

# STUDENT EVENTS NOTIFICATION AND EVALUATION SYSTEM

A Capstone Project Presented to

The Faculty of the Engineering and Technology

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**Chapter I**

**INTRODUCTION**

In today's digital era, technology is rapidly evolving from web-based, application and AI: Universities need to adapt to keep the fast pace of technology. Ever since technology started to impact our lives it gives us convenience in everything we do, from home, work, and schools and since then it helps people to do their job quickly, fast and efficient. In addition, this study will target the institution to help students and the stakeholders be more participative, productive and for improvement in every activity.

# Project Context of the Study

Mobile technology has dramatically transformed how people live, work, and communicate. Its rapid evolution continues to introduce new possibilities, but with that growth comes both exciting advantages and notable challenges and one of those advantages is the usage. That can help not only the administrators, but also the students. Mobile technology will likely continue to evolve rapidly, and how we address these challenges will play a big role in shaping the future of this field. Furthermore, many schools are using mobile applications to improve student participation and enable data-driven development. According to the study of Palshkhov et.al (2024), mobile applications increase student’s knowledge and skills resulting in a positive impact on their skill level and study motivation. Students in the country rely heavily on web-based tools in their academic pursuits. They also utilize the website to gain primary information about any educational institution like upcoming events and university websites serve as gateways for students to acquire all information without misinformation and with less confusion.

In today's modern technologies, there are a lot of smartphone users muting their notifications to avoid distractions. In a Liao and Sundar (2022) study, they conducted an online survey to over 138 iPhone users the most frequent choice among participants 42% was vibration alone, followed by 36.2% opting for normal mode, 13% opting for sound alone, and 8.7% opting for silent mode. To be more effective and less distracting to users, a specific mobile application is needed to solve these issues. The application features instant notification and an integrated evaluation system. Utilizing these approaches, students rarely miss upcoming events and evaluations. The system will send a direct banner notification to students; evaluation formats are rate scales, express opinions, and event recommendations.

Providing innovative solutions adds another layer of reaching students and enhances incoming events. The Colegio De la Purisima Concepcion will benefit by using the system to increase student event participation and better experiences. Creating new application software for specific functions will impact the mode of communication between institutions and students.

Reyes et.al (2022) developed an event management system with SMS notification. This system notified clients and employees about urgent meetings, announcements, and activities. This approach to communicate clients and employees using SMS transfigured into banner notifications for students.

Chang and Zeng (2024) conducted a study that focused on students studying art and design in higher vocational schools in Guangdong, China. From this study, the Entrepreneurship Coaching Index was developed. This tool is designed to assist coaches in creating more effective lesson plans. The findings from the study revealed that the use of this tool makes it easier to collect student feedback, including suggestions and satisfaction levels. This demonstrates that employing structured methods can significantly boost the performance of educational institutions and organizations.

**Purpose and Description of the Study**

The purpose of this project is to enhance the school for event notifications and evaluations, which are conducted every school year. This capstone project allows students to:

1. Receive instant notification about coming events, activities, and announcements.
2. Evaluate events for future improvement.

The purpose of this project is to develop an event notification and built-in evaluation system. The core part of the project is to create another layer of notification application and evaluate event performances. In this system students are allowed to access the school calendar, instant event notification, and evaluate events.

# Objectives of the Study

The primary objectives of the project are to develop a mobile application for students of Colegio De la Purisima Concepcion, that can monitor fixed events and notify students of urgent announcements.

By the end of the project, the system should:

a). Develop a user-friendly mobile application platform for events and built-in evaluation systems. Students can see the event school calendar and officers of Colegio De la Purisima Concepcion can upload

future activities.

b). The office of the student affairs will upload the following events, announcements, and activities.

c.). The mobile application language used is JavaScript, and the data collected is stored in a Firebase database.

d). The system security implements password encryption and a unique token.

# Conceptual Framework

Input Process Output

* Office of the

Student Affairs uploads events.

* List of Students.
* Student feedback and suggestion.

**Student Event Notification and Evaluation System (SENES)**

* Notify Student.
* Fix Future events.
* Events performance and student recommendation.

This conceptual framework outlines the structure and functionality of the Student Event Notification and Evaluation System, highlights how particular mobile application stands as the target solution to handle unreliable Facebook and Messenger event notification.

By maintaining complete event scheduling to deliver time-sensitive Information to student, providing comments through both rating scale and offer uncomplicated feedback capabilities. Student feedback serves as the vital tool to enhance event planning and event quality for upcoming student events.

# Significance of the Study

The development of the Student Event Notification and Evaluation System is expected to provide a cutting-edge solution. This study is significant as it elevates the effectiveness, security, and accessibility, which are vital in modern technological mobile applications.

This study will benefit the following groups:

**IT Students and Researchers**, it serves as a valuable reference for upcoming capstone projects, helping students discover about system architecture and development, clean coding practices and innovative technologies.

**Mobile Developers and IT Professionals**, the project, provides new methodologies that can help mobile software development be

efficient and user-friendly.

**Office of the Student Affairs**, the system can deliver real-time announcements and offer productive distribution of important information.

**Students** using the system will experience less destructive notification and more efficient event evaluation.

# Scope and Limitations of the Study

The Capstone Project focuses on Student Event Notification and Evaluation system for College of Purisima Concepcion events using banner notification. This involves an Office of Student Affairs and students in the campus.

I. Creating system architecture and design structure on June 1, 2025.

ii. Gathering important information and technologies will be used on June

5, 2025. iii. Prototyping phase and coding development on June 15, 2025.

1. Testing and user experience feedback on July 20, 2025.
2. Deployment phase on July 30, 2025.

Student required network access to received real-time and updated notification events. Since the server side needs an online client to update, notify and communicate to be more effective.

The system cannot efficiently notify students, if the mobile application permissions don't allow receiving notification.

**Definition of Terms**

**Banner headline.** aboldheadline running entirelythe page of a newspaper**,**

**Notification** a notifying or being notified (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993).Operationally, it is referred to as notifying students and attaching important event information.

**Rate.** The amount of something in relative to some other thing, **scale** a measuring instrument having such marks (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, it is referred to as event performance evaluation.

**Authorized**. to give legal power or right to or to give permission (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, it pertains to a designated individual who has been formally granted permission to access and manage sensitive data.

**Feedback**. the return of part of the output in order to control amplification, to increase (positive feedback), decrease (negative feedback) or otherwise change the quality of amplification (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, responses or assessments that function as a fundamental mechanism for enhancing forthcoming occurrences and elevating the overall quality of subsequent activities.

**Event**. an occurrence, esp. one regarded as having importance (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, it is defined as scheduled campus activities that give information to enlighten, guide, and involve participants, fostering relevant participation and awareness.

**Unique**. being the only one of its kind or not like anything else of its kind (New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, it is letters or identifiers generated at random for assigning to an individual gadget for the purpose of enabling as well as managing push notifications.

**Token**. an act or object serving as a symbol or evidence of something.

(New Webster’s Dictionary and Thesaurus Lexicon Publications, 1993). Operationally, refers to a virtual key used for authorization, granting access to individual data while strengthening cybersecurity.

**Suggestion**. a partly formed idea which, if develop, would be the basis of judgment. Operationally refers to students’ expressed ideas, insights, or recommendations intended to improve the quality of future campus activities, providing constructive input that helps organizers enhance planning, execution, and overall effectiveness of events.

Grant - to agree to fulfill, to grant, a request.

Graph - diagram showing the relation of one variable quantity to another, by expressing their values as distances from usually two, somethings three, axes at right angles to one another.

**Chapter II**

**REVIEW OF RELATED LITERATURE**

This chapter focuses on information and related study, used to find some important information that is related to the system being proposed.

# Foreign Literature

According to Hamid et al. (2022) developing a system will help students more notice current information about events and important announcements. Consequently, the system satisfied the users, as the notifications were communicated efficiently to the intended users. In addition, using Google Forms registration is ineffective for users because it is relegated to the bottom as fresh messages are appended to the page. As a result, they created a special mobile application that handled advertisement and managing registration (Mun & Mohamad, 2023). Using alternative terminology, Ghalia Alfarsi and Alsinani (2018) by a cell phone application linked to a website. In their assessment, SMS has a positive effect on the perception of students and enhances their learning outcomes in interactions. All student groups were interested in receiving the teaching

material through SMS. Throughout the year, the school hosts numerous festivals and events. Every task for events and festivals is completed by hand. Establishing an application saves time and lessens the amount of information needed to execute a successful event. Students can examine all the activities that are offered at each school, and school officials can add, remove, or alter events (Geerja Lavania et al., 2023).

The demand for effective campus events management necessitates the establishment and execution of sophisticated information systems that have the capability to deal with the multimodal aspects of event preparation, publicity, and assessment (Pensabe-Rodriguez et al., 2020). The development of a system for the notification and assessment of student events, with high integration with the academic calendar, is a significant leap in educational technology (Kamel et al., 2022). The system is intended to transform the management of academic activities, deployment of resources, and learning opportunities by students, guardians, and personnel in traditional and online learning systems, through the adoption of modern software architecture and user-centered design principles. The system addresses the common ills of disintegrated information diffusion, inefficient processing of data, and the lack of personalized interaction that plague most educational institutions in the modern age (Sarana et al., 2021). Through the centralization of event notifications, evaluation processes, and academic calendars, the system aims to provide an integrated and responsive education environment (Livingstone, 2023).

In today's interconnected world, smartphones have become an indispensable tool for communication, information access, and organization, with a whopping 3.8 billion users across the globe spending an average of 4.2 hours on these devices daily (Faimau et al., 2022). Recognizing this widespread use and the challenge faced by educational institutions in effectively communicating information, this project suggests a new Android-based mobile application that seeks to ease the communication of events and happenings in a college environment. In laying the ground for the need for a "centralized platform for pushing notifications," the article lays the indispensable groundwork for your system, whose "simpler, quicker, secure and user friendly" nature will be crucial both for effective notification delivery and for successful future integration of assessment features. (K. Sai Lakshmi et al., 2021).

# Local Literature

According to Ramil G. Lumauag (2016) currently mobile phone are seen as an essential part of people’s daily activities use for communication especially student’s he defines School Event Notification through (SMS) to update students about upcoming events, meetings, emergency meetings and suspension of the class due to weather changes (Ramil G. Lumauag, 2016). Fahad M Reyes, Montadzah A Abdulgani, Mhd Faheem, M Aliuden, Jonathan M Mantikayan, Tarhata S Guiamalon, Sema G Dilna, Haron A Mohamad, Zohereya D Sittie, (2022) at CSU - Cotabato State University they develop an Event Management system with SMS notification to inform employees, former clients about important events, urgent events and announcements. They used Microsoft Visual Studio to deploy the system while database used for storage id SQL server. Espinosa, Kevin Aldrin and Magbag, Avigail (2020) develop a Liturgical Planner Application for a Roman Catholic Diocese by the use of mobile/web application Clergy members are able to oversee their personal liturgical calendar-scheduler, and a web app for the Chancery office to convey significant liturgical and administrative updates to others (Espinosa, Kevin Aldrin and Magbag, Avigail, 2020). Sales Gamponia Aribe Jr. et al. (2019) develop an Android-based ubiquitous notification for Bukidnon State University (BukSU) to deliver upcoming events and activities more effectively in their university (Sales Gamponia Aribe Jr., Charlie Cablinda Yabes, Mark Vincent Galorport Jamago, Kenichi Itong Rayos, Hannah Leah Toledo Rebosura, and Jessica Joy Bahayanan Gonzales, 2019).

Eric B. Blancaflor et al. (2022) define Event management that can be used in an online setting and reduce paper work during COVID-19. In addition, EMS aims to make it easier to handle event proposals by implementing evaluations online. This helps student organizations and the university work together more efficiently and reduce the workload (Eric B. Blancaflor, Gabriel Angelo B. Dela Cruz, Raya Shane C. Rabanal, Jerome Patrick S. Ramos, 2022). James Michael E. Paz, et al. (2024) similarly defines EMS as organizing events providing a smooth and reliable platform for Mapúa Malayan Colleges Laguna (John Arthur G. Panti, Vivien Ericca I. Hermoso, Carlos Lorenzo M. Melchor, Khristian G. Kikuchi, 2024).

**Synthesis of Related Literature and Studies**

**Synthesis**

According to various sources, the consensus in academic literature talks about an imperative demand for modern, integrated systems to organize and disseminate information regarding student events and announcements in schools. Traditional methods, such as site-posted event fragments, failed Google Form registrations, and limited social media sharing, are consistently found to be time-consuming and inefficient, and unable to deliver timely and detailed information to students. Therefore, authors like Hamid et al. (2022), Mun & Mohamad (2023), and Geerja Lavania et al. (2023) suggest the development of niche mobile apps to consolidate event notices, simplify registration processes, and reduce manual processes, saving time and improving information accessibility in the end. Moreover, Pensabe-Rodriguez et al. (2020) and Kamel et al. (2022) suggest that the success of such systems depends on their ability to integrate with academic calendars and offer advanced features for event planning, promotion, and assessment, addressing general issues like fragmented information and lack of personalized interaction. This is particularly important in today's digital era where smartphones have become an indispensable tool for communication and organization, with billions of users spending significant daily hours on the devices, according to Faimau et al. (2022) and K. Sai Lakshmi et al. (2021). Lastly, the final goal is to develop a simpler, quicker, secure, and user-friendly centralized platform that not only efficiently notifies students but also facilitates critical feedback and evaluation processes, thereby developing a more connected and responsive learning environment.

**Local synthesis**

In today’s modern society, the use of mobile phones is common and important to the daily routines of individuals, students in particular, as a means of communication. As pointed out by Lumauag (2016), mobile phones, for instance, can be used to send messages informing students about relevant events such as meetings, emergency gatherings, or classes being canceled due to weather. This system makes sure that the students are kept up to date even when things change suddenly. A similar system was developed by Reyes et al. (2022) at the Cotabato State University. They developed an Event Management System that SMS’s important announcements and urgent event notifications to employees and former clients. The system was built and stored using Microsoft Visual Studio and SQL Server, which proves that dependable software tools strengthen the efficiency and ease of management in communication systems. Espinosa and Magbag (2020) created a Liturgical Planner Application for a diocese of the Roman Catholic Church. Through their system, the priests could manage personally via mobile app while the chancery office broadcast updates through a web-based system. This system improved communication in the diocese.

Gamponia Aribe Jr. et al. (2019) demonstrate what they refer to as a form of ubiquitous notification, in their implementation of an application via Android, for Bukidnon State University. Gamponia Aribe Jr. et al. note that letting the university community know in advance about upcoming events or activities is an essential component of an event management application. This is a feature common to any minimally adequate event management system, which is to ensure that appropriate information is actually distributed to target audiences, in a timely way, in an efficient manner. Blancaflor et al. (2022) provided a broader description of Event Management Systems (EMS) in the context of being online, their research revealed that it is important to minimize paperwork, especially considering the COVID-19 pandemic and the need for academic institutions to grant online evaluations of event proposals. In their analysis, they note that automating administrative tasks, particularly with respect to holding events, and enhancing collaboration between student organizations and universities rectifies concerns with the typically face-to-face and manual processes associated with event management. Decreasing the overall workload for all stakeholders is a clear motivation for adopting these kinds of solutions. Similarly, James Michael E. Paz et al. (2024), confirming the ideas of Panti et al. (2024), reaffirm the definition of EMS as a mechanism to coordinate meetings and an effective and reliable path. Although their investigation references particularly Mapúa Malayan Colleges Laguna, the overall principle of a reliable and functional system for coordinating events is relevant to everyone.

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