# **CHAPTER I – DESCRIPTION OF THE SYSTEM**

## ***1. a. System Overview***

### ***1. a. 1. Introduction***

In traditional education system, documenting and monitoring student grades was primarily done on paper, especially in high schools. Teachers manually enter grades on report cards, which can be time-consuming and prone to errors. The inefficiencies of this paper-based grading system have resulted in delays in the delivery of vital academic information, possible errors in grade recording, and a generally difficult experience for teachers.

Teachers face several obstacles when it comes to managing student grades, especially when they have a big number of students and subjects. The manual method of calculating, recording, and generating report cards on paper not only takes a long time and effort, but it also raises the risk of human mistake, such as miscalculations and data inaccuracies.

Recognizing the limitations and challenges of the traditional paper-based grading system, there is an urgent need for an innovative and efficient solution that can streamline the grading process, reduce teachers' workloads, and improve the overall accuracy and accessibility of student academic records.

To overcome these problems, the system aims to provide a complete Student Information System (SIS) that automates grade input and report card preparation. The system would provide a user-friendly interface for teachers to quickly and easily input grades, reducing the need for manual calculations and documentation. By moving from a paper-based to a digital system, the system is expected to improve grade management efficiency while significantly decreasing teacher workload.

In summary, the system seeks to improve high school academic management by developing and implementing a digital solution that tackles the issues inherent in the existing paper-based grading system.

## ***b. Project Site***

Southcom National High School, situated in Calarian, Zamboanga City, was established in 1997 and has played a significant role in education. With its focus on academic excellence, the school has made a significant difference in many students' lives.

Southcom National High School is aware of the need for modernization and is taking steps to reduce the inefficiencies brought about by manual record-keeping and paperwork. A complete student information management system will replace paper-based methods, simplifying workflows and increasing overall effectiveness.

A solution designed to satisfy Southcom National High School's particular needs is the Student Information Management System. SIMS seeks to enhance accuracy, accessibility, and overall efficient management by digitizing a variety of paper-works tasks associated with student information.

## ***c. Background of the Client***

Mrs. Ernelyn Librea is a school teacher working at Southcom National High School. She graduated from Ateneo de Zamboanga University with a Bachelor of Secondary Education with a major in Computer Education.

Mrs. Librea has an exceptional 13-year teaching career in public schools under the Department of Education (DepEd), particularly at Southcom National High School, demonstrating a strong commitment to public education. Ernelyn Librea is an accomplished teacher who currently works at Southcom National High School. She received a Bachelor's degree in Secondary Education with a major in Computer Education from Ateneo de Zamboanga University.

## ***d. Required Main Module***

Figure I: Required Main Module

### ***d. 1. Description of the Required Main Module***

***1.1. Student Profiles***

The Student Profiles module is the foundation of the Student Information System, allowing administrators and teachers to build, manage, and update individual profiles for each student.

***1.1.1. Student***

This sub-module allows you to add and modify member student information, such as personal detail , educational background, and other vital information.

***1.2. Attendance and Grading Module***

The Attendance and Grading Module allows the recording and tracking of student attendance and academic performance.

***1.2.1. Attendance Tracking***

This sub- module allows teachers to efficiently record daily student attendance, resulting in accurate and up-to-date records.

***1.2.2. Record Grades***

This sub- module allows teachers to record and update student grades for each academic term, hence facilitating the efficient handling of academic performance data.

***1.3. Report Generation and Printing Module***

This module is essential for creating and publishing important academic documents, as well as providing teachers with tools for effective document management.

***1.3.1. Form 138 Printing***

This sub-module generates and prints Form 138 (Report Cards) for individual students. Customization options are available for report card layouts and student information.

***1.3.2. Report Card Printing***

This sub-module allows users to create a academic reports, such as grades, and attendance records. Users can customize reports and export them in various formats for easier distribution.

***1.4. Academic Ranking Module***

The Academic Ranking Module aims to automate the computation and presentation of academic rankings for students, enabling a transparent and based on ability recognition process.

***1.4.1. Overall Academic Ranking***

Automatically computes and delivers overall academic rankings based on students' cumulative performance, giving teachers a complete picture of student achievement.

***1.4.2. Top Performers Recognition***

Identifies and awards certificates to students who achieve top rankings in overall academics or specific courses. Certificates can be customized, and the module makes it simple to distribute them to meritorious students.