

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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## **ACKNOWLEDGEMENT**

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## **CHAPTER 1 INTRODUCTION**

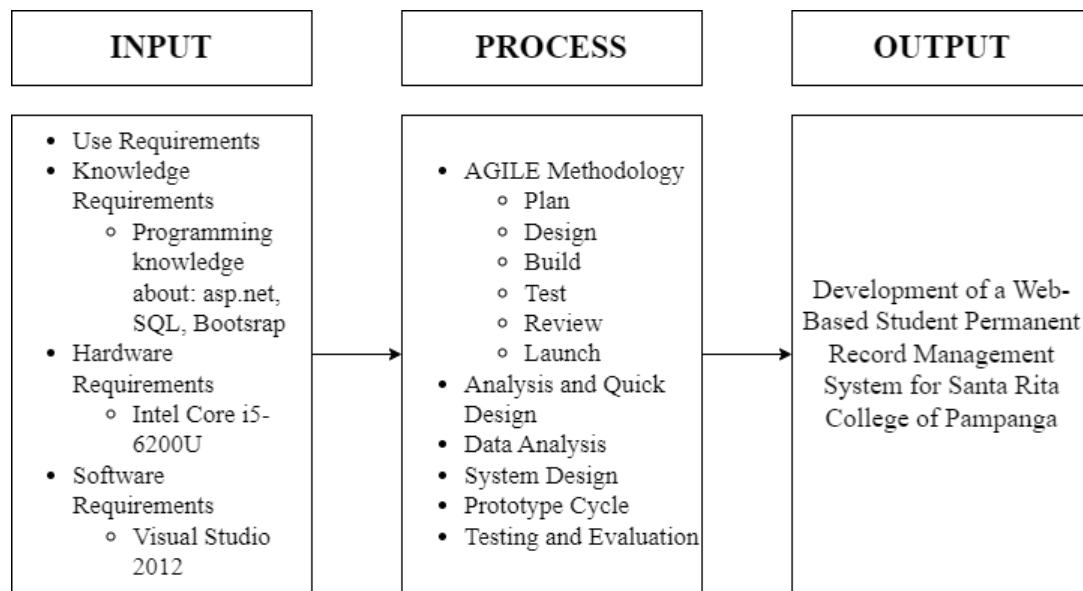
### **BACKGROUND OF THE STUDY**

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 shelves of the school's Registrar's Office, so when they are looking for a record of a student, they will search their shelves. The propose system can help Santa Rita College of Pampanga with their problem with the records of students of 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 see them 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 of 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 on a daily basis 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 use 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.

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## 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 includes 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 evaluation 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 change Santa Rita College of Pampanga by improving record holders, records management systems are important for Santa Rita College of Pampanga because they help organize and maintain important documents and information. They 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 permanently 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 Form 137 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, view, upload 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.

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## **CHAPTER II**

### **REVIEW OF RELATED LITERATURE AND STUDIES**

#### **INTRODUCTION**

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 are 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 (Akorhonor 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 the majority of 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 through the use of 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 period.

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 in order 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 on a daily basis 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.

A study by Otobo (2022), 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.

As mentioned by Otobo (2022), record disposal is the process of assessing the files and records that are currently available to determine their relative value and degree of inactivity inside the company. According to the researchers, records that are assessed for value and determined to be worthless are either destroyed permanently or submitted to the archives for ongoing management and use as valuable historical documents.

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**

<https://www.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 of your administrative and academic tasks with unparalleled efficiency, enabling you to meet the expectations of 21st-century education.

**Fedena**

<https://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 in order to increase the institution's efficiency.

**Alma**

<https://www.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 of record management. 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 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 part of quantitative research. It is applied in many disciplines, such as the social and scientific sciences.

## RESEARCH LOCALE

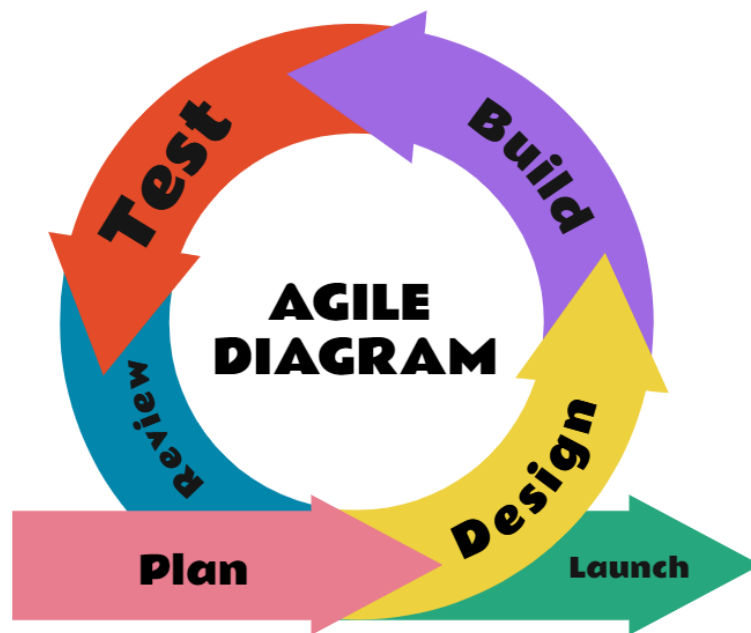
Santa Rita College of Pampanga is located at Carlos Mariano Street, San Jose Sta. Rita Pampanga. Santa Rita College of Pampanga (SRC) is a private, Catholic school that was founded in 1945–1946 and offers programs for elementary, high school, and college students. Students are taught to appreciate God, 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 to design the 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*

**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 visualize our system and select 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 user feedback 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.

## **SAMPLES 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 researcher 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 persons 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**

Through the use of interviews, we 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 researcher is able to use an interview 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:

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

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

***Table 1: The Likert Scale Conversion***

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

Their goals served as a guide for the researchers as they chose 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

$\sum f_i x_i$  = Sum of Weighted Frequencies

$\sum f_i$  = Sum of Number of respondents

## SYSTEM DEVELOPMENT TOOLS

The different instruments and techniques that researchers employ to build the proposed system are called system development tools. These were employed in order 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 a 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 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, we 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.

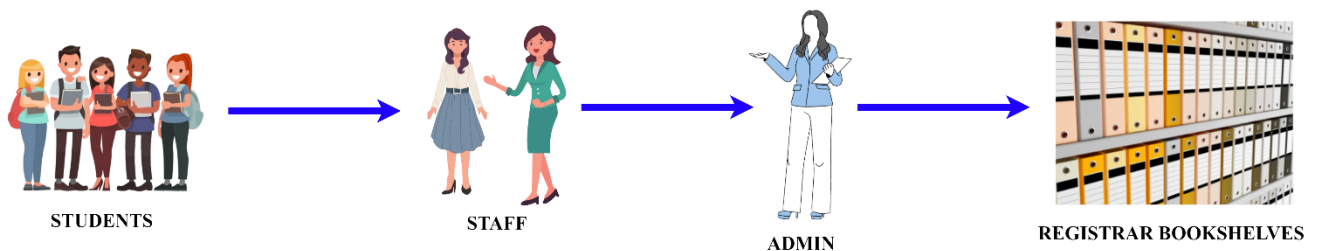


*Figure 4: Interview with the Locale*

## DESIGN PHASE OF THE SYSTEM

### Traditional Record Management System of Santa Rita College of Pampanga

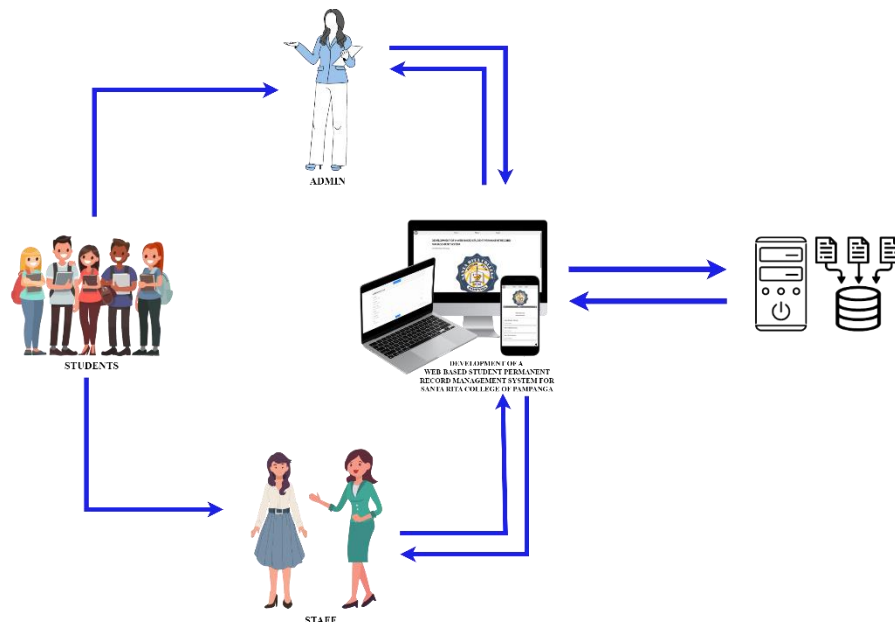
There is no record management system operating at the school. The Santa Rita College of Pampanga employs a method in which student records are stored on paper-based bookshelves. These bookshelves can sustain damage over time from storage. For example, records of graduates from 1945 are only kept in the 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 the (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 demonstrates the database design as it lays out the database's framework.

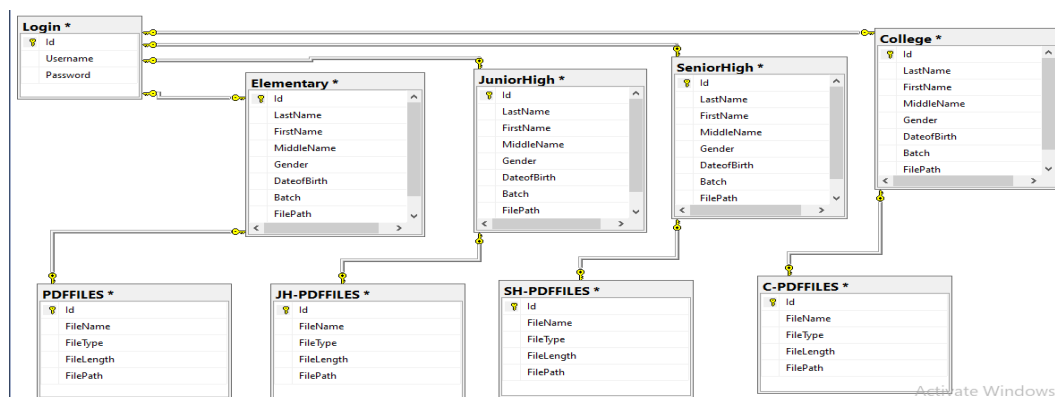
It determines how connectedly the database tables relate to one another.



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

## ENTITY RELATIONSHIP DIAGRAM (ERD)

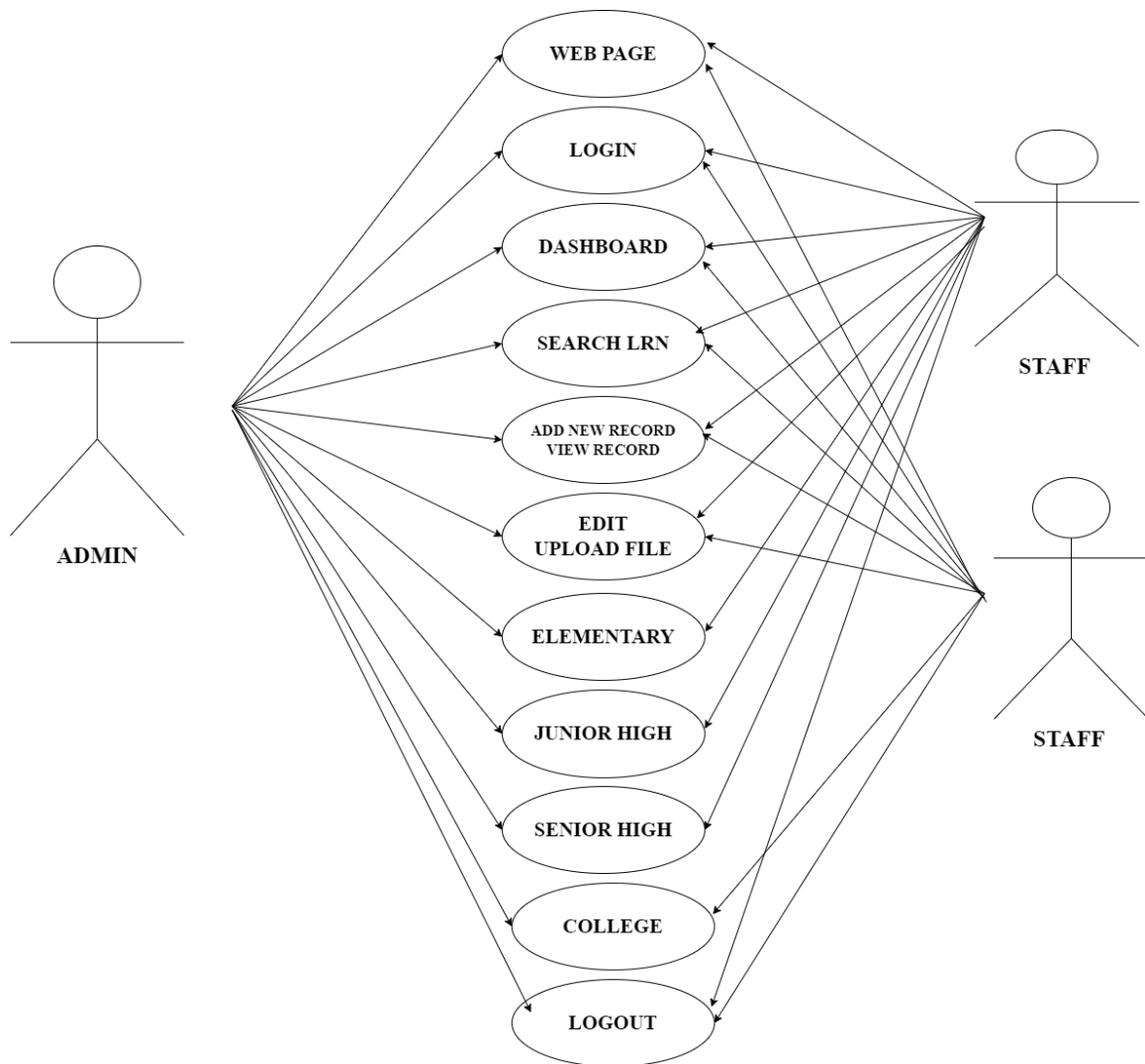
Figure 8 explains the Entity Relationship Diagram of the Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga.



**Figure 8:** Entity Relationship Diagram of a Student Permanent Record Management System for Santa Rita College of Pampanga

## USE CASE DIAGRAM (UML)

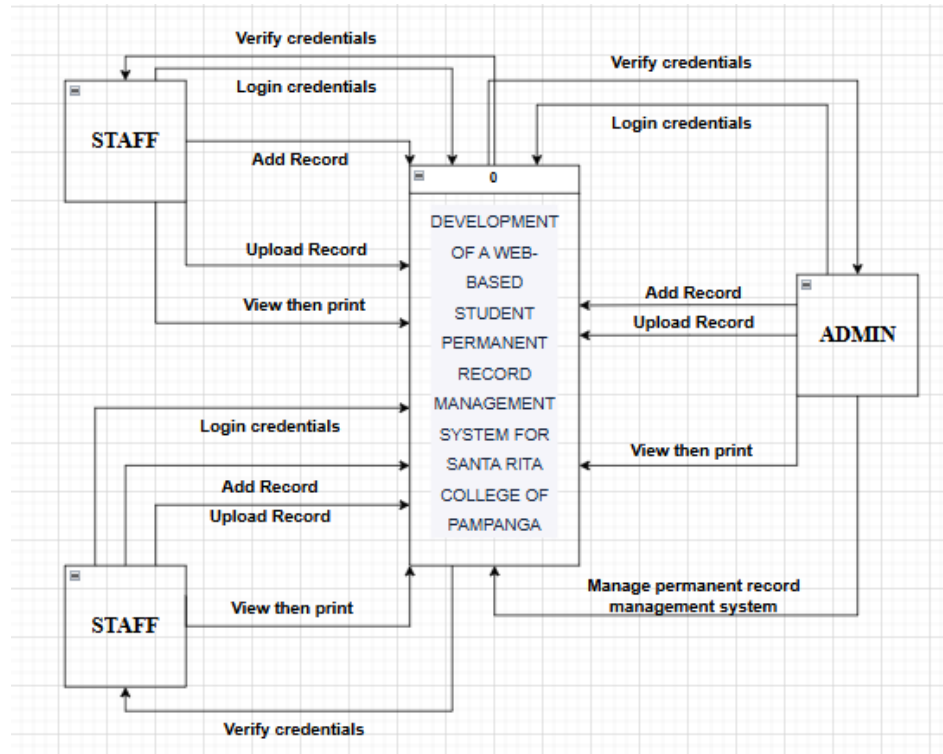
The relationships between the process and the data were defined by the use case diagram. It shows the users with access to the system as well as the features of the system.



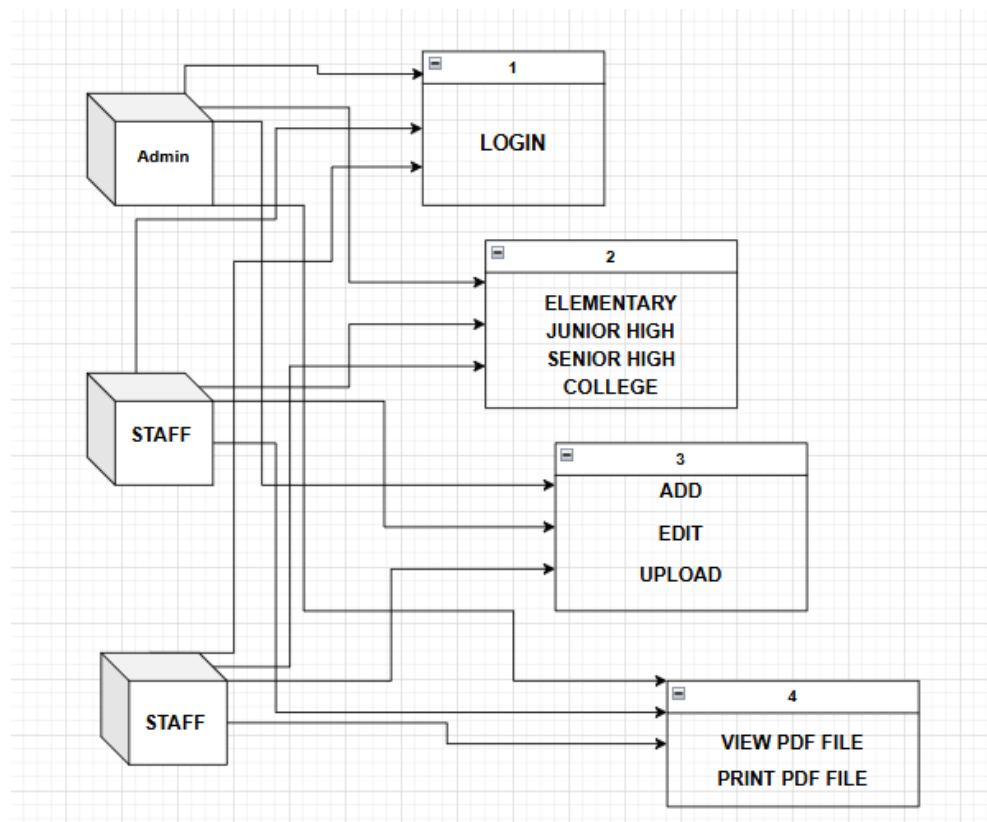
**Figure 9:** Use Case Diagram of a Student Permanent Record Management System for Santa Rita College of Pampanga

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

## DEVELOPMENT PHASE OF THE SYSTEM

### System Features and Functionalities

#### 1. Web Page

Here you 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**

Here we may observe how many recorded students, for example, Elementary 50 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 confused.

### **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 you edit 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 students information studying at Santa Rita College of Pampanga (SRC).

### **9. Print Record**

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

### **10. Logout**

Here at Logout, you 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:

### Intrations of the System

#### 1<sup>st</sup> Iterations

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

#### 2<sup>nd</sup> Iterations

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

#### 3<sup>rd</sup> Iterations

- 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 to obtain the information of students studying at Santa Rita College of Pampanga. In the deployment 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 for us researchers to learn the correct use of the System so that it could be tested and approved by our locale. After a few months of not sleeping at night and going to school early so that we could repeatedly show and check what we did. We gave our system to Ms. Monette Galang for this they can use our system made by researchers. The researchers have completed the deployment of the system and the processes to fulfill the requirements for the degree of Bachelor of Science in Information Systems.

## **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 shows the system evaluation based on functionality as rated by respondents in this study. The majority of the respondents rated the system functionality. With a general weight mean of 3.95.

FUNCTIONAL SUITABILITY											Mean
Criteria	5	%	4	%	3	%	2	%	1	%	
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: Evaluation of System Functional Suitability*

## PERFORMANCE EFFICIENCY

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

PERFORMANCE EFFICIENCY											Mean
Criteria	5	%	4	%	3	%	2	%	1	%	
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: Evaluation of System Performance Efficiency*

## COMPATABILITY

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

COMPATIBILITY											Mean
Criteria	5	%	4	%	3	%	2	%	1	%	
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: Evaluation of System Compatibility*



## USABILITY

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

USABILITY											Mean
Criteria	5	%	4	%	3	%	2	%	1	%	
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: Evaluation of System Usability*

## RELIABILITY

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

RELIABILITY											Mean
Criteria	5	%	4	%	3	%	2	%	1	%	
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: Evaluation of System Reliability*

## SECURITY

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

<b>SECURITY</b>											
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
<b>Weighted Mean</b>											3.87

*Table 7: Evaluation of System Security*

## MAINTABILITY

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

<b>MAINTABILITY</b>											
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
<b>Weighted Mean</b>											3.72

*Table 8: Evaluation of System Maintainability*

## **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 of 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, CONCLUSION AND RECOMMENDATIONS**

#### **SUMMARY**

Santa Rita College of Pampanga is located in San Jose, Sta. Rita, Pampanga. The 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.

Summary of our system created and designed 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 the 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 conclusion of the system we created for Santa Rita College of Pampanga is that it 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 their 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).

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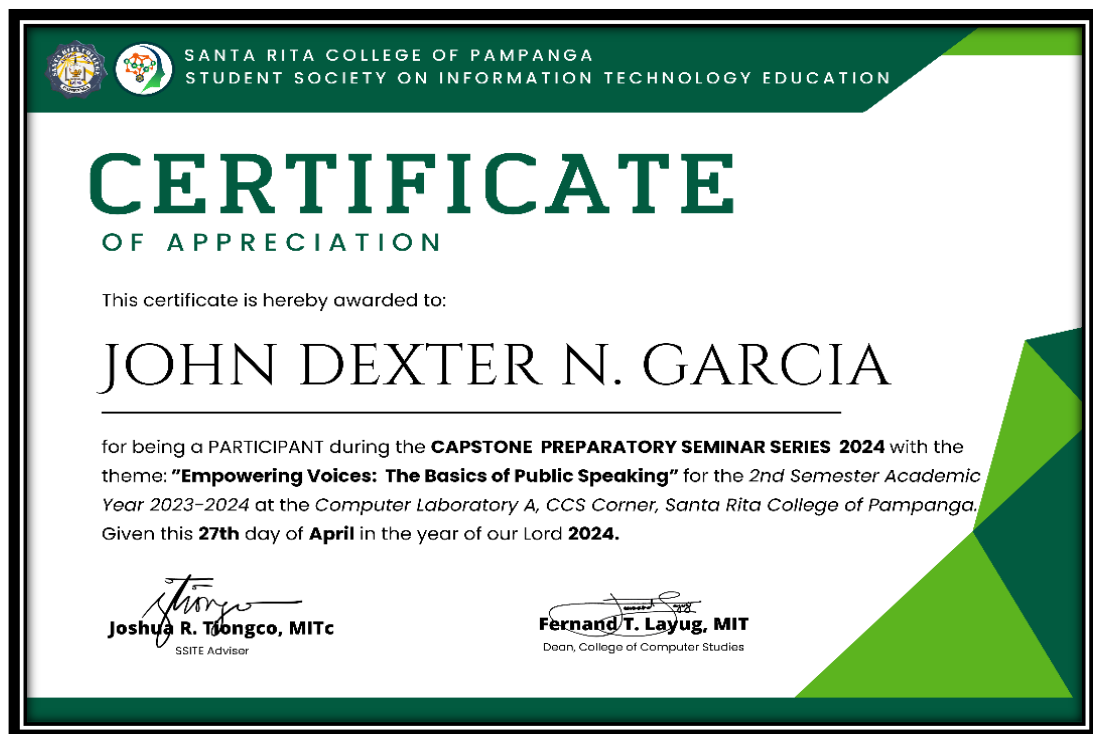
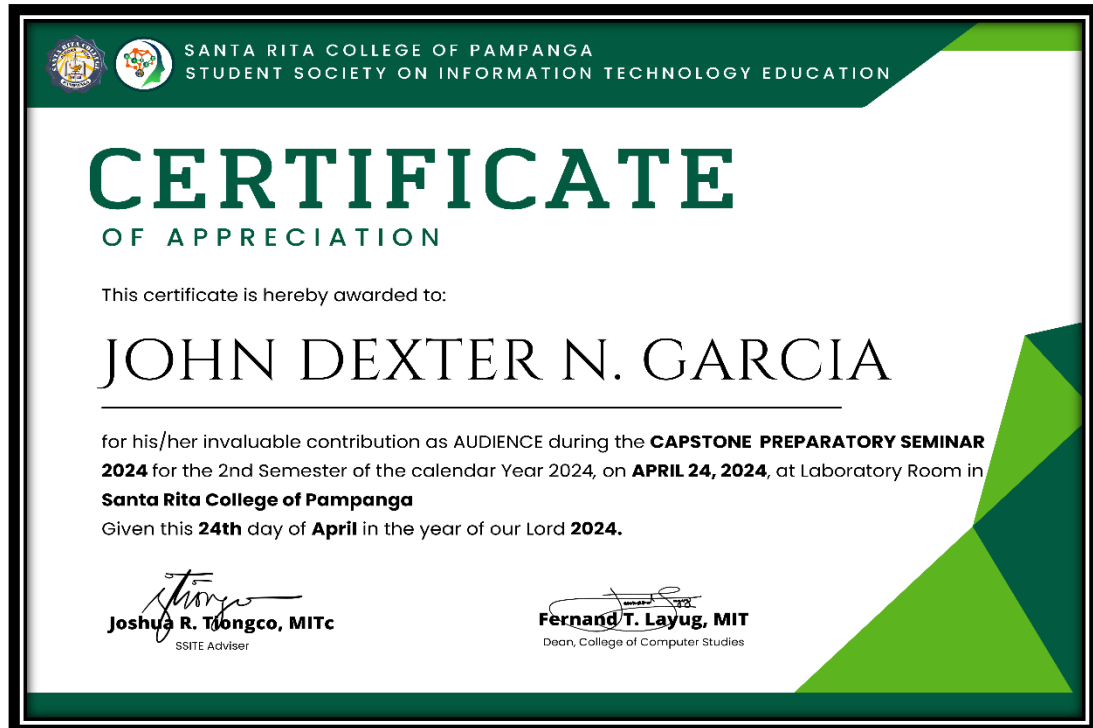
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## APPENDIX A

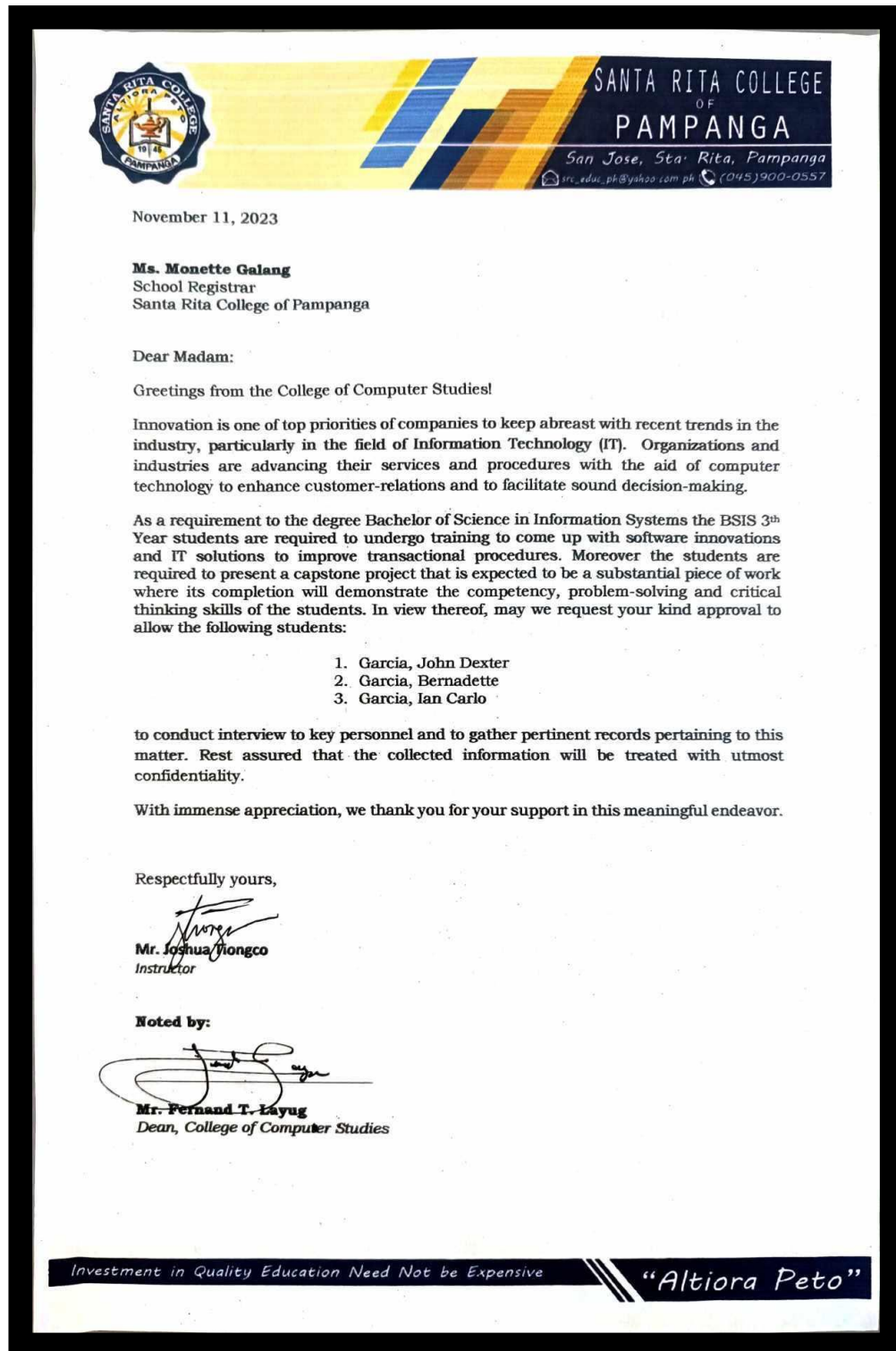
## CAPSTONE PREPARATORY SEMINAR CERTIFICATES





## APPENDIX B

## SUPPORTING DOCUMENTS



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## APPENDIX C

### RESUME

**JOHN DEXTER GARCIA**

#303 San Jose, Guagua, Pampanga  
(+63) 936-886-4171  
[gjoindexter99@gmail.com](mailto:gjoindexter99@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  
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

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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

**BERNADETTE M. GARCIA**

San Vicente Ebus Guagua, Pampanga  
(+63) 951-095-8747  
[graciasbernadette697@gmail.com](mailto: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	<b>San Vicente Ebus Elementary School</b> Ebus, Guagua, Pampanga
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**SECONDARY**

Junior High 2015-2018	<b>Natividad High School</b> Natividad, Guagua, Pampanga
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Senior High 2019-2020	<b>Natividad High School</b> Natividad, Guagua, Pampanga
--------------------------	-------------------------------------------------------------

**TERTIARY**

2021- Present Year	<b>Bachelor of Science in Information Systems</b> <b>SANTA RITA COLLEGE OF PAMPANGA</b> San Jose, Sta. Rita, Pampanga
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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

**Ian Carlo C. Garcia**

San Agustin, Sta. Rita Pampanga  
(+63) 961-296-1794  
[Garciaiancarlo1@gmail.com](mailto: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

**APPENDIX D**  
**GANTT CHART**

**APPENDIX F**  
**CERTIFICATE OF IMPLEMENTATION**

**CERTIFICATE OF IMPLEMENTATION**

This letter is to certify that Development of a Web-Based Student Permanent Record Management System for Santa Rita College of Pampanga was developed by the researchers and has been implemented at Santa Rita College of Pampanga on September 1, 2024.

Noted by:

  
Ms. Marlyn Mendoza

Registrar Staff

Santa Rita College of Pampanga