

A Development of
Web-based Student Information Management System
for Lake View Academy

A Capstone Project

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Chapter 1

Introduction

1.1 Background of the study

Today's technology has an impact on the way we live. It has affected growing facets of life and has redefined the community. Technology has undeniably played an important part in every area of life. Thanks to technology, various manual activities can be automated. Moreover, with the aid of modern technology, many complex and essential procedures can be carried out with ease and greater efficiency. Life has changed due to the application of technology. Technology has revolutionized the education industry and we can't ignore the importance of technology in schools (Raja & Nagasubramani, 2018). Every aspect of human activity needs reliable information; thus, everyone expects information to be secure, accurate, complete, correct and up-to-date enough. According to Caluza (2017) "The traditional method of data storage has shown its impact in managing data from security, retrieval, and monitoring. Many kinds of the literature suggest that this approach would result in low job satisfaction rating from its clients and Leyte Normal University's Office of the Registrar is no escape in this dilemma." According to Breitmeyer (2015) "With manual systems the level of service is dependent on individuals and this puts a requirement on management to run training continuously for staff to keep them motivated and to ensure they are following the correct procedures. It can be all too easy to accidentally switch details and end up with inconsistency in data entry or in hand written orders. This has the effect of not only causing problems with customer service but also making information unable to be used for reporting or finding trends with data discovery. Reporting and checking that data is robust can be timely and expensive. This is often an area where significant money can be saved by automation." In addition to Breitmeyer's statement was "Another impact of manual systems is inconsistency in data entry, room for errors, miskeying information, Large ongoing staff training cost, System is dependent on good individuals, Time consuming and costly to produce reports, and Lack of security."

Lakeview Academy at Don Carlos, Bukidnon is using the traditional method of gathering and transferring of student data using paper and pen. Although they are using spreadsheets as their data storage the process itself is still manual; copying from one document to another; which may lead to data inconsistency. As part of their alternative solution to avoid such a problem, double-checking is applied for the School Forms in which data are being transferred from class record, produced by the homeroom advisers; and to the registrar upon receiving their submission of school forms. The said school forms are School Form 1 (SF1) School Register which consist a list of learners who are officially enrolled an currently attending classes; School Form 2 (SF2) Daily Attendance Report of Learner which contains a list of the learners' daily attendance; School Form 4 (SF4) Monthly Learner's Movement and Attendance contains the summary number of learners as well as the transferring in/out and the dropout of students within the month and cumulative number of learners for the previous months; Form137A Learner's Permanent Academic Record as learners official record for their academic progress; Form138 as their report card; and grade slip which serves as a copy for the student to look their grades. So, upon their avoidance of erroneous data, work redundancy occurred. Consequently, a redundant of work is an additional to time consumption and time consumption may lead to delay of submission of reports, and

delay submission of reports to the Department of Education (DepEd) as stated in (DO 11, S. 2018) – “GUIDELINES ON THE PREPARATION AND CHECKING OF SCHOOL FORMS”, may lead to affect school performance.

A study conducted in Kalinga State University Rizal Campus shows that the present state of the existing student information system as perceived by the respondents was found to have met only to a "moderate degree" the five criteria of quality software, namely: data reusability, data durability, stability, usefulness and functionality, and system appeal assessment. Data Reusability of the existing system has been given the score of "low level." As to the recommendation based on findings it was suggested that the student information system be introduced to enhance the delivery of enrollment procedures and record-keeping of student information, as well as addressing the problems with the existing system. As a result, the performance of the Student Information System developed is better, more reliable and more effective than the Kalinga State University Rizal campus ' previously used student information system. Concerning the consistency criteria used to measure both the previously used and the developed Student Information System, it is also found that the Student Information System created is much better than the previously used system (Bayangan-Cosidon, 2016).

Furthermore, the Department of Education supports Different Student related Information systems. Highly implemented Pupil MIS was the top priority of the school because DepEd stands for its position as a learner-centered agency when implementing MIS funding moderately (Enteria and Role, 2018; DO 32, S. 2018).

1.1.1 Narrative Listing of the Existing System

The Registrar Office of Lake View Academy (LVA) in Lilydale Heights, Don Carlos handles different kinds of processes such as the Enrollment, receiving and consolidating of students' grades, consolidating students' performance for the submission of documents to the Department of Education (DepEd).

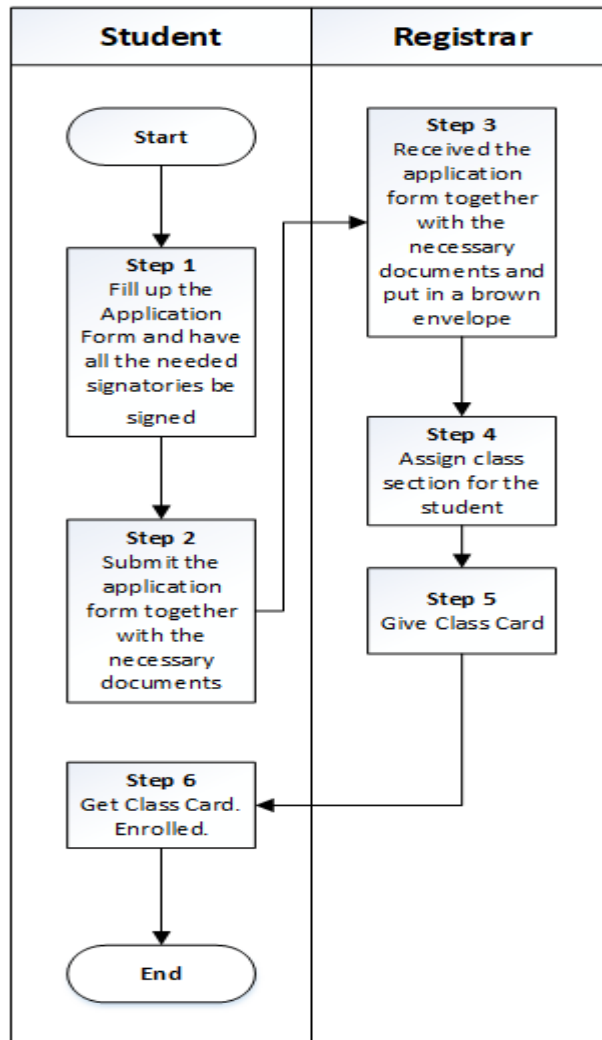


Figure 1- 1. Enrollment Process (New Student and/or Transferee)

Figure 1-1 shows the enrollment process for new students and/or transferee starts with the registrar giving the application for admission to those who want to be Enrolled at LVA. The Application for Admission Form contains basic information and applicant's last school attainment to be filled out by the applicant's handwriting; together with the affirmation of terms and conditions signed by them and their parents/guardians. At the back of the Application for Admission Form is the Registration Form which contains step by step process before a certain application will be registered. Certain faculties are approached for the signing of the registration form, starting from the Homeroom Adviser, School ID processor, Treasurer, and to the Principal. The Registrar then will receive the document together with the requirements needed such as NSO birth

certificate, Report Card, Good Moral, 2x2 ID picture, if junior high applied for grade 11 the additional requirement would be the certificate of completion and National Career Assessment Examination (NCAE) result; it will then be kept inside the envelope. Then the registrar will assign a section for the student using the heterogeneous approach. If there are two sections in a grade level, the first student will be in section A, second will be in section B, next will be in section A, and so on. Then the registrar will give the class card which contains the name of the student, section, and signature of the registrar.

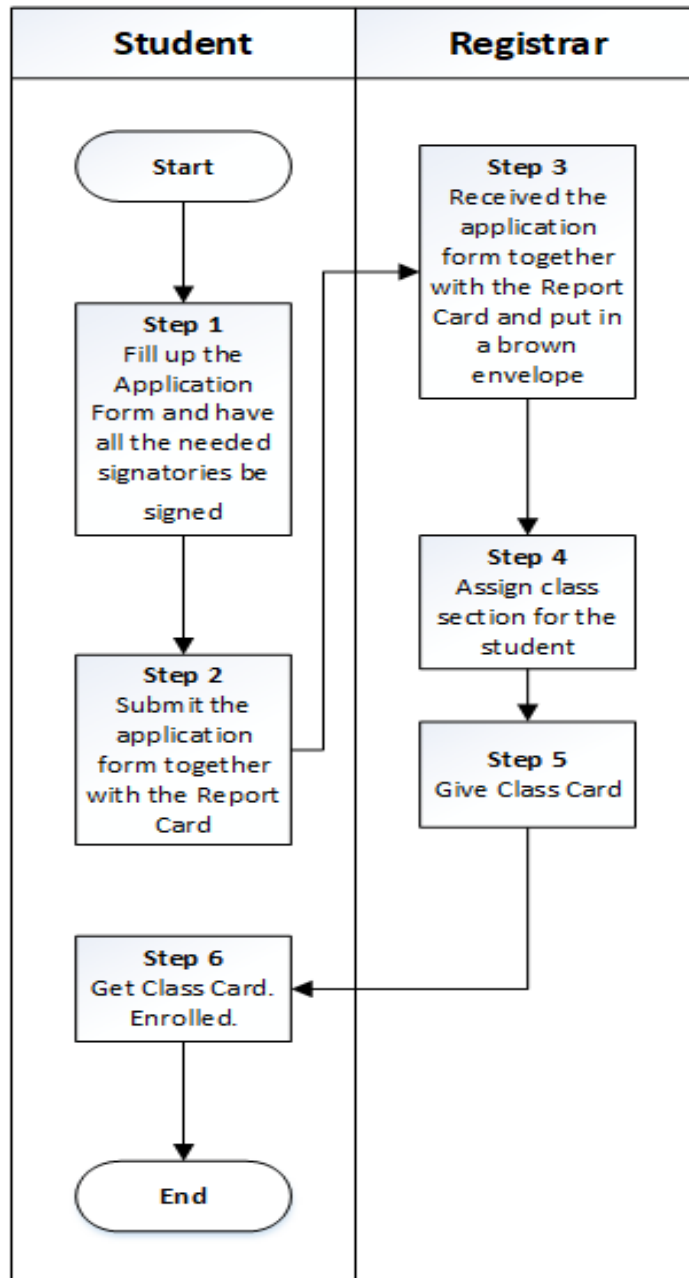


Figure 1- 2. Enrollment Process (Old Student)

Figure 1-2 shows the enrollment process for old students. It starts with the registrar giving the application for admission, the same form that is given to new student or transferee. The registrar then, will receive the document together

with the requirements needed such as NSO birth certificate, Report Card, Good Moral, 2x2 ID picture, if junior high applied for grade 11 the additional requirement would be the certificate of completion and NCAE result; it will then be kept inside the envelope. Then the registrar will assign a section for the student using the same approach in assigning sections mentioned above. Then the registrar will give the class card which contains the name of the student, section and signature of the registrar.

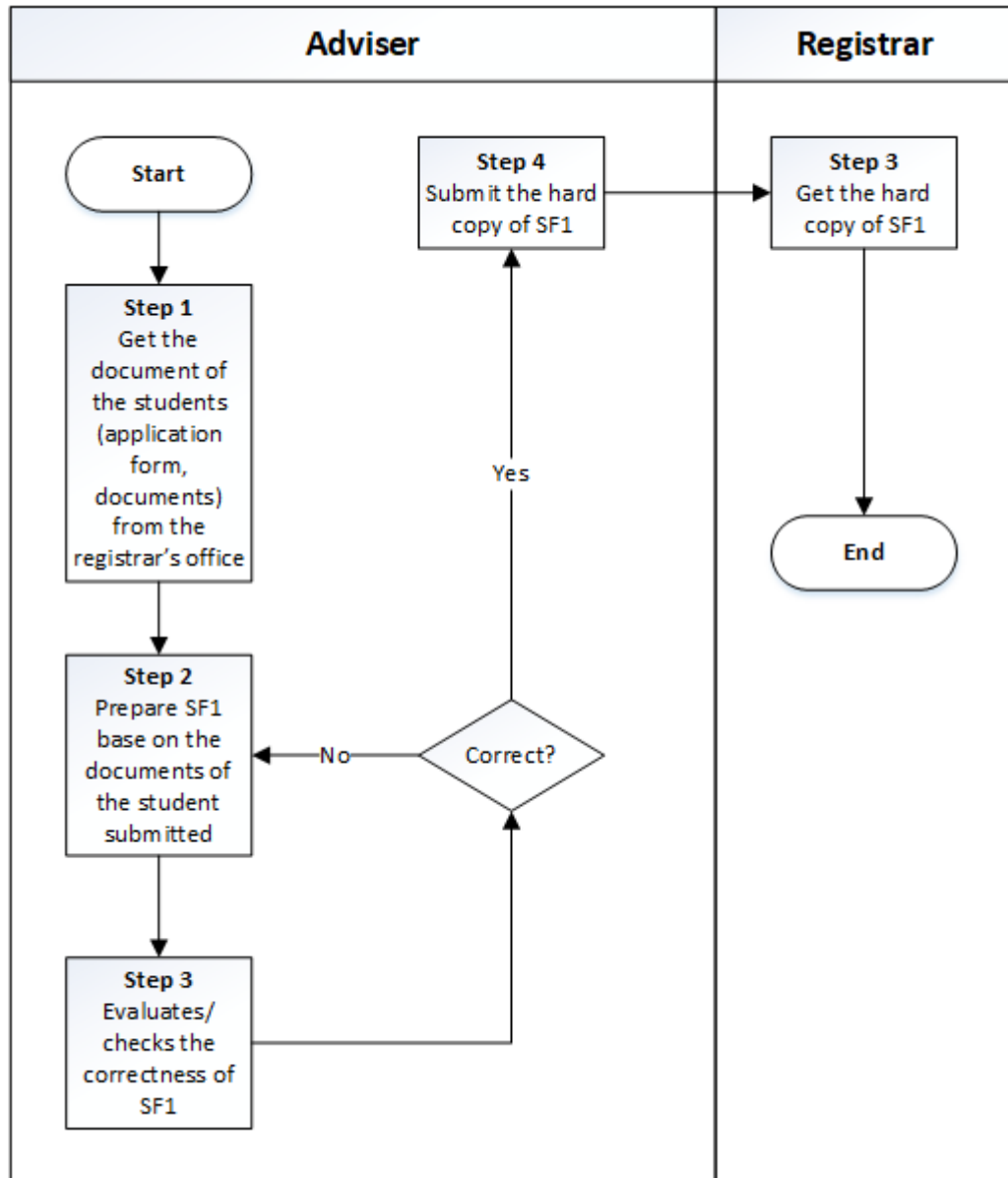


Figure 1- 3. Preparation of School Form 1 (SF1) School Register

Figure 1-3 shows the preparation and submission of School Form 1 (SF1). Starts with the homeroom adviser getting the documents of the students of the enrollment from the registrar’s office. This is the bases of producing SF1. And before submitting the SF1 to the registrar, the homeroom adviser will check manually the data integrity of the SF1. After checking and there is no error, the homeroom adviser submits the SF1 to the office of the registrar. Submission of SF1 to the registrar is every first month of the school year.

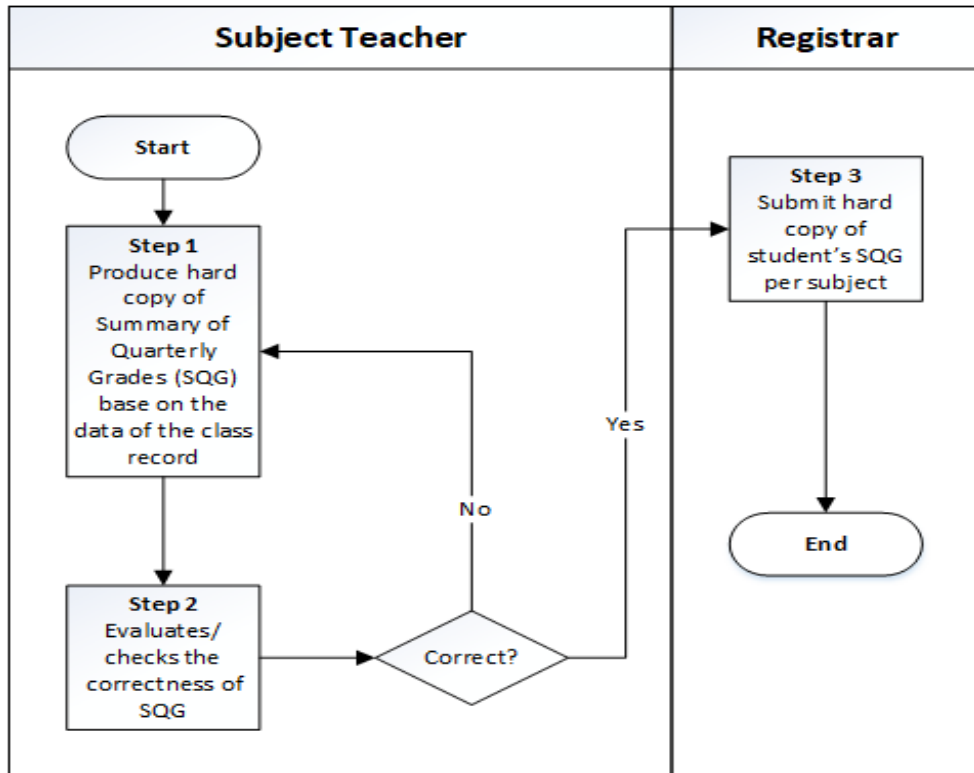


Figure 1- 4. Preparation of Summary of Quarterly Grades (SQG)

Figure 1-4 shows process in preparation of Summary of Quarterly Grades (SQG) of the students. Based on the data on the class record, the subject teacher produced the SQG. Then the subject teacher checks manually the data integrity of SQG. After checking and no more errors, the subject teacher submit the hard copy of SQG to the registrar.

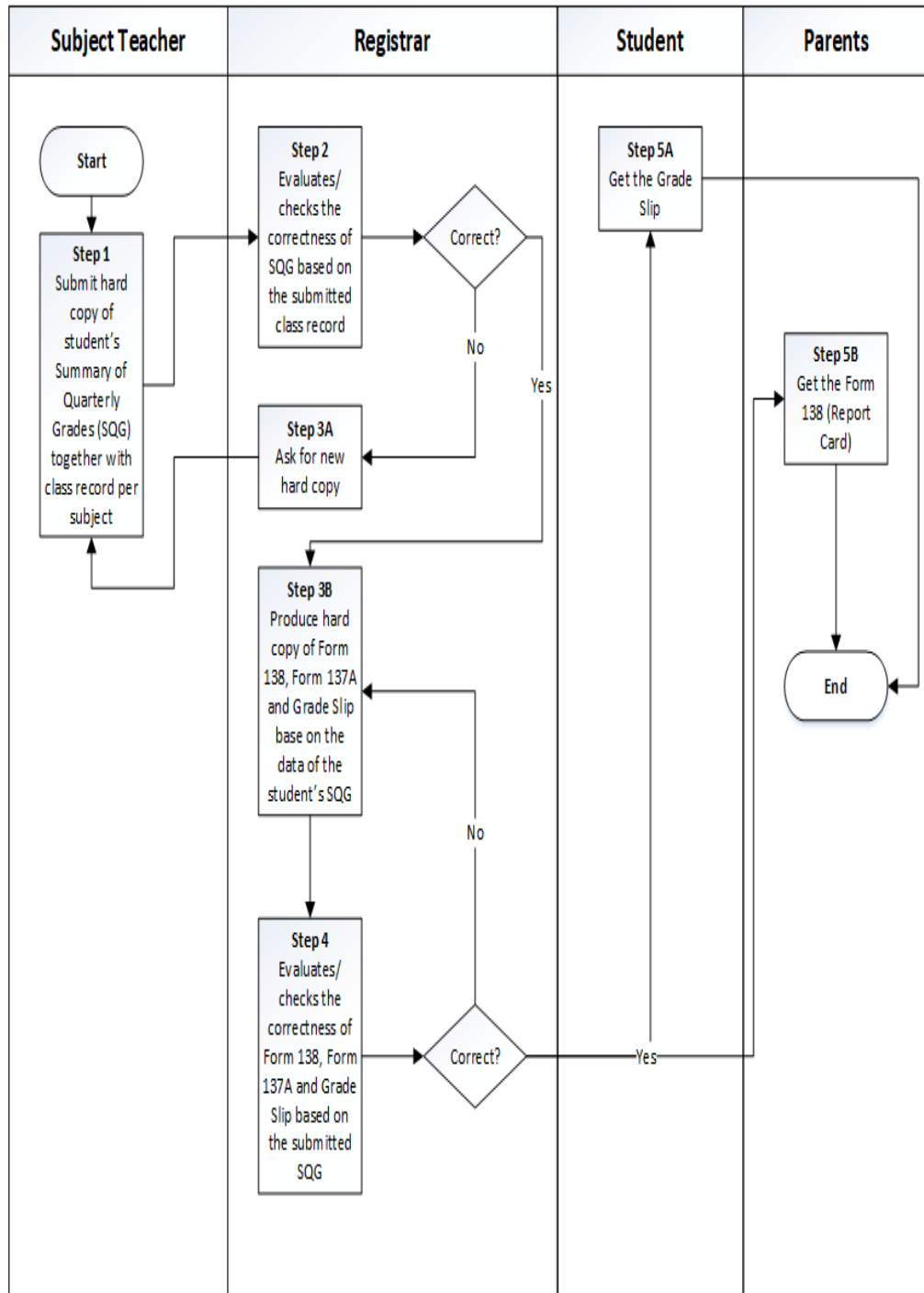


Figure 1- 5. Preparation of Form 138, Form 137A and Grade slip

Figure 1-5 shows the process of preparation of Form 138, Form 137A and the Grade slip of the students. Starting with the submission of Summary of Quarterly Grades (SQG) per subject from the subject teachers to the registrar. Then the registrar produced hard copy of Form 138, Form 137A and grade slip based on the students' SQG. The grade slip then be printed and be given to the student as their copy, and Form 138 will be given and will be signed by the parents/guardian during the Parent-Teacher Association (PTA) meeting.

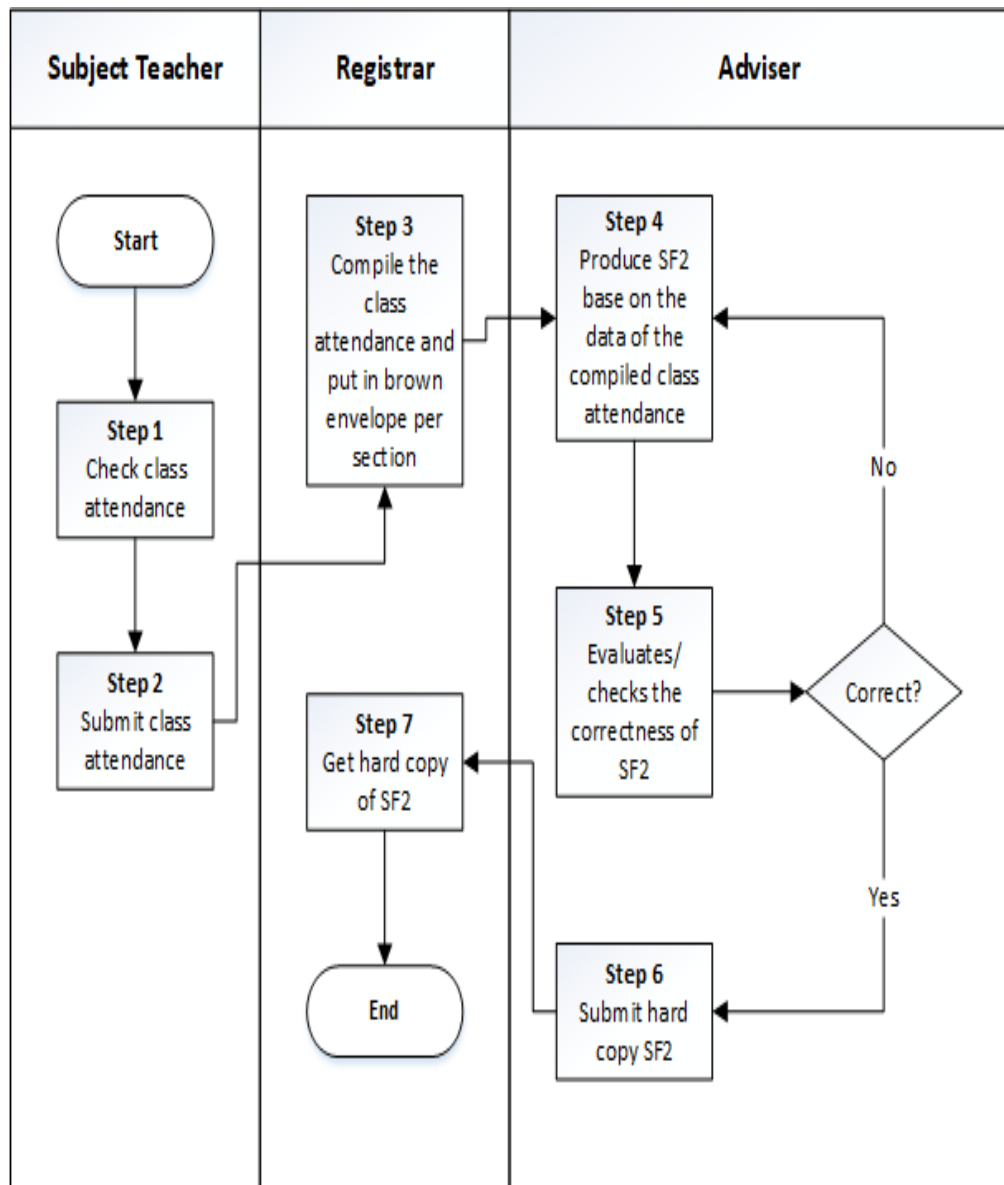


Figure 1- 6. Preparation of School Form 2 (SF2) Daily Attendance Report of Learners

Figure 1-6 shows the process in preparing the School Form 2 (SF2). SF2 is a list of the learners' daily attendance; it is submitted to the registrar by every end of the month. Subject teachers submit their class attendance record to the registrar every afternoon after all the classes ended, then the registrar compiles the records and put it inside the brown envelope per section. Before the week of submitting the SF2, the Homeroom advisers will get the class attendance records and based on that record the homeroom adviser produced the SF2. Then the homeroom adviser manually checked the data integrity of SF2, and if there are no errors, submit the SF2 together with class attendance records to the registrar.

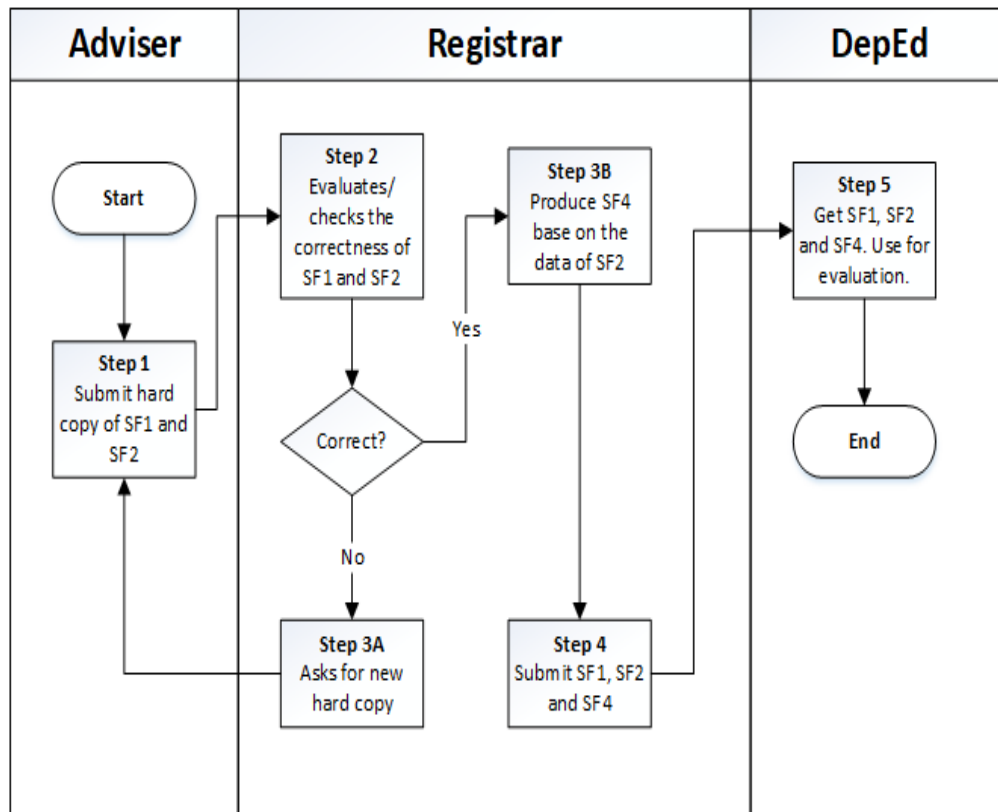


Figure 1- 7. Preparation of School Form 4 (SF4) Monthly Learner’s Movement and Attendance

Figure 1-7 shows the process of preparation of School Form 4. After submitting the SF2 from the Homeroom adviser to the Registrar, the Registrar produces School Form 4 (SF4) based on the summary found from the SF2. SF4 is a summary number of learners who transferred in/out and dropped out during the month and cumulative count from previous months. The registrar evaluates manually the data integrity of the submitted SF1 and SF2, and if there are errors, the registrar will ask new copies of SF1 and/or SF2. By the end of the semester, SF1, SF2 and SF4 will be submitted to the DepEd as part bases of their evaluation.

1.1.2 Issues and Problems

These are the following issues and problems sought:

- **Work redundancy.** The SF1 and SF2 are submitted by the adviser, and the Class Attendance Record, SQG and class records are submitted by the subject teacher. The registrar then rechecks the submitted SF1 based on the documents submitted by the student during enrollment, SF2 based on class attendance record, SQG based on the class records submitted. According to the registrar, rechecking the submitted entries is done to prevent erroneous data which will compromise reports integrity as experienced by them. This practice ensures that the data entries submitted are true and correct. However, work redundancy is

seen in this scenario. Redundancy of work can be laborious and can contribute to the delay of reports submitted to the DepEd.

- **Reports Submission Delay.** The registrar is experiencing a laborious work in the preparation and consolidation of report to be submitted to the DepEd due to work redundancy. This difficulty could result in the delay of reports submission which will possibly affect the performance of the school when it will be evaluated by the DepEd.

1.2 Statement of the Problem

The current system of Lake View Academy in preparing documents and/or reports is in manual approach which results to the identified issues and problems. Handling of data using paper and pen causes difficulty in consolidating and manipulating of data, for which it is vulnerable to data inconsistency and integrity.

1.3 Objectives of the Project

This section discusses the general and specific objectives of the proposed project.

1.3.1 General Objective

The main objective of this proposed project is to develop a Web-based Student Information Management System for Lake View Academy of Don Carlos that automates the preparation of documents and/or reports.

1.3.2 Specific Objectives

The proponents aim:

- To design the system's architecture using Unified Modeling Language for the database of the system and Entity Relationship Model for the diagrams based on the gathered information;
- To develop the designed system and set its software and hardware requirements and use it upon implementing the system;
- To evaluate the system's functionality and usability using the fault-error based test, task-based scenario, system usability scale, and user-acceptability test; and
- To turn-over and deploy the system to the client.

1.4 Scopes and Limitations of the Project

This section aims to discuss the scope and limitations of the proposed project, on what the system can do and cannot do.

1.4.1 Scope of the Project

The proposed project focuses on the following:

- The proponents will develop a system only for Lake View Academy
- The teacher can also record daily attendance of the student
- The teacher can also generate report like Final Summary Grade and Summary of Quarterly Grades

- Admin and Teachers can monitor the daily attendance of the students
- Registrar module can also generate daily schedule for the subject from different sections and teachers
- The generation and printing of reports only cover School Form 1 (SF1) School Register, School Form 2 (SF2) Daily Attendance Report of Learners, School Form 4 (SF4) Monthly Learner's Movement and Attendance, grade slip, Report Card (Form 138), and Student's Permanent Record (Form 137A).
- Online Portal for viewing of grades.
- The registrar can view graphical representation of data

1.4.2 Limitations of the Project

The project is bounded by the following limitations:

- It does not cover the billing of the students.
- This project only focuses on the production of SF1, SF2, SF4, grade slip, Form 138 and Form 137A, and does not provide or include evaluation of the school base on the submitted document to the DepEd, since it is only the DepEd which do the evaluation.
- Graphical representation only focuses on changes in the number of students, drop outs, transferred in and out, and student attendance.

1.5 Significance of the Project

This project will contribute greatly to Lake View Academy. The delay of reports submission of the documents and/or reports, and the work redundancy of the subject teacher, homeroom adviser, and registrar justifies why Lake View Academy needs and information management system. Thus, this project will stop all the difficulty in retrieving all the documents needed included in the preparation of reports to be submitted to the DepEd and eliminate the redundancy of work.

Furthermore, this study is about to help improve the process in which the information of the students is involved. According to Bunawan et al (2016), important asset for the academic institution are the academic records. Through the help of the proposed Student Information Management system; its goal is to lessen the processes, secure the data, promotes data integrity and reduce data redundancy, and with the use of data visualization it would be easier for the users to grasp the information for better decision making. In the study of Hariharan and Krithivasan (2016) that the true potential of data can only be discovered when it is extracted. Also, they discussed that data visualization tools lend a helping hand and such tools provide more innate insight into the complex details, patterns and trends that lie latent inside the data. In addition, by placing these trends and patterns in visual context we can obtain more benefits from it (Hariharan and Krithivasan, 2016). With this, data visualization can help identify people in making quality decision making and time fact-based decision (Aziz and Roslin, 2018).

Moreover, it is important to have the proposed Student Information Management system for a reason that the school will have a well-managed database for

students record, as well as they can monitor the attendance and student performance properly. It can also help the registrar in terms of assigning the students to its respective sections, and also aligning back the process of different form submissions while reducing its labor as to the part of the registrar. According to Bayangan-Cosidon (2016) “Compared to the existing system, the established Student Information System provided users with greater satisfaction inefficient querying of student information records, maintaining student records in a more secure manner, and providing more reliable information records of students.”

In Addition, the need of this study is to promote a more systematic way of storing data than just being computerized. Addresses the issues on the existing processes and making solutions to help improve the storing, retrieving, management of data, data integrity and data security. And also, this will set as the starting point for additional future improvements of other processes of the school. Furthermore, the Department of Education supports Different Student-related Information systems as stated by Enteria and Role, (2018) “Highly implemented Pupil MIS was the top priority of the school because DepEd stands for its position as a learner-centered agency when implementing MIS funding moderately.” As stated in DepEd Order (DO 32, S. 2018).

Chapter 2

Review of Related Literatures

The evolution of technology has a big impacted to all sectors of today's society. Due to the efficiency and effectiveness provide by the technology, it simplified and improved the process of transaction in education, industry, government, and etc. Base on the existing technologies or theories the proponent came up a different idea about creating a system that would help the Lake View Adventist Academy, Don Carlos, Bukidnon.

2.1 Student Information Management System

It is a web-based system that focuses mainly on improving the school processes that involve the data of the students. It is not to replace certain faculties and staff of the school but to help them create more reliable software for different data usage. Compare to Spreadsheets, it focuses on data security, data integrity and reduces work redundancy. Student Information Management System is essential for an institution, which utilizes a computer. Student Information Management System manages several student details like student attendance, performance evaluation, parent name, phone number, date-of-birth, class, sex, etc. In addition, the goal of evolving this application is to lessen the processes of storing and retrieving student information, to have a more secure and reliable system. And also, it will help the registrar and faculties when it comes to submission of reports needed by the Department of Education. Using SIMS, the registrar can store students' academic records, assign students to their respective sections. When it comes to protecting confidential school-related data, SIMS is indeed useful. The highly secured database of the system can only be accessed by authorized people. So, SIMS ensures stringent data security. On the other hand, user-friendliness and interactive user interface are two important features of SIMS. For such, the student information management system (SIMS) also targets ease the daunting tasks of tracking and updating the data of students— including their attendance records, outcomes, grades, among others — providing tremendous relief to the management of schools and their workers.

2.2 Related Literatures

2.2.1 Student Information System for Kalinga State University Rizal Campus

A study was done for Kalinga State University focuses on evaluating the characteristics of their currently used system as to how effective it is in terms of reusability, maintainability, security, usefulness, and functionality; so, they could determine the problems occurred in some areas. So, they conducted research using the descriptive-evaluation research design. The method involves the collection of data through survey questionnaires and observations to test assumptions or to answer questions concerning the current status of the subject of study. The descriptive-evaluation design was used for it is the most suitable for the study, because it involved a comprehensive analysis of the system's input, process and output component. Using documentary analysis, direct observation, survey questionnaires, and interview guides as tools; they were able to gather the needed data. As a result, their Findings shows the present state of the existing student information system as perceived by the respondents was found to have met only to a "moderate degree" the five criteria of quality software, namely: data reusability, data durability, stability, usefulness and

functionality, and system appeal assessment. Data Reusability of the existing system has been given the score of "low level." As to the recommendation based on findings it was suggested that the student information system be introduced to enhance the delivery of enrollment procedures and record-keeping of student information, as well as addressing the problems with the existing system. As a result, the performance of the Student Information System developed is better, more reliable and more effective than the Kalinga State University Rizal campus ' current student information system. Concerning the consistency criteria used to measure both the current and the Student Information System developed.

As part of proposed Student Information Management System, the proponents would like to apply the same tools used for gathering the data such as survey questionnaires, interview guides, and direct observation and documentary analysis; for it is proven effective in gathering the data and also to evaluate both existing system and the proposed system in terms of usability, effectiveness, consistency and data security. Since their process is found to be effective that helped them build a reliable system.

2.2.2 A Review paper on Student Information Supervision System

The concentration of this study is mainly towards properly maintaining student information. A student's concept and role in sequence framework and user limit are to replace the current paper records. College personnel can easily access all facets of the educational development of a student through a secure online platform installed on the website of the college. Furthermore, each subsystem has validation allowing authorized users to create or update information in that subsystem. In addition to a personnel user interface, the system will provide student user boundaries, allowing users to access information and submit requirements online thus reducing dispensation time. All data is stored strongly on SQL servers managed by the college commissioner and ensures the maximum possible level of safety. This system provides a simple crossing point for the continuation of student information. It can be used by educational institutes or colleges to keep up the records of students easily. All these problems are solved using an online student information management system. A paper focuses on presenting in sequence in an easy and comprehensible manner which provides conveniences like online registration and outline creation of student's thus plummeting paperwork and automating the record production process in an instructive institution. As a result, Student Information Management or Supervision system assists in automating the existing instruction manual organization. This is a paperless work. It can be monitored and forced distantly. It provides perfect information for a long time. All existence together gathers information that can be saved and can be accessed at any instant. The information which is stored in the repository helps in taking intelligent decisions by the organization. So, it is improved to have a Web-Based Information Management system. Everyone the stakeholders, faculty, and organization can get the necessary information without delay.

In connection with, the proposed system will focus on assisting the school process, as well as to provide a much more secured database for the data using MySQL, and promotes data integrity. Yet, the proposed system will not be associated with a Learning Management System, since it is not that relevant to junior and high school students compare to colleges. However, the system

will feature a portal for both students and guardians to view the student performance using data visualization, for easier grasping of information.

Also, some paper submission to the registrar will be eradicated, since the system will have a module for homeroom advisers and teachers for easier submission. Even though, the registrar would still produce physical documents like school forms upon the submission to the DepEd; yet, it would lessen its time upon preparation of this school forms.

2.2.3 Development of Electronic Document Archive Management System (EDAMS): A Case Study of a University Registrar in the Philippines

This study utilized an embedded single-case study design using a thematic analysis approach. Wherein the main instrument was an interview conducted by the researcher, including narratives of the participants about the current situation in the workplace. The researcher observed in the daily transactions in the registrar office, the researcher became interested in creating a system that the Registrar will benefit from and the university itself regarding quality service. This study includes investigation on the process of document retrieval and record-keeping of the paper archives of the Leyte Normal University Registrar. Moreover, the researcher would like to develop a digital document archive of all pertinent student documents that were not found or included in the current Integrated School Information System (ISIS). Specifically, this study addresses the following questions.

1. What are the issues faced by the office of the university registrar in dealing with documents received from the students, monitoring, and retrieval?
2. How do they cope up with these issues?
3. Based on the results of this study, what System can be developed to solve their problem in data management, monitoring, and retrieval?

As part of the process, they apply Requirements and analysis, Design and Coding, Testing, and Implementation. As part of their conclusion, In developing systems, it follows specific processes to produce the desired output. In this case, the issues faced by the office also revealed, such as limited storage area, misclassification, misplacement of the document, document security, termite, and pest attacked, difficulty in monitoring, and difficulty in document retrieval. On the other hand, several coping strategies were also identified by the participants like asking budgetary support, the use of a logbook, periodic maintenance, and the use of maintenance technologies and infrastructure. However, despite these coping strategies, drawbacks are still present like releasing on a budget take time, improper still happens, undermanned, and releasing of documents to the stakeholders still takes time. As a result, the development of an electronic document archiving management system was made to aid the problems faced by the Office.

Although SIMS focuses on the process to lessen and easier to the users; yet, archiving Is also part of this system, since it deals with the proper data management for easy retrieval of information and also it promotes security. On the other hand, Archiving focuses on storing and retrieving. Unlike SIMS, it

focuses on handling the data to avoid data inconsistency while reducing work redundancy that affects time consumption which may result to delay of submission; and also, it has its features to present data using data visualization for easier grasp of information for better decision making.

2.2.4 The Factors Affecting the Implementation of Students' Records Management System to Higher Learning Institutions in Tanzania a Case of The Institute of Accountancy Arusha

The concept of this study refers to the situation in which all students related to learning institution knowledge (schools, colleges, or universities) are entered and kept safe for easy organizing, retrieval, and control in the computerized system. Computerized systems are replacing the old model of keeping all the personal details and academic records of the students (especially for higher learning institutions) in paper files in the wooden shelves. Such computerized systems are known as record management systems for students.

Student Records Management System, by design, is a special information management system for an educational establishment to control the data of students. It provides students with the opportunity to register their classes, record grades, performance, and other test ratings, transcripts, create student schedules, monitor student attendance, and handle many other data related to student studies. This should not be confused with a Learning Management System (LMS) or Virtual Learning Environment (VLE) where instructional materials, tasks, and assessment assessments can be carried out online. Because of the proliferation of new technology and advanced technology in business information around the world, many learning institutions have embraced high-tech communication and record-keeping, especially using record management systems and improving network management in their organization's overall activity. The widespread use of Student Management Systems to many of the learning institutions has contributed to good results in their operations. According to the report, the use of Students ' Management Systems has not yet been widely used, especially in third world countries like Tanzania, in some of the higher learning institutions. This research has attempted to analyze the factors that impede the smooth implementation of SRMS, taking as the case study the Arusha Institute of Accountancy (Kavuta, & Nyamanga, 2018).

2.2.5 Educational Management Information System (EMIS) in Public Elementary School

The study was conducted to determine the extent of effectiveness in implementing the Education Management Information System (EMIS) as one of the functions of education management in Surigao Del Sur Philippines ' public primary schools. Using a researcher-made questionnaire, a concise survey approach was used. The study respondents were nine chosen public primary schools from the Surigao Del Sur Division's three clusters. The researcher-made questionnaire was validated by different experts on EMIS implementation. Findings showed that Pupil MIS received the highest mean from the eight (8) modules of EMIS, while Finance MIS obtained the lowest level of implementation of EMIS modules. The level of efficacy of EMIS in public elementary schools was found to be high in preparation and tracking. The

study concludes that most of the Surigao Del Sur Division's public schools are successfully adopting EMIS modules, irrespective of their form. Finance MIS, however, needs more preparation, execution, and performance enrichment. The study, therefore, recommends improving EMIS modules specifically on Finance MIS and developing sustainable EMIS by sharing best practices in the various schools' implementation of EMIS. Highly implemented Pupil MIS was the school's top priority because DepEd stands for its role as a learner-centered organization while moderately implementing finance MIS. The study shows that the current educational system is recognizing the power of technology by using it as part of better school management, and a good avenue to learning.

2.2.6 Data Visualization for Evaluation Form Management System

This study talks about Graphical data visualization that can help organizations view their data summary, making it easier to recognize patterns to derive any decision-making solution. The important aspect that should be addressed in a different format in a survey or questionnaire framework as a result of data collection. E-Latihan System has been developed as a digitized version of traditional pen and paper evaluation form management, but there is a lack of current data reporting modules to provide better representation for the administrator. This paper aims to outline the general criteria for a reporting module for data visualization based on the case study of E-Latihan to resolve the mentioned issue. At the same time, Perak Syariah Judicial Department will explore the use and impact of data visualization. The outcome of this study shows that data visualization can help established staff make quality decisions and make time fact-based decisions (Akhir, Aziz & Roslin, 2018). Using the Idea of data visualization and its importance, the proponents would like to apply this feature.

Chapter 3

Methodology

In this chapter, the software development process will be discussed. The proponents used the modified waterfall as a guide for the development process to accomplish the project. It also elaborates on the technologies to be used by the proponents.

The Modified Waterfall Model is an excerpt from the classical waterfall model which is the Waterfall Model, except that the errors are significantly reduced through verification. With this model, there is a lesser need for documentation and revision as it allows overlapping phases, unlike the classical model which requires a project to finish each phase before proceeding to the next phase of the model (Vennapoosa, 2010). It is also an advantage for the proponents in a way that the requirements gathered are being monitored and researched after such an interview. Lake View Adventist Academy (LVAA) is located at Don Carlos, Bukidnon in this location proponents get hard to capture the area because of the distance proponents must have to gather the total requirements or business rule of the school.

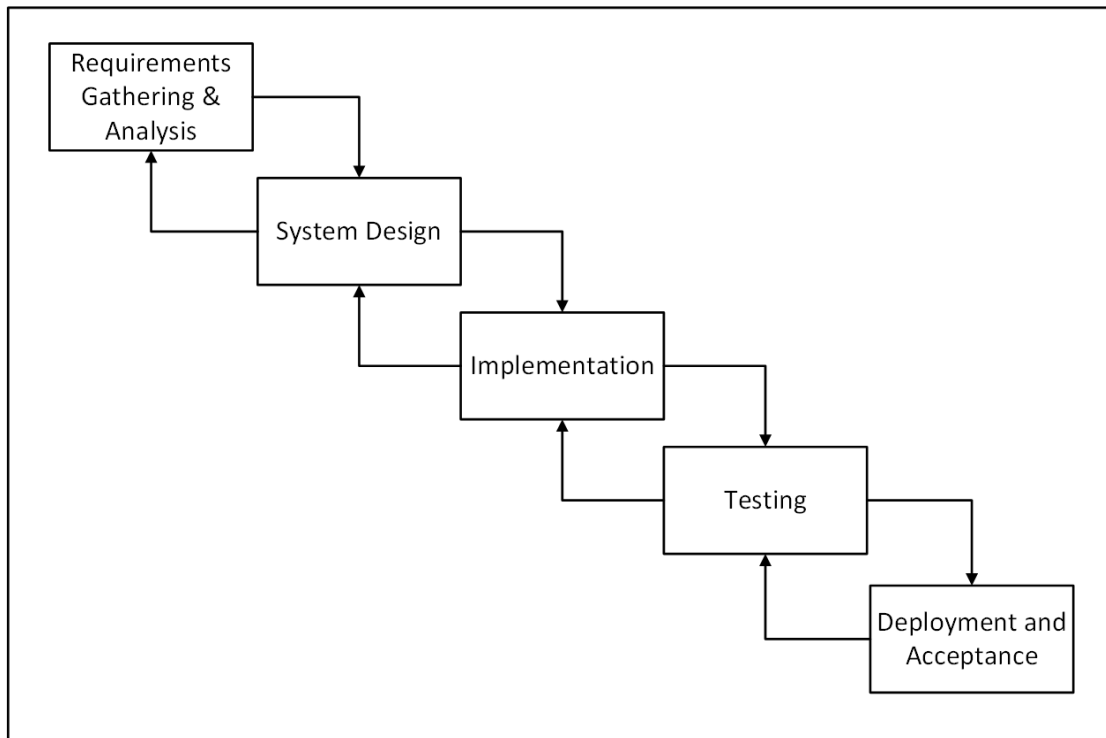


Figure 3- 1. Modified Waterfall Model for the Development of SIMS

Shown in figure 3-1 are the phases of the Modified Waterfall Model which the proponents are going to conduct.

3.1 Requirement Gathering and Analysis Phase

In this phase, the proponents conducted an interview together with the client. The purpose of this phase is to gather certain information that would help the proponents determine what the problem is and what would be the best IT solution for the said problem. The proponents conducted an interview together with the registrar of Lake View Academy, and principal of Lake View Academy, Don Carlos, Bukidnon last September 22, 2019

During the interview, the proponents wrote all the important details that registrar and the principal have said. The proponents asked the registrar and the principal the process of their work and how is it being done and what are the things they do with all the information they have. The developers studied their current system and determine the main problem of the client and the developers found out that it can be solved by an IT solution. And registrar gave the proponents sample forms of their reports.

3.2 Design Phase

In this phase, the information collected is used by the proponents to create a conceptual design. This also includes diagrams that help upon representing the proposed system.

Hereunder is the use case diagram of the proposed project.

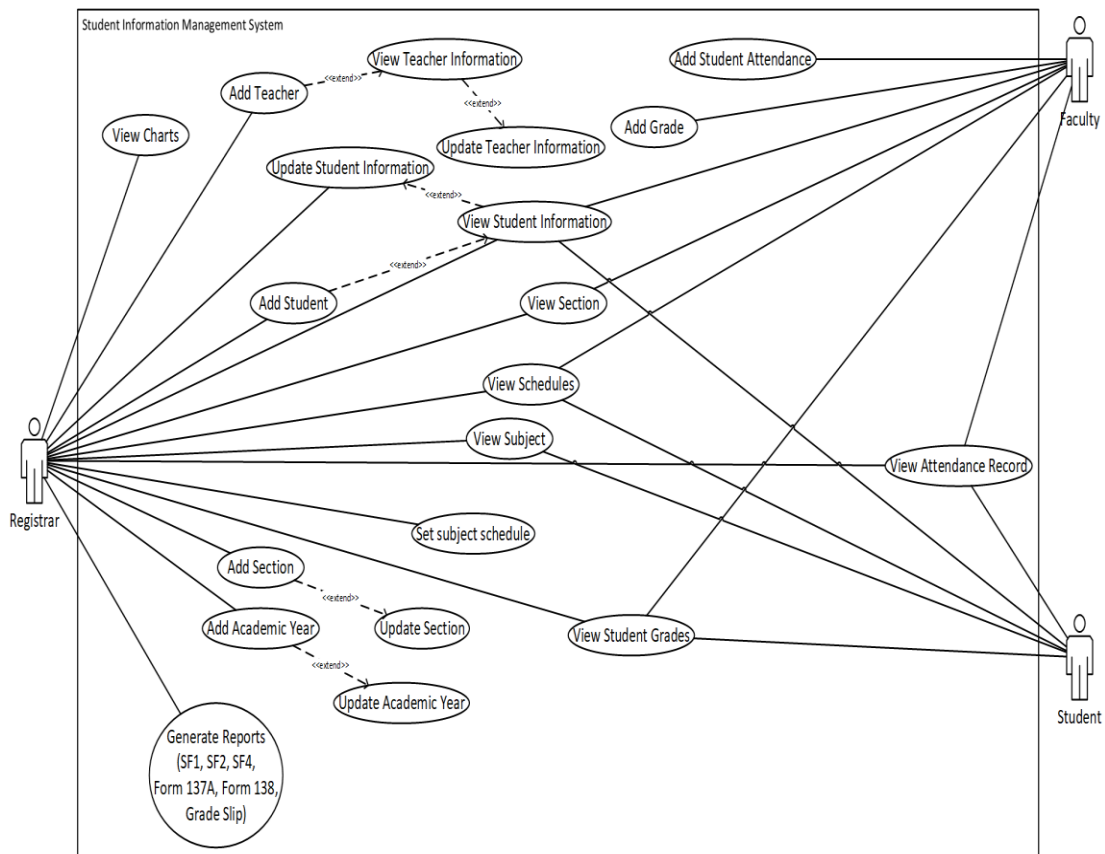


Figure 3- 2. Use Case Diagram of SIMS

Figure 3-2 is the representation of the users which are the Faculty, Registrar, Parent and the Student that shows their interaction with the system and their relationship between the users and the different use cases in which user is involved.

Table 3- 1. Use Case Specification

Use Case ID	Use Case Name	Participating Actor	Purpose	Pre-condition	Post-condition
1	Add Teacher	Registrar	Allows the Registrar to add teacher(s).	Registrar must log in the	If this use case is successful,

				system before he/she begins.	teacher(s) will be added in the system.
2	View Teacher Information	Registrar	Allows the Registrar to view teacher information.	Registrar must log in the system before he/she begins.	If this use case is successful, teacher information can be viewed.
3	Update Teacher Information	Registrar	Allows the Registrar to update teacher information.	Registrar must log in the system before he/she begins.	If this use case is successful, teacher information can be updated.
4	Add Student	Registrar	Allows the Registrar to add student(s).	Registrar must log in the system before he/she begins.	If this use case is successful, student(s) will be added in the system.
5	View Student Information	Registrar, Faculty, Student	Allows all actors to view student information	All actors must log in the system before he/she begins.	If this use case is successful, student information can be viewed.
6	Update Student Information	Registrar	Allows the Registrar to update student information	Registrar must log in the system before he/she begins.	If this use case is successful, student information can be updated.
7	Add Section	Registrar	Allows the Registrar to add section(s)	Registrar must log in the system before he/she begins.	If this use case is successful, section(s) can be added in the system.
8	View Section	Registrar, Faculty	Allows the Registrar and Faculty to view section(s)	Registrar and Faculty must log	If this use case is successful, section(s)

				in the system before he/she begins.	can be viewed.
9	Update Section	Registrar	Allows the Registrar to update section(s)	Registrar must log in the system before he/she begins.	If this use case is successful, sections(s) can be updated in the system.
10	Set Subject Schedule	Registrar	Allows the Registrar to set the schedule of subject(s)	Registrar must log in the system before he/she begins.	If this use case is successful, schedule(s) of subject(s) can be set.
11	View Subject	Registrar, Faculty, Student	Allows all actors to view subject(s)	All actors must log in the system before he/she begins.	If this use case is successful, subject(s) can be viewed.
12	View Schedule	Registrar, Faculty, Student	Allows all actors to view subject(s)	All actors must log in the system before he/she begins.	If this use case is successful, schedule(s) can be viewed.
13	Add Student Attendance	Faculty	Allows Faculty to add student attendance	Faculty must log in the system before he/she begins.	If this use case is successful, student attendance can be added in the system.
14	View Attendance Record	Registrar, Faculty, Student	Allows all actors to view attendance record	All actors must log in the system before he/she begins.	If this use case is successful, attendance record can be viewed.
15	Add Grade	Faculty	Allows Faculty to add grade	Faculty must log	If this use case is

				in the system before he/she begins.	successful, grade(s) can be added in the system.
16	View Student Grade	Registrar, Faculty, Student	Allows all actors to view student grade(s)	All actors must log in the system before he/she begins.	If this use case is successful, student grade(s) can be viewed.
17	Add Academic Year	Registrar	Allows Registrar to add academic year	Registrar must log in the system before he/she begins.	If this use case is successful, academic year can be added in the system.
18	Update Academic Year	Registrar	Allows Registrar to update academic year	Registrar must log in the system before he/she begins.	If this use case is successful, academic year can be updated in the system.
19	Generate Reports	Registrar	Allows Registrar to generate reports (SF1, SF2, SF4, Form 137A, Form 138, Grade Slip)	Registrar must log in the system before he/she begins.	If this use case is successful, reports can be generated.
20	View Charts	Registrar	Allows Registrar to view the charts (changes in the number students, drop outs, transferred in and out, student attendance, etc.)	Registrar must log in the system before he/she begins.	If this use case is successful, charts can be viewed.

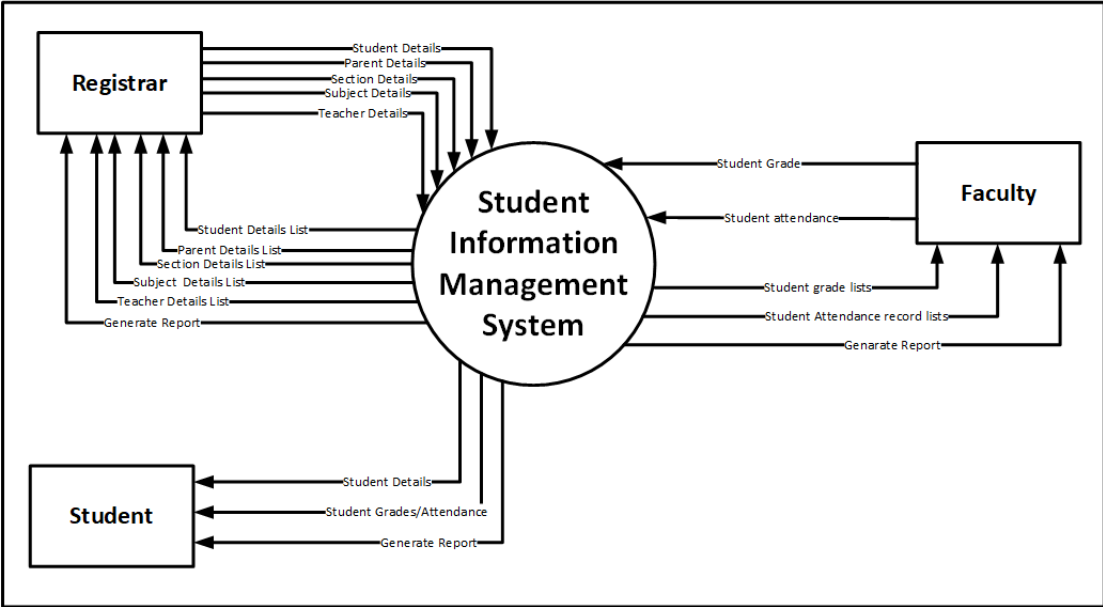


Figure 3- 3. Context Diagram

Figure 3-3 shows the functionalities of the system and how they respond to each action and shows the boundary between the system and its environment showing the entities that interacts with it. For the registrar, the system will return student details list, section details list, subject details list, teacher details list, and generate report. For faculty, the system will return student grade list, student attendance record list, and generate report. And for the student, the system will return student details, student grades/attendance, and generate report.

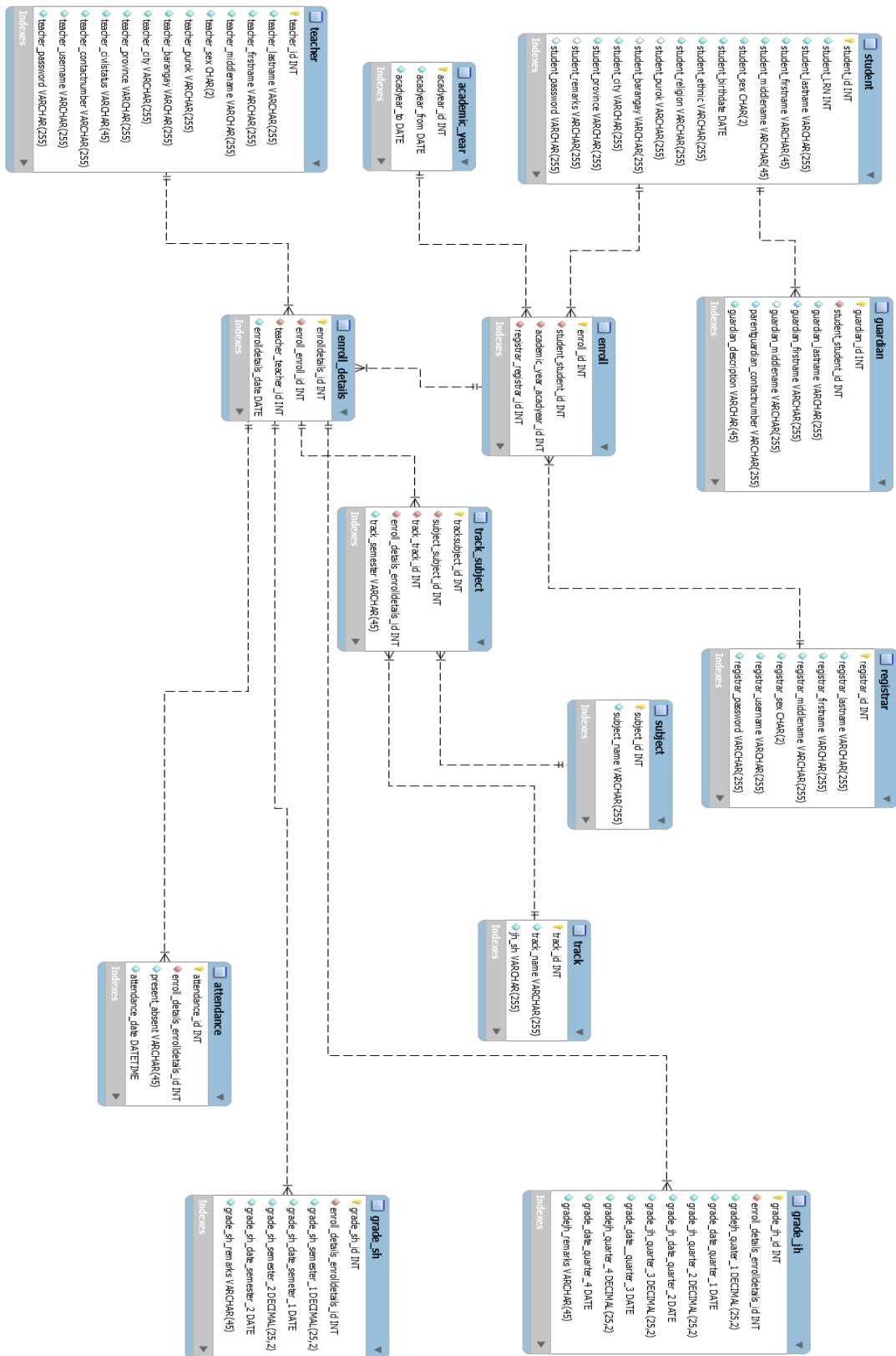


Figure 3- 4. Entity Relationship Diagram (ERD)

Figure 3-4 shows graphical representation of the data involved in the proposed system and its relationship to another connected table. The ERD above consist of 13 tables with attributes based on collected data.

3.3 Coding Phase

Coding or also known as the programming phase. In this phase, it involves writing program codes which is from different programming languages and also developing executable program which is error-free. In this phase, the proponents will begin to code and implement the detailed design specification to have functional software.

In order to develop the proposed system, the following are the requirements on the software and hardware.

Table 3- 2. Software Requirement

Software	Specification
JavaScript	For error handling and validation
HTML5 and CSS3	For the UI design
PHP	Server-side development
XAMPP	Development web server
MySQL	Database Management System
Visual Studio Code	Text editor during the development
Laravel	For the framework enabling rapid development of both web sites and web applications

Table 3- 3. Hardware Requirement

Hardware	Specification
RAM	Minimum of 4.00 GB
Storage	Minimum of 10 GB

3.4 Testing Phase

This phase identifies if the system that will be develop is functional, usable, and acceptable to the users and if it meets the satisfaction of the client on using the system.

Hereunder are the tools that the proponents will use:

- **Functionality Testing.** Functional testing is a type of testing that verifies that each function of the software application operates in conformance with the requirement specification. This testing mainly involves black box testing and it is not concerned about the source code of the application. An effective functional testing practice involves the definition of guidelines for using functional testing technologies effectively, and then the implementation and integration of those guidelines (along with supporting technologies and configurations) into your software development lifecycle to ensure that your teams apply the policy consistently and regularly. The functionality test of this system is categorized into two (2): (a) functionality within the developers through fault-error based test and (b) functionality test within the end users through task-based scenario in which each function of the system was converted into different scenarios that end users must solve in the system.

- Usability Testing.** This technique will be used to evaluate a product by testing it on users. Most people who set up a usability test carefully construct a scenario wherein a person performs a list of tasks that someone who is using the system for the first time is likely to perform. Someone else observes and listens to the person who is performing the tasks while taking notes. Watching someone perform common tasks on a website is a great way to test whether the site is usable because you will immediately be able to see whether they are able to perform the tasks and any difficulties they have while doing so.

The proponents will execute a usability testing in order to determine the experience of the users using the system so that the proponents will be able to examine the entire outcome to be able to determine design problems and apply improvement of the system.

In usability testing the proponents will be using System Usability Scale (SUS). SUS is technology independent and has since been tested on hardware, consumer software, websites, cell-phones, IVRs and even the yellow-pages.

		Strongly Disagree				Strongly Agree
1.	I think that I would like to use this website frequently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	I found this website unnecessarily complex.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	I thought this website was easy to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	I think that I would need assistance to be able to use this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	I found the various functions in this website were well integrated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	I thought there was too much inconsistency in this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	I would imagine that most people would learn to use this website very quickly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	I found this website very cumbersome/awkward to use.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	I felt very confident using this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	I needed to learn a lot of things before I could get going with this website.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 3- 5. Curved grading scale interpretation of SUS scores.

Figure 3-5 shows the ten items evaluation in SUS. There are positive and negative statements in the questions. The odd numbered items are the positive statements while the even numbers are the negative statements.

- User-Acceptability Testing.** The proponents will use user acceptability testing to determine the satisfaction of the user while using the system. To evaluate the user acceptance testing the proponents will have to use adjective rating scale.

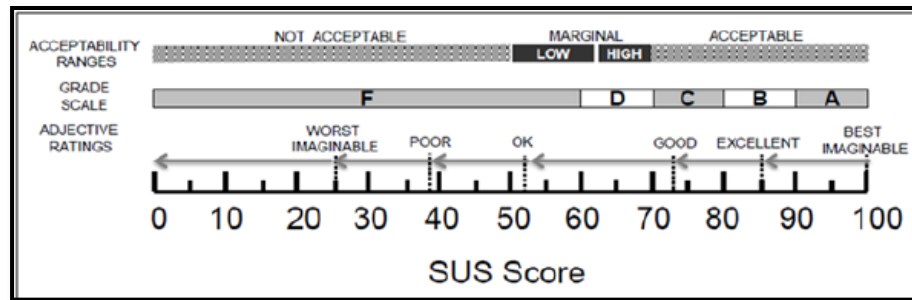


Figure 3- 6. Comparison of the adjective ratings, acceptability scores, in a relation of the average SUS score

Figure 3-6 shows the adjective rating scale added to the SUS. This implies the recommendation of this system, whether the system needs improvement or the system is acceptable. Adjective Rating Scale is split into 6 parts and categorized from worst imaginable to best imaginable. Final SUS score of every user that is below 25 is Worst Imaginable, 26 to 39 is POOR, 40 to 51 is OK, 52 to 73 is Good, 74 to 85 is Excellent, and 89 to 100 is Best Imaginable. The proponents will use the user acceptance testing in order to find out whether the system meets all the necessities that are needed by the user. With the user acceptance testing, the proponents will make sure that the system meets the clients expectation.

3.5 System Deployment and Acceptance

In this phase, the system will be deployed to the client. Hereunder is a diagram that shows the interaction of each user of the system after the deployment phase.

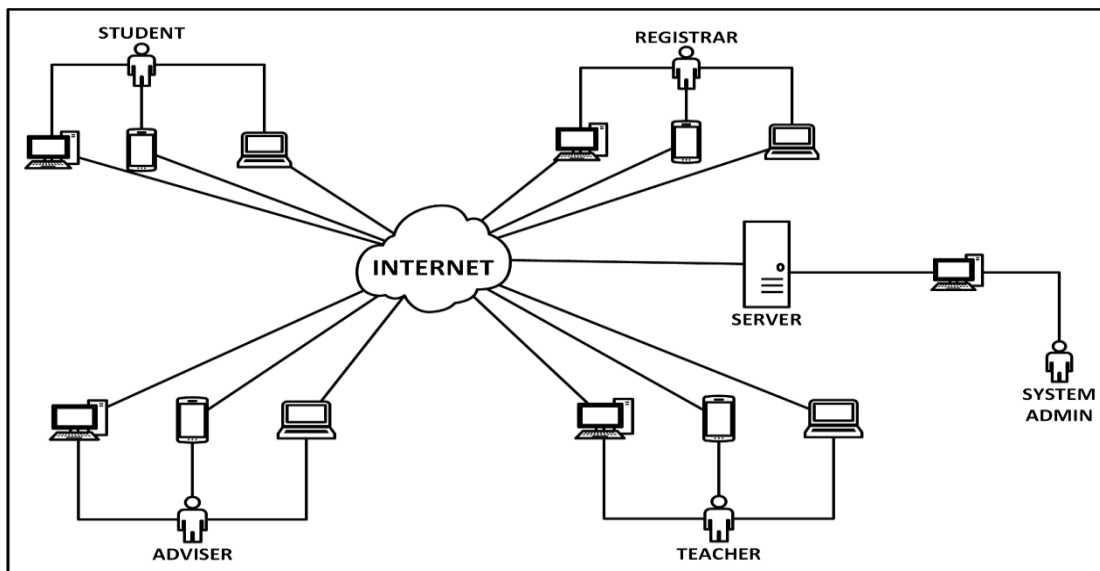


Figure 3- 7. Deployment Diagram

Figure 3-7 shows the deployment diagram where the system admin, registrar, advisers, teachers, and students can access the system. This figure illustrates the relationships between the software and hardware components in the system and the physical distribution of the system elements.


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APPENDICES

Appendix A. Registration Form



LAKE VIEW ACADEMY
Lilydale Heights, Don Carlos
APPLICATION FOR ADMISSION
SY 2019-2020

This application must be filled out in ink by the applicant's own handwriting.

Grade Level: _____ LRN # _____ Sex: _____ Age: _____
 Name in Full _____
 (Last Name) (First Name) (Middle Name)

Home Address _____ (Barrio/Street) _____ (Town/City) _____ (Province)
 Parent/Guardian Contact Number _____ Student's Contact Number _____
 Date of Birth _____ Place of Birth _____ Religion _____ Occupation _____
 Father's Name _____ Religion _____ Occupation _____
 Father's Educational Attainment _____ Religion _____ Occupation _____
 Mother's Name _____ Religion _____ Occupation _____
 Mother's Educational Attainment _____ Religion _____ Occupation _____

What school did you last attend: Name of School _____ Grade/Year level: _____ Section: _____
 SY: _____ Address: _____

FINANCIAL INFORMATION

Fixed Fees Detail			Yearly
		Monthly	
Entrance			3,000.00
Tuition	865		8,650.00
Laboratory - Computer	250		2,500.00
- Science			550.00
- TLE			200.00
English- SRA			85.00
Student Handbook			500.00
Security Guard	50		100.00
Developmental fee	10		16,135.00
		Less ESC Scholarship	9,000.00
			7,135.00

Additional Charges- OPTIONAL		
Cafeteria	3,500.00	35,000.00
Books(Approximate)		5,500.00
Dorm Rental	600	6,000.00
Piano	700	7,000.00
School Bus (town Proper)	650	6,500.00

AFFIRMATION

I understand that as I register, I have received a copy of the student handbook and I will enter into a contract to comply willingly and faithfully with all policies and principles of the school.

Having read the school's behavior code thoroughly, I agree to abide by it to the best of my ability without mental reservations. I shall willingly submit to any corrective action that LVA disciplinary committee will impose should I be careless and violate any of the provisions in the code of behavior. If at any time I find myself out of harmony with the regulations and standards of the school, I agree to withdraw when required by the duly constituted authorities in the school.

IN WITNESS WHEREOF, I hereunto affix my signature this _____ day of _____ 20_____ at Lake View Academy, Don Carlos, Bukidnon.

Parent/Guardian signature

Student's signature

VERY IMPORTANT NOTICE:
 No application will be considered for approval without FORM 138, photocopy of NSO birth certificate and Certification of good moral from the previous school attended. Each student enrolled in LVA is obliged to pay the whole year regardless whether he/she quits or drops of school or transfer to another school.



LAKE VIEW ACADEMY
8712 Don Carlos, Bukidnon, Philippines

REGISTRATION FORM

Name _____ Age _____ Gender _____
Last Name, First name, Middle Name


Note : Before you will be registered, please seek signature of the following persons:

Step 1 _____ Homeroom Adviser	Step 2 Jan Gabrielle O. Portillas School ID Processor	Step 3 <u>Jeril L. Dulana</u> Treasurer
Step 4 <u>Shepard R. Abejo</u> Principal	Step 5 <u>Jemer Estrera</u> Guidance Counselor	Step 6 <u>Darlene C. Dulana</u> Registrar


CONGRATULATIONS!!! YOU ARE NOW A BONAFIDE STUDENT OF LAKE VIEW ACADEMY

NOTE: PLEASE GET YOUR CLASS CARD AND GIVE IT TO YOUR ADVISER

Appendix B. Summary of Quarterly Grades



Summary of Quarterly Grades



REGION DIVISION

SCHOOL NAME SCHOOL ID

SCHOOL YEAR:

LEARNERS' NAMES	GRADE & SECTION: 10- Sardonyx				FINAL GRADE	RE
	TEACHER: Darlene C. Dulana					
	ENGLISH 1st Quarter	ENGLISH 2nd Quarter	ENGLISH 3rd Quarter	ENGLISH 4th Quarter		
MALE						
1 Agol, CJ Zarate	85					
2 Añora, Syric Nueva	85					
3 Ardemer, Ryan Valledor	83					
4 Baradillo, Vonn Kaseiah Casancio	90					
5 Benitez, Rhald Endroe Loyloy	82					
6 Binuya, James Christian Redula	84					
7 Borja, Kurt Roberto Dumpasan	70					
8 Braga, Shinji Yabo	90					
9 Cabajar, Vhytdale Clark Clarin	92					
10 Caderao, Carel Roger Gem Caoagdan	87					
11 Castor, RV Lemuel De Manuel	75					
12 Comilang, John Isaac Pautan	90					
13 Galon, Christian James Pinsoy	76					
14 Heyasa, Lystyr Jym Espiritu	94					
15 Juni, Kaine Raziel Chua	75					
16 Lano, Eldrin Chris Malinao	88					
17 Majorenos, Mark Louie Patcheo	76					
18 Mila, Seigfred Rebosura	78					
19 Molato, Gleford Redula	75					
20 Neolpes, Joseph Presores	85					
21 Paid, Emerald Pascubillo	76					
22 Panaguiton, Adrian Abis	78					
23 Quia-ot, Glester Kyle Baco	95					
24 Sabio, Allen Roo Heyasa	76					
25 Saicedo, Ryan Dave Falsis	93					
26 Selgas, Steven Boncales	79					
27 Tudtud, Jossant James Salipada	70					
28 Vacalares, Jomer, Cortico	75					
29 Villa, Lance Harold Cambel						
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Appendix D. Class Record

FIRST QUARTER		GRADE & SECTION		TEACHER		SUBJECT																														
LEARNERS' NAMES		WRITTEN WORKS (30%)		PERFORMANCE TASKS (60%)		QUARTERLY ASSESSMENT (20%)																														
HIGHEST POSSIBLE SCORE	1	2	3	4	5	6	7	8	9	10	Total	Pct	1	2	3	4	5	6	7	8	9	10	Total	Pct	1	2	3	4	5	6	7	8	9	10	Total	Pct
MALE	1	2	3	4	5	6	7	8	9	10	Total	Pct	1	2	3	4	5	6	7	8	9	10	Total	Pct	1	2	3	4	5	6	7	8	9	10	Total	Pct
1	Agul, CJ Zaira	17	10	12	18	28	10	50	6	15	13	177	71.08	21.42	45	30	48	45	64	80	312	62.40	41.40	56	68.24	13.65	78.45	88								
2	Alvira, Ryan Valdez	11	14	17	18	8	50	15	14	14	147	69.54	17.11	43	40	40	40	40	70	85	318	63.60	42.28	70	82.56	16.47	78.47	88								
3	Baralita, Yoni Kusnadi Cahyono	14	10	17	18				40	14	18	11	43	67.43	17.23	44	50	45	60	90	294	58.80	39.10	70	82.56	16.47	72.80	83								
4	Banzar, Rizal Erickson Loyky	9	12	15	24	30	9	40	12	18	10	142	71.08	21.83	39	40	45	45	71	90	327	65.40	42.60	50	64.12	12.82	84.24	90								
5	Bharya, James Christian Reula	19	19	19	19	19	19	19	40	3	15	10	67	34.54	10.48	40	39	40	45	62	80	303	60.60	44.29	73	88.80	17.76	71.84	82							
6	Boga, Shiry Yee	20	15	28	8	50	10	19	4	15	10	150	75.00	18.75	44	45	48					220	44.00	29.28	50	23.83	4.71	40.38	70							
7	Calajar, Yhendy Cruz Cim	12	12	25	30	9	40	14	10	18	170	85.00	20.47	40	40	40	40	40	80	90	308	61.60	47.21	71	85.83	16.71	84.45	90								
8	Casiano, Carol Roger Dam Changan	7	14	15	14	36	10	45	14	17	172	86.00	20.77	47	40	50	45	64	80	342	68.40	40.18	72	88.80	17.76	79.27	87									
9	Castro, RV Lameil Da Mural	8	25	18	10	2	8	30	11	8	14	134	67.00	21.83	39	40	40	45	50	80	291	58.20	36.18	72	88.80	17.76	79.27	87								
10	Comang, John Isaac Padua	16	8	17	21	36	6	45	14	14	117	58.50	14.63	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
11	Galera, Christian James Prioz	12	18	20	24	10	26				117	58.50	14.63	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
12	Hayasa, Agnes Am Egrita	18	12	20	24	10	26				117	58.50	14.63	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
13	Junio, Elnor Ochi Munoz	5	5	8	8	5	30	10			126	63.00	15.75	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
14	Marino, Mark Louie Pacheco	13	8	5	5	20					126	63.00	15.75	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
15	Martin, Stephen Francisco	12	2	5	8	12	9				141	70.50	17.63	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
16	Martin, Joseph Francisco	10	12	8	12	10	35	14	15	3	119	59.50	14.88	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
17	Padilla, Emmanuel Francisco	19	14	14	14	14	14	14	14	14	141	70.50	17.63	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
18	Pangayan, Kelvin Ross	15	17	21	27	6	35	14			2	136	68.00	17.00	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
19	Quia-D, Gabriel Rye Bero	19	28	20	25	36	10	50	14	18	24	104	52.00	13.00	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
20	Sison, Alvin Rio Reyes	13	20	20	25	36	10	50	14		24	112	56.00	14.00	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
21	Sison, Ryan Dawn Felisa	9	18	20	25	36	10	50	14		6	126	63.00	15.75	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
22	Sigua, Sherry Bernice	9	18	20	25	36	10	50	14		6	126	63.00	15.75	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
23	Tand, Jassent James Salveda	9	18	20	25	36	10	50	14		6	126	63.00	15.75	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
24	Valante, Jomar Carlos	5	12	5	8	30	6	30	14	10	123	61.50	15.38	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								
25	Vila, Lancel Herold Camdel	5	12	5	8	30	6	30	14	10	123	61.50	15.38	40	40	40	40	40	70	85	284	56.80	35.60	50	64.12	12.82	84.24	90								



REGION 10
DIVISION Lanao View Academy
SCHOOL NAME
SCHOOL ID 426877
SCHOOL YEAR 2019-2020



LEARNER'S NAME

(Last Name, First Name, Middle Name)

Learner's Name	M T W T H F S S							(1st row for date)							Total for the Month	REMARKS if DROPPED OUT state reason please refer to legend number 2. If TRANSFERRED IN/OUT write the name of School.												
	M	T	W	T	H	F	S	1	4	5	6	7	8	11			12	13	14	15	18	19	20	21	22	25	26	27
11. Mazon, Jenny Ann, Pagano																												
12. Martinez, Angel Anne, D																												
13. Marco, Shari Charne, Sison																												
14. Paraga, Sherron Fern																												
15. Quidat, Gailyn-Vivay, Estanicon																												
16. Ralente, Abby, del, Tan																												
17. Ramando, Daphne Mae, Bano																												
18. Soriano, Sheri Sherron Vive, Sandoval																												
19. Subaga, Kazandra, Mariano																												
20. Sugaote, Geyrene, Duranador																												
21. Sularic, Jovani Archael, Remulla																												
Combined TOTAL PER DAY								21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
FEMALE TOTAL PER DAY								21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21

GUIDELINES:

- The attendance shall be accomplished daily. Refer to the codes for checking learners' attendance.
- Dates shall be written in the columns after Learner's Name.
- To compute the following:
 - Percentage of Enrollment = $\frac{\text{Registered Learners as of end of the month}}{\text{Enrollment as of 1st Friday of the school year}} \times 100$
 - Average Daily Attendance = $\frac{\text{Total Daily Attendance}}{\text{Number of School Days in reporting month}} \times 100$
 - Percentage of Attendance for the month = $\frac{\text{Registered Learners as of end of the month}}{\text{Enrollment as of 1st Friday of the school year}} \times 100$
- Every end of the month, the class adviser will submit this form to the office of the principal for recording of summary table into School Form 4. Once signed by the principal, this form should be returned to the adviser.
- The adviser will provide necessary interventions including but not limited to home visitation to learners who were absent for 5 consecutive days and/or those at risk of dropping out.
- Absentee performance of learners will be reflected in Form 137 and Form 138 every grading period.
- Beginning of School Year out-of-report is every 1st Friday of the School Year.

1. CODES FOR CHECKING ATTENDANCE

(Blank) - Present (P); Absent (A); Year Enroller - Upper for (Last Enroller - Lower for Lower Classes)

2. REASONS/CAUSES FOR DROPPING OUT

- Domestic-Related Factors
 - Had to take care of siblings
 - Early marriage/pregnancy
 - Parental alcoholism
 - Family problems
- Individual-Related Factors
 - Illness
 - Coverage
 - Overwork
 - Drug Abuse
 - Poor academic performance
 - Lack of interest/Distractions
 - Harassment
- School-Related Factors
 - Teacher Factors
 - Physical condition of classroom
 - Fear/refusance
- Geographic/Environmental
 - Distance between home and school
 - Among conflict (no. Tires) was & classmate
- Financial-Related
 - Calendar/Disasters
- Others (Specify)

Month	September	No. of Days of Classes	M	T	F	TOTAL
* Enrollment as of (1st Friday of June)	18	21				39
Late Enrollment during the month (beyond out-of)	0	0				0
Registered Learners as of end of the month	17	21				38
Percentage of Enrollment as of end of the month	94%	100%				97%
Average Daily Attendance	16	21				37
Percentage of Attendance for the month	94%	100%				97%
Number of students absent for 5 consecutive days	0	0				0
Drop out	0	0				0
Transferred out	0	0				0
Transferred in	0	0				0

I certify that this is a true and correct report.

Mrs. My C. Tarnani
(Signature of Teacher and Printed Name)

Appendix G. Resource Person

Name: Mrs. Darlene C. Dulana

Profession: School Registrar; English Teacher, LVA

Address: Don Carlos, Bukidnon

Name: Mr. Shepard R. Abejo

Profession: School Principal, LVA

Address: Don Carlos, Bukidnon

Appendix H. Biographical Data

Name: Kert Rey Nikko S. Lumahang

Project Designation: Programmer/System Analyst/Project Manager

Email Address: kertnik@gmail.com

Contact Number: 09654020110

Name: Reymark C. Mutia

Project Designation: Technical Writer/Front-end Designer

Email Address: reymark4991mutia@gmail.com

Contact Number: 09758866212