DEVELOPMENT OF A WEB-BASED STUDENT PERMANENT RECORD MANAGEMENT SYSTEM FOR SANTA RITA COLLEGE OF PAMPANGA

A Capstone Project

Presented to the

Faculty of the College of Computer Studies

Santa Rita College of Pampanga

In Partial Fulfillment

of the Requirements for the Degree

BACHELOR OF SCIENCE IN INFORMATION SYSTEM

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APPROVAL SHEET

This Capstone Project entitled "**Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga**" proposed and submitted by **John Dexter N. Garcia, Bernadette M. Garcia, Ian Carlo C. Garcia** in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN INFORMATION SYSTEM**, has been examined and found in order and is hereby recommended for acceptance and approval for **ORAL EXAMINATION**.

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The Researchers

ABSTRACT

Researchers have created a system that will facilitate the paper works of the registrar office of Santa Rita College of Pampanga. The system created by the researchers is the Permanent Record Management System which contains the records of the students at Santa Rita College of Pampanga where the school can maintain students' records within the system developed by the researchers. The system created by the researchers is where they can add new students studying at Santa Rita College of Pampanga. With this system, they can also print what is needed for a student's record. These records contained in the system created by the researchers do not have an image of a student because they are confidential documents, no matter where you go to a company or another school, whether private or public, their record or Form 137 does not have an image of a student.

Keywords: *Record Management System, Student Permanent Record, Web-Based*

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INTRODUCTION

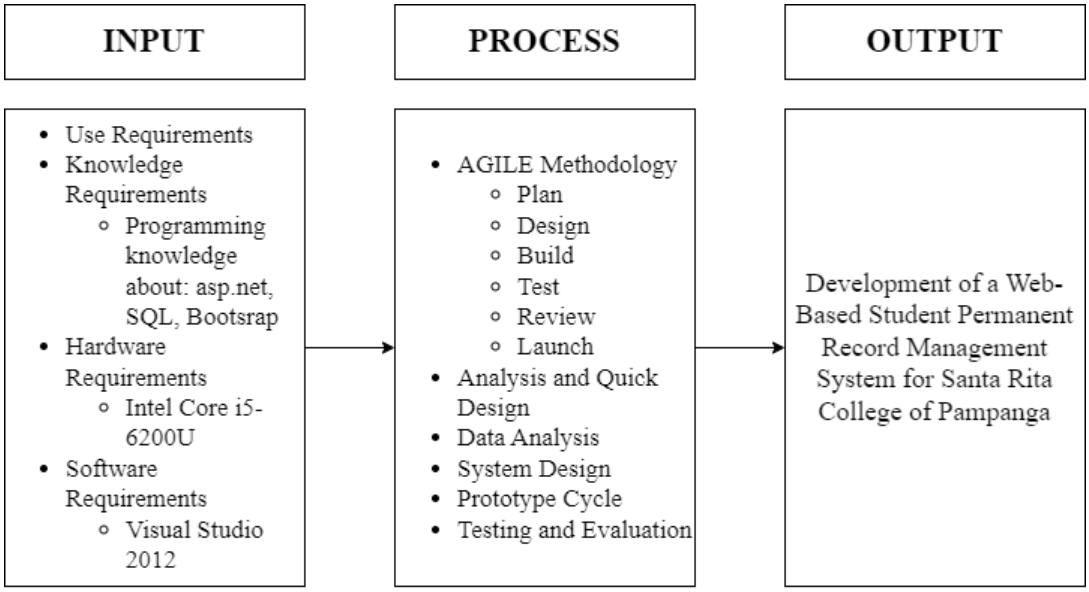
BACKGROUND OF THE STUDY

Records used to be easy to place but difficult to find because of the increasing population of students attending a school like Santa Rita College of Pampanga, there are many students in this school so their records are placed in a shelf of the school's Registrar's Office, so when they are looking for a record of a student, they will search their shelves. The proposed system can help Santa Rita College of Pampanga with their problem with the records of students at the school. The record management system helps us facilitate our daily work especially at the Registrar's Office of Santa Rita College of Pampanga, it can make it easier to see when using this system. The records of a school will be collected in a single system where it will not be lost, and it will not be destroyed because it is no longer the manual search on the shelves of the Registrar's Office.

The record management system used to be paper based, all the records of students are on the shelves, usually found in the registrar's office. So, when they look for a record of a student, they manually search the shelves, so it is a hassle, and it takes time to find a record of a student at the school. Today's system in record management is technological or will make it easier to find a record or document of a student. The system now uses different technologies, they are creating a system for record management so that it is no longer a hassle to find a record or document of a student.

This system can do a lot for us daily such as our work at the Registrar's Office will be made easier, it will no longer be difficult to search the records of students. The destruction of records on the shelves will also be avoided because it is no longer paper based.

Figure 1
Conceptual framework Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga



In figure 1, the researchers will utilize a conceptual framework that is designed to show inputs needed which will be utilized and pressed to produce the Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga. It shows the concept and procedures to be undertaken in line with the completion of the system. The knowledge requirements are asp.net, SQL, Bootstrap. The Hardware requirements of the designed project consist of Intel core i5-6200U.

STATEMENT OF THE PROBLEM

The Santa Rita College registrar has no existing information system that will handle the student permanent record which can store and retrieve the record in the proposed project.

Problems:

1. How to design and develop record management for Santa Rita College of Pampanga?
2. Identify the features and functionality included in the record management system?
3. What are the benefits of the proposed system?
4. How to evaluate the system based on the ISO 25010 standards with the following criteria:
    a. Functional Suitability
    b. Performance Efficiency
    c. Compatibility
    d. Usability
    e. Reliability
    f. Security
    g. Maintainability

OBJECTIVES OF THE STUDY

The objective of the study is to design, develop and evaluate the proposed project in the Santa Rita College Registrar information system for student permanent record.

The researchers' specific goals are as follows:

1. Designing and developing a record management system involves several steps to ensure that it meets the needs of users, is efficient, secure, and scalable.
2. A record management system (RMS) typically includes a range of features and functionalities designed to efficiently manage, store, retrieve, and secure records or documents.
3. The benefits of implementing a record management system (RMS) are numerous and can have a significant positive impact on organizations.
4. To evaluate the system based on ISO 25010 with the following criteria:
    a. Functional Suitability
    b. Performance Efficiency
    c. Compatibility
    d. Usability
    e. Reliability
    f. Security
    g. Maintainability

SIGNIFICANCE OF THE STUDY

This study will improve the existing process in the Registrar's office of Santa Rita College of Pampanga by improving record handling and management. Records management systems are important for Santa Rita College of Pampanga because they help organize and maintain important documents and information. The system will ensure easy access, proper storage, and efficient retrieval of records, which saves time for staff to facilitate record retrieval for students of Santa Rita College of Pampanga.

Benefiting the study are the various sectors:

- **School** - With the proposed system they will be able to organize the records of students in Santa Rita College of Pampanga by creating a centralized database for grade 1 to college level.
- **Students** - This study can be used by Santa Rita College of Pampanga to enhance their record keeping system so that data is more secure and has backups.
- **School Registrar** – The staff we often see in a school, the staff are the ones who take care of our records or documents of students or staff of Santa Rita College of Pampanga. Here we can see our students at Santa Rita College records where they are placed on their shelves, the system helps registrar to permanent record the data of student.
- **Registrar Department** – The Registrar Department is the holder of students record in Santa Rita College of Pampanga where they can get what they need such as grades, good moral, and form137 of students in Santa Rita College of Pampanga. They also manage the records at the Registrar Office.
- **Researchers** – Researchers prepared their research for Santa Rita College of Pampanga to help their problem in the Registrar Office.
- **Future Researchers** - Future researchers can use this study as a reference to their study.

SCOPE AND DELIMITATION OF THE STUDY

The scope of the study is to effectively manage and arrange the enormous volume of documents that are often found in educational institutions, the proposed system uses a

Record Management System (RMS), which includes a variety of features and functionalities.

The delimitation of the Santa Rita College of Pampanga Record Management System is limited in that it does not allow us to attach a photo to a student's file. Student records can be printed, viewed, uploaded PDF, and edit by the Registrar Department.

DEFINITION OF TERMS

The following terminologies are operationally defined to make this study simpler to understand and interpret:

1. **Facilitate -** To make something easier or more likely to happen.
2. **Permanent Record -** The permanent record is where we can see our grades from when we studied, it's called Form 137. This document is a DepEd Form 137-A, which contains a secondary student's permanent record. It includes personal information like name, date of birth, parents' names. It also contains academic records like test scores, grades in subjects per grading period, days present and absent from school.
3. **Paper Based -** Used to describe a system that keeps information on paper, rather than on a computer.
4. **Record** – A collection of fields, possibly of different data types, typically in a fixed number and sequence. The fields of a record may also be called members.
5. **Registrar Department** – maintains student records and course data, which can include helping students schedule or register for classes. They also make sure that

their academic performance meets graduation requirements in order to reach an institution's goals by verifying grades with professors on time.

6. **Shelves** - A flat length of wood or other rigid material, attached to a wall or forming part of a piece of furniture that provides a surface for the storage or display of objects.
7. **Storage** - The act of storing: the state of being stored. especially the safekeeping of goods in a depository.
8. **Streamline** - To make a simpler or more efficient system that streamlines the process.
9. **Technology** - The application of scientific knowledge for practical purposes or applications.

CHAPTER II

REVIEW OF RELATED LITERATURE AND STUDIES

In this chapter, the researchers conducted research on earlier studies that are relevant to the current study and that the researchers can recommend. Any related research or articles should be included as references in the Student Permanent Record Management System to identify areas for improvement.

RELEVANCE OF THE DIFFERENT RELATED STUDIES

An electronic program, or group of programs, called an Electronic Records Management System (ERMS) is used to store and maintain current records. ERMS has been widely used to improve educational institutions' performance. The planning and decision-making processes are aided by the system, which improves skills. KSII Transactions on Internet and Information Systems (2021).

As mentioned by Ukaogba and Nwankwo (2020), information that is properly structured, kept, and accessible is made possible by efficient record management in educational institutions. Administrative activities are made simpler, and records release services are provided more quickly and accurately if academic records are in order.

The benefit of school record is derived when information is properly managed through record management practices (Ukaogba & Nwankwo, 2020). Empirical evidence showed that records management had a significant impact on school administration (Charles, 2005) and promotes good governance (Matina & Ngulube, 2019).

In record management, records must meet certain criteria such as confidentiality, proper maintenance, security, content preservation, and context (Akporhonor 2020).

Regardless of their format, nature, or storage, these records are essential assets that need to be handled with care. Efficient documentation is synonymous with efficient administration.

Records generation and reception, records use and maintenance, and records disposition are the three primary stages of recording activities as defined by the records life cycle model (Babalola, 2021).

Netshakhuma (2021) explains that most educational institutions with manual file systems will only grant access for managing archives.

To this end, the results of this study provide insights that other scholars can use to further develop theory involving multiple management standards (MMSs), stakeholder theory (Freeman, 2021).

Records help with decision-making, documenting public operational processes, providing evidence of policies, decisions, transactions, and activities, and assisting the university in legal cases (Giba-Fosu, 2020).

Thus, all universities must take responsibility for the proper storage and management of their records. Clear, consistent, and organized records are essential for keeping compliance and avoiding future issues (Heaney, 2021).

Backups ensure that at least one additional copy of important files can be easily restored if the originals are lost or damaged (Castagna, 2021).

Incorrect course registration, late release of student results, inaccuracy due to manual and tedious calculation, and retrieval difficulties/inefficiency are all issues with student academic record management (Okumbor & Todo, 2020).

The Queensland State Archives (2010) enumerates the record formats as to paper (reports, letters, memos, books, journals and diaries), roll (microfilm, microforms),

photographs (prints, negatives, transparencies and x-ray films), sound recordings (disk or tape), moving images (film or video), electronic records and multimedia. School records are broadly classified into statutory and non- statutory records (Babalola et al., 2021).

Recording activities are categorized into three major phases according to the records life cycle model: records creation & receipt, records use and maintenance and records disposition (Babalola, 2021).

Records management leads to the achievement of organizational goals. Theoretical and empirical research show that good records management benefits institutions (Mukred & Yusof, 2020).

The act of producing intended and expected results of reaching established goals using school resources—human, financial, and material—is known as managerial effectiveness. According to Akinwumi and Opadeye (2020), managerial effectiveness is the ability of an organization to successfully attain its stated goals and objectives by making wise use of its available resources.

A record is a written document that details official transactions or activities within an institution. As mentioned by Opara (2022), a record is an intentional compilation of the actions and occurrences that took place within an organization. It is information contained in files or data about an event that occurred during a specific time.

As mentioned by Elujekwute et al. (2021), a record is any official document, book, or file that contains crucial information about actions and events and is stored at the school office for use and retrieval of data as needed.

Record management procedures are described by Abdullahi (2020) as the manual or electronic generation, storage, retrieval, maintenance, disposal, and usage of official files carrying information about organizational affairs.

As mentioned by Onunwor (2022), record management practices, are procedures or instruments used in the production, archiving, retrieval, and dissemination of official data and information. It refers to methods for gathering, categorizing, keeping, and managing files or records that detail an organization's operations.

Record management practices are methods for generating, preserving, using, and discarding records to guarantee that the appropriate information is given to the appropriate person at the appropriate time (Agu et al., 2021).

As stated by Ajike et al. (2021), record management procedures support information control daily to ensure the organization runs smoothly. Using a variety of record-keeping techniques, principals create, maintain, use, and oversee school documents and files that contain information.

The three steps of record management, according to Otobo (2022), are record generation, record maintenance, and record disposition. The creating, storing, maintaining, and disposing of records—all crucial components of record management are the focus of this investigation. Additionally, records that are made through printed reports, emails, phone calls, and papers that describe the choices, policies, actions, and functions of the organization serve as proof of activities.

As stated by Asamonye et al. (2020), in order for schools to advance and continue, information must be accurate, truthful, signed, and carefully stored.

According to Okaforcha (2022), record maintenance is taking steps or adopting tactics to guarantee that the records that are now accessible are in good order. The author went on to say that updating records also entails making changes to the information already in them.

Based on Onunwor (2022), record maintenance practice is the method used to protect data by making sure they are dust-free, stored in a dry location, and arranged in a logical sequence to make it easier for users to access them.

Records are disposed of by shredding, placing in trash cans, burning, and transferring to archives, according to Babalola et al. (2021). Reducing the amount of paperwork and vast amounts of data that secondary school principals must handle is the main goal of record disposal.

In accordance with Ukaogba and Nwankwo (2020), there is a concerning rate of loss or misplacing of important documents in Delta State secondary schools, and the retrieval of necessary data from storage is done slowly.

TECHNOLOGY RELATED TO THE PROJECT

Edmatix

edmatix.com

Edmatix is the first school management software to be hosted on the cloud. With its highly scalable, secure, and reliable ERP solutions, it offers educational institutions of all sizes a wonderful, automated experience. With the most user-friendly interface available, our school ERP software is made to streamline all your administrative and

academic tasks with unparalleled efficiency, enabling you to meet the expectations of 21st-century education.

Fedena

fedena.com

Fedena is a multifunctional school management system that helps to simplify everyday operations for the school and offers informative data and 360-degree tracking to enable stakeholders to make better decisions more quickly to increase the institution's efficiency.

Alma

getalma.com

Alma is an additional cloud-based student data management system made to make daily administrative duties at educational institutions easier. It is simply customizable to meet the requirements of businesses of all sizes. Alma's ability to provide sophisticated data manipulation and analysis capabilities for improved planning and decision-making is one of its key features.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

The methodology and research design are crucial elements in conducting the study. Organizations can efficiently manage and arrange records to suit their business objectives by utilizing good research design ideas and methodology procedures. Organizations can obtain important insights into their record management procedures and make defensible decisions to enhance their record management systems through surveys, case studies, interviews, observations, and document analysis.

RESEARCH DESIGN

To solve the problem encountered in this study, the researchers executed the agile diagram which focused on the observation of needs of its users. The researchers assessed the existing process of the school to determine the technical feasibility of creating a Record Management System. The researchers also interviewed the staff of the Registrar Department for the requirements analysis and an in-depth understanding of the problems with the current school practices in managing school documents.

RESEARCH PARTICIPANTS

The participants of this study were a total of 1 admin and 2 staffs of School Registrar in Santa Rita College of Pampanga. The Web-Based system that was covered in this chapter, data analysis tools, statistical tools, and data gathering procedures will all be used by the researchers.

Analyzing and collecting numerical data to find patterns, compute averages, assess correlations, and extract general conclusions are all parts of quantitative research. It is applied in many disciplines, such as the social and scientific sciences.

RESEARCH LOCALE

Santa Rita College of Pampanga is located at Carlos Mariano Street, San Jose Sta. Rita Pampanga. Santa Rita College of Pampanga (SRC) is a private, Catholic school that was founded in 1945–1946 and offers programs for elementary, high school, and college students. Students are taught to appreciate God, the community, and the environment in addition to academic performance through SRC's inexpensive education, which aligns with its belief that "Investment in quality education need not be expensive." The College Department now grants bachelor's degrees in information system, accounting technology, and teaching. On the other hand, the Senior High School division provides Technical-Vocational-Livelihood (TVL) and Academic paths. Santa Rita College of Pampanga is recognized by the Commission on Higher Education (CHED) and the Department of Education (DepEd).

Figure 2
Geographical Map and Canvas of the Locale

SOFTWARE DEVELOPMENT METHODOLOGY

The researchers employed agile development methodology to develop the proposed system. The series of clearly defined stages that a software product goes through as it advances through the project life cycle is known as agile. The plan, design, build, test, and review phases are all included in this procedure.

Figure 3
Agile Software Development Life Cycle

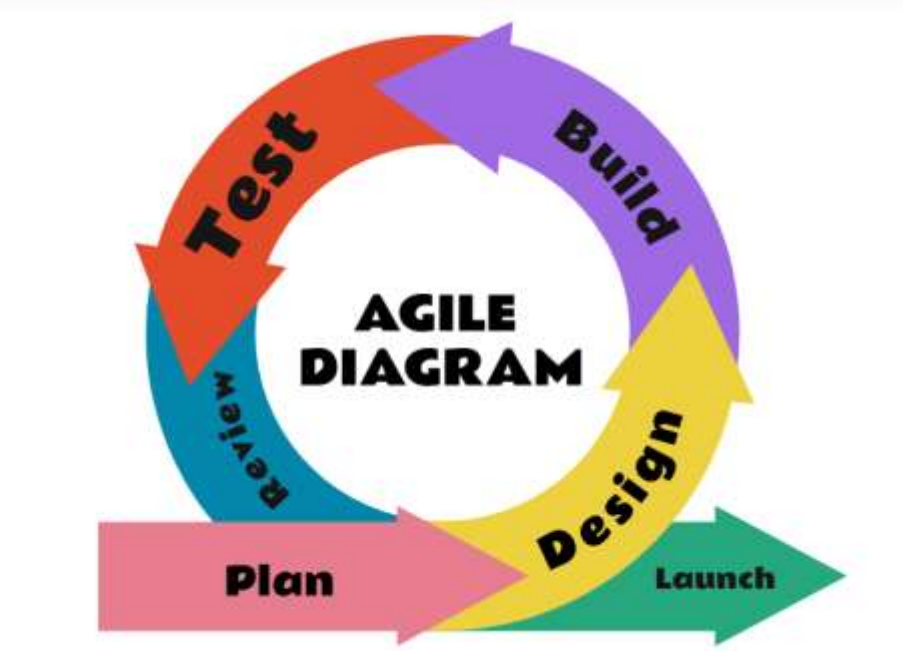


Figure 3 illustrates that the Agile software development lifecycle is not a linear, sequential process but rather a series of iterative cycles. Each cycle involves planning, designing, building, testing, and reviewing a small, functional increment of the software. Feedback from each review is then used to refine the plan or design for subsequent iterations, allowing for flexibility and adaptation to changing requirements throughout the

development process. The "Launch" phase signifies the release of a working version of the software after one or more iterations.

Plan. The researchers determined the amount of work needed for each level and talked about the current agreed-upon schedule. Here is where we combine our thoughts for the system.

Design. During the design phase, the researchers work on to appropriately visualizing the system and selecting an interface that is simple, easy to use, and instructive.

Build. In terms of technology, the researchers create a front-end web application while it is being developed.

Test. The most crucial stage following the creation of the product prototype. This stage of the process involves testing the product so that the developer may get feedback from the user and troubleshoot or improve the system.

Review. Finding reviews from people not involved in the software development process can help detect bugs.

Launch. The release of the system is almost imminent. Agile team members will test the code to make sure there are no errors in it. The system can be launched once the researchers have finished it.

SAMPLE AND SAMPLING PROCEDURES

The Santa Rita College of Pampanga registrar staff makes up the sample and sampling for this study. The convenience sampling method was utilized by the researchers to identify the respondents. Non-probability/non-random sampling, in which samples are chosen based on convenience, was used to pick the study's sample.

RESPONDENTS OF THE STUDY

The respondents of the study were the 1 admin, 2 Staffs from School Registrar and 10 IT experts in Santa Rita College of Pampanga. These people were primarily involved in and benefited from the study.

THE RESEARCH INSTRUMENT

The researchers will use the interview method as their research instrument in collecting data.

Interview - In the field of research, interviews are widely acknowledged as one of the most effective instruments. It is a discussion between two or more people during which the interview is questioned to elicit information. Data linked to the creation and enhancement of the study are to be gathered through interviewing. The researchers spoke with staff members at Santa Rita College in Pampanga's registrar's office, where they disclosed their issues.

Observation - As observed, the registrar's office finds it difficult to locate each student's record; for this reason, the researchers conducted this study to facilitate record management. Prior to working on the system, the researchers identified and comprehended the references and gathered ideas.

DATA GATHERING PROCEDURES

Using interviews, the researchers were able to collect the data required for this study. By questioning registrar staff members about their opinions of the system and some

facts regarding the current state of the registrar office, the researchers were able to collect data and information from their genuine point of view.

DATA ANALYSIS TOOL

The researchers can used interviews to obtain the information required for this study. To obtain data from the actual viewpoint of the registrar office, the researchers conducted an interview with them in which they inquired about their opinions regarding the system and certain facts regarding the state of Santa Rita College of Pampanga at the time.

Researchers will use the ISO 25010 approach to determine software product standards. The results of the assessment on functional suitability, performance efficiency, compatibility, usability, dependability, security, and maintainability will be analyzed using the Likert scale approach. The findings will be calculated and interpreted using the following formula:

$$\text{Rating} = \frac{(E*5) + (VG*4) + (G*3) + (F*2) + (P*1)}{\text{Total Respondents}}$$

Table 1
The Likert Scale Conversion

DESCRIPTION	VALUE	CONVERSION
E	5	4.21 - 5.00
VG	4	3.41 - 4.20
G	3	2.61 - 3.40
F	2	1.81 - 2.60
P	1	1.00 - 1.80

Whereas:

Rating = total result of the evaluation

E = total number of respondents who answered Excellent

VG = total number of respondents who answered Very Good

G = total number of respondents who answered Good

F = total number of respondents who answered Fair

P = total number of respondents who answered Poor

STATISTICAL TOOLS USED

This section will serve as a guide for the researchers as they choose which statistical tools to employ.

Frequency: This was used to calculate the proportion of respondents who fit the statistical survey criteria for the range of given attributes.

Percentage: This was used to determine the number of respondents.

The formula is:

$$P = \frac{F * 100}{N}$$

Where:

P = Percentage

F = Frequency

N = Total number of populations

Mean: This was utilized to ascertain the general description of the answers provided by the participants for every question on the survey.

The formula is:

$$\bar{x} = \frac{\sum f_i x_i}{\sum f_i}$$

Where:

$\bar{x}$= Weight Mean

$\Sigma fixi$= Sum of Weighted Frequencies

Σfi= Sum of Number of respondents

SYSTEM DEVELOPMENT TOOLS

This section shows the different instruments and techniques that researchers employ to build the proposed system. These were employed to enhance the evaluation of the system requirements.

Data Flow Diagram (DFD). The process of flow and logic was visualized using a data flow diagram. The system data's input and output are also displayed.

Entity Relationship Diagram (ERD). Displayed the connections between the entity sets that were kept in the database. In this context, an entity is a part of the data. The database's logical structure is shown in the ERD.

Database Tables. One of the system's most important components is its database tables. It will function as a storage facility for the system's vital input data and information.

CHAPTER IV

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

The information acquired by the researchers on how the suggested system addresses the problem statement is presented in this chapter. It encompasses the creation of a student information system. The findings of the system evaluation, which was conducted using ISO 25010 questionnaires to assess the functional suitability, performance efficiency, compatibility, usability, security, and maintainability of the study "Development of a Student Permanent Record Management System for Santa Rita College of Pampanga", are also included in this section.

PLANNING PHASE OF THE SYSTEM

In this phase, the researchers went to an office inside the school where the documents or records of a student in said school made a broad definition of what the system needs so that they are not troubled and not hassle in obtaining information on a student, the researchers went to the registrar office of Santa Rita College of Pampanga and there we talked to the head of the registrar office to observe here and the researchers saw that on the bookshelves where there were stored student information from 1945 to the present year.

On November 25, 2023, the researchers gave a letter to the Registrar's office of Santa Rita College of Pampanga where the researchers will create a wide system for their office so that they can take care of their information held in the school has been standing for 79 years. The researchers discussed how to operate the system we created for the Santa Rita College of Pampanga.

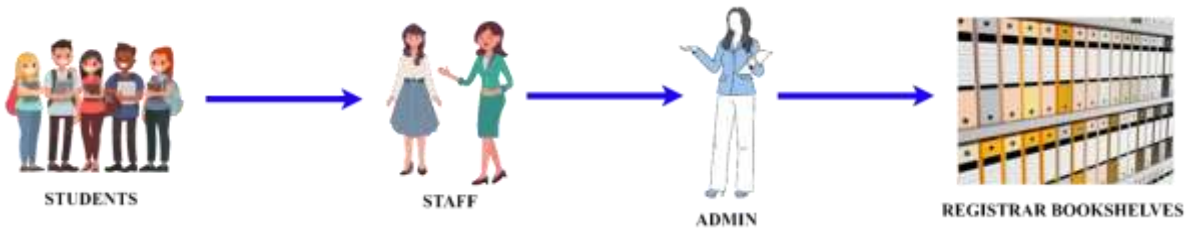
Figure 4
Interview with the Locale

DESIGN PHASE OF THE SYSTEM

Traditional Record Management System of Santa Rita College of Pampanga

There is no record management system operating at the locale. The Santa Rita College of Pampanga employs a method in which student records are stored on paper-based bookshelves. These bookshelves can sustain damage over time from storage. For example, records of graduates from 1945 are only kept in the Registrar's Office, and if they are damaged from long-term storage, the owner or the school may no longer be able to use them.

Figure 5
Traditional Record Procedure in Santa Rita College

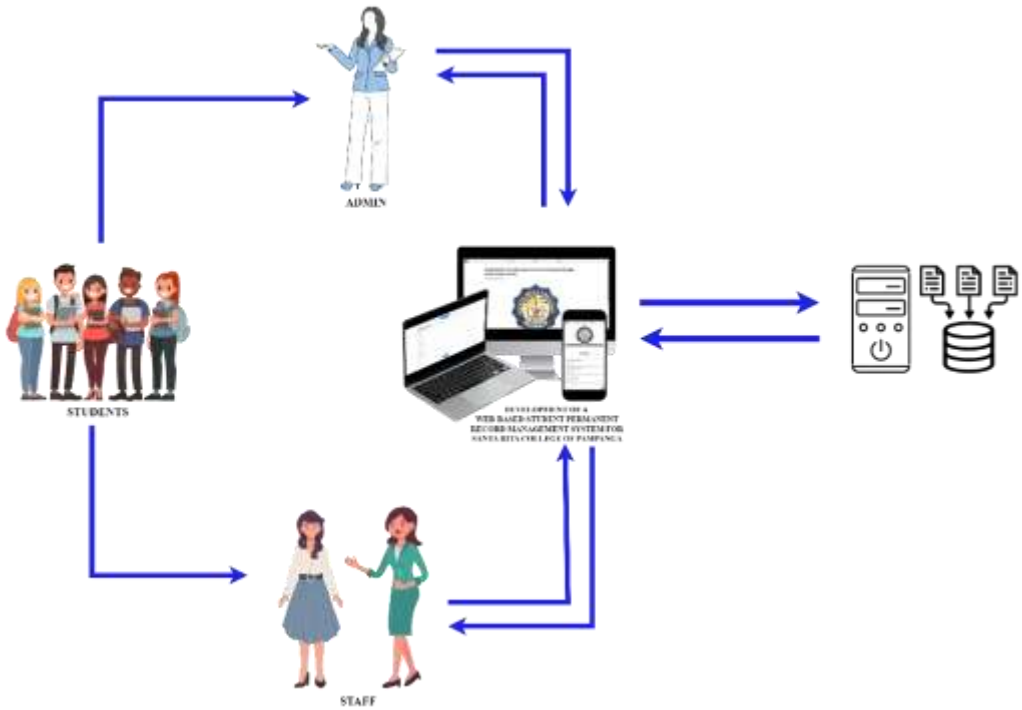


DESIGNING OF THE PROPOSED SYSTEM

The development of a web-based student permanent record management system for Santa Rita College of Pampanga includes activities that will involve (1) Student: go to in the registrar (2) Admin: the one that input the records (3) Staff: The staff can also assist and input records of the student when the admin is not around. Now see the student's uploaded documents. The Admin of the Registrar can print it when someone requests to take or get a copy of a record at the Registrar Office.

Figure 6

Overall Process of a Student Permanent Record Management System for Santa Rita College of Pampanga



DATABASE TABLES

Figure 7
Database Table of a Student Permanent Record Management System for Santa Rita College of Pampanga

Figure 7 demonstrates the database design as it lays out the database's framework. It determines how connectedly the database tables relate to one another.

ENTITY RELATIONSHIP DIAGRAM (ERD)

Figure 8

Entity Relationship Diagram of a Student Permanent Record Management System for Santa Rita College of Pampanga

Figure 8 explains the Entity Relationship Diagram of the Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga.

USE CASE DIAGRAM (UML)

The relationships between the process and the data were defined by the use case diagram. It shows the users with access to the system as well as the features of the system.

Figure 9
Use Case Diagram of a Student Permanent Record Management System for Santa Rita College of Pampanga

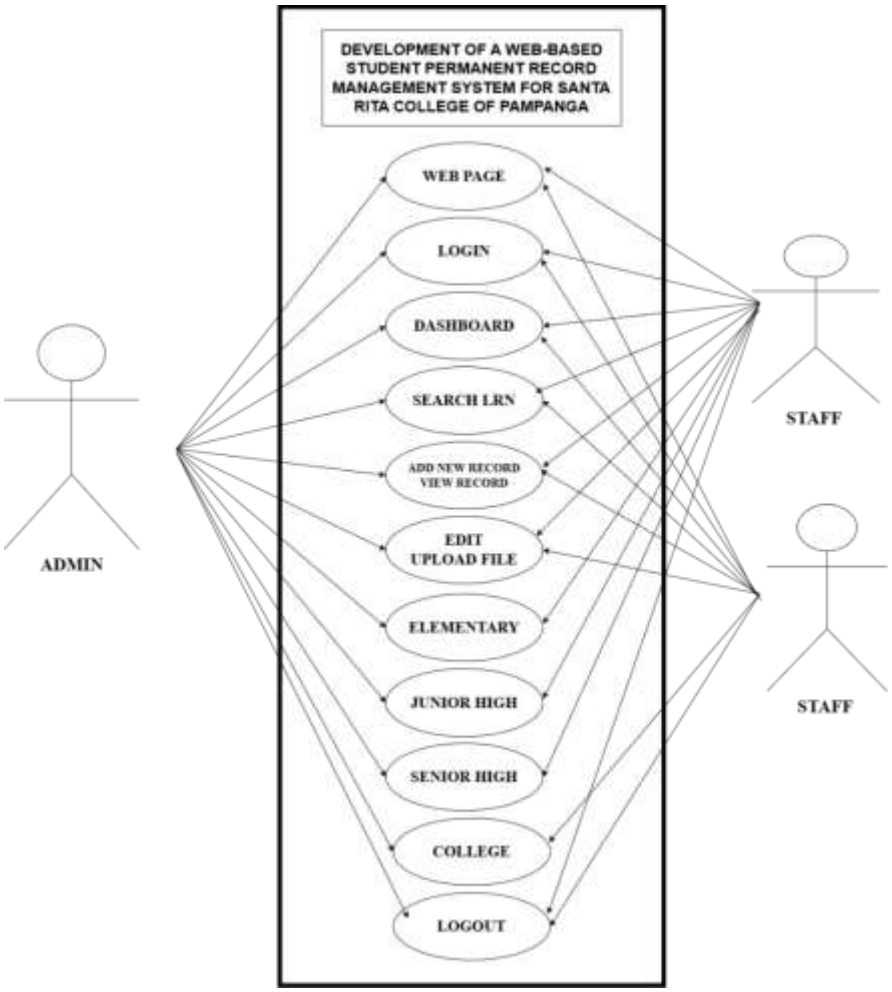


Figure 9 shows how the "Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga" is set up with varying access permissions for various users. The admin has complete authority over every part of the

system, whereas the staff has less access and is mainly responsible for adding, searching, and examining student records. Additionally, the system has basic features like dashboards, login, and log-out capabilities. Although the Admin in this figure is the only one expressly related to direct access to these categories, the classification of records by educational level implies that they may be arranged or filtered according to these levels.

DATA FLOW DIAGRAM (DFD)

The Data Flow Diagram shows the flow of data and process of the system.

Figure 10
Context Diagram Level 0 of a Student Permanent Record Management System for Santa Rita College of Pampanga

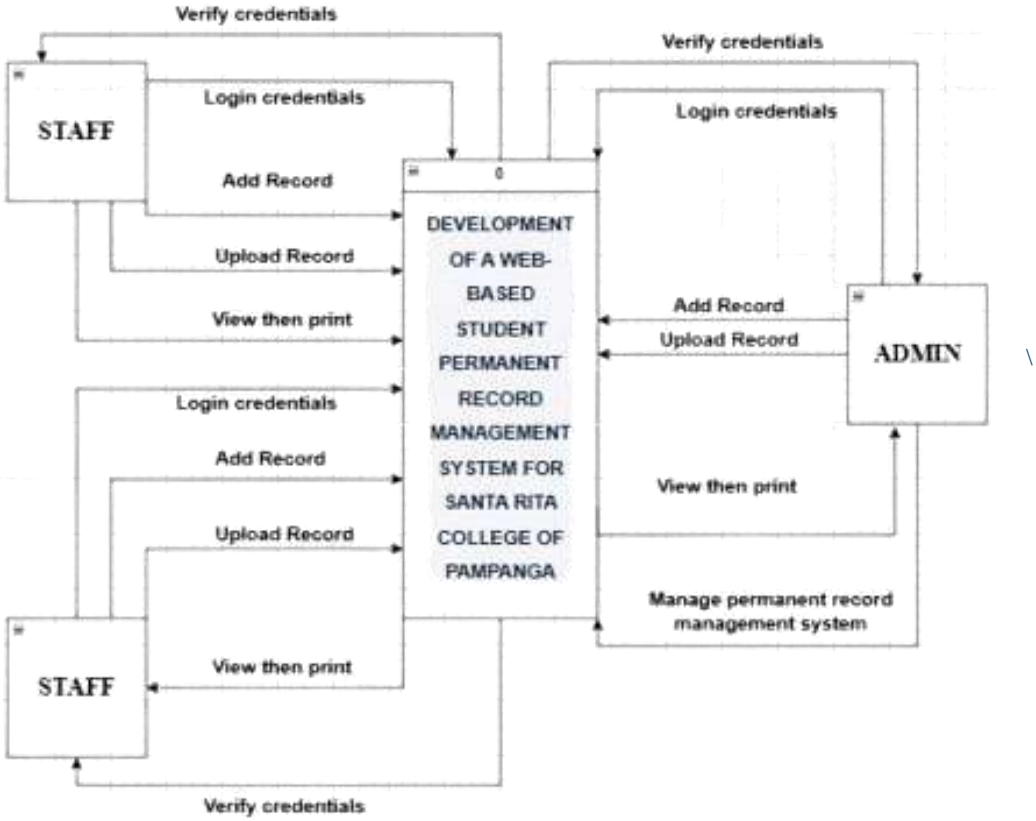


Figure 10 it demonstrates how staff and admin use the system to add records, upload records, examine and print records, and provide login credentials. Furthermore, the admin possesses the exceptional capacity to "Manage permanent record management system," signifying administrative authority over the setup and upkeep of the system. The system serves as a central hub for handling student records that are available to authorized individuals, as the graphic illustrates by highlighting the data flows required for these interactions.

Figure 11
Context Diagram Level 1 of a Student Permanent Record Management System for Santa Rita College of Pampanga

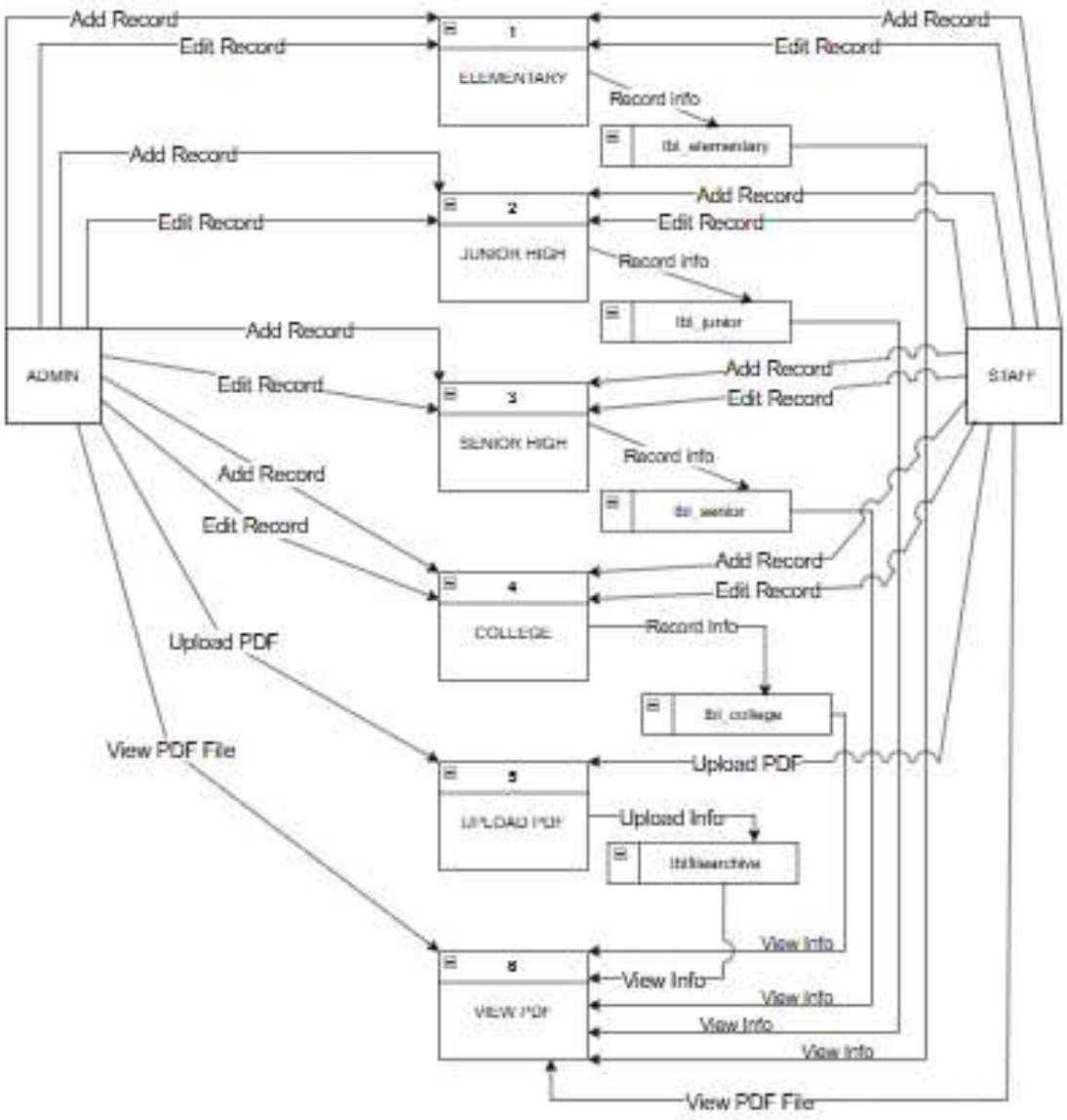


Figure 11 shows how the Student Permanent Record Management System operates inside. It demonstrates how student records are handled differently according to educational attainment. Within these processes, records can be added and edited by the admin and staff, respectively. The admin also can view and upload PDF files. The system makes use of

distinct data stores for the supplied PDF files and for every educational level. Lastly, the staff receives the record information, and the submitted PDF files are viewable by both admin and staff.

DEVELOPMENT PHASE OF THE SYSTEM

System Features and Functionalities

1. **Web Page**

   The user can see the pictures of our locale where the creators of the system can also be seen here.

2. **Login**

   Login only Staff and Admin can access the records of children at Santa Rita College of Pampanga (SRC).

3. **Dashboard**

   The user may observe how many recorded students, for example, 50 Elementary records as well as Junior and College.

4. **Search**

   The staff and the admin are the ones who search the student records so that it will not be difficult to search for credentials and avoid confusion.

5. **Add Record**

   Staff and admin are the ones who add student records to make it easier to find students' records.

6. **Edit**

   This is where the user edits student records that can be corrected if there is an error in the information entered.

7. **Upload File**

   Here they can upload the PDF file of a record of a student studying at Santa Rita College of Pampanga (SRC).

8. **View Record**

   The staff and admin can view the records of student's information studying at Santa Rita College of Pampanga (SRC).

9. **Print Record**

   This module can also be used print a student record if they request it at the Registrar's office of Santa Rita College of Pampanga (SRC).

10. **Logout**

    The user can log out when office hours are over at the Registrar's Office at Santa Rita College of Pampanga (SRC).

TESTING PHASE OF THE SYSTEM

In the testing phase, the researchers deploy a prototype and let the users test the system. During testing, there's a recommendation and revisions needed in the prototype. Some of the iterations are the following:

Iterations of the System

1st Iteration

- On the webpage, by clicking "about" their name will appear, and then you'll just log in, and the dashboard will open.

2nd Iteration

- While you're on the dashboard, you can add a record to the students by clicking their level, whether they are elementary, high school, or college. You can also edit their records.

3rd Iteration

- After you input the information of the student, and then you will upload their form 137. Then click the view, and the form 137 will appear. By printing the form 137, just click the print, and after that, you can log out.

DEPLOY PHASE OF THE SYSTEM

The Registrar's Office is still using the manual method to obtain the information of students studying at Santa Rita College of Pampanga. In the deposition of the System made by the researchers for the Santa Rita College of Pampanga, the researchers discussed what can be done about what the researchers made for the student permanent record management system for the Santa Rita College of Pampanga. The researchers took a few months, a few weeks, and a few hours to learn the correct use of the system so that it could be tested and approved by locale. The researchers deployed the system after one of the registrar's staff signed the letter of implementation, so Registrars' office can use the

system. The researchers have completed the deployment of the system and the processes to fulfill the requirements.

REVIEW PHASE OF THE SYSTEM

System Evaluation Results of User Acceptability

FUNCTIONALITY

Based on the ISO 25010 standards for software quality, the functionality of the system was described based on characteristics namely: completeness, correctness, and appropriateness.

Table 2
Evaluation of System Functional Suitability

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Completeness	2	15.38	9	69.23	2	15.38	0	0.00	0	0.00	4.00
Correctness	2	15.38	7	53.85	3	23.08	1	7.69	0	0.00	3.77
Appropriateness	3	23.08	6	46.15	4	30.77	1	7.69	0	0.00	4.08
Weighted Mean											3.95

Table 2 shows the system evaluation based on functionality as rated by respondents in this study. Most of the respondents rated the system functionality with a general weight mean of 3.95.

PERFORMANCE EFFICIENCY

Table 3
Evaluation of System Performance Efficiency

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Time-Behavior	2	15.38	8	61.54	3	23.08	0	0.00	0	0.00	3.92
Resource Utilization	2	15.38	7	53.85	4	30.77	0	0.00	0	0.00	3.85
Capacity	2	15.38	7	53.85	4	30.77	0	0.00	0	0.00	3.85
Weighted Mean											3.87

Table 3 shows the system evaluation based on performance as rated by respondents in this study. Most of the respondents rated the system performance with a general weight mean of 3.87.

COMPATABILITY

Table 4
Evaluation of System Compatibility

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Co-Existence	2	15.38	6	46.15	5	38.46	0	0.00	0	0.00	3.77
Interoperability	2	15.38	8	61.54	2	15.38	1	7.69	0	0.00	3.85
Weighted Mean											3.81

Table 4 shows the system evaluation based on compatibility as rated by respondents in this study. Most of the respondents rated the system compatibility with a general weight mean of 3.81.

USABILITY

Table 5
Evaluation of System Usability

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Appropriateness Recognizability	1	7.69	9	69.23	3	23.08	0	0.00	0	0.00	3.85
Learnability	4	30.77	3	23.08	6	46.15	0	0.00	0	0.00	3.85
Operability	4	30.77	5	38.46	4	30.77	0	0.00	0	0.00	4.00
User Error Protection	1	7.69	6	46.15	5	38.46	1	7.69	0	0.00	3.54
User Interface Aesthetics	2	15.38	4	30.77	5	38.46	2	15.38	0	0.00	3.46
Accessibility	2	15.38	6	46.15	5	38.46	0	0.00	0	0.00	3.77
Weighted Mean											3.90

Table 5 shows the system evaluation based on usability as rated by respondents in this study. Most of the respondents rated the system usability with a general weight mean of 3.90.

RELIABILITY

Table 6
Evaluation of System Reliability

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Maturity	1	7.69	9	69.23	3	23.08	0	0.00	0	0.00	3.85
Availability	4	30.77	6	46.15	3	23.08	0	0.00	0	0.00	4.08
Fault Tolerance	1	7.69	5	38.46	6	46.15	1	7.69	0	0.00	3.46
Recoverability	2	15.38	6	46.15	4	30.77	1	7.69	0	0.00	3.69
Weighted Mean											3.79

Table 6 shows the system evaluation based on reliability as rated by respondents in this study. Most of the respondents rated the system reliability with a general weight mean of 3.79.

SECURITY

Table 7
Evaluation of System Security

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Confidentiality	6	46.15	3	23.08	3	23.08	1	7.69	0	0.00	4.08
Integrity	2	15.38	6	46.15	5	38.46	0	0.00	0	0.00	3.77
Non-Repudiation	2	15.38	6	46.15	5	38.46	0	0.00	0	0.00	3.77
Accountability	4	30.77	3	23.08	3	23.08	3	23.08	0	0.00	3.62
Authenticity	5	38.46	8	61.54	3	23.08	0	0.00	0	0.00	5.08
Weighted Mean											3.87

Table 7 shows the system evaluation based on security as rated by respondents in this study. Most of the respondents rated the system security with a general weight mean of 3.87.

MAINTABILITY

Table 8
Evaluation of System Maintainability

Criteria	5	%	4	%	3	%	2	%	1	%	Mean
Modularity	1	7.69	8	61.54	4	30.77	0	0.00	0	0.00	3.77
Reusability	1	7.69	7	53.85	5	38.46	0	0.00	0	0.00	3.69
Analyzability	1	7.69	7	53.85	5	38.46	0	0.00	0	0.00	3.69
Modifiability	2	15.38	4	30.77	7	53.85	0	0.00	0	0.00	3.62
Testability	1	7.69	5	38.46	7	53.85	0	0.00	0	0.00	3.54
Weighted Mean											3.72

Table 8 shows the system evaluation based on maintainability as rated by respondents in this study. Most of the respondents rated the system maintainability with a general weight mean of 3.72.

IMPLEMENTATION OF THE SYSTEM

The system meets the needs of the staff at Santa Rita College of Pampanga. Apparently, the system is simple to implement, and the researchers make sure that everything is going smoothly. The researchers implemented the System for a test by the admins and staff of the Registrar's Office of Santa Rita College of Pampanga, so that the researchers can get the results from it. The obtained averages reflect the system developed by the researchers. Retrieving the information of a student at Santa Rita College of Pampanga will be made easier because of the work done by the researchers in the system for Santa Rita College of Pampanga.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

SUMMARY

Santa Rita College of Pampanga opened in 1945 to students who wanted to study at the Santa Rita College of Pampanga. Santa Rita College of Pampanga is owned by Jose Antonio Blas L. Carlos. Since 1945, the offices at Santa Rita College of Pampanga (SRC) have been paper based, where the documents of students studying at Santa Rita College of Pampanga are only placed on bookshelves.

The researchers developed the system to improve the effectiveness and security of the records of children studying at Santa Rita College of Pampanga (SRC). The Student Permanent Record Management of Santa Rita College of Pampanga was done by the researchers where the records of a student are placed here so that it can last and cannot be destroyed because it is contained in the System that was created, the documents of a student of Santa Rita College of Pampanga (SRC). With this system, the work of the staff and admin of the registrar office will be made easier because they will no longer use paper-based where they put the children's documents on the bookshelves.

CONCLUSION

The researchers developed a system for Santa Rita College of Pampanga that will help the staff and admin of the registrar office because they will benefit from it because it will make their work easier with the documents of the children at Santa Rita College of Pampanga. The researchers created a Web-Based Student Permanent Record Management

System where they entered the records of a student at Santa Rita College of Pampanga (SRC).

RECOMMENDATIONS

The Student Permanent Record Management System is highly recommended by the researchers. Using a Record Management System is about facilitating the use of a new system created by researchers that will facilitate their work in entering information of a student at Santa Rita College of Pampanga (SRC).

The panels advised us to modify our system's layout and filter names to make it simpler to look for the name of a student enrolled at Santa Rita College in Pampanga.

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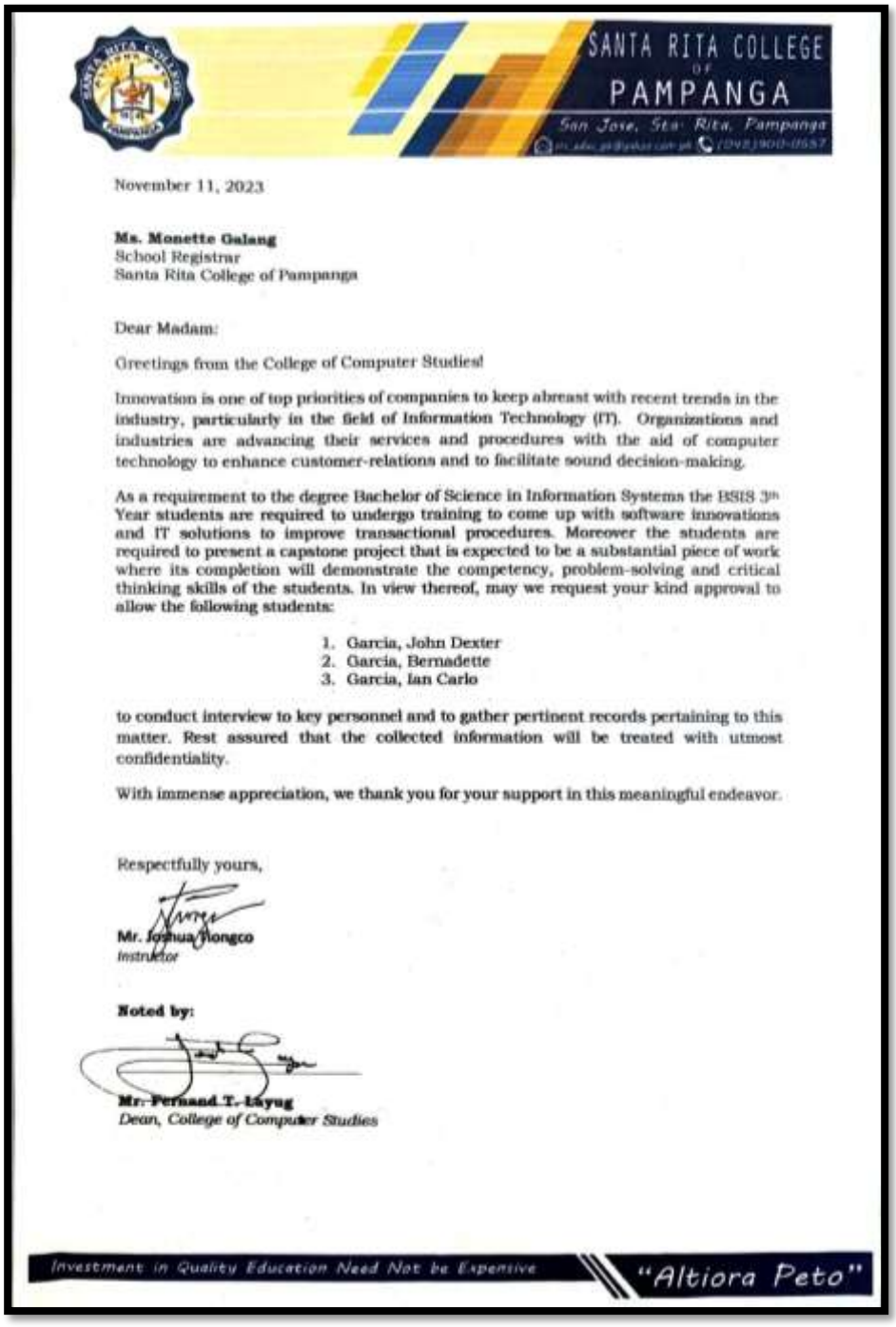
APPENDIX A

GANTT CHART

TASK	ASSIGNED TO	PROGRESS	START	END
Planning				
BRAINSTROMING	DEXTER,BERNADETTE,IAN	100%	10/9/23	10/11/23
LOCALE	DEXTER	100%	10/12/23	10/13/23
GETTING A LETTER FOR LOCALE	BERNADETTE	100%	10/14/23	10/16/23
DECIDING A FINAL TITLE	DEXTER,BERNADETTE,IAN	100%	10/17/23	10/22/23
SDLC	DEXTER,BERNADETTE,IAN	100%	10/16/23	10/23/23
Starting Chapter 1 to 3	DEXTER AND BERNADETTE	100%	10/25/23	10/11/23
Analyzation				
Revision of Chapter 1 to 3	DEXTER AND BERNADETTE	100%	1/22/24	1/26/24
Starting Chapter 4 to 5	DEXTER, BERNADETTE AND IAN	100%	1/4/24	12/4/24
Final Revision Chapter 1 to 5	DEXTER, BERNADETTE AND IAN	100%	5/5/24	5/17/24
Development				
Login	IAN	100%	5/12/23	12/15/23
Admin Account	IAN	100%	12/28/23	12/31/23
Staffs Account	IAN	100%	3/1/24	12/1/24
PDF and Upload Button	IAN	100%	1/16/24	1/21/24
Designing the System	DEXTER, BERNADETTE AND IAN	100%	1/27/24	1/31/24
Fully Development	DEXTER, BERNADETTE AND IAN	100%	5/2/24	2/20/24
Phase 4 Title				
Title Defense	DEXTER , BERNADETTE & BERNADETTE	100%	2/24/2024	2/24/2024
Final Defense	DEXTER , BERNADETTE & BERNADETTE	100%	9/20/2024	9/20/2024

APPENDIX B

LETTER OF LOCALE



SANTA RITA COLLEGE OF PAMPANGA
San Jose, Sta. Rita, Pampanga

November 11, 2023

Ms. Monette Galang
School Registrar
Santa Rita College of Pampanga

Dear Madam:

Greetings from the College of Computer Studies!

Innovation is one of top priorities of companies to keep abreast with recent trends in the industry, particularly in the field of Information Technology (IT). Organizations and industries are advancing their services and procedures with the aid of computer technology to enhance customer-relations and to facilitate sound decision-making.

As a requirement to the degree Bachelor of Science in Information Systems the BSIS 3rd Year students are required to undergo training to come up with software innovations and IT solutions to improve transactional procedures. Moreover the students are required to present a capstone project that is expected to be a substantial piece of work where its completion will demonstrate the competency, problem-solving and critical thinking skills of the students. In view thereof, may we request your kind approval to allow the following students:

1. Garcia, John Dexter
2. Garcia, Bernadette
3. Garcia, Ian Carlo

to conduct interview to key personnel and to gather pertinent records pertaining to this matter. Rest assured that the collected information will be treated with utmost confidentiality.

With immense appreciation, we thank you for your support in this meaningful endeavor.

Respectfully yours,

Mr. Joshua Nongco
Instructor

Noted by:

Mr. Fernand T. Layug
Dean, College of Computer Studies

Investment in Quality Education Need Not be Expensive "Altiora Peto"

APPENDIX C

TRANSCRIPT OF INTERVIEW

Researchers:
Good day, ma'am Monette We are currently working on our Capstone Project titled "Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga." We would like to ask some questions regarding the current record management process in the Registrar's Office.

Registrar:
Good day. Sure, go ahead.

Q1: Can you describe the current system used in managing student records?

Registrar:
Our current system is manual and paper based. Student records from as early as 1945 are kept in shelves and folders. When we need a record, we manually search through these shelves, which can be time-consuming.

Q2: What are the common challenges encountered with the manual system?

Registrar:
The biggest issue is the difficulty and time it takes to locate specific records. Over time, documents become worn or damaged. There is also a risk of misplacing records. Since everything is stored physically, it is also harder to back up and preserve information long-term.

Q3: How often do you retrieve student records, and for what purposes?

Registrar:
We retrieve records almost daily for requests like Form 137, certificates of good moral, and transcript of records. Alumni, current students, or even employers and other schools request these documents.

Q4: Are there times when requested documents are not found or are delayed?

Registrar:
Yes, particularly with older records. Delays occur when records are misplaced or difficult to find due to the volume of documents.

Q5: What features would you expect or want in a computerized system?

Registrar:
We would like a system that allows us to easily add, edit, and retrieve student records. It should also include the ability to upload PDF versions of important documents, generate printable copies, and restrict access for confidentiality.

Q6: Would you be open to using a digital system in the Registrar's Office?

Registrar:
Absolutely. If it's secure, user-friendly, and reliable, it would greatly help streamline our work.

Q7: How do you envision this system improving your office's workflow?

Registrar:
It would significantly reduce the time we spend searching for documents. Also, it would protect records from physical damage and ensure better organization.

Q8: Would staff need training to use this system?

Registrar:
Yes, some of us are not very familiar with digital systems, so basic training would be helpful.

Researchers:
Thank you very much for your time and valuable input. This will greatly help us design the system according to the needs of the office.

Registrar:
Good luck with your project!

APPENDIX D

CERTIFICATE OF IMPLEMENTATION

APPENDIX E

CERTIFICATE OF PLAGIARISM

APPENDIX F

CERTIFICATE OF GRAMMARIAN

APPENDIX G

EVALUATION FOR USER ACCEPTABILITY

(ADAPTED FROM ISO 25010)

Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga

Respondent's Profile:

Name: _____

Position / Profession: _____

Years of Service: _____ years

QUESTIONNAIRE

Please indicate a check mark (√) under the column that best describes your responses for each item about the A Mobile Application for Tree Growth Monitoring with QR code-based at Santa Rita Pampanga.

Please use the rating below:

5 – Excellent
4 -Very Good
3 – Good
2 – Fair
1 - Poor

Please start answering here:

A. Functional Suitability					
Indicators	**5**	**4**	**3**	**2**	**1**
Completeness - The set of functions covers all the specified tasks and user objectives.					
Correctness - The function provides the correct results with the needed degree of precisions.					
Appropriateness - The function facilities the accomplishment of specified tasks and objectives.					

B. Reliability					
Indicators	**5**	**4**	**3**	**2**	**1**
Maturity - A system, product or component meets for reliability under normal operation.					
Availability - A product or system is operational and accessible when required for use.					
Fault tolerance – A system, product or component operates as intended despite the presence of hardware of software results.					
Recoverability - In the event of an interruption or a failure, a product or system can recover the data establish the desired state of the system.					

C. Usability					
Indicators	**5**	**4**	**3**	**2**	**1**
Appropriateness Recognizability – Users can recognize whether a product or system is appropriate for their needs.					
Learnability – A product or system enables the user to learn how to use it with effectiveness, efficiency in emergency situations.					
Operability - A product or system is easy to operate, control and appropriate to use.					
User error protection - A product or system protects users against making errors.					
User interface aesthetics - A user interface enables pleasing and satisfying interactions for the user.					
Accessibility - A product or system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.					

D. Performance Efficiency					
Indicators	**5**	**4**	**3**	**2**	**1**
Time-behavior – The response and processing times and throughput rates of a product or system, when performing its functions, meet requirements.					
Resource utilization – The amounts and types of resources used by a product or system, when performing its functions, meet requirements.					
Capacity – The maximum limits of the product or system, parameter meet requirements.					

E. Security					
Indicators	**5**	**4**	**3**	**2**	**1**
Confidentiality – The prototype ensures that data are accessible only to those authorized to have access.					
Integrity – A system, product or component prevents unauthorized access to, or modification of, computer.					
Non-repudiation - Actions or events can be proven to have taken place, so that the events or actions cannot be repudiated later.					
Accountability- The actions of an entity can be traced uniquely to the entity.					
Authenticity - The identity of a subject or resources can be proved to be the one claimed.					

F. Compatibility					
Indicators	**5**	**4**	**3**	**2**	**1**
Co-existence – A product can perform its required functions efficiently while sharing a common environment and resources with other products, without detrimental impact on any other product.					
Interoperability – Two or more systems, products or components can exchange information and use the information that has been exchanged.					

G. Maintainability					
Indicators	**5**	**4**	**3**	**2**	**1**
Modularity – A system or computer program is composed of discrete components such that a change to one component has minimal impact on other.					
Reusability – An asset can be used in more than one system, or in building other assets.					
Analyzability – It is possible to assess the impact on a product or system of an intended change to one or more of its parts, or to diagnose a product for deficiencies or causes of failures, or to identify parts to be modified.					
Modifiability – A product or system can be effectively and efficiently modified without introducing defects or degrading existing product quality.					
Testability – Test criteria can be established for a system, product or component and tests can be performed to determine whether those criteria have been met.					

APPENDIX H

BROCHURE

APPENDIX I

POSTER

CURRICULUM VITAE

JOHN DEXTER GARCIA
#303 San Jose, Guagua, Pampanga
(+63) 936-886-4171
gjohndexter99@gmail.com

OBJECTIVES I am seeking a company where I can use my experience And education to help the company meet and surpass its goals.

PERSONAL INFORMATION

Date of Birth:	June 10, 2003
Age:	21 years old
Gender:	Male
Civil Status	Single
Height:	5'6
Weight:	80 lbs.
Religion:	Roman Catholic
Father's Name:	Joseph A. Garcia
Mother's Name:	Michelle N. Garcia

EDUCATIONAL BACKGROUND

PRIMARY
2009-2014 **Sto. Domingo Integrated School**
Sto. Domingo, Angeles City

SECONDARY
Junior High
2015-2018 **Natividad High School**
Natividad, Guagua, Pampanga

Senior High **Natividad High School**
2019-2020 Natividad, Guagua, Pampanga

TERTIARY
2021- Present Year **Bachelor of Science in Information Systems**
SANTA RITA COLLEGE OF PAMPANGA
San Jose, Sta. Rita, Pampanga

I hereby certify that all the information given above is true and correct to the best of my knowledge and belief.

JOHN DEXTER N. GARCIA
Applicant's Signature

SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF APPRECIATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

JOHN DEXTER N. GARCIA

for presenting an outstanding project embraced by the community, demonstrating creativity and inspiring innovation at the 2nd CCS Research Colloquium 2025, with the theme 'Catalyzing Connected Solutions: Bridging Industry, Academe, and Government for an Innovative Future,' held on April 24, 2025, at the SRC Gymnasium, Santa Rita College of Pampanga.

Awarded on this 24th day of April in the year 2025

JOSHUA TIONGCO, MITc
SSITE ADVISER

DR. FERNAND T. LAYUG
DEAN, COLLEGE OF COMPUTER STUDIES

PSITE
Philippine Society of Information Technology Educators
PSITE - Central Luzon

CERTIFICATE OF
PARTICIPATION

is awarded to

JOHN DEXTER GARCIA

for actively participating during the **International Research Conference on Information Technology Education (IRCITE) 2025** with the theme: **"Empower, Collaborate, Excel: Advancing Excellence and Inclusivity in IT Education for a Digital Future"** held on **April 4, 2025** at **Bulacan Capitol Gymnasium, Capitol Compound, City of Malolos, Bulacan.**

Given this **4th day of April, 2025** at **Bulacan Capitol Gymnasium, Capitol Compound, City of Malolos, Bulacan.**

IRCITE

DR. ALMA THERESA D. MANALOTO
Conference Chair, IRCITE 2025

DR. [illegible] C. MABABA
President, PSITE-CL


SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF ATTENDANCE

THIS CERTIFICATE IS AWARDED TO:

JOHN DEXTER N. GARCIA

IRCITE 2025

in recognition of the participant's presence and engagement during the **"PRE-IRCITE Orientation 2025"** held on *March 20, 2025 at SRC Gymnasium, Santa Rita College of Pampanga.*

JOSHUA R. TONGCO, MITc
SSITE ADVISER

FERNAND T. LAYUG, DIT
DEAN, COLLEGE OF COMPUTER STUDIES


HOLY ANGEL UNIVERSITY
SCHOOL OF COMPUTING

3RD REGIONAL CYBERSECURITY CONFERENCE

CYBERSECURITY IN THE AGE OF A.I.
NAVIGATING THE DOUBLE-EDGED SWORD

CERTIFICATE OF APPEARANCE

THIS IS TO CERTIFY THAT

JOHN DEXTER N. GARCIA

ATTENDED THE 3RD REGIONAL CYBERSECURITY CONFERENCE ON FEBRUARY 7, 2025, AT HOLY ANGEL UNIVERSITY, ANGELES CITY.

DR. EVERLY M. CHUA
CONFERENCE CHAIR

MR. CHRIS ALMOCERA
CONFERENCE CO-CHAIR

DR. MARLON TAYAG
DEAN, SCHOOL OF COMPUTING

LEADING THE WAY IN CYBERSECURITY EDUCATION

Project Management Institute

THIS IS TO CERTIFY THAT

John Dexter Narciso Garcia

HAS BEEN FORMALLY EVALUATED AT THE FOUNDATIONAL LEVELS IN PROJECT MANAGEMENT FUNDAMENTALS, TRADITIONAL PLAN-BASED METHODOLOGIES, AGILE METHODOLOGIES, AND BUSINESS ANALYSIS AND IS HEREBY GRANTED THE GLOBAL CREDENTIAL

PMI Project Management Ready®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Jennifer Thary
Chair, Board of Directors

Pierre Le Manh
President and Chief Executive Officer

PROJECT MANAGEMENT INSTITUTE CORPORATE SEAL 1969

Original Grant Date: December 3, 2024

verify.certiport.com
ULs2-s4kd

Project Management Institute

SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES

CERTIFICATE
OF PARTICIPATION

This certificate is hereby awarded to:

JOHN DEXTER N. GARCIA

for actively participating during the **College Department Days: Day2 CCS Seminar 2024** with the theme ***"AI in MultiMedia"*** on **November 21, 2024**, at Gymnasium in **Santa Rita College of Pampanga.**

Given this **21st** day of **November** in the year of our Lord **2024.**

John Vincent Lagmay, MIT
Resource Speaker

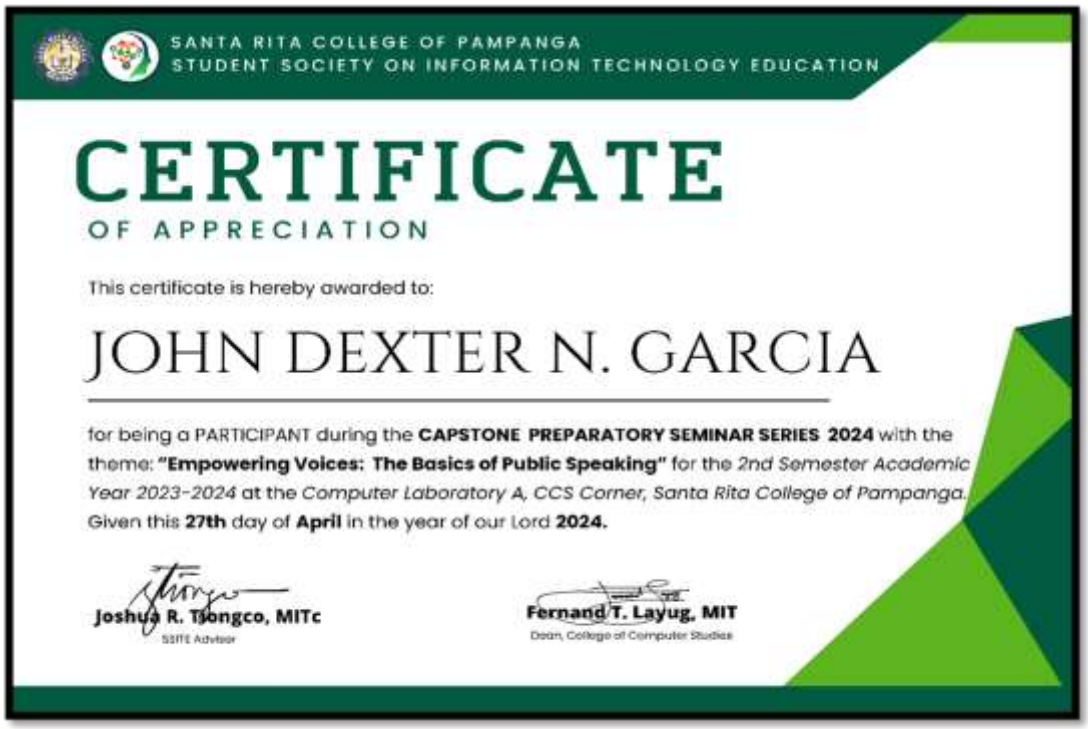
Joshua R. Tiongco, MITc
SSITE Adviser

Dr. Fernand T. Layug
Dean, College of Computer Studies

STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION


RAITE 2024
CERTIFICATE OF
PARTICIPATION
is awarded to
JOHN DEXTER N. GARCIA
for actively participating during the:
7th Regional Assembly on Information Technology Education
with the theme:
"Navigating the AI-Driven Future: Education, Ethics and Innovation."
Given this 24th day of October, 2024
at AUF Sports and Cultural Center, Angeles City, Pampanga.
EUGENE S. PEREZ, MIT
Convention Chair, RAITE 2024
JONILO O. ALABABA, DIT
President, PSITE Central Luzon
HOST SCHOOLS:
SPONSORS:
INNOVATIVE TRAINING WORKS
HUION
PH
INSTRUCTURE
PSITE


SANTA RITA COLLEGE OF PAMPANGA
Student Society on Information Technology Education
Certificate
Of Attendance
This certificate is hereby awarded to:
JOHN DEXTER N. GARCIA
for his/her invaluable participation an being an attendee during the seminar with a theme "BUILDING A CULTURE OF CUSTOMER-CENTRIC LEADERSHIP" at the SRC GYMNASIUM of Santa Rita College of Pampanga.
Given this 10th day of September in the year of our Lord 2024.
Joshua A. Tiongco, MITc
PSITE Adviser
Mr. Daryle David
RESOURCE SPEAKER
Fernand T. Layug, DIT
Dean, College of Computer Studies



SANTA RITA COLLEGE OF PAMPANGA
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF APPRECIATION

This certificate is hereby awarded to:

JOHN DEXTER N. GARCIA

for being a PARTICIPANT during the **CAPSTONE PREPARATORY SEMINAR SERIES 2024** with the theme: **"Empowering Voices: The Basics of Public Speaking"** for the *2nd Semester Academic Year 2023-2024* at the *Computer Laboratory A, CCS Corner, Santa Rita College of Pampanga.*
Given this **27th** day of **April** in the year of our Lord **2024.**

Joshua R. Tiongco, MITc
SSITE Adviser

Fernand T. Layug, MIT
Dean, College of Computer Studies

SANTA RITA COLLEGE OF PAMPANGA
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF APPRECIATION

This certificate is hereby awarded to:

JOHN DEXTER N. GARCIA

for his/her invaluable contribution as AUDIENCE during the **CAPSTONE PREPARATORY SEMINAR 2024** for the 2nd Semester of the calendar Year 2024, on **APRIL 24, 2024**, at Laboratory Room in **Santa Rita College of Pampanga**
Given this **24th** day of **April** in the year of our Lord **2024.**

Joshua R. Tiongco, MITc
SSITE Adviser

Fernand T. Layug, MIT
Dean, College of Computer Studies

Networking Academy
CISCO

This certificate is awarded to

John Dexter Garcia

for successfully completing

Data Analytics Essentials

offered by Guagua National College
through the Cisco Networking Academy program.

Christian John Cariño
Instructor
Guagua National College

18 Mar 2024
Completion Date

Networking Academy
CISCO

This certificate is awarded to

John Dexter Garcia

for successfully completing

Introduction to Data Science

offered by Guagua National College
through the Cisco Networking Academy program.

Christian John Cariño
Instructor
Guagua National College

19 Feb 2024
Completion Date


PSITE
CENTRAL LUZON REGION
CERTIFICATE OF
PARTICIPATION
is awarded to
John Dexter García
for actively participating during the
6th Regional Assembly on Information Technology Education
with the theme:
"AI Nexus: Convergence of Technology and Human Ingenuity"
Given this 20th day of October, 2023
at AUF Sports and Cultural Center, Angeles City, Pampanga.
FERNAND T. LAVUG,MIT
JONILO V. MABABA,DIT
President, PSITE Central Luzon
RAITE
EASTWOODS


CERTIFICATE
of Participation
IS AWARDED TO
John Dexter Narciso Garcia
for actively participating the
CCS Research Colloquium
with the theme:
"Emerging Trends and Challenges in Information Systems"
Given this 2nd day of October, 2023
at Santa Rita College Library, Santa Rita Pampanga.
FERNAND T. LAVUG, MIT
Dean, College of Computer Studies


PSITE
RAITE
CERTIFICATE
OF APPRECIATION
is awarded to
JOHN DEXTER NARCISO GARCIA
for actively participating
during the 5th REGIONAL ASSEMBLY ON INFORMATION TECHNOLOGY EDUCATION
with the theme: "NGL IT FTW IYKWIM: Decoding and Security FR"
Given this 21st day of October 2022 at Central Luzon, Philippines.
DR. RAQUEL C. ADRIANO
CONVENTION CHAIR - RAITE 2022
DR. JONILO C. MABABA
PRESIDENT - PSITE CENTRAL LUZON
iPhiTech
cloudstaff
TIGERNETHOST
Vita-Lize
INNOVATIVE TRAINING WORKS


PSITE
RAITE
CERTIFICATE
OF PARTICIPATION
is awarded to
JOHN DEXTER GARCIA
during the Regional Assembly on Information Technology Education
with the theme: "Digital Economy and Cryptocurrency through Gamification:
An Emerging Platform in the New Normal"
given this 12th day of November 2021 via Zoom
PROF. FERNAND T. LAYUG
PROF. GEORGE M. GRANADOS
PRESIDENT - PSITE CENTRAL LUZON
WSI
cloudstaff
TIGERNETHOST
iPhiTech
techFactors
INNOVATIVE TRAINING WORKS
wacom
MVN PHOTOSTUDIO
DH6

BERNADETTE M. GARCIA
San Vicente Ebus Guagua, Pampanga
(+63) 951-095-8747
graciasbernadette697@gmail.com

OBJECTIVES I am seeking a company where I can use my experience And education to help the company meet and surpass its goals.

PERSONAL INFORMATION

Date of Birth:	September 23, 2002
Age:	22 years old
Gender:	Female
Civil Status:	Single
Height:	5'1
Weight:	55 lbs.
Religion:	Roman Catholic
Father's Name:	Arnold S. Garcia
Mother's Name:	Belinda M. Garcia

EDUCATIONAL BACKGROUND

PRIMARY
2009-2014 **San Vicente Ebus Elementary School**
Ebus, Guagua, Pampanga

SECONDARY
Junior High
2015-2018 **Natividad High School**
Natividad, Guagua, Pampanga

Senior High
2019-2020 **Natividad High School**
Natividad, Guagua, Pampanga

TERTIARY
2021- Present Year **Bachelor of Science in Information Systems**
SANTA RITA COLLEGE OF PAMPANGA
San Jose, Sta. Rita, Pampanga

I hereby certify that all the information given above is true and correct to the best of my knowledge and belief.

BERNADETTE M. GARCIA
Applicant's Signature

SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF APPRECIATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

BERNADETTE M. GARCIA

for presenting an outstanding project embraced by the community, demonstrating creativity and inspiring innovation at the 2nd CCS Research Colloquium 2025, with the theme 'Catalyzing Connected Solutions: Bridging Industry, Academe, and Government for an Innovative Future,' held on April 24, 2025, at the SRC Gymnasium, Santa Rita College of Pampanga.

Awarded on this 24th day of April in the year 2025

JOSHUA TIONGCO, MITc
SSITE ADVISER

DR. FERNAND T. LAYUG
DEAN, COLLEGE OF COMPUTER STUDIES

PSITE
Philippine Society of Information Technology Educators
PSITE - Central Luzon

CERTIFICATE OF
PARTICIPATION

is awarded to

BERNADETTE GARCIA

for actively participating during the **International Research Conference on Information Technology Education (IRCITE) 2025** with the theme: **"Empower, Collaborate, Excel: Advancing Excellence and Inclusivity in IT Education for a Digital Future"** held on **April 4, 2025** at **Bulacan Capitol Gymnasium, Capitol Compound, City of Malolos, Bulacan.**

Given this **4th day of April, 2025** at **Bulacan Capitol Gymnasium, Capitol Compound, City of Malolos, Bulacan.**

DR. ALMA THERESA D. MANALOTO
Conference Chair, IRCITE 2025

DR. [illegible] C. MABABA
President, PSITE-CL

IRCITE


SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE
OF ATTENDANCE

THIS CERTIFICATE IS AWARDED TO:

BERNADETTE M. GARCIA

in recognition of the participant's presence and engagement during the **"PRE-IRCITE Orientation 2025"** held on *March 20, 2025* *at SRC Gymnasium, Santa Rita College of Pampanga.*

IRCITE 2025

JOSHUA R. TIONGCO, MITc
SSITE ADVISER

FERNAND T. LAYUG, DIT
DEAN, COLLEGE OF COMPUTER STUDIES


HOLY ANGEL UNIVERSITY
SCHOOL OF COMPUTING

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CYBERSECURITY IN THE AGE OF A.I.
NAVIGATING THE DOUBLE-EDGED SWORD

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DR. EVERLY M. CHUA
CONFERENCE CHAIR

MR. CHRIS ALMOCERA
CONFERENCE CO-CHAIR

DR. MARLON TAYAG
DEAN, SCHOOL OF COMPUTING

LEADING THE WAY IN CYBERSECURITY EDUCATION


SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES

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Given this **21st** day of **November** in the year of our Lord **2024.**

John Vincent Lagmay, MIT
Resource Speaker

Joshua R. Tiongco, MITc
SSITE Adviser

Dr. Fernand T. Layug
Dean, College of Computer Studies

STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION


SANTA RITA COLLEGE OF PAMPANGA
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Certificate

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Given this 10th day of September in the year of our Lord 2024.

Joshua R. Tiongco, MITc
SSITE Adviser

Mr. Daryle David
RESOURCE SPEAKER

Fernand T. Layug, DIT
Dean, College of Computer Studies

Networking Academy

Certificate of Course Completion

Bernadette Garcia

has successfully achieved student level credential for completing the Data Analytics Essentials course.

The student was able to proficiently:

- Explain how the data analytics process creates value from data.
- Explain the characteristics of data, including formats, availability and methods to acquire.
- Transform data using analytics tools.
- Analyze data using basic statistical and data preparation techniques.
- Complete hands-on lab using Excel, SQL, Tableau and other tools.
- Evaluate and share project portfolio.

Scan to verify

May 16, 2024

Laura Quintana

Laura Quintana
Vice President and General Manager
Cisco Networking Academy

PSITE
CENTRAL LUZON REGION

CERTIFICATE OF
PARTICIPATION

is awarded to

Bernadette Garcia

for actively participating during the

6th Regional Assembly on Information Technology Education
with the theme:
"AI Nexus: Convergence of Technology and Human Ingenuity"

Given this 20th day of October, 2023
at AUF Sports and Cultural Center, Angeles City, Pampanga

FERVANDY T. LAVUG, MIT
Convention Chair, RAITE 2023

JONILO V. ALABABA, DIT
President, PSITE Central Luzon

RAITE

EASTWOOD


PSITE
RAITE
CERTIFICATE
OF APPRECIATION
is awarded to
BERNADETTE MANALO GARCIA
for actively participating
during the 5th REGIONAL ASSEMBLY ON INFORMATION TECHNOLOGY EDUCATION
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Given this 21st day of October 2022 at Central Luzon, Philippines.
DR. RAQUEL C. ADRIANO
DR. JONILO C. MABABA
PRESIDENT - PSITE CENTRAL LUZON
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cloudstaff
Vita-Lize
INNOVATIVE TRAINING WORKS


PSITE
RAITE
CERTIFICATE
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given this 12th day of November 2021 via Zoom
PROF. FERNAND T. LAYUG
PROF. GEORGE M. GRANADOS
PRESIDENT - PSITE CENTRAL LUZON
iPhiTech
cloudstaff
wacom

Ian Carlo C. Garcia
San Agustin, Sta. Rita Pampanga
(+63) 961-296-1794
Garciaiancarlo1@gmail.com

OBJECTIVES I am seeking a company where I can use my experience And education to help the company meet and surpass its goals.

PERSONAL INFORMATION

Date of Birth:	June 2, 2002
Age:	22 years old
Gender:	Male
Civil Status:	Single
Height:	5'0
Weight:	55 lbs.
Religion:	Roman Catholic
Father's Name:	Henry Garcia
Mother's Name:	Marites Garcia

EDUCATIONAL BACKGROUND

PRIMARY
2008-2014 **V De Castro Elementary School**
Santa Monica, Sta. Rita Pampanga

SECONDARY
Junior High
2015-2018 **Ambrocio S. Simpao Educational & Trade Center of Learning**
San Agustin, Sta. Rita Pampanga

Senior High **Ambrocio S. Simpao Educational & Trade Center of Learning**
San Agustin, Sta. Rita Pampanga

TERTIARY
2021- Present Year **Bachelor of Science in Information Systems**
SANTA RITA COLLEGE OF PAMPANGA
San Jose, Sta. Rita, Pampanga

I hereby certify that all the information given above is true and correct to the best of my knowledge and belief.

IAN CARLO C. GARCIA
Applicant's Signature

SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

CERTIFICATE OF APPRECIATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

IAN CARLO C. GARCIA

for presenting an outstanding project embraced by the community, demonstrating creativity and inspiring innovation at the 2nd CCS Research Colloquium 2025, with the theme 'Catalyzing Connected Solutions: Bridging Industry, Academe, and Government for an Innovative Future,' held on April 24, 2025, at the SRC Gymnasium, Santa Rita College of Pampanga.

Awarded on this 24th day of April in the year 2025

JOSHUA TIONGCO, MITc
SSITE ADVISER

DR. FERNAND T. LAYUG
DEAN, COLLEGE OF COMPUTER STUDIES

CodeSignal

HTML, CSS and Web Browser Fundamentals

This certificate is awarded to

Ian Carlo Garcia

For successfully completing the course

Introduction to HTML

as part of the "Comprehensive Introduction to Front-End Engineering" learning path

April 11, 2025
Date of Completion

Tigran Sloyan
Tigran Sloyan, President and CEO

Verify at: https://learn.codesignal.com/certificates/cm40rgb000e633asuyfm/rourses/22


SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION
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IRCITE 2025
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SANTA RITA COLLEGE OF PAMPANGA
COLLEGE OF COMPUTER STUDIES
CERTIFICATE
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Resource Speaker
Joshua R. Tiongco, MITc
SSITE Adviser
Dr. Fernand T. Layug
Dean, College of Computer Studies
STUDENT SOCIETY ON INFORMATION TECHNOLOGY EDUCATION

Networking Academy

This certificate is awarded to

Ian Carlo Garcia

for successfully completing

Data Analytics Essentials

offered by Guagua National College
through the Cisco Networking Academy program.

Christian John Cariño
Instructor
Guagua National College

01 Apr 2024
Completion Date

Networking Academy

This certificate is awarded to

Ian Carlo Garcia

for successfully completing

Introduction to Cybersecurity

offered by Guagua National College
through the Cisco Networking Academy program.

Joshua Tiongco
Instructor
Guagua National College

08 Apr 2025
Completion Date

Networking Academy
cisco

This certificate is awarded to

Ian Carlo Garcia

for successfully completing

Introduction to Data Science

offered by Guagua National College
through the Cisco Networking Academy program.

Christian John Cariño
Instructor
Guagua National College

13 Feb 2024
Completion Date

iPhiTech
cloudstaff
smarter outsourcing
TIGERNETHOST
Vita-Lize DISTRIBUTIONS INC
INNOVATIVE TRAINING WORKS

PSiTE RAiTE 2022

CERTIFICATE
OF APPRECIATION
is awarded to

IAN CARLO CASTRO GARCIA

for actively participating

during the 5TH REGIONAL ASSEMBLY ON INFORMATION TECHNOLOGY EDUCATION
with the theme: "NGL IT FTW ITKWIM: Decoding and Security FR"

Given this 21st day of October 2022 at Central Luzon, Philippines.

DR. RAQUEL C. ADRIANO
CONVENTION CHAIR - RAITE 2022

DR. JONILO C. MABABA
PRESIDENT - PSITE CENTRAL LUZON


PSITE
RAITE
CERTIFICATE
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during the Regional Assembly on Information Technology Education
with the theme: "Digital Economy and Cryptocurrency through Gamification:
An Emerging Platform in the Now Normal"
given this 12th day of November 2021 via Zoom
PROF. FERNAND T. LAYUG
PROF. GEORGE M. GRANADOS
PRESIDENT - PSITE CENTRAL LUZON
cloudstaff
iPhiTech
wacom