clicking.



v. Save ... When this button is clicked, the edited information will be saved.



b. Add Employee. It allows the Payroll Administrator to add new employee.



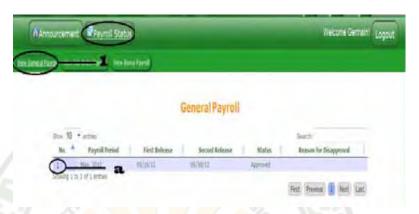
.This links allows the Payroll Administrator to choose the employee type of the new hired employee. This links contain the following:

- i. <u>Personal Information</u>. This page requires the user to fill in the new employee/s' personal information being asked such as the Employee Id, Name, Address, Birthday, Civil Status, Gender, No of Dependents, GSIS number. HDMF number, TIN, PhilHealth and Email address.
- ii. <u>Employment Record</u>. This page requires the user to fill in the employee/s' employment record which consist of the Branch Name (PENRO, CENRO Buguias/La Trinidad/Baguio), Position, Start Date, Hired Date and Step Since Date.
- iii. <u>User Account</u>. This requires the user to fill in the new member's user account.
- iv. Next . This button links the user to the next page.
- v. This button links the user to the previous page.
- vi. When this button is clicked, the entered information of the new employee/s will be saved into the database.

Main Page for the Head Administrator

The Head Administrator's page contains the Announcement page and Payroll Status. The head administrator can also view/post announcements.

1. Payroll Status Menu. This page shows payrolls pending for approval.



- a. <u>View General Payroll.</u> This tab will show general payroll pending foe approval.
- b. No. link. This links the user to view the whole contents of a payroll.
- i. Approve . Once this button is clicked, the payroll will be saved and will be ready for printing.
- ii. Disapprove . When this button is clicked, a comment box will appear.
- iii. <u>Comment Box</u>. This will appear once Disapprove button is clicked.This is used to input corrections found in the payroll.

- iv. . When this button is clicked, it will be directed to the Payroll Administrator for revision.
- c. <u>View Job Order Payroll.</u> This tab will show a job order payroll pending for approval.
- d. <u>View Bonus Payroll</u>. This tab will show a bonus payroll pending for approval.

Main Page for the System Administrator



The System Administrator has two (2) menus also namely, Announcement Menu and Database Menu. He/she can also view or post announcement and is the only one who is allowed to manipulate the database.

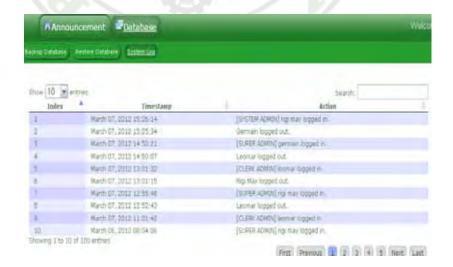
- 1. Database Menu. This page allows the System Administrator to restore/backup database and view the system log.
 - a. <u>Back-up Database</u>. In this page, the System Administrator can back-up databases.



b. <u>Restore Database</u>. This page allows the System administrator to restore those databases that were previously backed-up.



- i. Restore. When this button is clicked, selected database will be restored.
- c. <u>System Log</u>. This page allows the System Administrator to view who logged in, the time he/she logged-in and logged-out, as well as what action the user commit.



Main Page for the Super Administrator

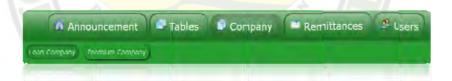


The System Administrator has five (5) menus namely, Announcement Menu, Table Menu, Company Menu, Remittances Menu and Users Menu. He/she can also view or post announcement.

 Table Menu. This menu consists of the PhilHealth, GSIS, HDMF and Salary Table which are edited by the Super Admin.



2. Company Menu. This menu will show the current loaning companies where the employees avail loans and premiums.



- ADD Company. This links the user to add a new companies where the employees avail loans and premiums.
- 3. Remittances Menu. This menu will show the GSIS, HDMF, PhilHealth and MOWEL Remittances which can be edited by the Super Admin.



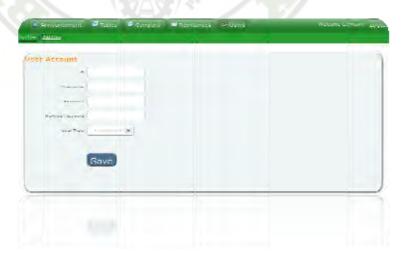
4. <u>User Account</u>. This menu will the list of users of the system and allows the user to edit or delete an account.



i. <u>User List</u>. This tab will show the list of all users.



ii. Add User. This tab will allow the user to add a new user account.



Main Page for the Member

Payroll officers such as the System Admin, Payroll Admin, Head Admin and Super Admin have different account as a member from the the account they have as a Payroll Officer. Other employees are registered as a member. Members are only allowed to view Announcements, their Profile and Payroll Tables.

a. <u>Home Page</u>. The home page of a member's account does not only contain the list of announcement but it also includes the vision and mision of PENRO Benguet.



b. <u>Profile</u>. This tab will show the member's Personal Information,
Attendance, Leave Credit, Loans, Premium, Tax, Leave Without Pay,
Benefit and their Pay List.



c. <u>Payroll Tables</u>. This tab will show the member's GSIS Table, HDMF
 Table, PhilHealth Table and Salary Table.



CERTIFICATION

This is to certify that

PROVINCIAL ENVIRONMENT AND NATURAL RESOURCES (PENRO) BENGUET PAYROLL SYTEM

was reviewed and revised grammatically for thesis requirements as of March 18-21, 2012.

This certification is issued for any legal or academic purposes it may serve.

Issued on the 21ST day of March 2012 atPocna, Pico La Trinidad, Benguet, Philippines.

Kellani Tigo Rafael

English Tutor (Online Communication)

Curriculum



ANAS, LEO MAR LABADDAN

+63948404369

neomhar@yahoo.com

Personal Background

Date of Birth: April 10, 1990

Place of Birth: Agoo, La Union

Parents Name: Anas, Lorenzo

Anas, Marilyn

Present Address: Fb 016 Tabangaoen, Balili, La Trinidad,

Benguet

Educational Background:

Tertiary: Benguet State University

Secondary: Rosario Integrated School

Elementary: Saytan Elementary School

"Love is what makes the world go round."



CHUMACOG, MELODY S. +639094681684 mmhyrue@yahoo.com

Personal Background

Date of Birth: June 17, 1992

Place of Birth: Sapid, Mankayan, Benguet

Parents Name: Chumacog, George Mendoza

Chumacog, Rosalina Saliwey

Present Address: IC88A Betag La Trinidad, Benguet

Educational Background:

Tertiary: Benguet State University

Secondary: Lepanto National High School

Elementary: Lepanto Elementary School

"A man cannot gain anything without sacrificing something"



COPATAN, RIGI MAY BANG-NGIT +63948204464 rigi_may@yahoo.com

Personal Background

Date of Birth: May 10, 1991

Place of Birth: Capinitan, Sabangan, Mt. Province

Parents Name: Copatan, Leo Tangpep

Copatan, Theresita Bang-ngit

Present Address: P004, Wangal, La Trinidad, Benguet

Educational Background:

Tertiary: Benguet State University

Secondary: Pingad National High School

Elementary: Capinitan Elementary School

"No Pain, No Gain"



LUTONG, GERMAIN C. +639994466492 gemzzzx@yahoo.com

Personal Background

Date of Birth: June 15, 1991

Place of Birth: Lepanto, Paco, Mankayan, Benguet

Parents Name: Lutong, Geoffrey

Lutong, Filomina Casido

Present Address: OD-327 Tawang, La Trinidad, Benguet

Educational Background:

Tertiary: Benguet State University

Secondary: San Jose High School

Elementary: La Trinidad Central School

"Do not beg for things, do it yourself, or else you will not get anything"



Sabino, Daisy I.
+639107855632
sakurasano76@yahoo.com

Personal Background

Date of Birth: December 30

Place of Birth: Kayapa, Nueva Vizcaya

Father's Name: Sabino, Paul O.

Mother's Name: Sabino, Conchita I.

Present Address: JC-227 Pico, La Trinidad, Benguet

Educational Background:

Tertiary: Benguet State University

Secondary: Besong High School

Elementary: Kayapa Elementary School

"..the result of a battle is not determined by strength alone.."

