



Department of Information Technology
COLLEGE OF ENGINEERING
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Science City of Muñoz, Nueva Ecija



**Development of CLSU-OSA Web Portal for the Enhance
Accessibility of Student Services and Welfare Programs
(IS Module for the Information Management and
Publication Unit)**

A Capstone Project
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Department of Information Technology

In Partial Fulfillment
of the Requirements for the Degree
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

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Disclaimer:

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ABSTRACT

The development of the CLSU-OSA Web Portal aims to enhance the accessibility of student services and welfare programs offered by the Central Luzon State University's Office of Student Affairs (CLSU-OSA). The IS module will allow for the efficient handling of student information such as personal details, academic records, and involvement in extracurricular activities. Furthermore, it will permit the dissemination of timely updates, announcements, and event schedules, ensuring that students are aware of the different possibilities and resources accessible to them. The development process will begin with CLSU-OSA's current student service system, followed by the design and implementation of a user-friendly and intuitive web portal. To provide accessibility for all students, the portal will be created with a responsive interface that accommodates diverse devices. The information management features of the site will improve administrative efficiency, allowing employees to focus on delivering tailored support to students. The successful creation and implementation of the CLSU-OSA Web Portal would help to improve the overall student experience at Central Luzon State University by creating a supportive and inclusive environment for all students.

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CHAPTER I

INTRODUCTION

The Office of Student Affairs (OSA) is a component of the whole educational program of the university. It plays a crucial role in providing support and services to students, ensuring their overall well-being, and enhancing their academic experience. However, the absence of an existing website and centralized portal for all the activities of four sub-units poses significant challenges to the effective delivery of student affairs and services.

The Office of Student Affairs' reliance on its Facebook page to disseminate information and address student concerns has limitations. A high volume of posts and content on Facebook can bury important messages from student affairs. Communication and interaction with students become difficult since messages can easily be buried in social media feeds, and the Information Management and Publication Unit (IMPU), which is in charge of handling and managing the OSA Facebook page, may struggle to manage a significant volume of inquiries properly. Students encounter difficulty getting the needed information as it is distributed across the Facebook page's feed. Relying only on Facebook for student affairs communication could limit collaboration and coordination in department sub-units. This lack of centralized access can lead to confusion, service access delays, and poor overall student satisfaction. Coordination and collaboration among OSA sub-units may suffer if there is no dedicated online portal (Wesley, Burnside, Wesaw, & Parnell, 2021).

To address this concern, this study proposes the design and development of a customized web portal to ensure better communication, improved service delivery, and a better overall experience for students.

PROBLEM STATEMENT

The Office of Student Affairs of CLSU has no centralized portal for all the services and activities of its sub-units; hence, the office cannot effectively cater to the best practices of student affairs and student services.

Specifically, the office encounters the following:

- Students are facing challenges in seeking assistance or addressing concerns within the Office of Student Affairs;
- Students have difficulties accessing important information and resources, especially those who are unable to attend the Office of Student Affairs in person;
- The Office of Student Affairs struggles to identify students' feedback about their OSA Activity experiences and the facilities at the university;
- Confidentiality issue with the use of a Facebook page to disseminate information instead of a personalized web portal.

OBJECTIVE/S

The main objective of the study is to design, develop, and implement a web portal that will help in delivering various services to the Office of Student Affairs at Central Luzon State University.

Specifically, this study aims to achieve the following:

- To provide an email complaint help desk to enhance the efficiency of handling student concerns;
- To create a platform that provides easy access to important information, downloadable materials, and resources are always available to bona fide students of CLSU;
- To design an online evaluation platform that enables students to easily provide feedback on their OSA Activity experiences;
- To develop a secure and confidential web portal that provides controlled access to downloadable materials and evaluation information.

SCOPE AND LIMITATION

This project is designed specifically for the Office of Student Affairs at CLSU. The scope of the proposed system has two (2) user roles: Admin and Student.

The web portal will incorporate an email complaint helpdesk where students can seek information, ask questions, and receive prompt responses. The helpdesk will facilitate general inquiries and provide assistance and guidance to students regarding various issues they may encounter. It is a channel for students to raise concerns, report misconduct, or address issues that require the attention of the concerned OSA staff. It will allow immediate back-and-forth communication to resolve queries or provide assistance promptly.

Announcement posts and resources on the web portal will keep students informed and engaged with the resources available to them and will serve as

a reliable source of information. Integrated email notification of the system will ensure that students receive timely updates. It will provide convenience by delivering information directly to students' email accounts, making it easier for them to stay informed about important matters. The proposed system will include announcement filtering, which allows users to manage and prioritize announcements based on their relevance and importance, improving overall user experience and information management.

An online evaluation platform will provide an efficient and accessible way for students to share their opinions and experiences about OSA activities. It will provide the students with a more convenient and inclusive feedback process that contributes to the enhancement of their OSA activities and experiences.

A secure and confidential web portal with controlled access to OSA downloadable materials and evaluation information is protected and only CLSU students can access the content. It will foster a trusted environment for communication, collaboration and information sharing.

SIGNIFICANCE OF THE STUDY

This study aims to improve the efficiency and effectiveness of student services by streamlining processes and centralizing information. This study highlights the significance of the proposed system for the Office of Student Affairs, CLSU students, the Information Management and Publication Unit, researchers, and future researchers.

Office of Student Affairs. The system will provide OSA with an efficient and effective delivery of student services. The system will also provide relevant data and

be a source of information resources for all their stakeholders and clientele. The system can minimize OSA load and improve service delivery by streamlining processes, automating tasks, and centralizing information. This increased efficiency will allow OSA to devote more time and resources to providing individualized support and addressing students' specific needs.

Students. Students can save time and effort by quickly and simply accessing information, forms, guidelines, and announcements relating to their academic and personal lives. The solution will improve administrative operations by lowering paperwork and wait times and providing students with a more efficient and convenient experience. Students may simply request help and clarify problems, resulting in faster and more tailored solutions. The system consolidates information on-campus events and extracurricular activities, making it simple for students to identify and participate in a variety of activities that help their social, personal, and leadership development. Students will receive timely information and updates via email notifications and announcements, ensuring they are kept up-to-date on significant news and changes.

Information Management and Publication Unit. The system will improve communication between the Information Management and Publication Unit and the student community. Announcements and email notifications may be included. These features will enable the unit to successfully share critical information, announcements, and updates with students, resulting in improved communication and engagement.

Researchers. Researchers can evaluate the success of student affairs initiatives by accessing data on student participation, feedback, and outcomes. By studying data on student choices, service requests, and engagement patterns, researchers can acquire insights into changing student needs and trends. Researchers can use the obtained data to make more informed decisions and improve the efficacy of student affairs initiatives.

Future Researchers. This study can help or be a good reference for future researchers who are pursuing a similar project. Future researchers could look into ways to tailor website portals to individual students' hobbies, academic programs, or other characteristics. Creating customized dashboards or recommendation systems could give future researchers relevant information and resources.

CHAPTER II

REVIEW OF RELATED LITERATURE AND EXISTING ALTERNATIVES

The Electronic Human Resource Management System (EHRMS) is a paperless-based system that plays a vital role in facilitating organizational processes, overcoming all obstacles of a paper-based system, reducing cost, time, and efforts, enhancing the quality of services (QoS), and providing more accurate data (Shukur, Zeebaree, Zebari, Hussan, Jader, & Haji, 2021).

A Web-based management system is greatly needed in the Advanced Technological Institute (ATI) community functioning under the Sri Lanka Institute of Advanced Technological Education (SLIATE). Ultimately, to help and promote students' achievement and success, ATI must have access to complete, accurate, and timely information about students (Attanayake & Thilanka, 2021).

The Development and Assessment of an Online Student Affairs System with Short Message Service provides a possible solution to the problems and difficulties encountered by the Office of student affairs in a secondary high school in the province of Nueva Ecija, Philippines. It covers the management and organization of student records and the effective delivery of information through Short Message Service (SMS) notification to students, parents, and guardians (Nakae, Haywood, Love, Kothari, Saldaña & Sánchez, 2021).

Colleges and Universities have been established to provide educational services to the public. Like any other organization, the school has processes and procedures similar to those of a business or industry that involve admissions, the processing of data, and the generation of reports. Those processes are made possible through a centralized system for storing, processing, and retrieving data and information. The absence of a computer system and the complexity of the transactions of the college, which make the personnel loaded with paper work in storing and keeping student records and information, are the motivating factors why the School Management Information System has been designed and developed for a community college in the northern part of Mindanao (Grepon, Baran, Gumonan, Martinez, & Lacsa, 2021).

Academic advising is essential for students' success at the university level. WS-ADVISING will address several weaknesses related to the traditional academic advising process by offering enhanced and value-added online services that have proven beneficial for both advisors and students (Adrezo & Wirawan, 2021).

Student complaints are critical information that reflects students' voices and is a significant indicator of student unhappiness. As the complexity and number of college student complaints increase, a well-structured web app with a good database will be required to assist lecturers and school officials in combating this trend; a computerized complaint system will provide a solution to this problem. This online application was created to respond to student concerns addressed by the proper body. The online application is divided into three sections: Student Login, Student Registration, and Administration. The object-oriented design and analysis

methodology (OOADM) was used in this study, which is a technical technique for evaluating and developing an application or system using objects throughout the software development process. HTML, CSS, JavaScript, PHP, SQL, and JQuery are the programming languages used. Web programming languages were selected since it is a web-based application that is platform-neutral. The complaint record contains information about any complaint made by the user (the student) and is viewable by the administrator, who refers complaints to the proper authorities. The Student Login needs the student to log into the program before filing a complaint; the Student Register is a form that collects the student's information before they can use the system; and the administrator is in control of the system and has access to all filed complaints (Saleh & Nawab, 2022).

The handling of any student activity lies in the collective processes of submitting the proposal, securing the budget, getting approval, promoting and handling the event, collecting feedback, reporting, and post-mortem discussion. The management of these activities has been a major concern with the involvement of over 100 student clubs that carry out more than 20 events per week and are vying for a budget. Acquiring approval for the event proposal, tracking the running of the activities, and reporting are some of the factors that created a backlog from the management aspect. These procedures require a physical approach. Therefore, an Interactive Student Activities Management System (iSAMS) was designed and developed through the Waterfall methodology as a one-stop center to help the UiTMCM Student Affairs Division facilitate the management of the students' activities. This web-based system is able to track, display, and store all the activity information from the proposal application stage until the end, which includes tracking

attendance, progress of the event, collecting feedback, reporting completed activities, storing supporting documents, and generating reports for administrative purposes. All of these are done and managed via a secure online interface on the Student Affairs Division website without the physical presence of the students or the administrators (Aziz, 2021).

One of the many ways that the universities can communicate with students is through their website, which is considered the face of the organization. It also represents the organization as a whole, its culture, values, and vision (Karani, Thanki, & Achuthan, 2021).

The website of a university is considered a virtual gateway to providing primary resources to its stakeholders. It can play an indispensable role in disseminating information about a university to a variety of audiences at once (Rashida, Islam, Kayes, Hammoudeh, Arefin, & Habib, 2021).

University portals have evolved into an important channel for universities to release campus information and publicize themselves to the outside world, with website design playing a significant role in enhancing the user experience and office efficiency (Jia-Zhou, Zhu, & Song, 2022).

Usability and HCI are becoming core aspects of the system development process to improve and enhance system facilities and satisfy users' needs and necessities. HCI will assist designers, analysts, and users in identifying the system needs from text style, fonts, layout, graphics, and color, while usability will confirm if the system is efficient, effective, safe, utility, easy to learn, easy to remember, easy to use and evaluate, practical, visible, and provides job satisfaction to the users.

Adopting these aspects in the system development process, including sustainable design, will measure and accomplish users' goals and tasks by using a specific technology. Finally, designers should include these aspects in their agenda to enhance technology acceptance and performance and satisfy users' necessities (Issa & Isaias, 2022).

Many challenges are facing modern web applications, and security is a major concern for web application developers, especially when today's web applications are interactive and support user collaboration. SQL injections, cross-site scripting, cross-site request forgery, and broken authentication are examples of these common security vulnerabilities. Several web development frameworks (e.g., Laravel, Spring Boot, Django, Ruby on Rails, and ASP.NET Core) provide out-of-the-box security features to protect modern web applications against the above-mentioned vulnerabilities.

Developers usually use manual protection mechanisms to secure modern web applications. Although manual protection increases the probability of web application attacks. This study focuses on reviewing, comparing, and analyzing the most common vulnerabilities found in modern web applications and the web development frameworks' built-in security features (Aborujilah, Adamu, Shariff, & Awang Long, 2022).

Nowadays, web applications can do a lot more than just display static data. Modern web applications have become an important part of the daily ecosystem due to the demands of clients' needs. Therefore, development on the front-end side of the web plays an important role in website creation because it becomes a means of user

interface with the system. A good web front-end can attract users (Lazuardy & Anggraini, 2022).

From past analyses by various organizations, it has been observed that during the web development phase, the developers didn't invest much of their focus on the security of the product, which resulted in its breakdown and gave rise to vulnerabilities, ultimately defeating the user's trust. A simple way to overcome the vulnerabilities is to use web development frameworks with records of good security (D. Goyal, P. Jain, and B. Bhushan, 2020).

In complex information systems, some features may recur hundreds of times. Therefore, identifying such features and suggesting suitable design solutions for them can simplify the development and maintenance of such complex systems. In that regard, this work introduces five design patterns that were utilized to develop data management features that recurred many times in several web-based information systems used to manage enterprise and student data at the German Jordanian University. In this context, a software design pattern describes a solution to designing repeating software features. The proposed design patterns are documented in a general manner using UML diagrams to enable their utilization on different web development platforms and their development using popular object-oriented programming languages. In particular, the suggested patterns seek to solve the following software features: flexible user_interface for data management; reusable modules for dependent dropdown filters; lazy loading of table data; unified modules to handle data addition and editing; and page state restoration when navigating between related pages. Not to mention, the validation results show that the discussed design patterns were used hundreds of times while implementing six information

systems for the university. Specifically, one of the patterns was utilized more than 700 times. Additionally, it seems that some of the design patterns in this work were not investigated in related work (Riasti, B. KA'la, F. Y., Safi'ie, Natalia, J., 2022).

Passwords are still the most widespread means for authenticating users, even though they have been shown to create huge security problems. This motivated the use of additional authentication mechanisms in so-called multi-factor authentication protocols. In this article, we define a detailed threat model for this kind of protocol. While in classical protocol analysis, attackers control the communication network, we take into account that many communications are performed over TLS channels, that computers may be infected by different kinds of malware, that attackers could perform phishing, and that humans may omit some actions. We formalize this model in the applied pi calculus and perform an extensive analysis and comparison of several widely used protocols—variants of *Google 2-step* and *FIDO's U2F* (Yubico's Security Key Token). The analysis is completely automated, systematically generating all combinations of threat scenarios for each of the protocols and using the PROVERIF tool for automated protocol analysis. To validate our model and attacks, we demonstrate their feasibility in practice, even though our experiments are run in a laboratory environment. Our analysis highlights the weaknesses and strengths of the different protocols. It allows us to suggest several small modifications of the existing protocols that are easy to implement, as well as an extension of *Google 2-step* that improves security in several threat scenarios (Jacomme & Kremer, 2021).

Review of Existing Technologies

University of Santo Tomas (UST) Office for Student Affairs (OSA)

The University of Santo Tomas (UST) OSA website provides information on the many services and programs offered to students. These include academic assistance, career services, counseling, and opportunities for leadership development. There are other materials on health and wellness, sports and recreation, and student groups on the website. On the OSA website, students can find key documents, requirements, and policies, as well as information about upcoming events and activities on campus. The website is updated regularly with news and announcements of interest to UST students. The OSA at UST plays an important role in promoting the holistic development of its students and enriching their campus experience. The website provides students with an easy and accessible platform to acquire the tools and support they need to succeed academically, professionally, and personally.

De La Salle University (DLSU): MyPortal

The Office of Counseling and Career Services (OCCS) at De La Salle University (DLSU) in the Philippines provides student support services. They offer a website named "MyPortal" that acts as a one-stop shop for many student services. Students can get confidential counseling services from the OCCS via MyPortal. Students can make an appointment with a counselor and access counseling services online. MyPortal also has resources for career development, such as job advertisements, career fairs, and workshops. Students can use the MyPortal to get academic counseling services such as course selection and degree planning. MyPortal contains information about student groups and events, such as event calendars and

registration forms. The OCCS provides financial assistance and scholarship information, including application methods and deadlines. To encourage student health and wellness, MyPortal gives access to medical and mental health services, wellness initiatives, and physical activities. The MyPortal contains information about the student code of conduct, incident reporting methods, and disciplinary action policies.

The Student Affairs Office (SAO) at Siliman University

The SAO provides support and oversight to a variety of student organizations, clubs, and societies on campus. They promote the formation and registration of student organizations, offer leadership development advice, and guarantee compliance with university policies. The SAO provides seminars and workshops that aim to improve students' leadership abilities, personal growth, and character development. Leadership training, communication skills seminars, team building activities, and values development sessions are examples of such programs. Counseling and guidance services are often provided by the SAO to assist students in dealing with personal, academic, and career-related issues. Counselors are trained to provide one-on-one therapy, group counseling, and courses on themes such as stress management, time management, and study skills.

Xavier University, Ateneo de Cagayan (Office of Student Affairs)

The portal may contain information about student organizations and clubs on campus, allowing students to learn more about them and join or engage in their activities. The portal could include capabilities for handling student events such as registration, ticketing, and promotion. Provide students with access to a variety of

student services, including academic advice, career services, health services, and counseling options.

Frontline Services, Office of Student Affairs and Service, University of Southeastern Philippines

Through its Office of Student Affairs and Services (OSAS), the University of Southeastern Philippines (USEP) uses a dedicated portal to provide frontline services. The portal is an online platform that enables quick and easy access to a variety of student services and resources. The USEP OSAS portal is intended to improve administrative operations, improve communication between students and the OSAS, and enable easy access to a variety of student services and resources. It aspires to establish a unified and user-friendly digital environment that supports students' academic and personal development throughout their university experience.

Mindanao State University - Iligan Institute of Technology (MSU-IIT)'s My.IIT Portal

The My.IIT Portal, designed for the Mindanao State University - Iligan Institute of Technology (MSU-IIT) community, is a comprehensive and user-friendly platform that integrates all academic and administrative activities. It provides access to course offerings, academic achievements, eLibraries, and various downloads. It also facilitates administrative tasks and includes the MSU-IIT Online Learning Environment (MOLE) for distance learning programs. Additionally, it offers access to documents, records, an alumni registry, a jobs database, and a calendar of events, fostering a sense of community and engagement.

The University of the Philippines (UP) Diliman utilizes several web-based systems

The Diliman University uses many different systems to streamline its operations and services. One of these is the University Information Systems (UIS), a comprehensive data network that provides access to various systems that automate the University's processes. The UIS can be accessed anytime, anywhere, as long as there is internet connectivity. It includes systems such as the Human Resource Information System (HRIS) for managing human resources information, the Financial Management Information System (FMIS) for automating financial processes, the Supplies, Procurement, and Campus Management Information System (SPCMIS) for managing procurement processes, and the Student Academic Information System (SAIS) for managing student processes and records.

Another significant system is the Digital Archives @ UP Diliman, which serves as the official Institutional Repository of the University. It identifies, acquires, maintains, preserves, and provides access to the digital institutional records and memory of the University. This includes research papers, theses, dissertations, and other academic and administrative documents.

The University also uses Google Workspace for Education, a suite of tools that provide several services catering to UP's faculty and students.

Lastly, the UP Integrated Library System (iLib) is a library management system designed specifically for the UP Diliman Main Library and its 40+ college and unit libraries. It has administrative functions such as acquisitions and cataloging

as well as user-facing functions like the Web OPAC (online public access catalog), which allows users to search and access the library's collection of books, journals, and other resources.

Table 1. Studies of Existing Alternatives

Existing Alternatives	Key Features					Feedback
	Announcements	Student Organization Management	Event Registration	Scholarships and Financial Assistance	Student Registration and Records	
The Student Affairs Office (SAO) at Siliman University	✓		✓	✓	✓	✓
De La Salle University (DLSU) – My Portal	✓	✓	✓	X	✓	✓
Xavier University – Ateneo De Cagayan (Office of Student Affairs)	✓	✓	✓	X	X	✓
Office of Student Affairs at the University of Santo Tomas	✓	✓	✓	✓	X	✓
Frontline Services Office of Student Affairs and Service – University of Southeastern Philippines	✓	✓	✓	X	✓	✓

Mindanao State University – Iligan Institute of technology's My.IIT Portal	✓	✓	✓	X	X	X
The University of the Philippines (UP) Diliman	✓	✓	✓	✓	✓	✓

Note: Check (✓) indicates that the system has features/function while x mark (X) indicates if it is not.

In synthesis and significance, the purpose of the review of related literature and studies was to uncover efforts and studies that created an online system and analyzed the system. Investigating different systems can also aid in the development of a more comprehensive and efficient system. Reviewing related literature and existing technology brought up similarities between all the websites and the one for the CLSU. All of them are using Cloud Services and are made to have major purposes for the university they are made for, namely to reduce traffic for the offices and greatly enhance database management.

All of the universities mentioned have online portals or websites dedicated to their respective student affairs offices. These portals offer a centralized platform for students to access numerous services, resources, and information. Each system provides a variety of services and tools to assist students' needs and growth. These

may include counseling services, student handbooks, guidelines, forms, scholarships, grants, student organization registration, and assistance with crucial paperwork. The portals attempt to make materials and services easily accessible to students. They provide online forms for a variety of purposes, allowing students to easily apply for student groups, register for events, request papers, and provide feedback through digital channels. All of the systems keep students up-to-date on pertinent news, announcements, activities, events, and projects. This allows students to stay informed and engaged with what is going on their campuses. The systems are designed to help students. This can take the form of counseling services, FAQs addressing frequent student difficulties, and contact information for staff members who can provide more aid.

A proposed system will provide a centralized platform for various student affairs services, resources, and information. By providing user-friendly interfaces, an improved system may improve accessibility. This proposed system can automate and streamline different activities such as viewing announcements, events, publications, and so on. This can save students time and effort by removing the need for physical visits to the office. The proposed system can deliver real-time information on announcements and events. Students can receive notifications through email, keeping them up-to-date on important information and activities. The system will enhance communication between students and the student affairs office. It may include features such as chatbots and messaging systems. A proposed system can collect and evaluate data on student participation, preferences, and needs. The proposed system included email complaint help-desk functionality that provides students with an additional layer of support and assistance, boosting their experience and satisfaction

with the student affairs system. It simplifies the process of responding to student inquiries, allows for more effective communication, and guarantees that students receive fast and correct responses to their issues.

The mentioned universities' student affairs systems have effectively used web portals as centralized platforms for students to access a wide range of services, resources, and information. These systems focus on students' needs and advancement by providing counseling, handbooks, guidelines, forms, scholarships, grants, and paperwork assistance. By providing online forms and enabling quick access to documents and services, the portals stress accessibility and convenience. With regular notifications on news, announcements, events, and initiatives, these systems play an important role in keeping students informed and involved. They also offer student support services like counseling, FAQs, and contact information for staff members.

The proposed system can build on these qualities by centralizing student affairs services and information even more. It can improve accessibility, optimize procedures, and provide real-time information through user-friendly interfaces and automated functionalities. Chatbots and messaging technologies, for example, can improve communication between students and the student affairs office. The proposed system has the ability to provide a comprehensive and efficient solution that fulfills the demands of students, thereby supporting their growth and well-being within the university context.

CHAPTER III

METHODOLOGY

This section describes the steps that the development team will follow in designing and developing the Information System Module for the Information Management and Publication Unit (IMPU) of the Office of Student Affairs at Central Luzon State University. The developers will follow the Dynamic Systems Development Method, which has five phases as illustrated in Figure 1. It includes five phases, such as, the Feasibility Study, Business Study, Functional Model Iteration, Design and Build Iteration, and Implementation. This will be used by the developers to accomplish, design, and analyze each aspect of the proposed system by taking specific steps towards its development.

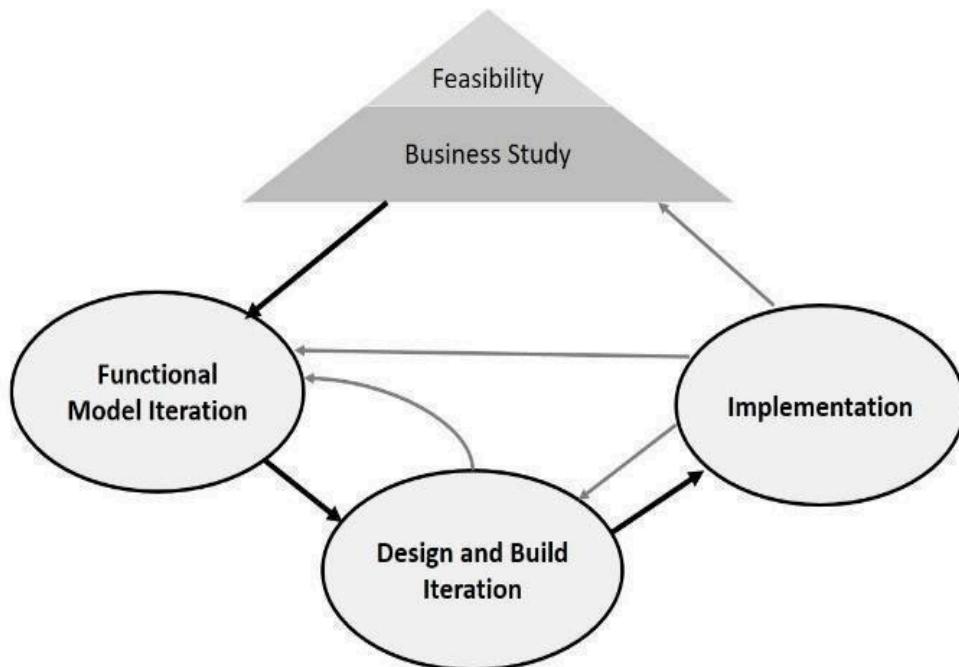


Figure 1. Dynamic Systems Development Method

A. Feasibility Study

In this initial phase, the development team will gather relevant data and information to assess the viability and potential success of the proposed project or initiative. Data gathering will be presented using a cause-and-effect diagram to identify the possible causes of a problem in order to identify its root cause. Evaluating the feasibility of the project determines the organization's capacity to support the development and implementation of the system. The aim is to determine whether the project is worth pursuing and if it aligns with the organization's objectives.

Schedule Feasibility. A Schedule feasibility study will be conducted to determine the tasks and schedule that are needed to be done. A Gantt chart will be made to provide a graphical illustration of the timeline or schedule that helps to plan and track specific tracks on the project.

Operational Feasibility. Using the operational feasibility study to be conducted, the developers will determine whether the users of the system will be able to operate and learn the system's processes and functionalities. Users must have the ability and be technically proficient enough to know how to use the system.

Technical Feasibility. A Technical feasibility study will be conducted to determine whether the proposed system can be deployed using the available or existing technologies and resources in the organization. Hardware specifications will also be analyzed to determine if the organization's technical resources can handle the proposed system requirements.

Economic Feasibility. An Economic feasibility study will also be conducted to determine whether it is possible to implement the system. This will determine the

tangible and intangible benefits as well as the tangible and intangible costs of the requirements that will be needed.

B. Business Study

This phase will focus on understanding the business requirements and objectives in detail. The development team will collaborate closely with the organization to gather information about the desired system, its functionalities, and any constraints or dependencies. Analysis of the results and system requirements will be presented using the conceptual framework to guide the design, development, and implementation of the project. The Conceptual Framework will provide a conceptual structure or model for understanding and organizing the various elements and aspects of the proposed system. It will also provide a basis for communication and collaboration among developers and stakeholders. The aim is to define the scope and boundaries of the project.

C. Functional Model Iteration

In this phase, the development team will use the information gathered to start building the functional model iteratively. The development team will visualize the interface of the website that aims to satisfy the organization's requirements or demands. Regular feedback from the organization will also be collected and incorporated into the development process to ensure that the system meets their needs. In order for the developers to build functional models, logical and database designs will be created. The logical design includes a Use Case Diagram, a Context Diagram, a Data Flow Diagram, and an Exploded Data Flow Diagram. On the other hand, the Entity Relational Diagram and Relational Data Model will represent the database design of the proposed system.

D. Design and Build Iteration

Once the functional model is established, the design and build iteration phase will begin. The development team will focus on developing the software components and integrating them into a working system. The development work will be carried out iteratively, with each iteration, adding or enhancing specific features based on the organization's feedback and requirements. This phase also includes testing, where the development team will test the system themselves to check its functionalities and features. Developers will create a test case that will be based on the core functionalities of the system. The testing will focus on finding and fixing other existing errors and bugs in the proposed system. Once the developers have tested the system, they will also conduct a mock test for the Office of Student Affairs staff. This will be conducted to attest to and determine if the desired functionalities were achieved by the developers.

E. Implementation

The final phase involves the implementation, maintenance, and evaluation of the system. The proposed system will be implemented to the Office of Student Affairs. Once the development team ensures that the system is thoroughly tested, documented, and ready for production use, user training will be conducted to familiarize users with the system's interface and processes. Comprehensive documentation will be created, including user manuals and any other relevant documentation. The documentation will serve as a reference guide for users, administrators, and support teams.

The initial users will be the Office of Student Affairs staff, IMPU personnel and students, as they are the primary stakeholders and will greatly benefit from the

system's functionalities. By considering potential user needs and scalability, developers will ensure that the system can accommodate an expanding number of users.

Once the developers turn over the system, they will leave their contact information with the organization so that if ever there's a problem in the program that needs support, the developers will be able to assist them.

An evaluation of the system will be conducted to assess its security, usability, reliability, effectiveness and user interface. The developers will provide an evaluation questionnaire to the Office of Student Affairs staffs who will be operating the system to personally engage in an overall view of how they see, work, and interact with the system they use.

Chapter IV

RESULTS AND DISCUSSION

This section discusses the methodology's results and the relevance of such results using the Dynamic Systems Development Method.

A. Feasibility Study

The results of data gathering were obtained through interviews. The following are the thoughts generated based on Mr. Laurence Lingat's (IMPU Coordinator) responses to the team's questions. The procedure's outcome and solution are shown below.

- What methods or channels are available for students to access important information and resources from the Office of Student Affairs?
 - “Students access OSA information and resources through Facebook and Google drive.”
- Can you describe the important roles and duties in the present process, such as who handles queries, announcements, and feedback?
 - “Feedback is handled by GSU and IMPU, while IMPU also manages informations and publication.”
- Can you describe the current system for gathering feedback from students about OSA activities evaluation?

- “Feedback from students about OSA activities evaluation is gathered through Google form survey and encoded in Excel for summary report.”
- What do you think are the common challenges or issues faced by students when interacting with the office of Student Affairs under the current process?
 - “A common challenge or issue faced by students is the lack of direct online communication for some announcements and concerns.”
- What do they need for future system functionality?
 - “A future system functionality that they need is a faster and more accessible system for evaluation results and resources.”
- Is there any computer equipment in the office?
 - “The office has computer equipment available.”
- How familiar are employees with the use of web-based tools and applications for work-related tasks?
 - “The staff are computer literate”
- Are staff members willing to receive training on how to use new digital tools or systems introduced in the department or office?
 - “Yes, willing to receive training on new digital tools or systems.”

SUMMARIZING KNOWLEDGE OBTAIN

Based on information gathered, OSA IMPU's current method of posting resources is via Facebook social media. Feedback on OSA activities are gathered using Google Form surveys. Students face common challenges such as limited online communication for announcements and a desire for a faster evaluation system. The office is equipped with computers, and employees are willing to learn new digital tools.

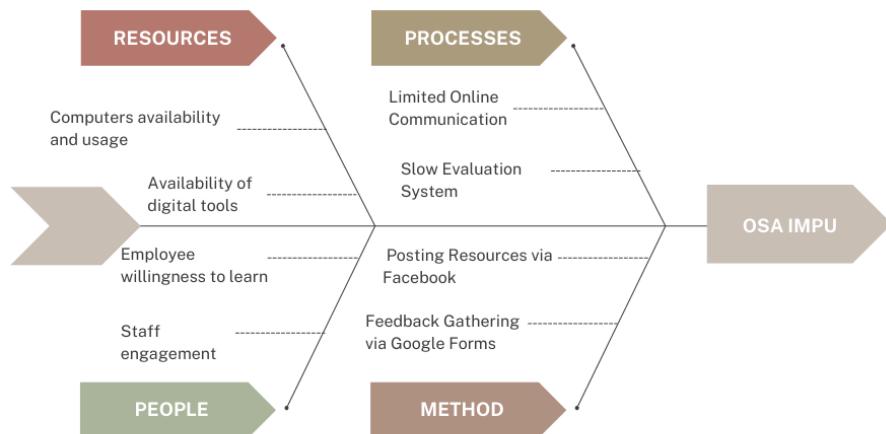


Figure 2. The Cause-and-Effect Diagram (Ishikawa Diagram)

As illustrated in Figure 1, the problem of the current system, the possible cause and effect that they encountered in the current process. This cause-and-effect diagram is divided into processes, resources, methods and people. Central issues include a lack of online communication channels and slow feedback processing. These difficulties are caused by factors such as resource availability, reliance on

communication platforms such as Facebook, and staff familiarity with digital technologies. To overcome these barriers, it is necessary to improve online communication, improve feedback mechanisms, and invest in staff training.

Schedule Feasibility

Schedule feasibility study will be conducted to determine the tasks and schedule that are needed to be done. A Gantt chart will be made to provide a graphical illustration of the timeline or schedule that helps to plan and track specific tracks on the project.

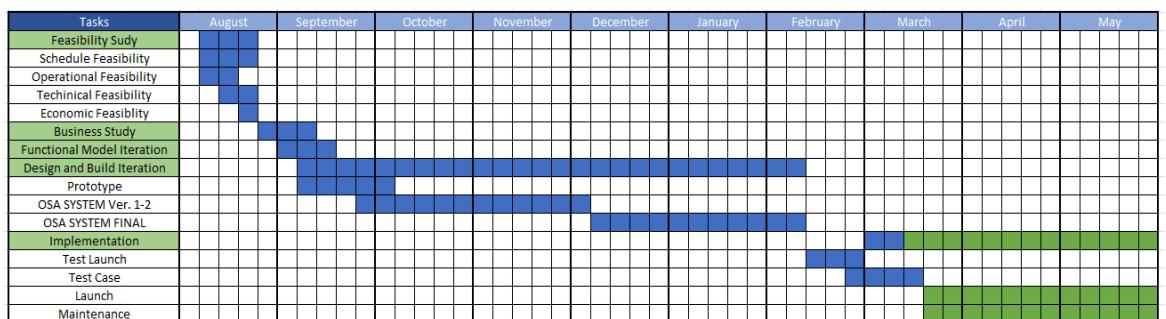


Figure 3. Gantt Chart

The Gantt chart included herein visually depicts the anticipated timeline for key project phases, from initial feasibility studies to final launch and ongoing maintenance.

The project follows a sequential workflow, with initial phases laying the groundwork for subsequent stages. The schedule spans from August 2023 to May 2024, divided into months and weeks for illustrative purposes.

- **Feasibility Studies (August 2023):** This initial phase encompasses various feasibility studies, including schedule, operational, technical, economic, and business feasibility assessments. These studies determine the viability of the project across different aspects.
- **Functional Model Development (August - September 2023):** Following successful feasibility assessments, the project progresses to developing functional models. This iterative process involves two stages, refining the functionalities based on evaluations.
- **Design and Build Iterations (October - December 2023):** With the functional model established, the project enters the design and build phase. This phase is also iterative, with two build cycles incorporating the learnings from the previous iteration.
- **Prototyping and System Development (December 2023 - February 2024):** A prototype is created based on the finalized design. Subsequently, two versions of the OSA system are developed and tested.
- **Testing and Launch (March 2024):** The developed system undergoes rigorous testing through a test launch phase. Following successful testing and finalization, the system was launched in March 2024.
- **Maintenance (March 2024 - Ongoing):** Project completion signifies the official launch; however, ongoing maintenance is crucial to ensure system functionality and address any arising issues.

Progress Tracking

The included Gantt chart utilizes a color-coded system to represent task progress. Blue indicates completed tasks and green signifies tasks currently in progress. As of March, 2024, the project exhibits satisfactory progress, with several key tasks completed and others ongoing as planned.

Operational Feasibility

The developers will determine whether the system's users will be able to operate it and learn its processes and features. Users must have the skills and technical knowledge to understand how to use the system.

The developers collect information about the system's user in order to prove that the officer is operationally feasible. The user's profile is shown below.

USER	RESULT
Age	23
Occupation/Role	IMPU Coordinator/ Instructor 1
Computer Literate	Yes

Table 2: User's Information

Table 2 shows the IMPU coordinator's user profile. The coordinator of IMPU is 23 years old. He is a college graduate with prior work experience; he was familiar with the use of any system. The developers concluded that the IMPU coordinator was capable of using the system.

Technical Feasibility

The proposed system is web-based; therefore, users will need an Internet connection as well as the requisite equipment to use it. The Office of Student Affairs has existing computer equipment, and the office is ready for the changes that the planned system will bring in the near future. As a result, the proposed system is technically feasible. Table 3 indicates the system requirements that must be acquired.

Minimum Specs	Recommended Specs
Pentium	Intel Core i5
Microsoft Windows 10	Microsoft Windows 10
2GB RAM	4GB RAM
500GB Hard Disk Space	500GB Solid State Drive

Table 3: Hardware System Requirement for IS Module for the Information

Management and Publication Unit

Economic Feasibility

The total cost of the project was calculated. All software and hardware requirements, staff required for installation, and office expenses for the system were all listed. The project's estimated cost is provided below, which will be utilized for cost-benefit analysis.

ITEMS	COST
SOFTWARE	
Hosting site	P 400.00
HARDWARE	
Desktop	P 0.00
Printer	P 0.00
TOTAL	P 400.00/month

Table 4: Approximate Project Costing

Table 4 shows the estimated cost of the system. The following systems needed were a hosting site, the hardware needed are desktop, printer which cost zero pesos because the office already has them. The expenses for items in report printing, which cost 1,500 pesos per year for an estimated 2 rims of bond paper and 1 black ink. The whole cost was 1,500 pesos.

A cost-benefit analysis compares the total expected cost of the project against the total expected benefits. Its main purpose is to show that the expected benefits outweigh the cost. To show the benefit overweighs the cost, the developers compare the current cost of the office and the expected cost of the office after implementing the project. The cost of the current process and proposed system is shown below.

B. Business Study

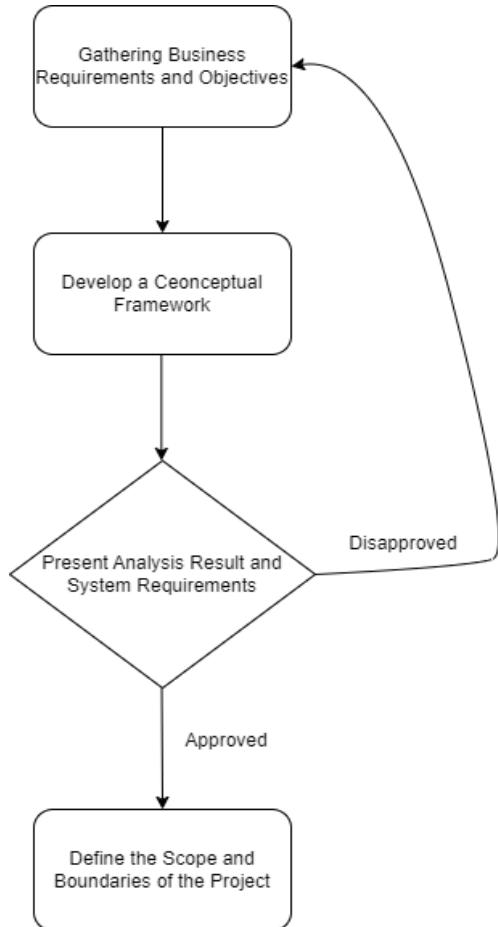


Figure 4. Business Requirements and Objectives Flow

Gathering business requirements and objectives.

The development team gathered the business requirements and objectives of the system. This includes understanding the needs of the users, the goals of the organization, and the constraints on the project.

System Requirements:

Functional:

- **Email Complaint:** Ability to submit and track student concerns, provide answers to frequently asked questions, and connect students with relevant staff members.
- **Information and resources portal:** Ability to browse information about student services, academic programs, and OSA activity events. Ability to download materials, such as policies and procedures, and handbooks.
- **Online evaluation platform:** Ability for students to submit feedback on their OSA activities experiences. The ability for staff to view and analyze feedback data.
- **Secure and confidential web portal:** Ability to restrict access to certain resources to bona fide students. Ability to protect student data from unauthorized access.

Non-Functional:

- Scalability to support a large number of users.
- Performance to ensure that the system is responsive to user requests.
- Security to protect student data and prevent unauthorized access.

System Architecture



Figure 5. System Architecture of the proposed system

As illustrated in Figure 4, the system architecture of the proposed system is intended to facilitate user interaction by offering a user interface connected to the internet through which users can submit requests. These queries are sent across the internet and to the server, which functions as the central processing unit. The server handles incoming requests by performing the relevant logic and fetching data from a cache or a database. Once the processing is complete, the server creates suitable replies, which are transmitted back to the user through the Internet, providing seamless and efficient communication between the user and the system.

System Interfaces:

The web portal will interface with the Office of Student Affairs staff's recommendation, such as the student information system and the academic advising system. The system will also interface with external systems, such as social media platforms and learning management systems.

Conceptual Framework

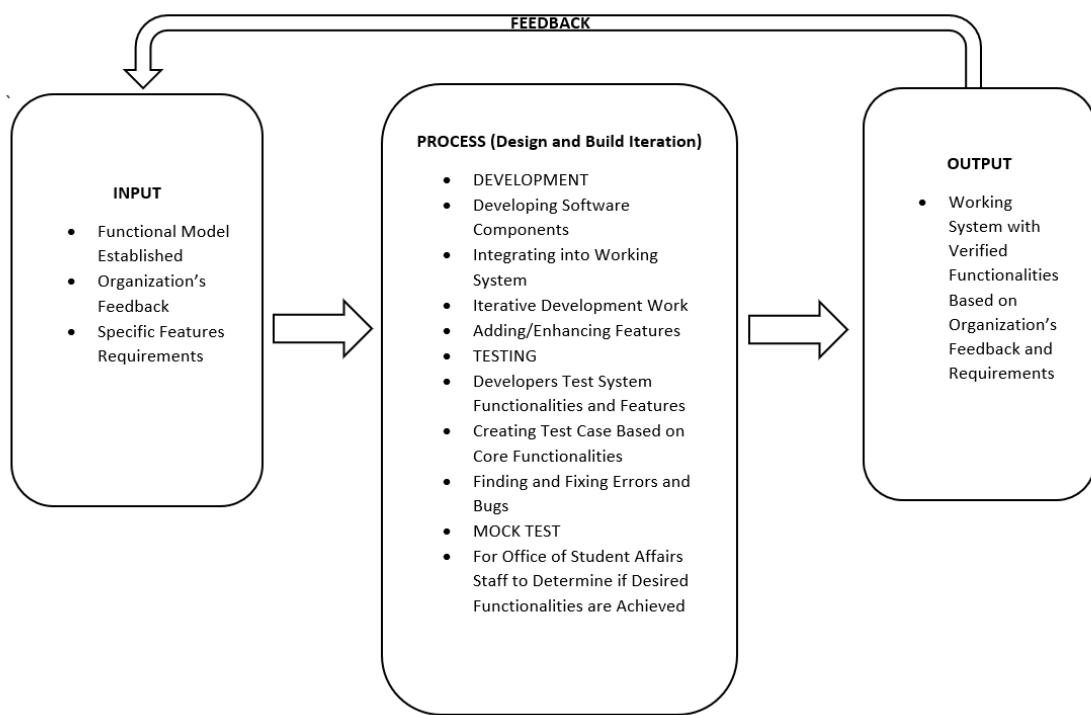


Figure 6. Conceptual Framework

As illustrated in Figure 5, the conceptual framework for the web portal provides a clear and concise overview of the system's objectives, requirements, architecture, and interfaces. This framework will help the development team to focus their efforts and ensure that the system meets the needs of the Office of Student Affairs and its students.

The following are some specific examples of how the web portal could be used to achieve the system objectives:

- **Online Email Complaint Helpdesk:** Students could submit questions and concerns about their student accounts, registration, financial aid, and other student services through the online help desk. Staff members could then respond to these queries in a timely manner.
- **Information and resources portal:** Students could use the information and resources portal to find information about academic policies, and OSA Activity events. They could also download forms and other important documents.
- **Online evaluation platform:** Students could use the online evaluation platform to provide feedback on their OSA Activities and experiences.
- **Secure and confidential web portal:** The security and confidentiality of the web portal are for certified CLSU students and personnel only. Privatizing content such as student handbook and evaluation for the affiliated individuals, and granting roles to have different access privileges.

Overall, the web portal has the potential to improve the efficiency and effectiveness of the Office of Student Affairs' services. It can also make it easier for students to access important information and resources. By providing a secure and confidential portal, the web portal can also help to protect student data.

C. Functional Model Iteration

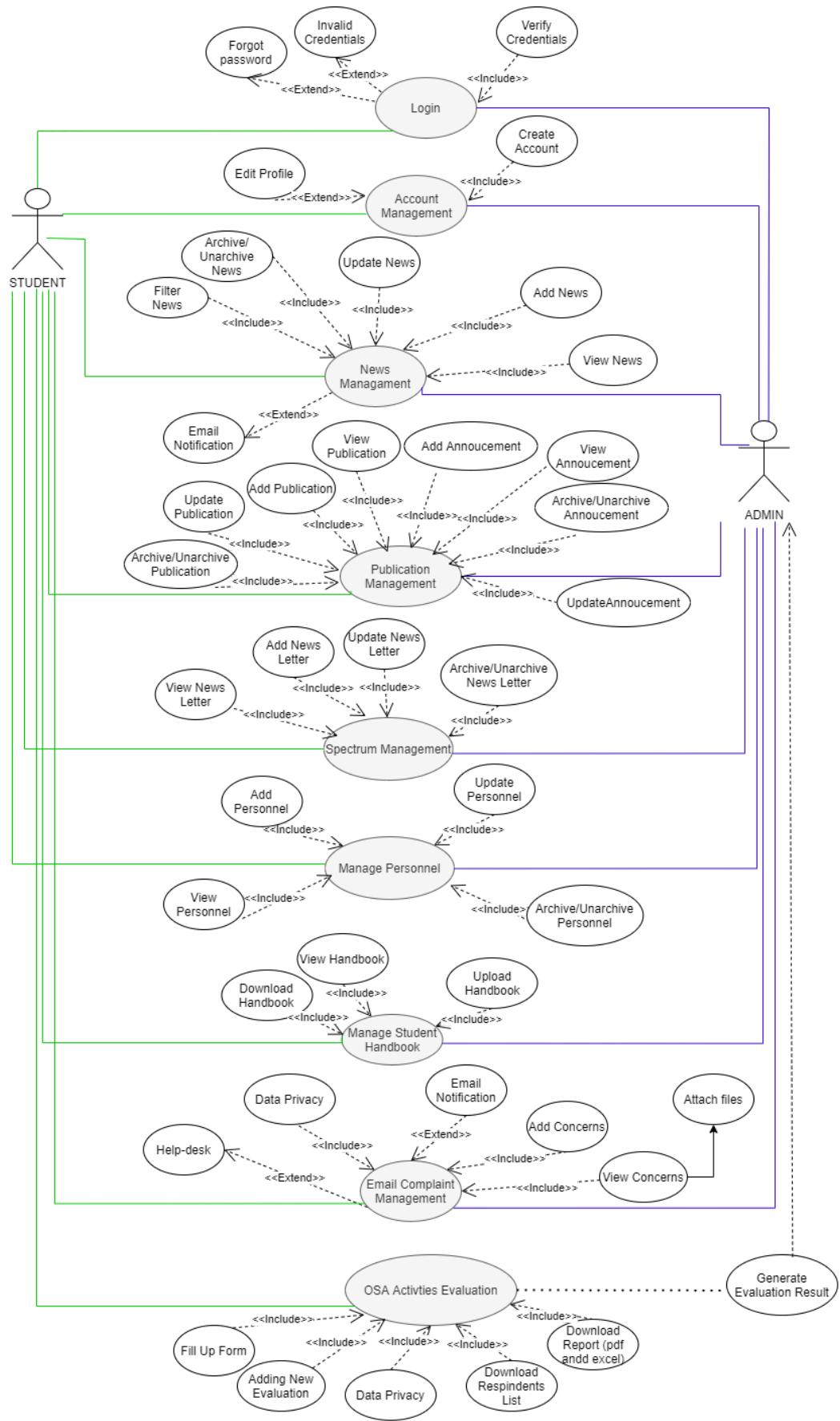


Figure 7. Use Case Diagram of the proposed system

As illustrated in Figure 6, the use case diagram shows how the users interact with the system. It also illustrates how the user operates the system. The proposed system has two main actors; Admin and Students. To access the system, everyone must log in. Students must sign up with their CLSU email address to create an account. Admin is in charge of keeping the system running, sharing news and resources, creating evaluation reports, and responding to email complaints. Admin also manages news, publication page and announcements, spectrum newsletters, and uploading the student handbook. Registered students can receive important notifications of news via email and they can download a copy of the student handbook, participate in evaluations, and send email complaints. It allows the admin to manage everything smoothly while also providing students with easy access to what they need.

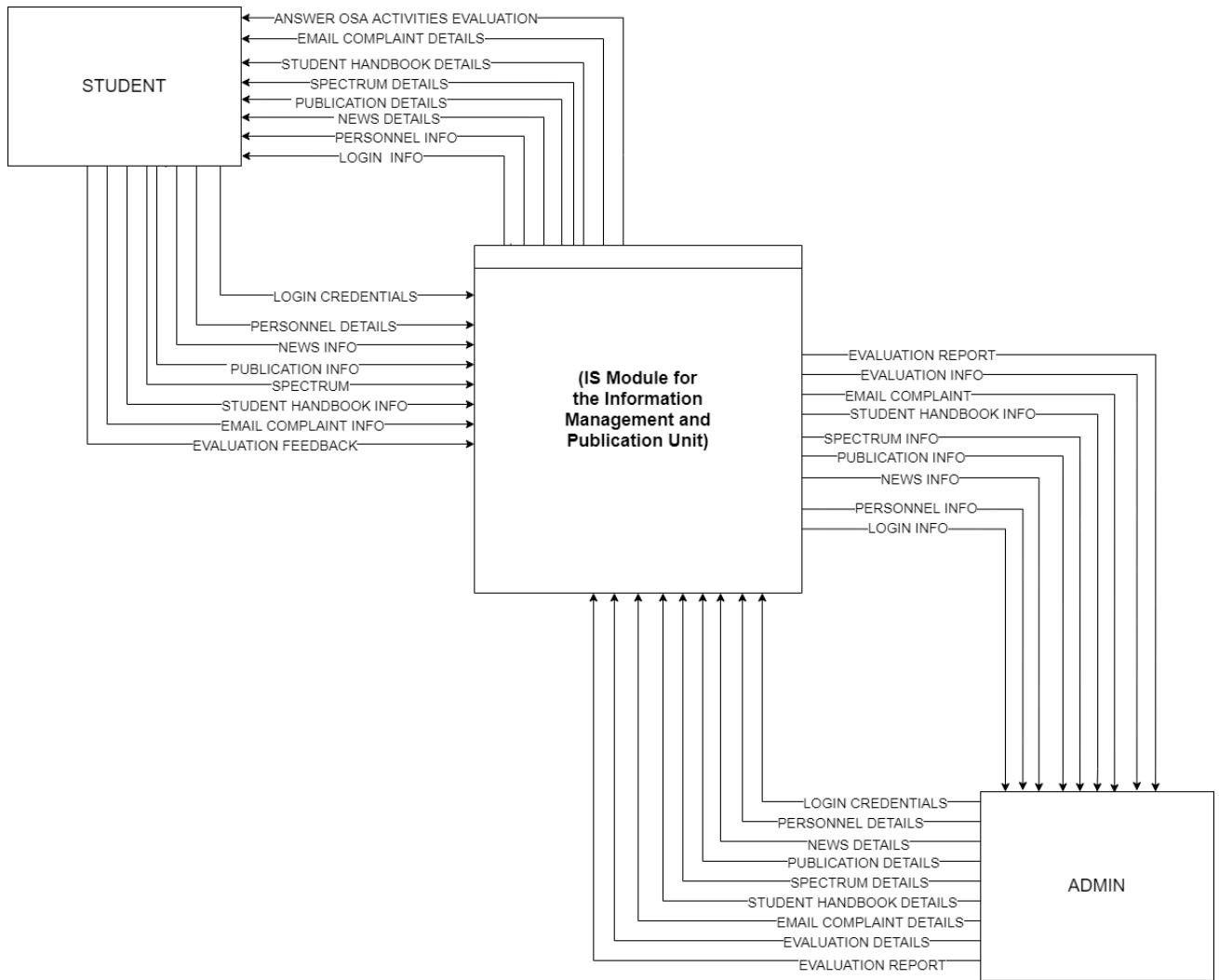


Figure 8. Context Diagram of the proposed system

As illustrated in Figure 7, users will have access to the OSA portal. As shown in the figure each user has a specific role inside the system. The Admin can add news, publication page and announcements posts, personnel, and spectrum newsletter where students can view, check OSA activities evaluation, and download resources uploaded there. In addition, the admin can create an evaluation about OSA activities that the student should take. The Admin can download the list of respondents, download the PDF and Excel file of the evaluation report.

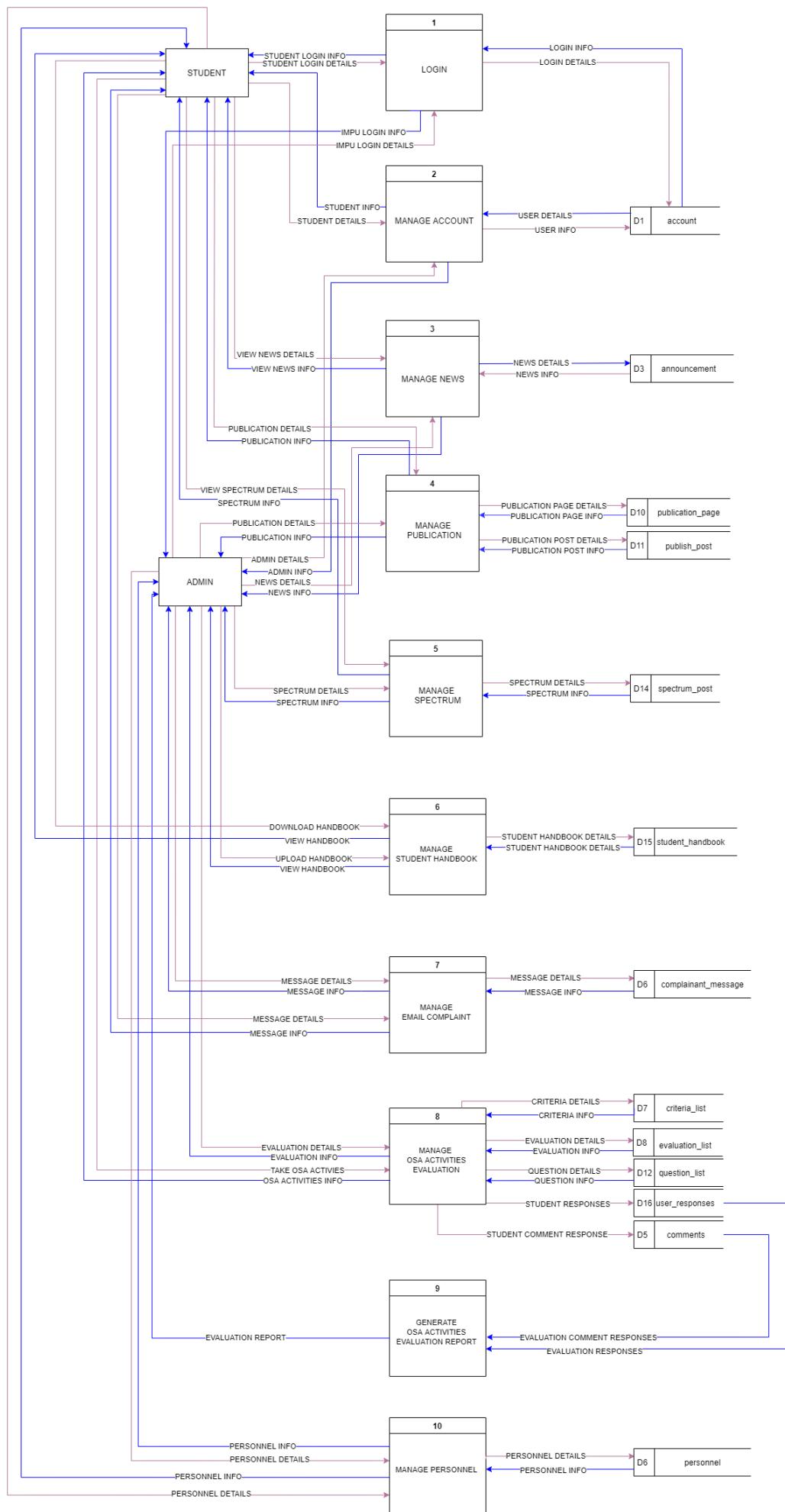


Figure 9. Level 0 Data Flow Diagram of the proposed system

As illustrated in Figure 8, it shows how data flows through different processes happening in the system. The diagram for the system has 10 processes. These are the Login, Manage Account, Manage News, Manage Publication and Announcement, Manage Spectrum, Manage Student Handbook, Manage Email Complaint, Manage OSA Activities Evaluation, Generate OSA Activities Evaluation, and Manage Personnel. The inputs are stored in their designated data stores such as account, announcement, publication_page, publish_post, spectrum post, student_handbook, complainant_messages, evaluation_list, question_list, criteria_list, user_responses, comments, and personnel. The students can use the web portal to access information and resources. CLSU students serve as external entities in the system. They are the major users who engage with the OSA web portal. Admin can create and post news, publication, spectrum, and OSA Activities evaluations to keep students up to date on important concerns. The student can send concerns through email complaints, the admin is the one who will manage the complaints from students. To have access to the system, the Student needs to sign up first and afterwards, registered student accounts and admin can login. The students will take the OSA Activities Evaluation, all the feedback will be saved in the database. The summary of the evaluation report will be generated by Admin.

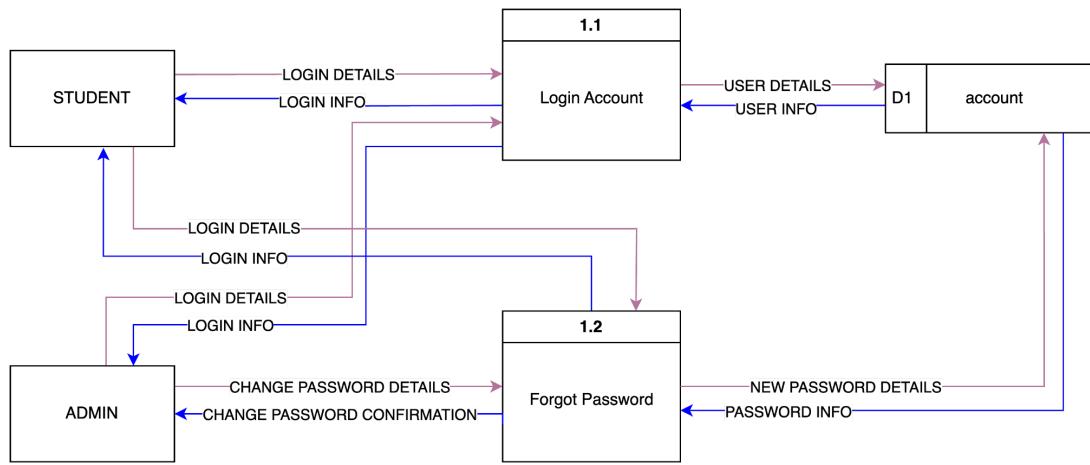


Figure 10. Level 1 DFD for Login Account

As illustrated in Figure 9, it shows the process of logging in user accounts. Users with a saved account can login into the system.

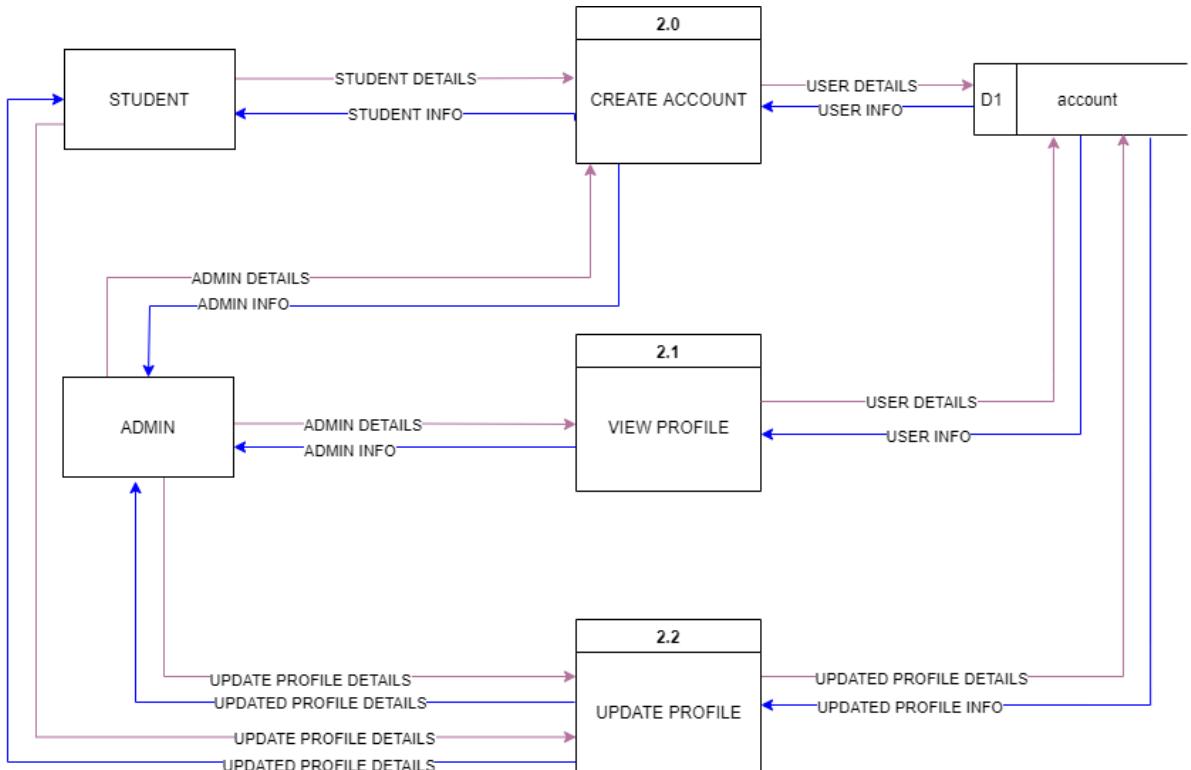


Figure 11. Level 1 DFD for Manage Account

As illustrated in Figure 9, it shows the process of accounts management for students and admin. Initially, a student or an admin initiates the account creation process, which is then meticulously recorded in the ‘CREATE ACCOUNT’ phase. Upon successful creation, the account details are securely stored in the ‘account’ data store. As the accounts reach completion, both students and administrators are empowered to engage with the system through a variety of actions. They can access their profiles, update personal information, and manage their accounts with ease. This seamless integration of account management functions fosters an efficient and user-friendly environment for all system participants.

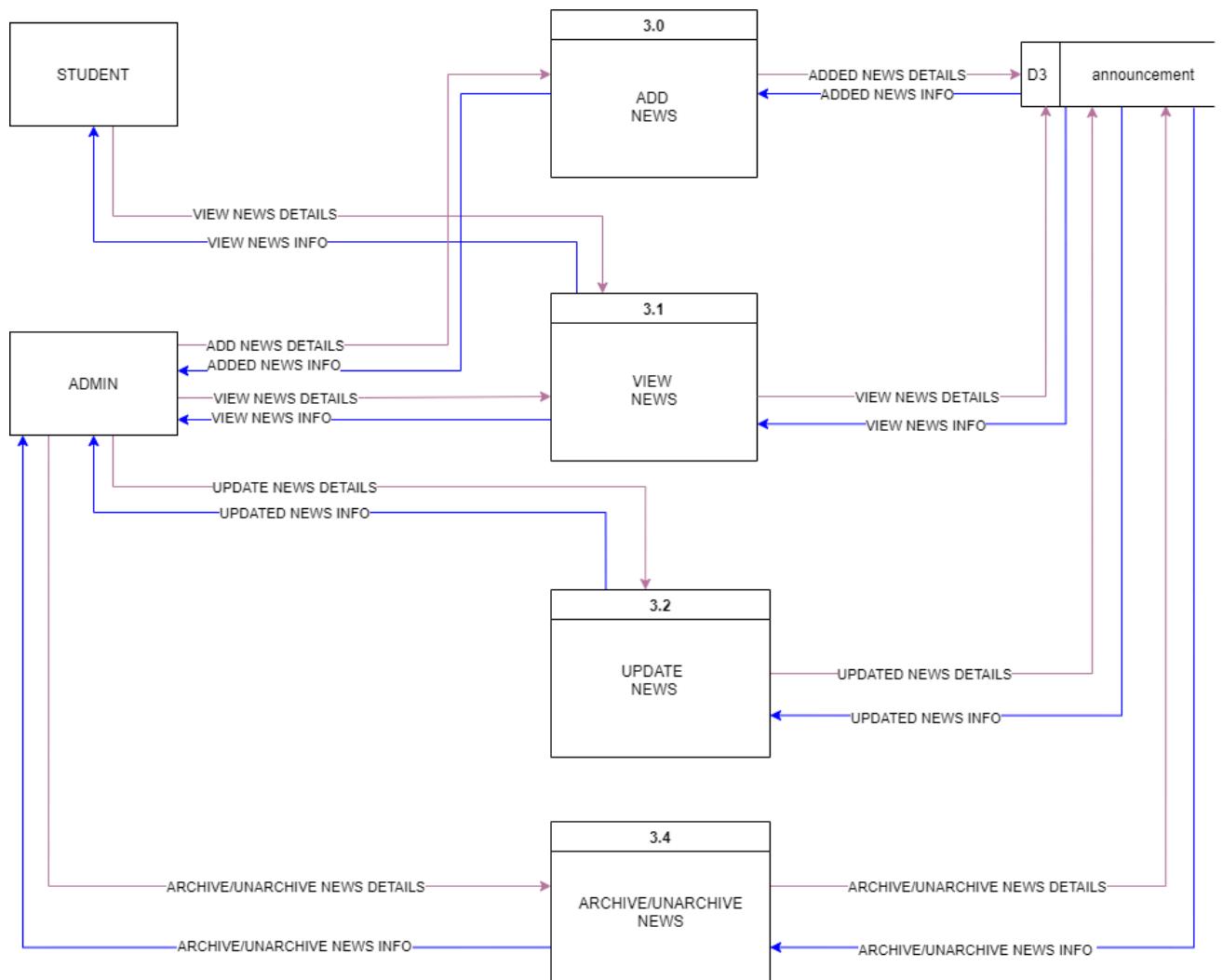


Figure 12. Level 1 DFD for Manage News

As illustrated in Figure 11, admin has the capability to add and view news using the web portal. Students can view news that have been posted in the portal. As appropriate, the admin can also update and archive existing news. The inputs are stored in designated data stores which is announcement.

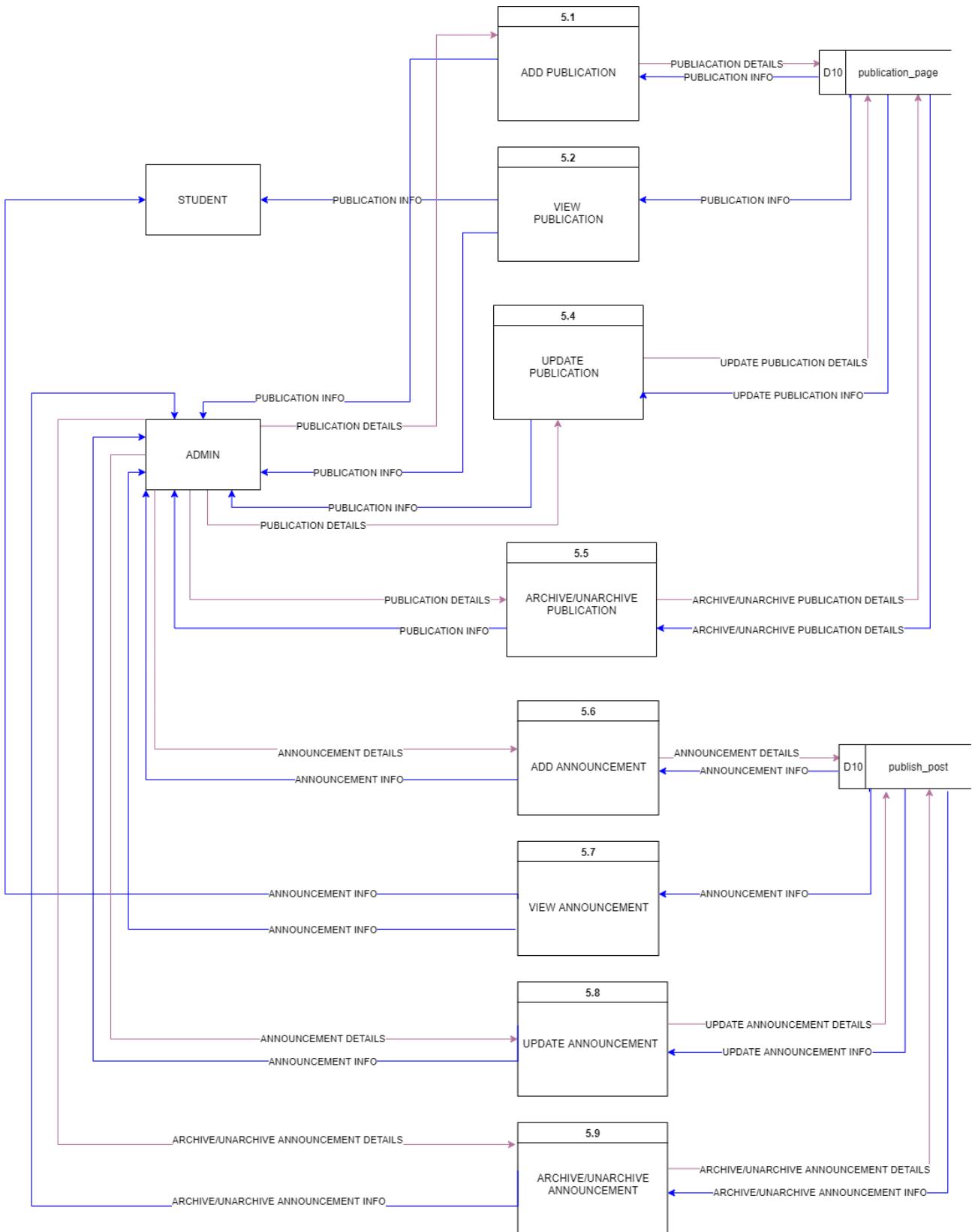


Figure 13. Level 1 DFD for Manage Publication

As illustrated in Figure 12, this represents the action of the admin to create a publication page using the web portal. Admin can view, edit, update, and archive/unarchive the publication pages. This functionality allows the admin to

efficiently manage the portal's content, ensuring that publication pages are up to date and organized according to user needs. Additionally, admin can also add, view, update and archive/unarchive announcement posts to the publication pages. Students can view the publication page as well as its announcement posts.

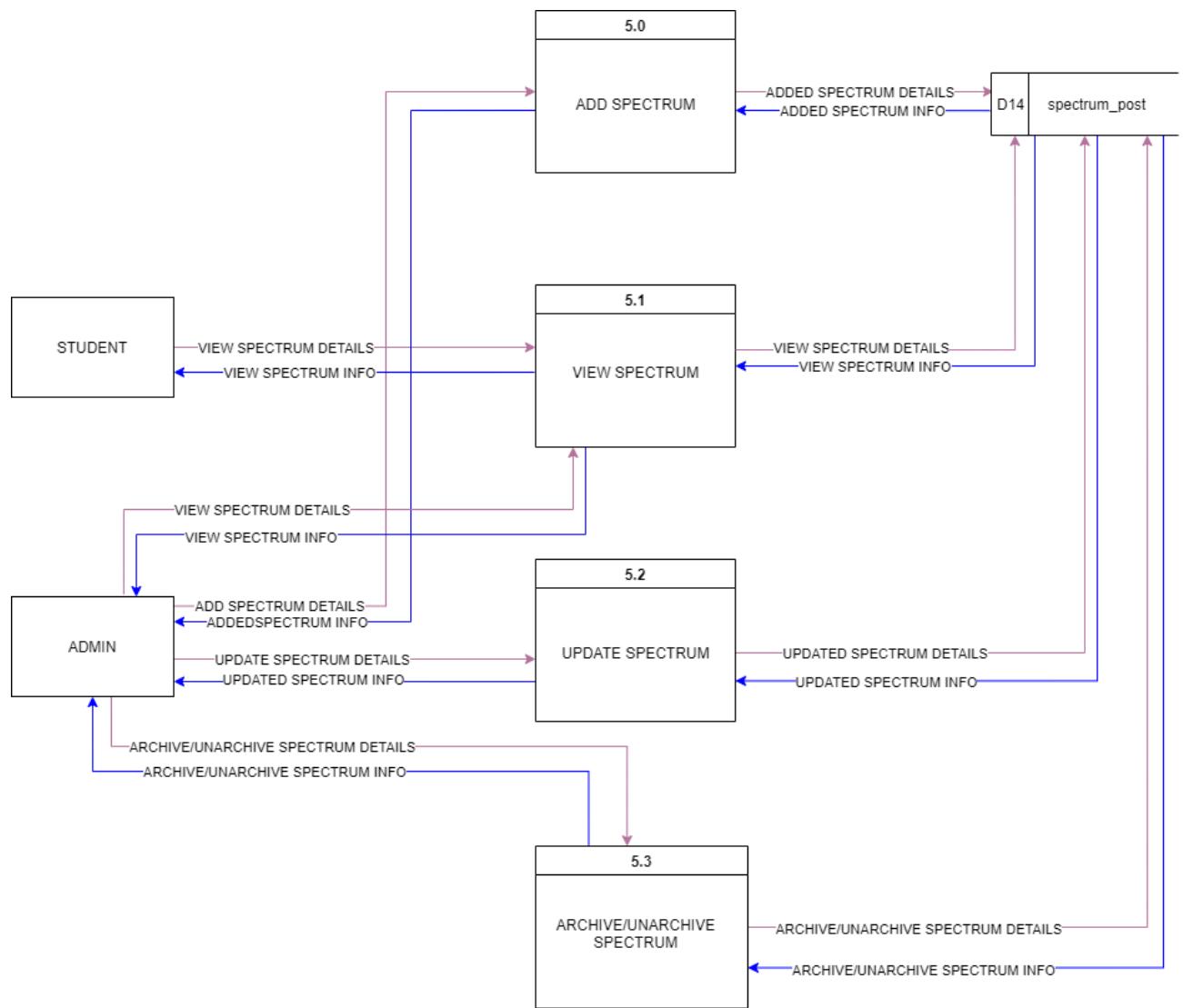


Figure 14. Level 1 DFD for Manage Spectrum

As illustrated in Figure 13, admin has the capability to post and view spectrum newsletters using the web portal. Students can view the spectrum that has been posted in the portal. As appropriate, the admin can also update and archive/unarchive existing spectrum newsletters. The inputs are stored in designated data stores which is spectrum_post.

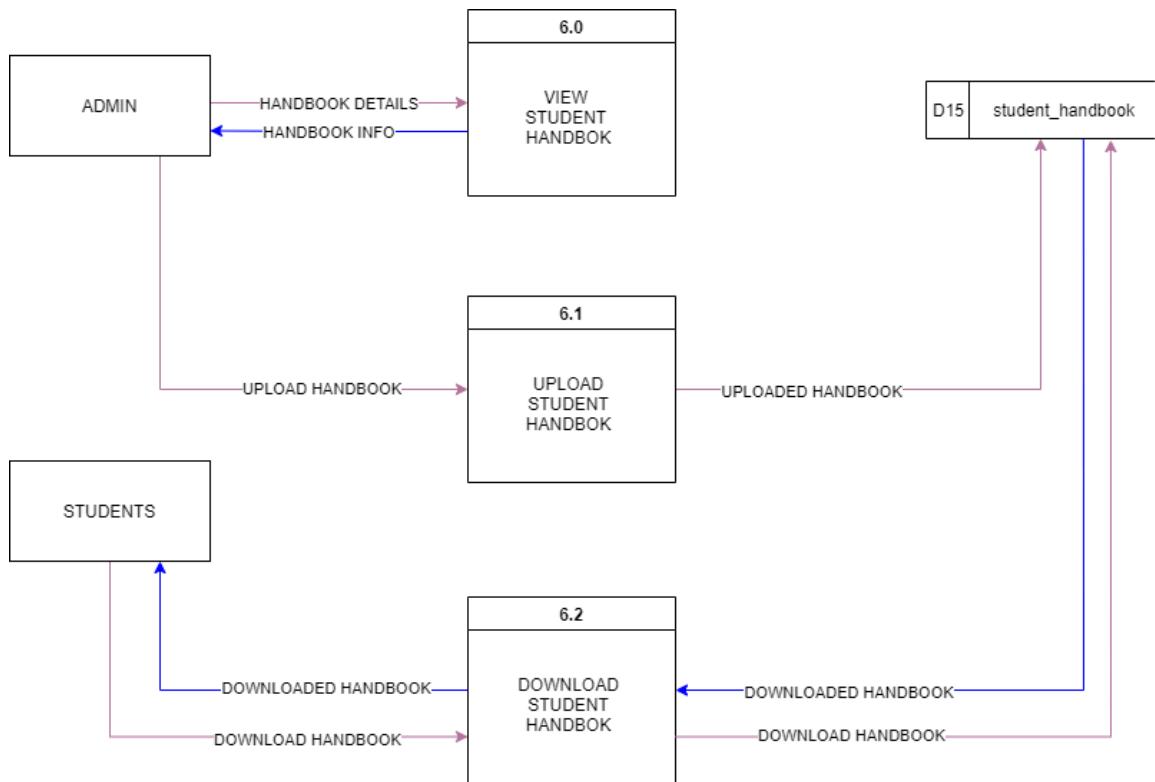


Figure 15. Level 1 DFD for Manage Student Handbook

As illustrated in Figure 14, Uploading and viewing the handbook are also admin responsibilities. They can view the handbook as needed and start the data flow by uploading it into the system. Students, however, can access and download the handbook online once they are logged on. The inputs are stored in designated data stores which is student_handbook.

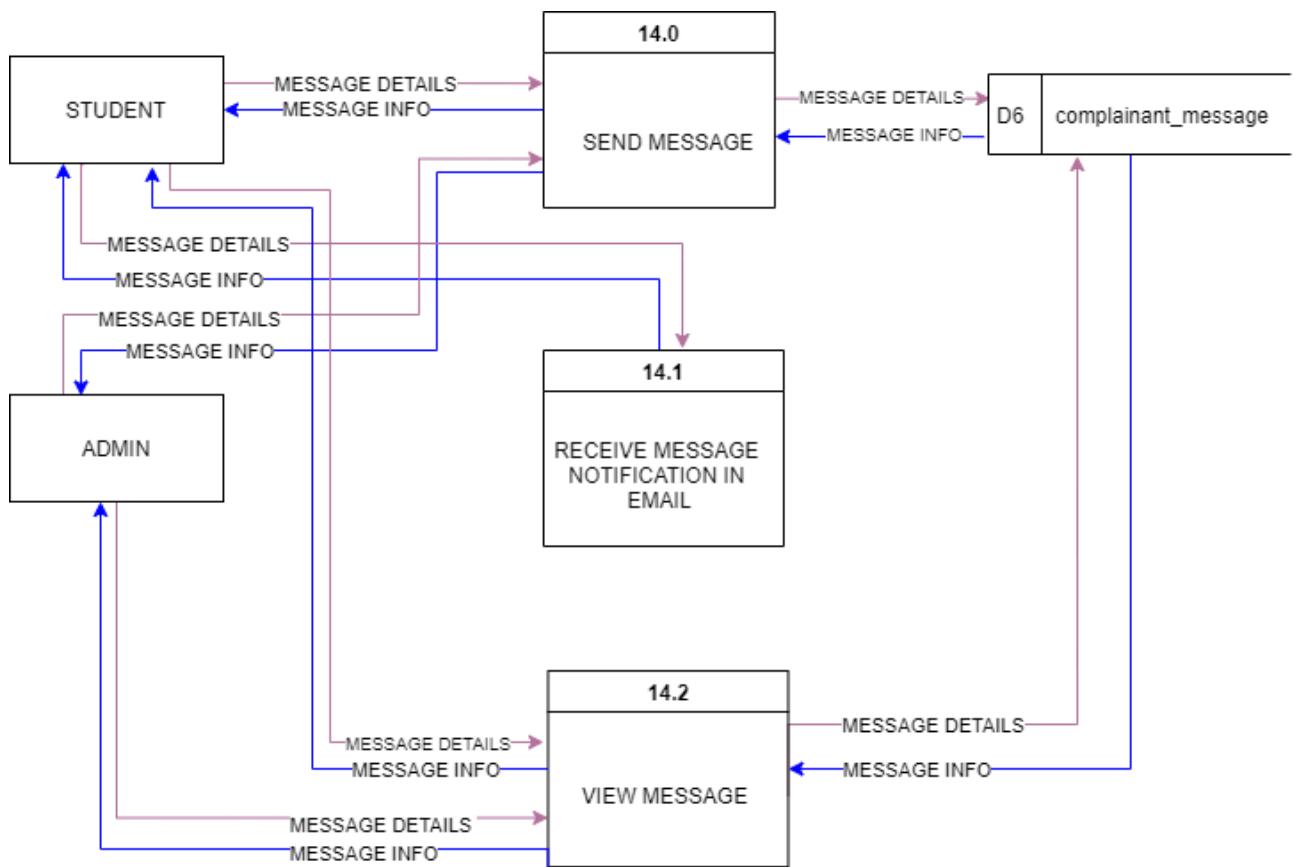


Figure 16. Level 1 DFD for Email Complaint

Figure 15 illustrates the process of a student filing an email complaint and the admin's response. It shows a student sending a detailed message, which prompts an email notification to the admin. The admin then views the message and responds, with the student receiving the reply via their registered email. This DFD captures the flow and storage of data within the system, illustrating the steps involved in handling and responding to email complaints in an educational or organizational context.

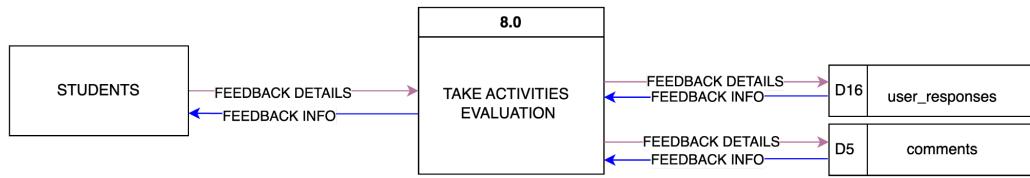


Figure 17. Level 1 DFD for Manage OSA Activities Evaluation

As illustrated in Figure 16, logged on students can use the web portal to access evaluation forms and surveys covering many aspects of OSA Activities. The inputs are stored in designated data stores which are user_responses and comments.

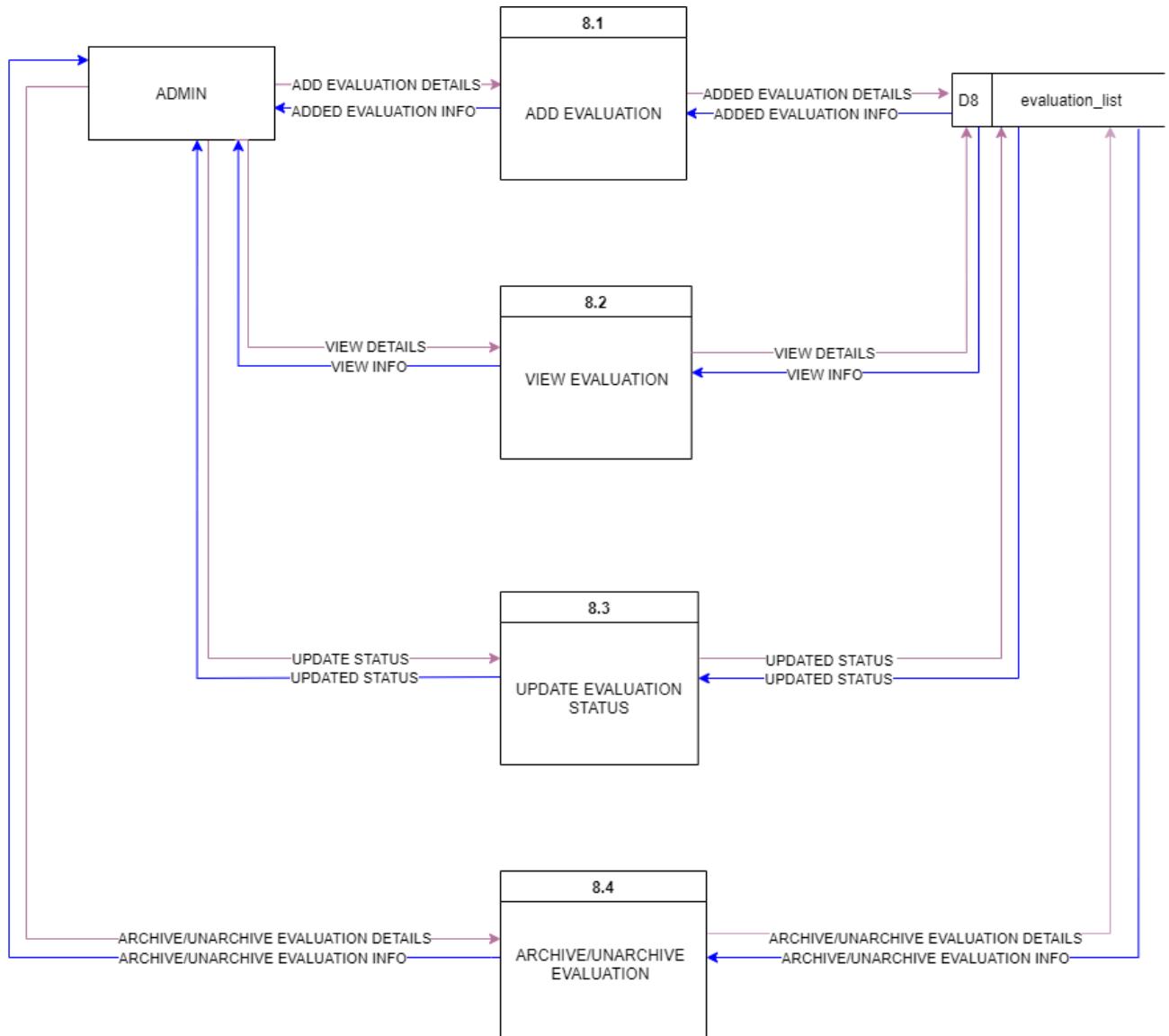
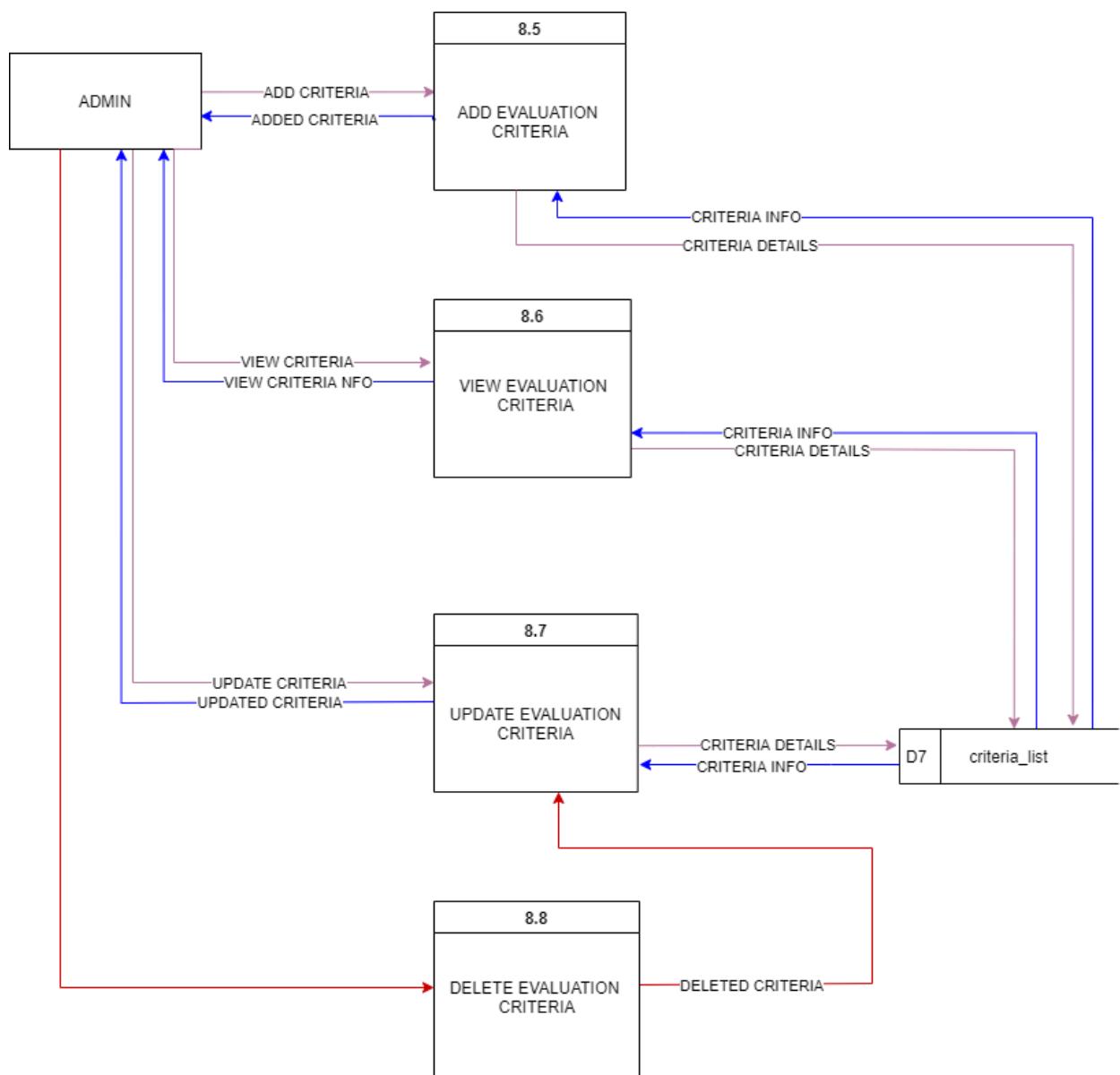


Figure 18 Level 1 DFD for Manage OSA Activities Evaluation

As illustrated in Figure 18, admin can use the online portal to create evaluation to the system, specifying the content and structure of surveys as needed, and modifying existing evaluation by changing the information and status. The admin can also archive/unarchive existing evaluation. The inputs are stored in designated data stores which is evaluation_list



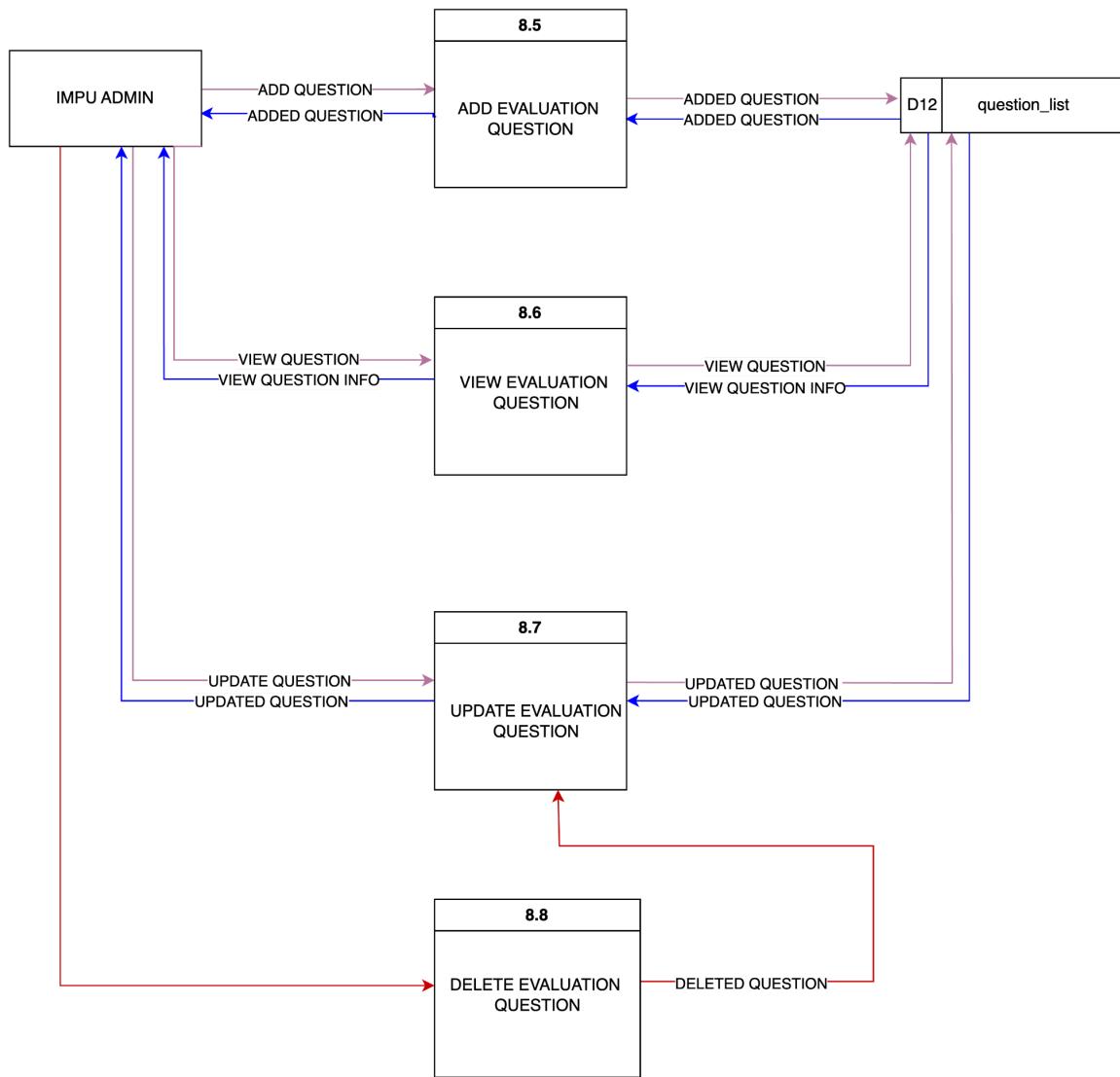


Figure 19&20. Level 1 DFD for Manage OSA Activities Evaluation

As illustrated in Figure 19&20, Admin can use the web portal to access evaluation forms and surveys covering many aspects of OSA Activities. Admin can use the online portal to add, view, and delete evaluation criteria related to evaluation questions. Admin can also modify the existing evaluation questions. The inputs are stored in designated data stores which are question_list and criteria_list.

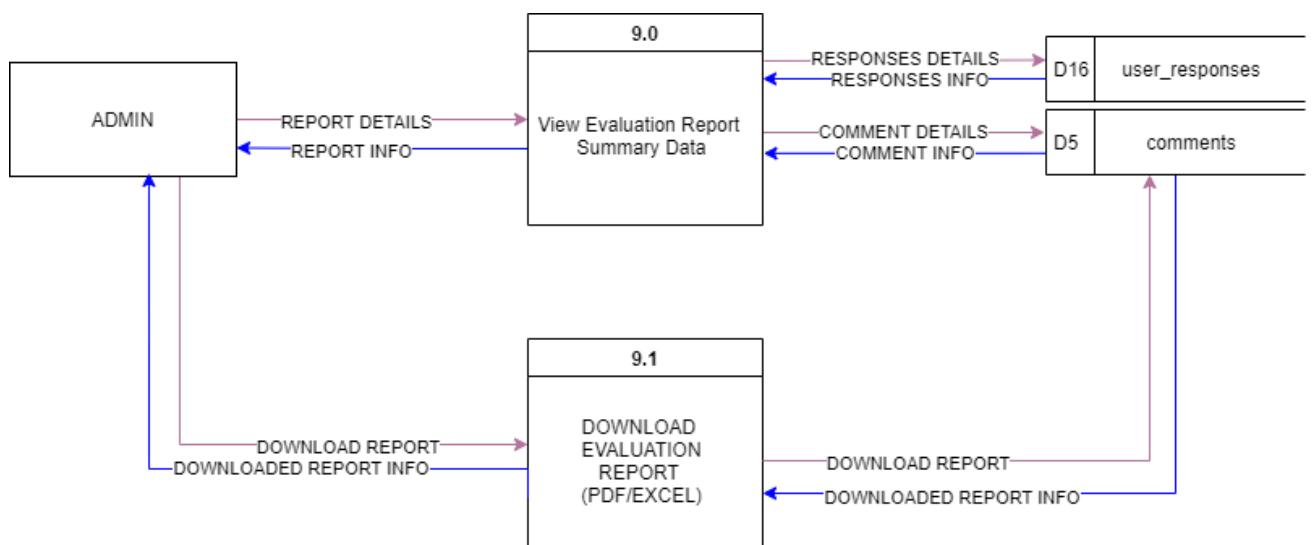


Figure 21. Level 1 DFD for Manage OSA Activities Evaluation

As illustrated in Figure 15.3, Admin can use the web portal to access evaluation reports, they can view evaluation report summary and download the whole generated evaluation report. The inputs are stored in designated data stores which contain user_responses and comments.

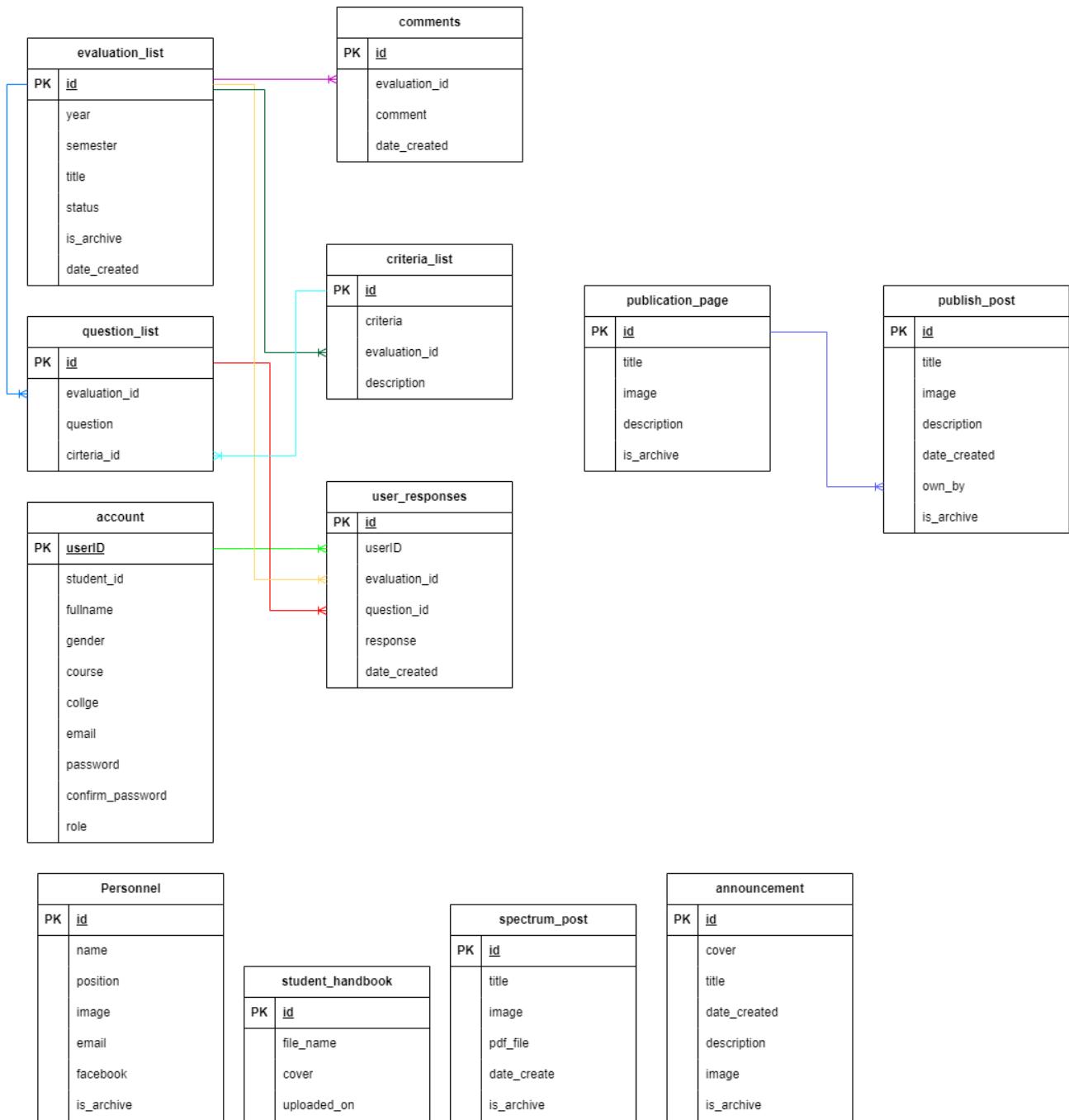


Figure 22. Entity Relational Diagram

Figure 20, is a visual presentation of how the data is being shared between the entities. With each table being connected using the foreign keys, the primary keys became the main reference point to call data from data tables to another. These entities are mostly for storing and retrieving data.

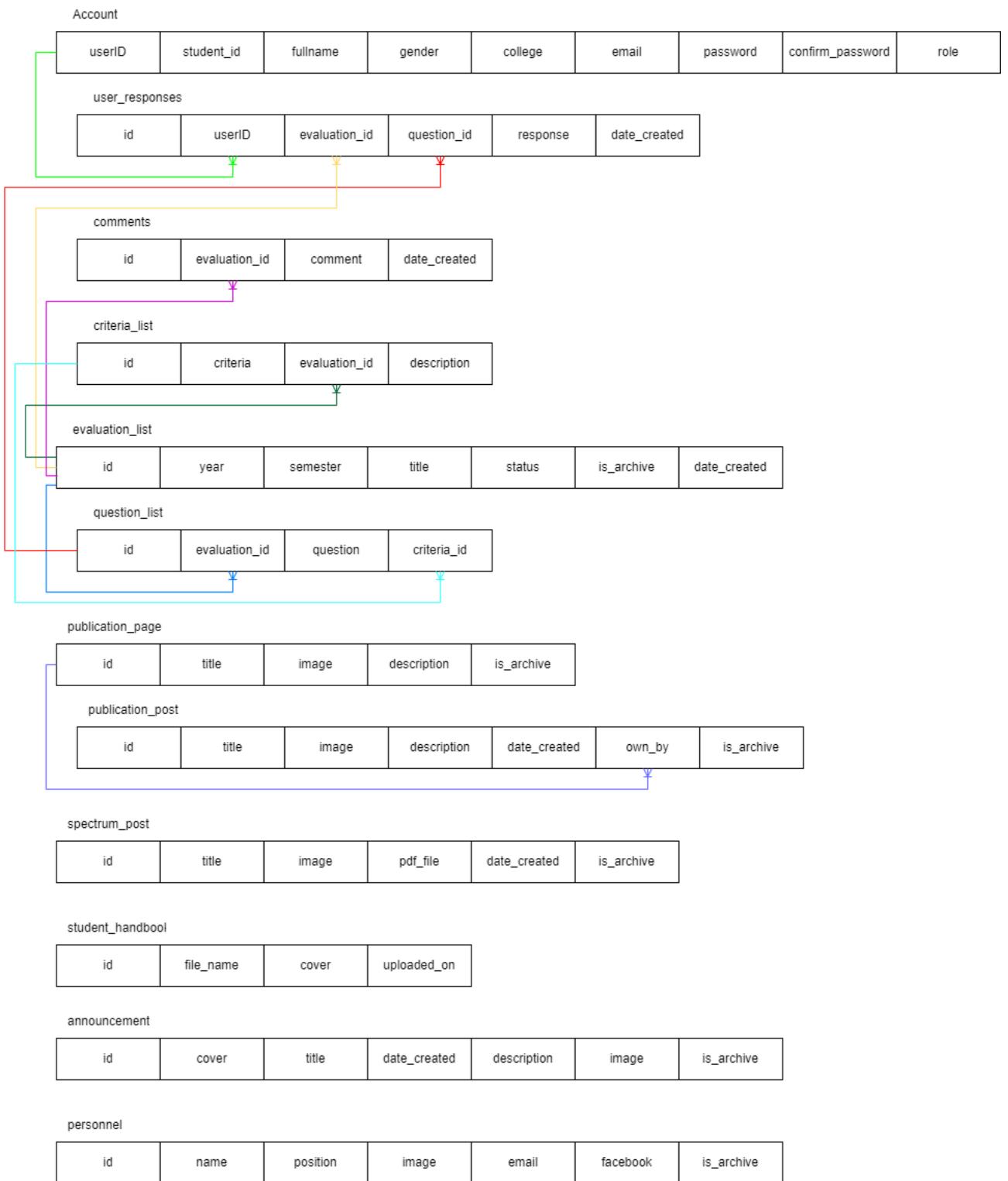


Figure 23. Relational Data Model

The relational data model figure depicts a system for storing and managing publication page and posts, and user evaluations. It uses tables like publication_page, publish_post, account, user_responses, evaluation_list, criteria_list, question_list, announcement, student_handbook, and personnel to store user information, evaluation details, responses, questions, publication page and announcement posts, handbook, and personnel. The relationships between the tables are established using foreign keys and primary keys.

D. Design and Build Iteration

During this phase, the development team focused on creating software components and integrating them into a functional system. The work was carried out iteratively, with each iteration aimed at enhancing specific features in response to feedback and requirements from the organization. This phase also involved rigorous testing, including the creation of test cases and a mock test for the Office of Student Affairs staff. After the developers tested each needed feature, the developers asked the client to test and verify if the system met the requirements that they needed.

Test Case

The team tested the developed system by using test cases to determine existing potential problems. The test cases were executed by the developers.

E. Implementation

The team managed the implementation of the system and uploaded it to the internet to test and use it online. Evaluations were conducted to assess its capability in real-time online. The team provided an evaluation questionnaire to the OSA Office's staff who will be operating the system. Additionally, IT experts evaluated the system's technical aspects, including usability, reliability, security and portability. These evaluations, combined with user feedback, inform the system's adjustments and refinements, ensuring its readiness for the full launch.

The results are tallied and calculated in the sum of a category. The Usability criteria on the IT experts' side scored 88.6% satisfactory rating, with the majority of scores coming from the 5 ratings. In total five ratings are in neutral (3), 7 in satisfied (4), and 18 in Very Satisfied (5). The mean Average rating here is 4.43. The non-IT side had scored an 84.2% satisfactory rating. The majority rated 4 in usability on the non-IT side. One rated this a dissatisfaction (2) and other than that the other rating is favorable. Two rated neutrality (3), twelve are satisfied (4), and nine very satisfied (5). The mean Average rating here is 4.21.

CHAPTER V

CONCLUSION AND RECOMMENDATION

CONCLUSION

The implementation of the IS Module for the Information Management and Publication Unit has significantly improved the delivery of services to students at Central Luzon State University. The system has successfully achieved its objectives, providing an efficient email complaint help desk, a user-friendly platform for accessing information and resources, an online evaluation platform for feedback, and secure access to materials and evaluation information.

The system has not only streamlined processes and centralized information but also enhanced the efficiency and effectiveness of student services. It has facilitated better communication between the Information Management and Publication Unit and the student community, and improved the overall student experience by providing timely information and updates.

In addition, the development of this project has greatly contributed to the enhancement of Office of Student Affairs services, marking a significant step forward in the university's commitment to providing high-quality services to its students.

RECOMMENDATION

For further improvements of the project and for development of projects, it is highly recommended to:

- The system may include a feature that allows OSA administrators to bulk-send certificates to students who have participated in various OSA activities, such as workshops, seminars, or volunteer events. Administrators can personalize the certificate template with the student's name, activity title, date, and any other information regarding the activity.
- Integrate an interactive calendar into the web portal to show upcoming OSA events, deadlines, and important dates. Users can view event information and add events to their personal calendars, keeping them informed and organized.

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APPENDICES

Appendix A

USER MANUAL

The screenshot shows a web browser window with the title bar "OSA | Register Account" and the URL "osa-clsu.website/register.php". The page has a green header section featuring the CLSU logo (Circular seal with "CENTRAL LUZON STATE UNIVERSITY" around the top, "1907" at the bottom, and a central emblem), the text "CLSU", and "OFFICE OF STUDENT AFFAIRS". Below this, a copyright notice reads "© Copyright. 2023. Central Luzon State University. All Rights Reserved." The main content area is titled "Registration for Student" and contains the instruction "Please provide all information requested below". It includes a "Personal information" section with fields for "Student ID" (with placeholder "(Ex. Student ID 00-0000)", "Full Name", "Choose your college" (dropdown menu), "Choose your course" (dropdown menu), "Choose your gender" (dropdown menu), "Email", "Password" (text input), and "Confirm Password" (text input). There is also a checkbox for "Show Password". At the bottom are "BACK" and "REGISTER" buttons.

Figure 24: Registration for Student

To register a student account:

- The open browser then inputs “osa-clsu.website” in the URL.
- Click “Register Here” below the login page.
- Input the required information to register an account.

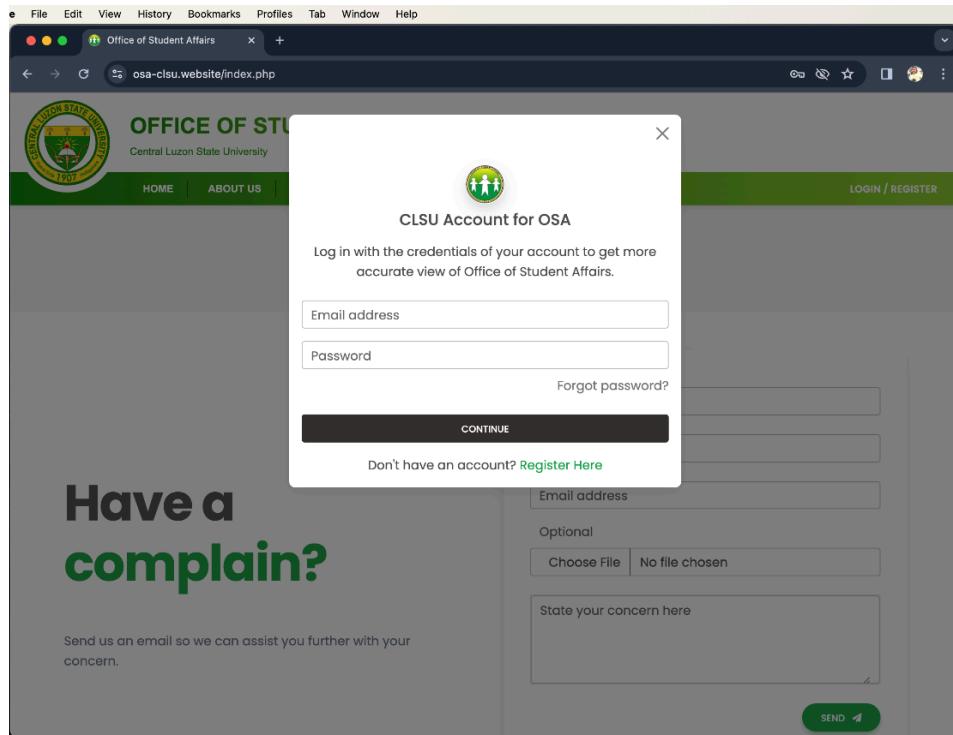


Figure 25: System Login

To access the system:

- The Open browser then type “osa-clsu. website” in the URL.
- click the Login button and input the email and password in the login form.

After logging in, user will be redirected to the homepage.

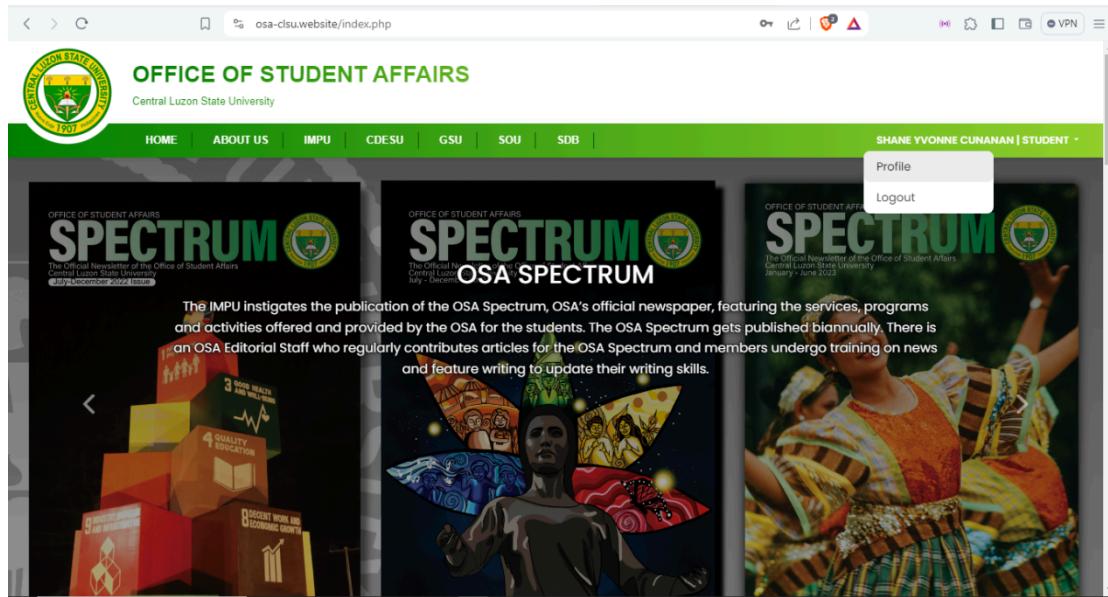


Figure 26&27: Update profile

To update the profile:

- Click the dropdown button, on the right side of the navigational tab.
- Click the 'Profile'. User then will be redirected to update profile page.

The figure consists of two vertically stacked screenshots of a web application. Both screenshots feature a dark green header bar at the top and a dark green footer bar at the bottom, both containing the Central Luzon State University (CLSU) logo and text.

Screenshot 1 (Top): Reset Password

- The title is "Reset Password".
- A sub-instruction says: "Enter the email associated with your account and we'll send an email with instructions to reset your password."
- An input field labeled "Email" is present.
- A black button labeled "SEND VERIFICATION CODE" is below the input field.
- A "Back" link is in the top right corner.

Screenshot 2 (Bottom): Create new password

- The title is "Create new password".
- A sub-instruction says: "Your new password must be different from previous used passwords."
- Two input fields are present: "Password" and "Confirm Password".
- A black button labeled "RESET PASSWORD" is below the input fields.
- A "Back" link is in the top right corner.

Figure 28&29: Forgot Password

To reset an Account password:

- On the Login modal, click “Forgot password?”
- Input CLSU email account that is registered and wait for an email.
- Click “Reset Password” in the email.
- Input the new password two times and click the ‘Reset Password’

For the Admin

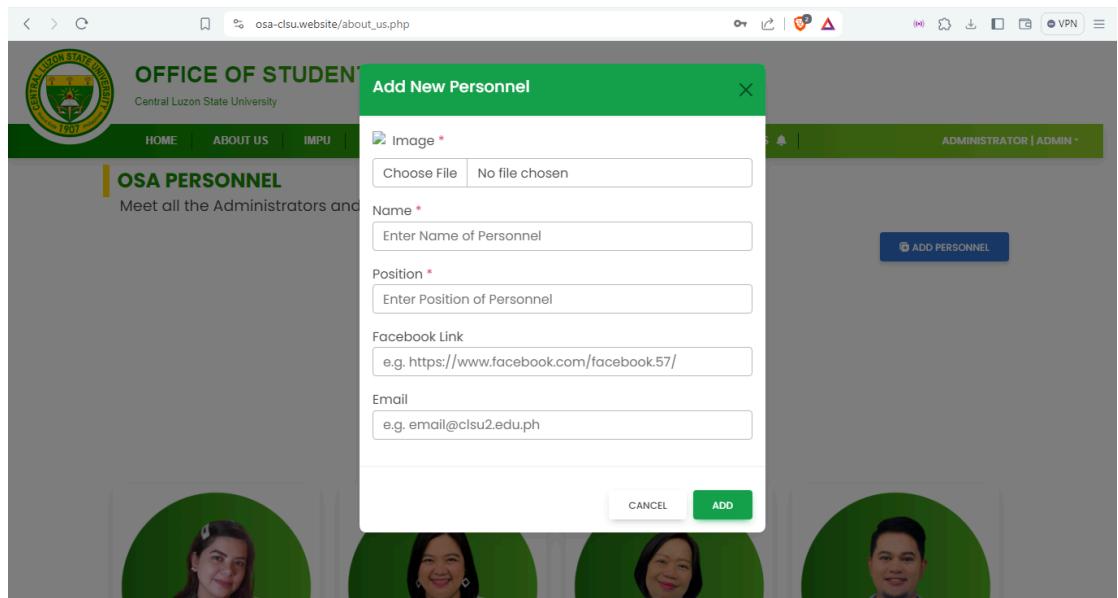
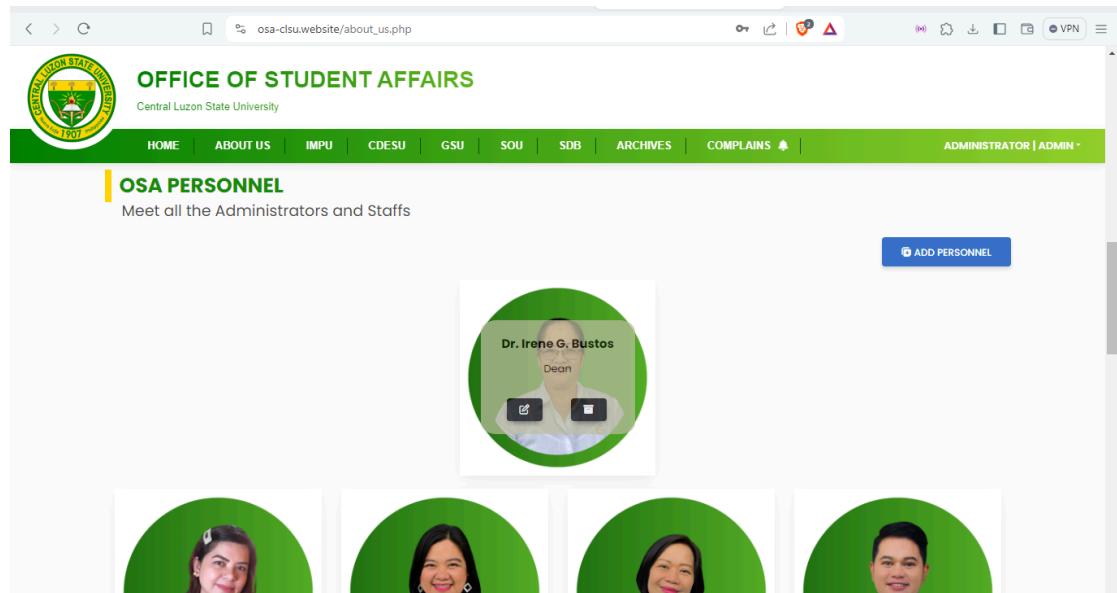


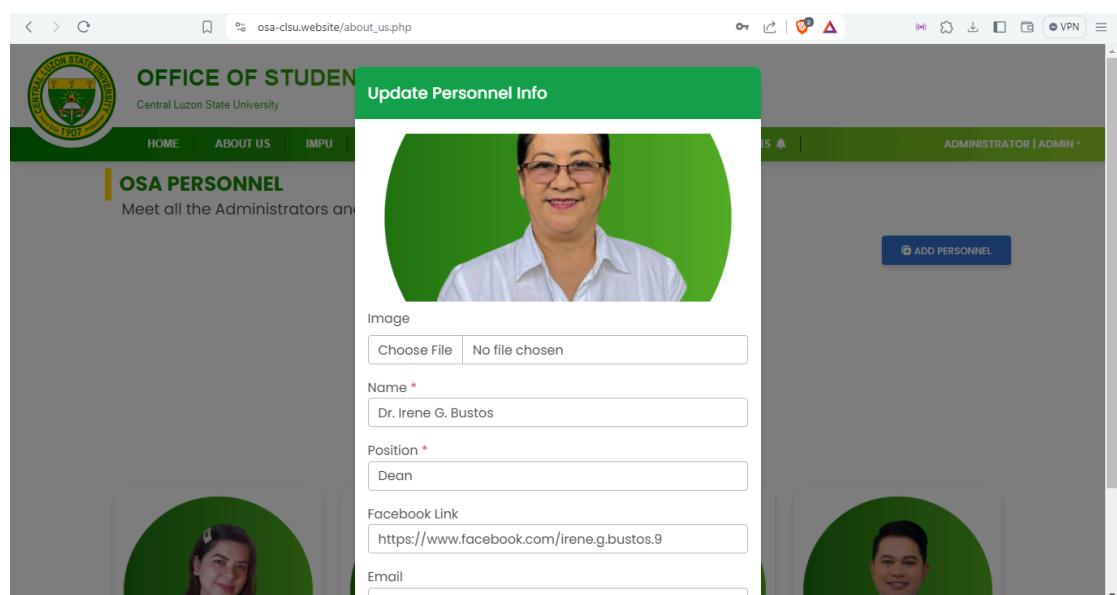
Figure 25: Adding of New Personnel

To Add New Personnel:

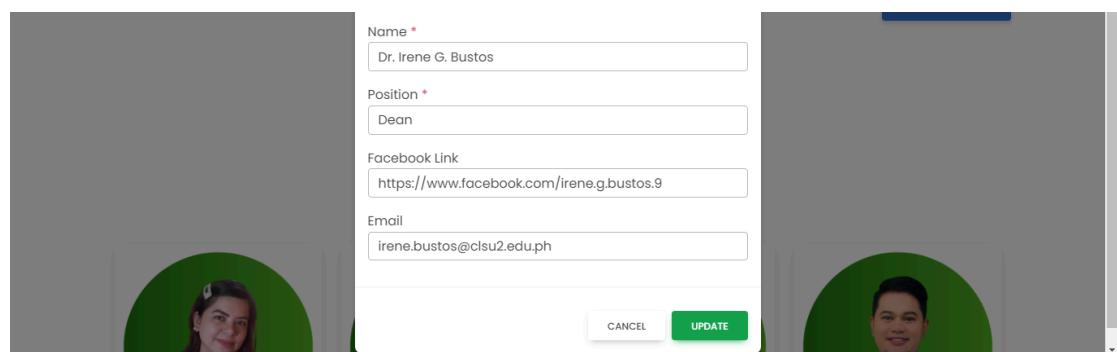
- Go to the About Us page, click the Add Personnel button.
- Fill up the Add New Personnel form.
- Click “Add”



The screenshot shows the 'OSA PERSONNEL' section of the website. It features a grid of circular profile pictures. The top row contains one large profile (Dr. Irene G. Bustos, Dean) and three smaller ones below it. A blue button labeled 'ADD PERSONNEL' is located in the top right corner.



This screenshot displays the 'Update Personnel Info' modal. It includes a preview image of Dr. Irene G. Bustos, a white shirt and glasses. Below the image are input fields for 'Name' (Dr. Irene G. Bustos), 'Position' (Dean), 'Facebook Link' (https://www.facebook.com/irene.g.bustos.9), and 'Email' (irene.bustos@clsu2.edu.ph). A 'Choose File' button is also present. The modal has a green header bar with the title 'Update Personnel Info'.



This screenshot shows the same 'Update Personnel Info' modal, but the 'UPDATE' button at the bottom right is highlighted in green. The other fields and preview image remain the same as in the previous screenshot.

Figure 26&27: Updating of Personnel Details

To update personnel:

- Hover over the image of the Personnel.
- Click the update icon.
- Fill up the form.
- Click “Update”

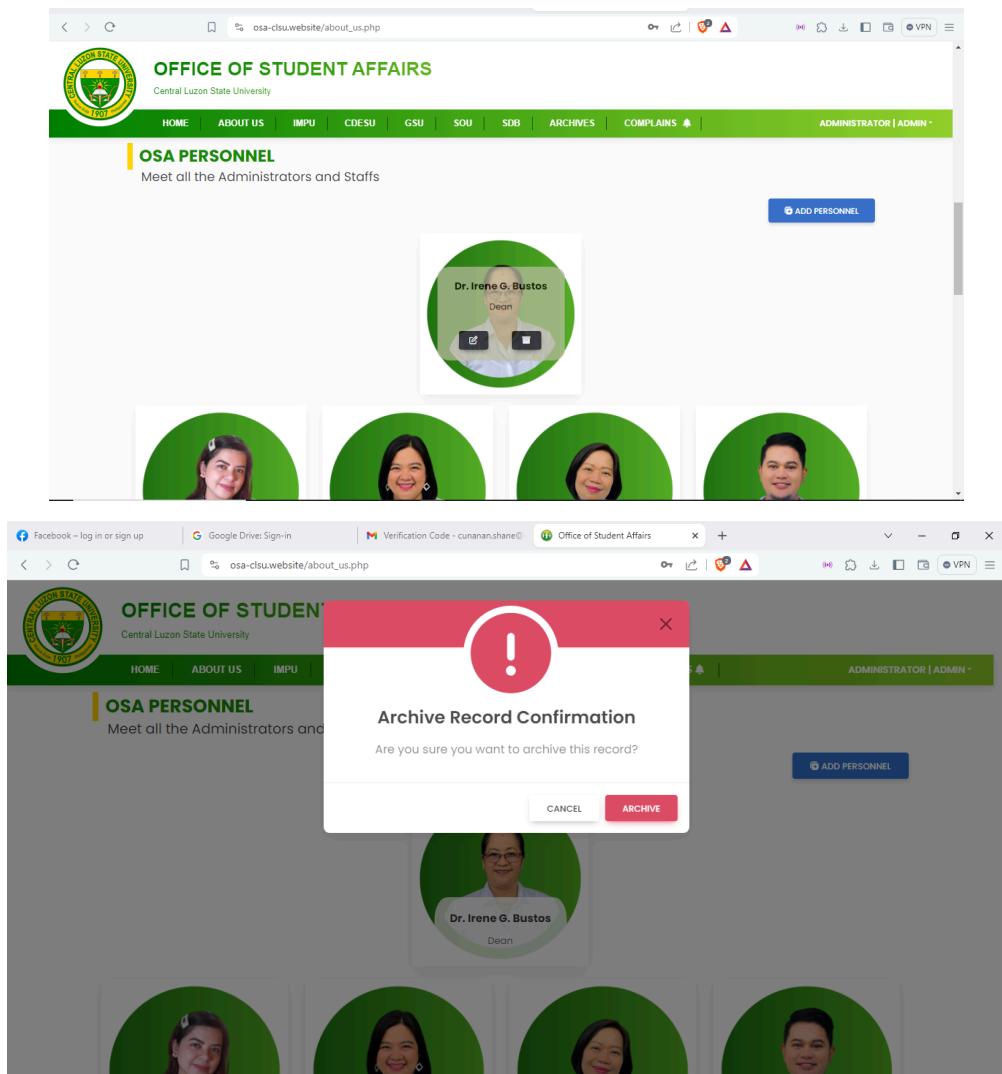


Figure 28&29: Archiving of Personnel

To update personnel:

- Hover over the image of the Personnel.
- Click the archive icon.

- Confirmation modal will appear and click ‘ARCHIVE’

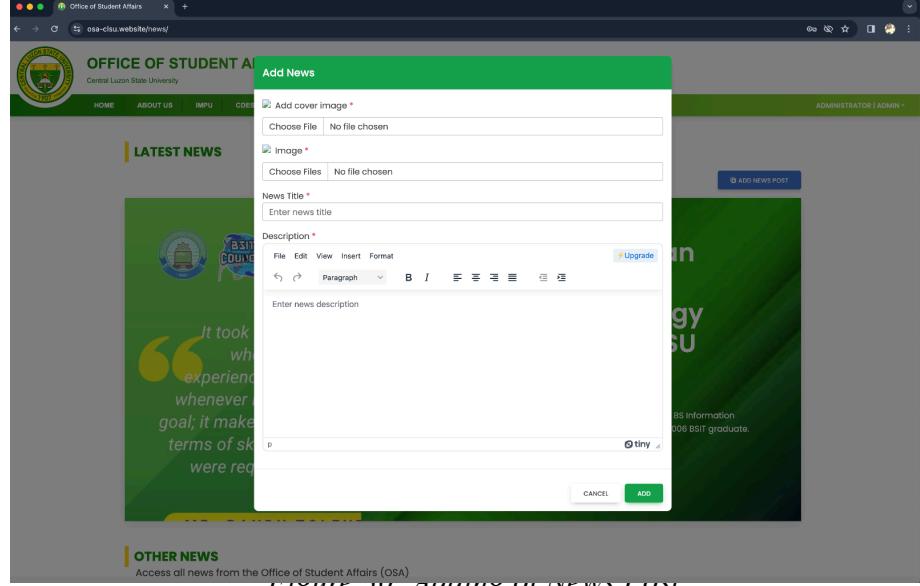


Figure 30: Adding of News Post

To Add News Post:

- Go to the Home page, click View More news.
- Click the “Add New Post” button.
- Fill up the Add News form.
- Click “Add”

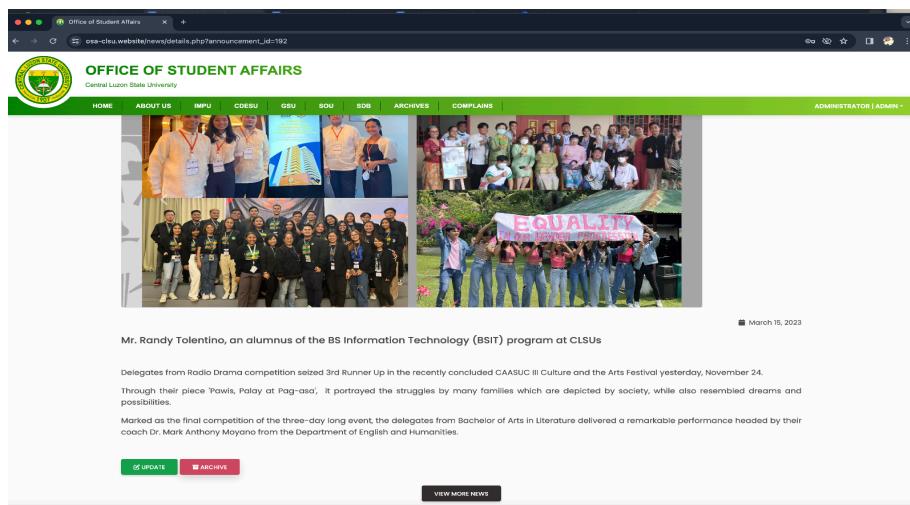


Figure 31: Updating of News Post

To Update News Post:

- Click “Update” below the news details.
- Fill up the “Update News form”
- Click “Update”

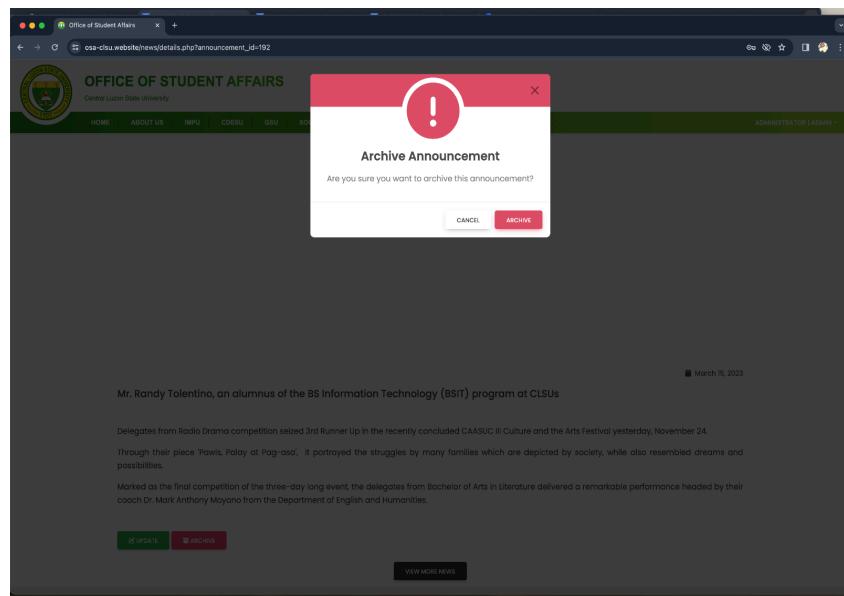


Figure 32: Archiving of News Post

To Archive News Post:

- Click “Archive” below the news details.
- Click the “Archive” button in the modal.

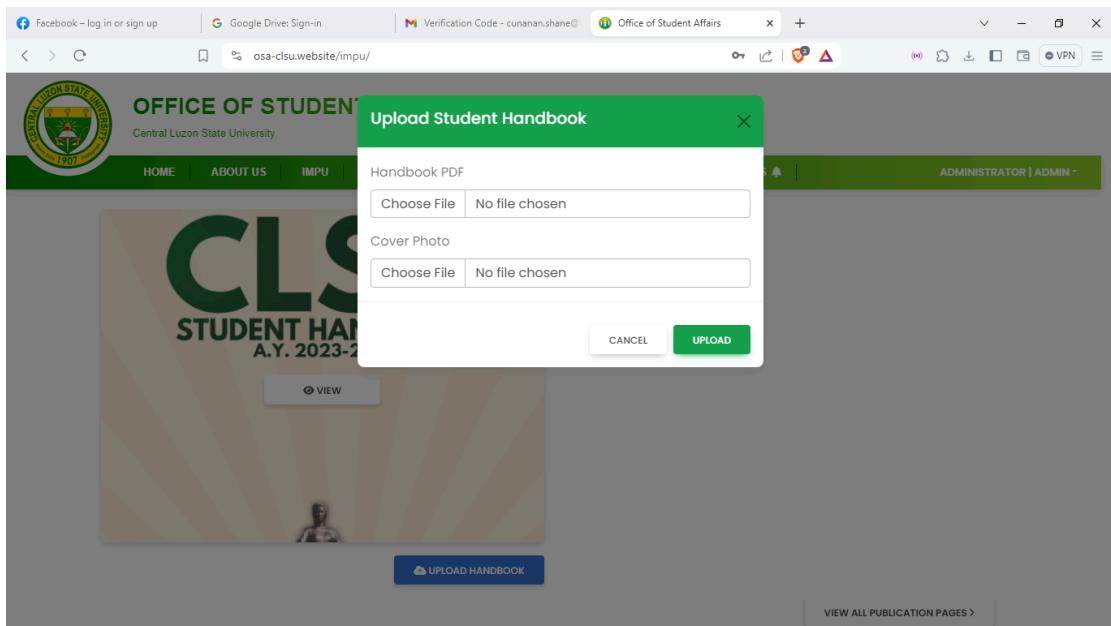


Figure 33: Uploading of Student Handbook

To Upload Student Handbook:

- Click the “Upload” button.
- Choose files to upload.
- Click the “Upload” button.

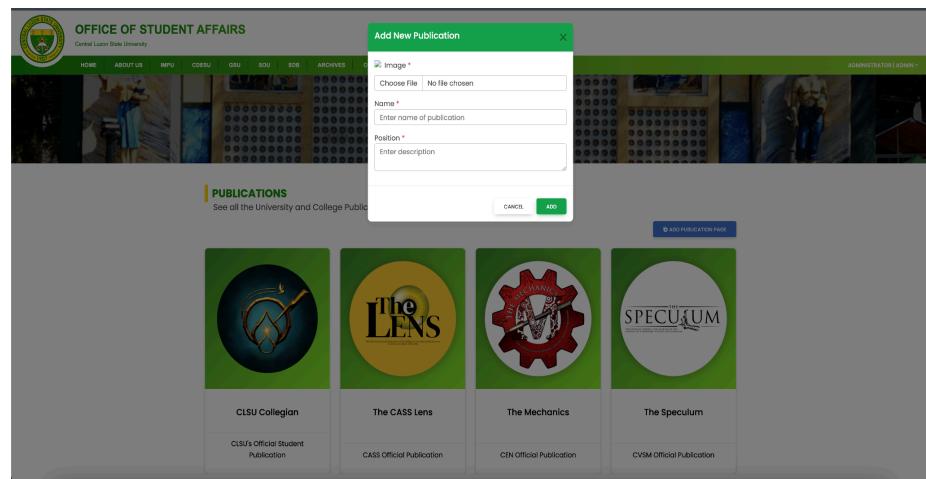


Figure 34: Adding of New Publication page

To Add New Publication Page:

- Click the “Add Publication Page” button
- Fill up the form
- Click the “ADD” button

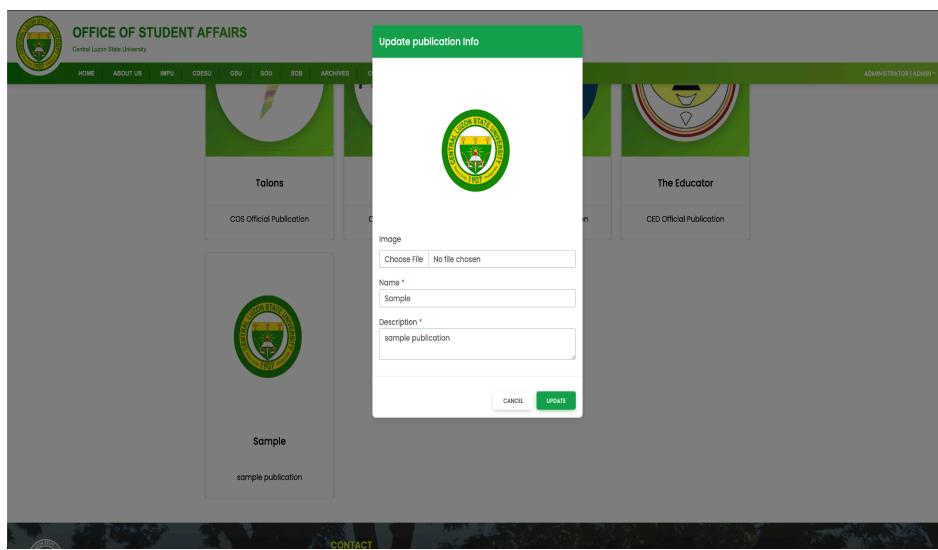
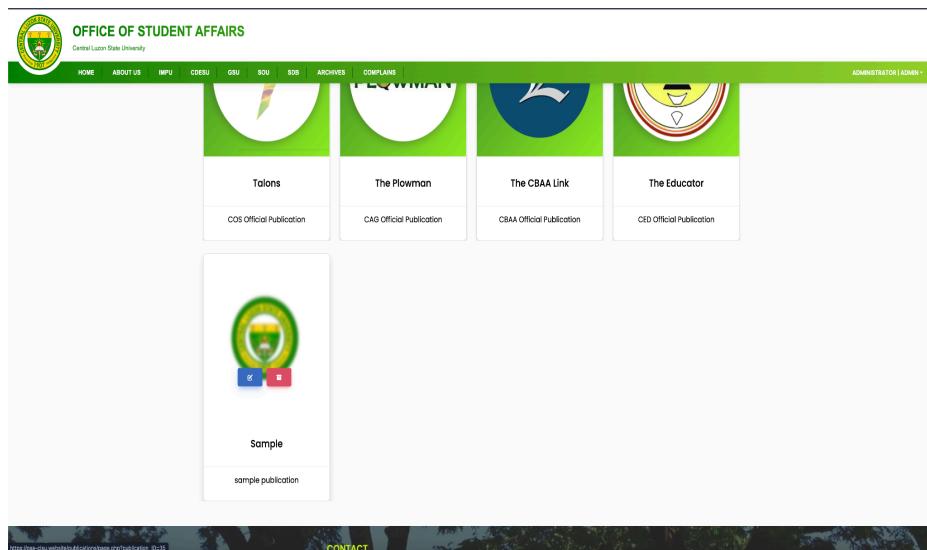


Figure 35&36: Updating of Publication page

To Update New Publication Page:

- Hover over the mage and click the edit icon
- Modal will appear and fill up the form
- Click the “UPDATE” button

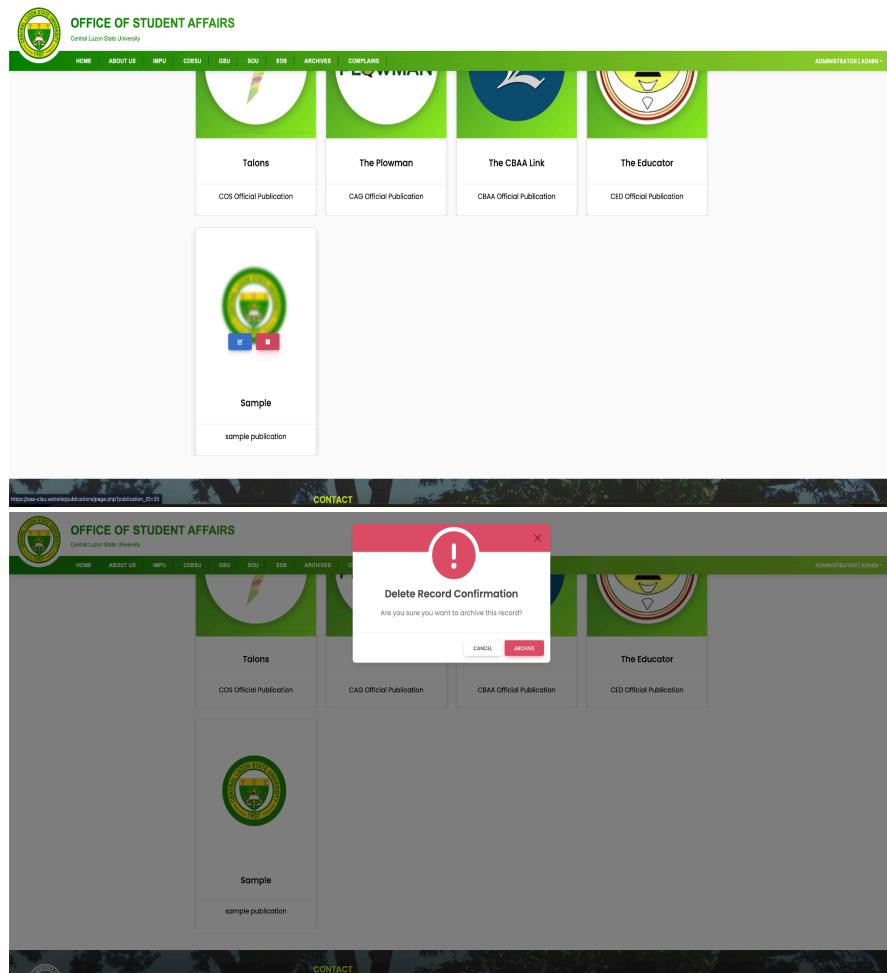


Figure 37&38: Archiving of Publication page

To Archive New Publication Page:

- Hover over the mage and click the archive icon
- Confirmation modal will appear
- Click the “Archive” button

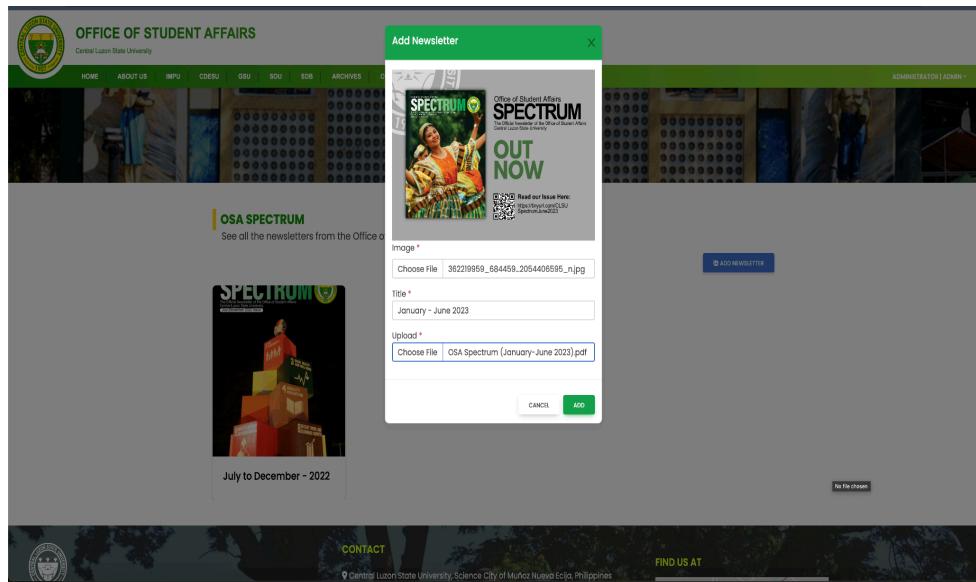


Figure 39: Adding of Spectrum Newsletter

To Add Spectrum:

- Click the “Add Newsletter” button
- Fill up the form
- Click the “ADD” button

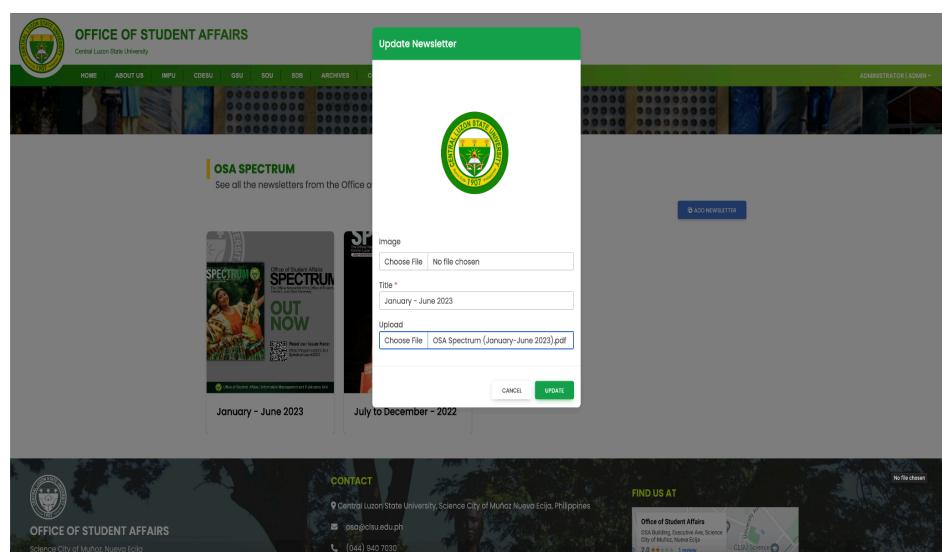
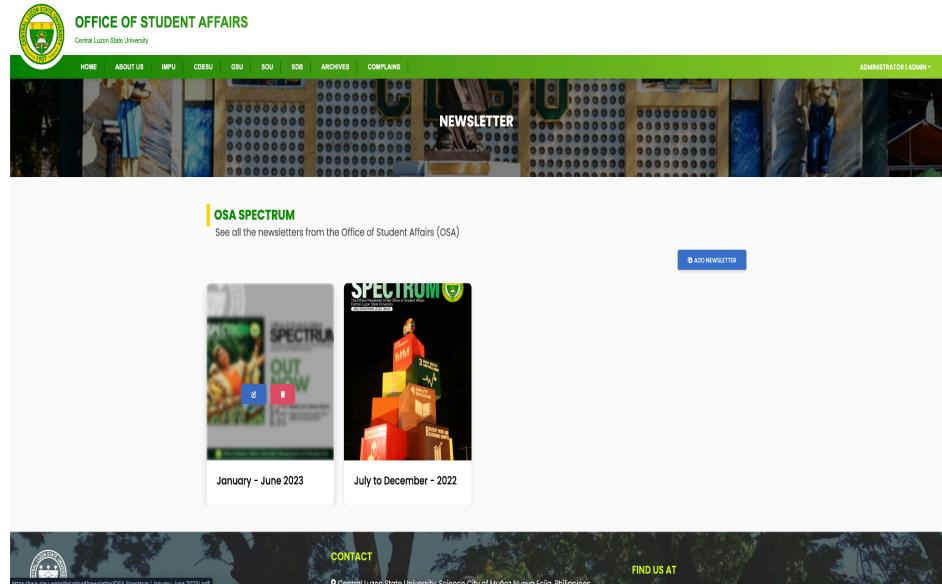


Figure 40&41: Updating of SpectrumNewsletter

To Update Spectrum:

- Hover the mouse over the image and click the edit icon
- Update the newsletter information
- Click the “UPDATE” button

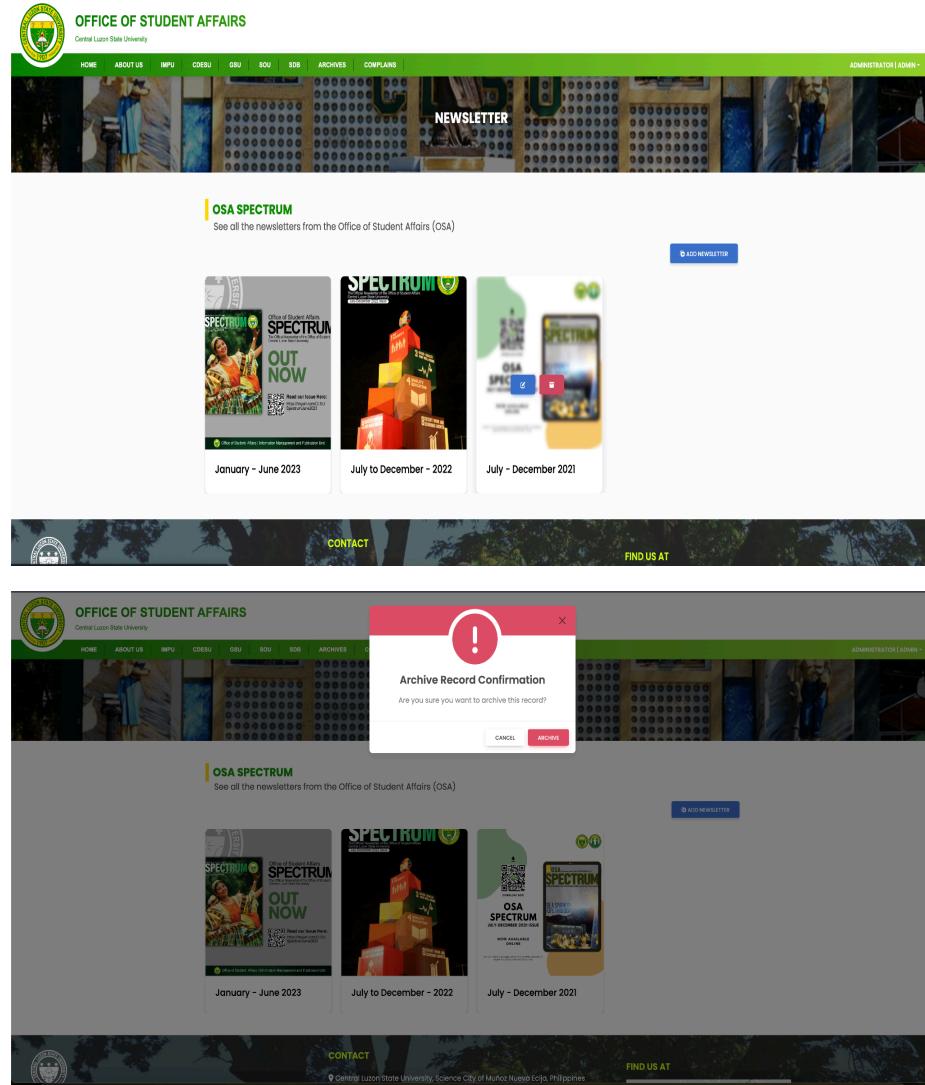


Figure 42&43: Archiving of SpectrumNewsletter

To Archive Spectrum:

- Hover the mouse over the image and click the archive icon
- Confirmation modal will appear
- Click the “Archive” button

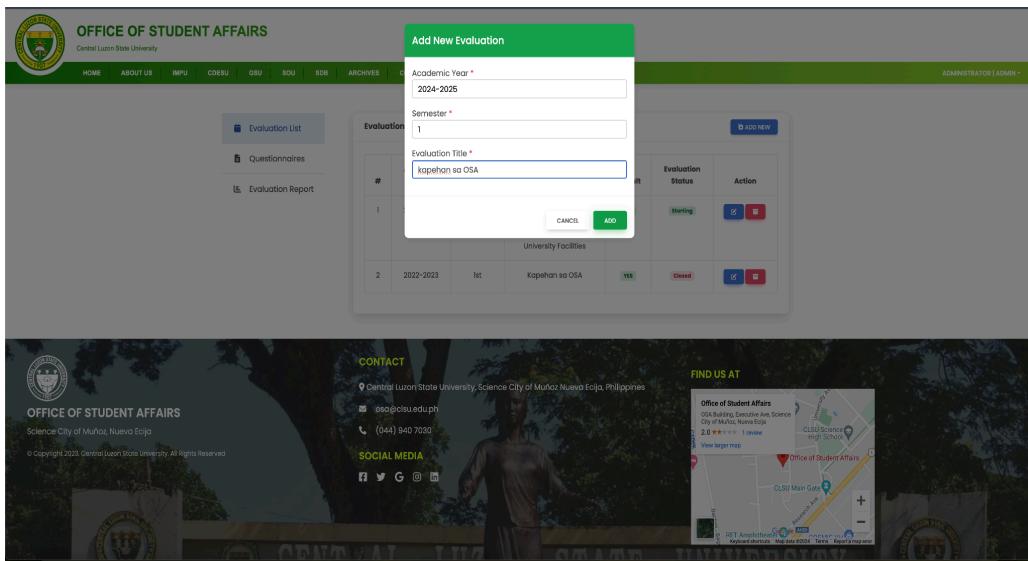


Figure 44: Adding of New Evaluation

To Add New Evaluation:

- Go to Evaluation
- Go to evaluation list page
- Click “ADD NEW” button
- Fill up the evaluation form
- Click “ADD”

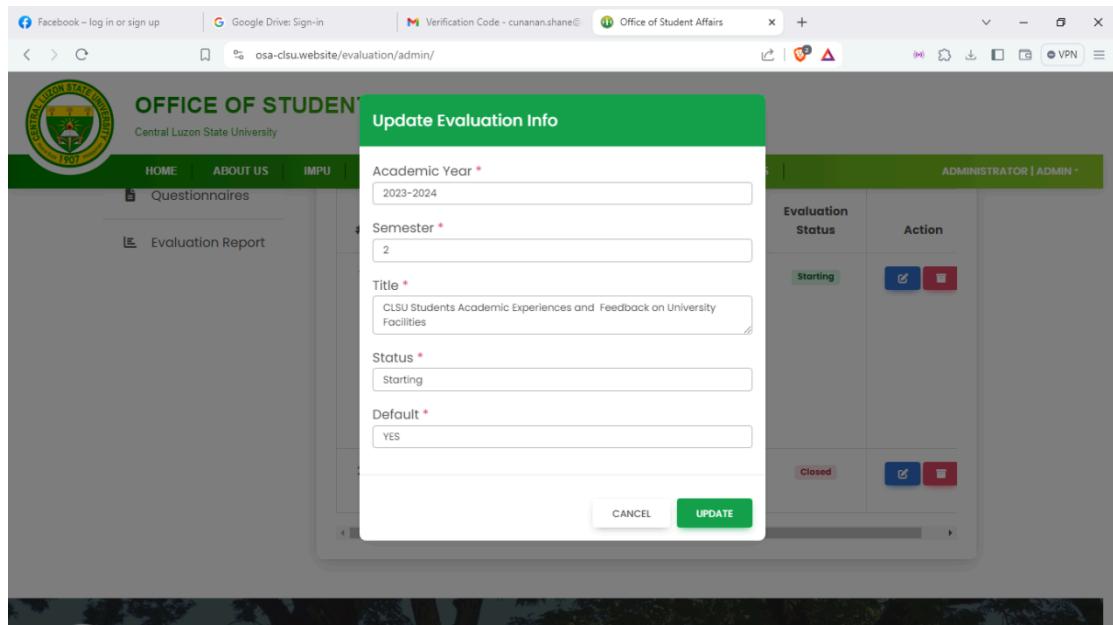


Figure 45: Updating evaluation

To Update Evaluation:

- Under evaluation list page, click the update icon
- Fill up the form for new details
- Click “UPDATE”

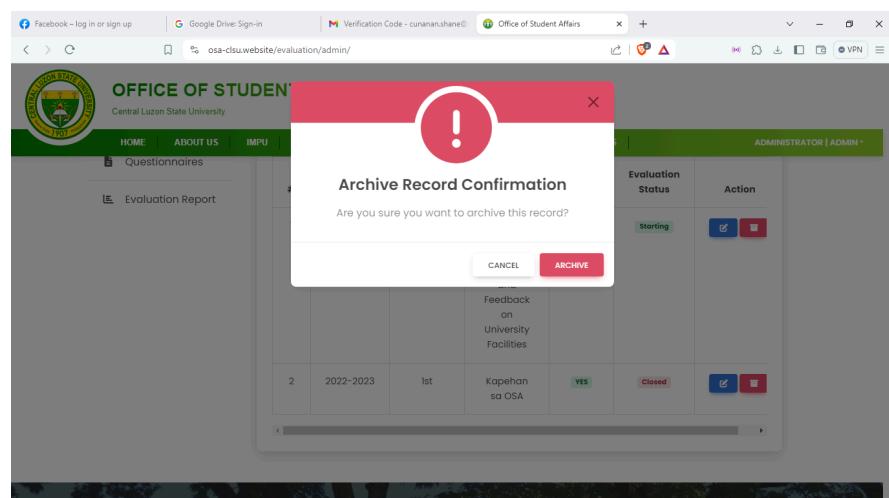


Figure 46: Archiving evaluation

To Archive Evaluation:

- Under evaluation list page, click the archive icon
- Confirmation modal will appear
- Click “ARCHIVE”

The figure consists of three screenshots of the Central Luzon State University (CLSU) Office of Student Affairs (OSA) website. The top screenshot shows the 'Manage Questionnaires' page, which lists two existing questionnaires: 'CLSU Students Academic Experiences and Feedback on University Facilities' (Academic Year 2023-2024, Semester 2nd, 44 questions) and 'Kapelon sa OSA' (Academic Year 2022-2023, Semester 1st, 4 questions). The middle screenshot shows the homepage with sections for CONTACT, SOCIAL MEDIA, and FIND US AT, along with a banner image of a statue and the university's seal. The bottom screenshot shows a modal window titled 'Add Criteria' with fields for 'Criteria Name' and 'Description', and buttons for 'CANCEL' and 'ADD'.

Figure 47: Add Criteria

To add criteria:

- Under Questionnaires page, click the ‘MANAGE’ button
- On the left column, click the ‘+’ icon and fill up the form.
- Click add.

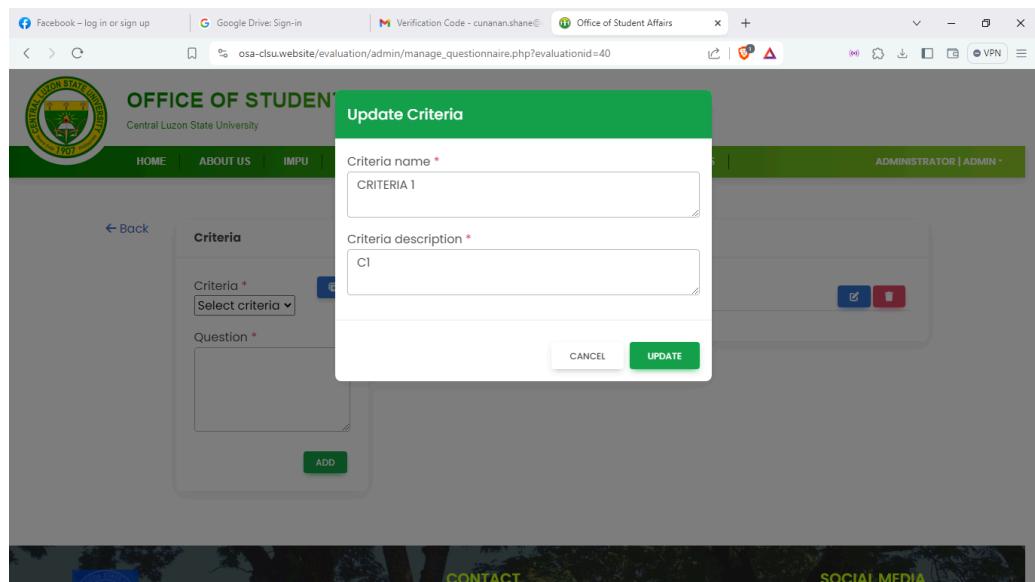


Figure 48: Update Criteria

To Update criteria:

- On the right column, click the update icon and fill up the form.
- Click update

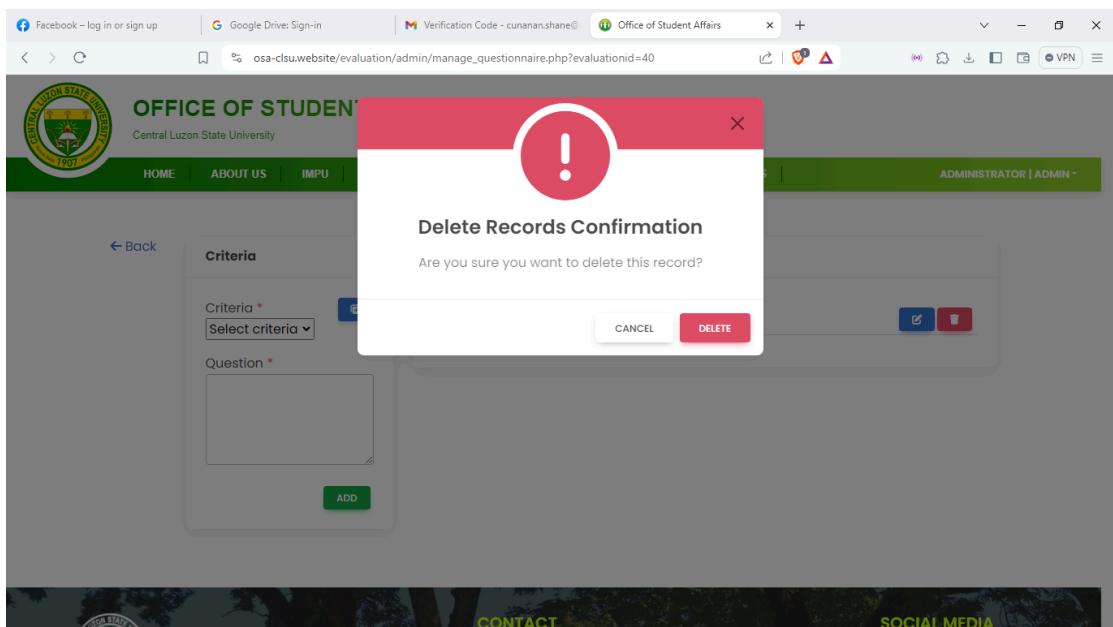


Figure 49: Delete Criteria

To Delete criteria:

- On the right column, click the delete icon
- Confirmation modal will appear and click delete.

The screenshot shows a web browser window with the following details:

- Address Bar:** osa-clsu.website/evaluation/admin/manage_questionnaire.php?evaluationid=40
- Header:** OFFICE OF STUDENT AFFAIRS, Central Luzon State University
- Navigation:** HOME, ABOUT US, IMPU, CDESU, GSU, SOU, SDB, ARCHIVES, COMPLAINS, ADMINISTRATOR | ADMIN
- Left Sidebar (Criteria):** A dropdown menu labeled "Criteria" with options "Select criteria" and "CRITERIA 1". Below it is a text input field and a green "ADD" button.
- Main Content Area:** Evaluation Questionnaire for Kapehan sa OSA. It contains a section for "CRITERIA 1" with a red "Delete" button.
- Bottom Navigation:** CONTACT, SOCIAL MEDIA

Figure 50: Add Question

- On the left column, select a criteria first
- Fill up the form below and click add

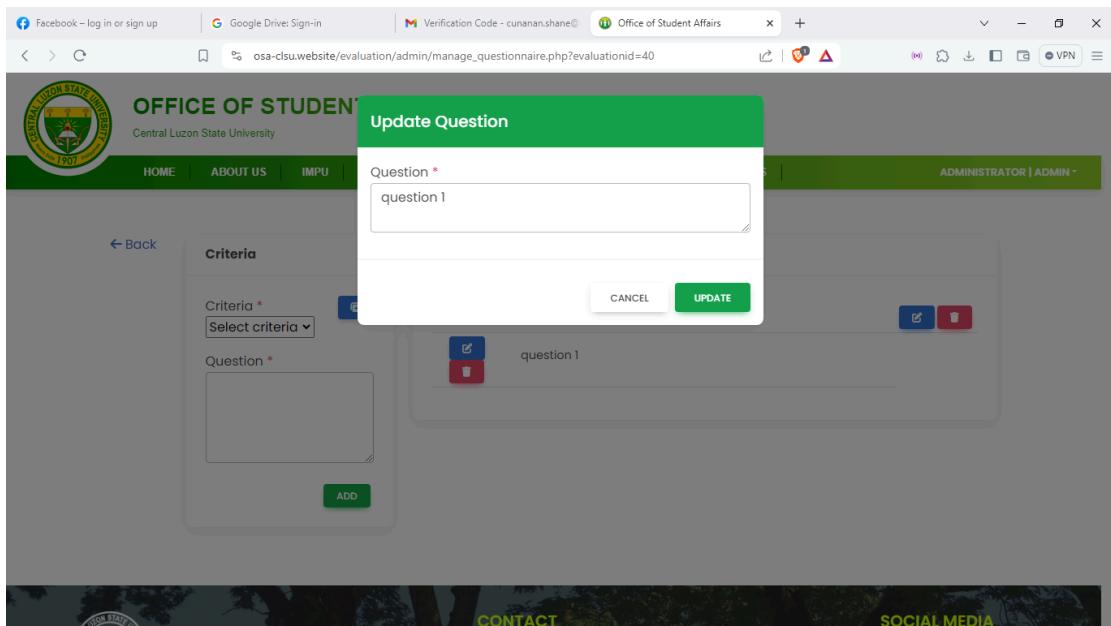


Figure 51: Update Question

- Click the update icon beside the question
- Update the question and click update

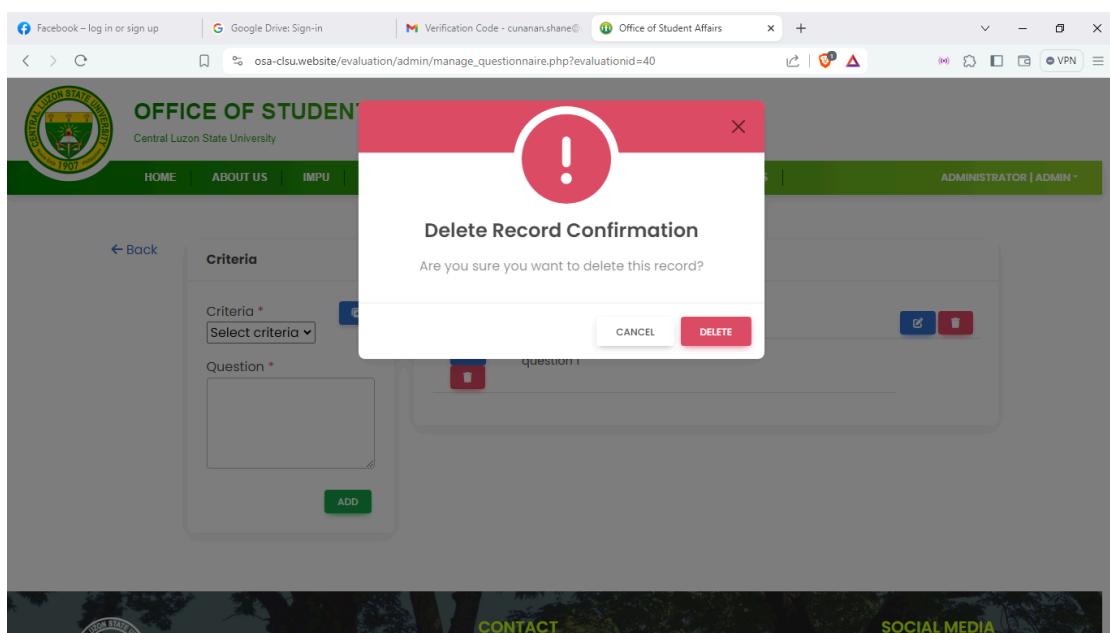


Figure 52: Delete Question

To delete question:

- Click the delete icon beside the question
- Confirmation modal will appear and click delete

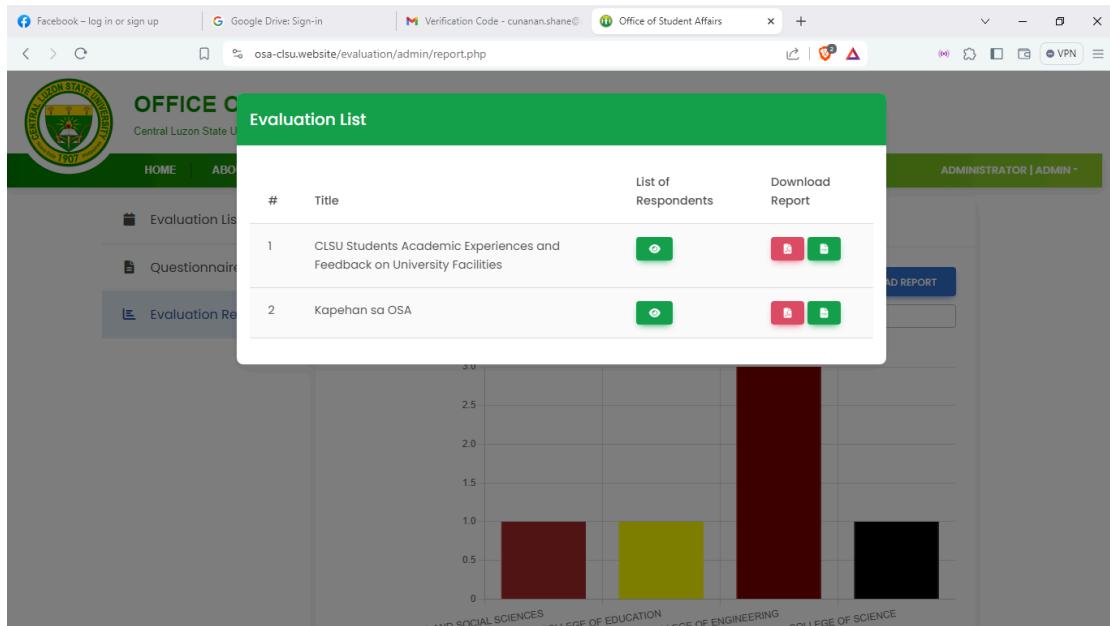


Figure 53: Generate Report

To generate report:

- Under Evaluation Report page, click the Download Report button
- To download the list of respondents, click the eye icon.
- To download summary report, click the pdf and excel icons.

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SOCIAL MEDIA

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#	Cover	Title	Description	Action
1		Mr. Randy Tolentino, an alumnus...	This week, we are featuring Mr. Randy Tolentino, an alumnus of the BS Information Technology (BSI...)	View
2		NEWS...	ewrwetewytre5	View

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1		Mr. Randy Tolentino, an alumnus...	This week, we are featuring Mr. Randy Tolentino, an alumnus of the BS Information Technology (BSI...)	View
2		NEWS...	ewrwetewytre5	View

Showing 1 to 2 of 2 entries

Figure 54,55,56: Unarchive

To unarchive data:

- Under Archives tab, select options to archive.
- Click the unarchive icon and modal confirmation will appear.
- Click unarchive.

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Academic Year: 2023-2024, 2nd semester

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AY: 2023-2024, 2nd semester

CLSU Students Academic Experiences and Feedback on University Facilities

The following statements pertain to your satisfaction on the quality of teaching, learning environment and student services provided/offered by CLSU. Please choose and pick the appropriate response.

	Very Dissatisfied (1)	Dissatisfied (2)	Neutral (3)	Satisfied (4)	Very Satisfied (5)
The professors/teachers of CLSU are very effective.	<input type="radio"/>				
The professors/teachers of CLSU are very efficient.	<input type="radio"/>				
The professors/teachers of CLSU are very much involved in the learning development of the students.	<input type="radio"/>				
The courses/classes/subjects taught to me are effective.	<input type="radio"/>				

Figure 57&58: Answer Evaluation

To Answer Evaluation:

- Under IMPU tab, scroll down to Research and Evaluation section.
- Click the Evaluate now and fill all the radio buttons and click submit at the end.

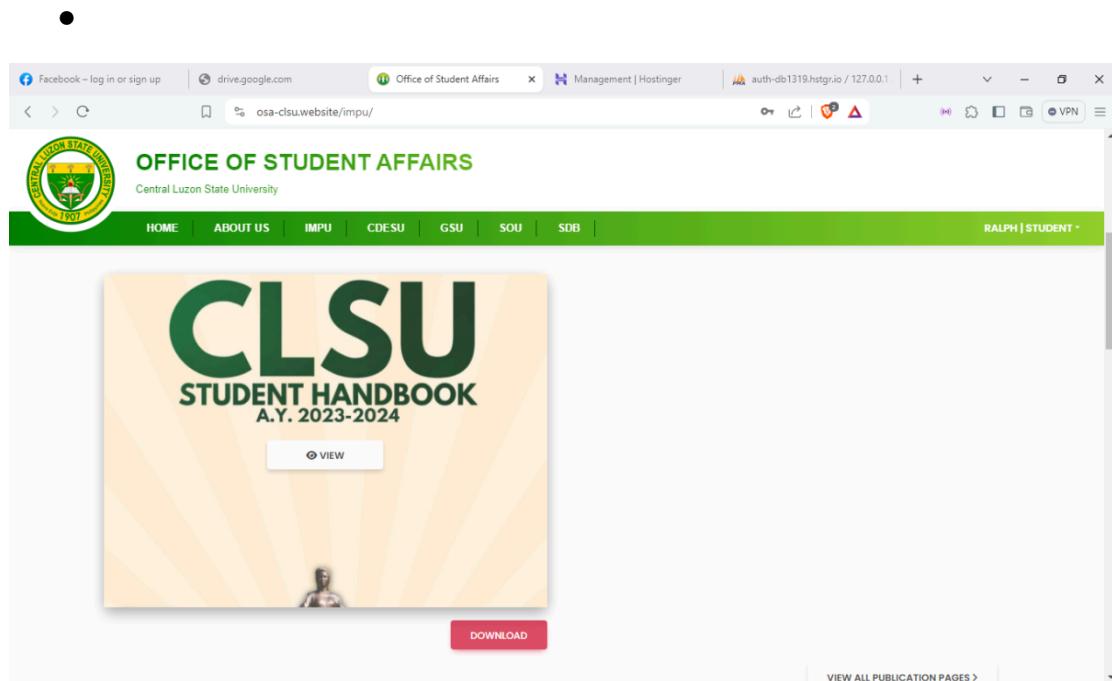


Figure 59: Download Student Handbook

- Navigate to IMPU tab, under Publication section, click download button.

APPENDICES

Appendix B

TEST CASE

Table 5. Test Case 1. Login

Test Title	User login using valid email and password		
Test Case No:	1	Test Executed By:	
Test Priority (Low/Medium/High):	High		Lyka Ann Casita
Module Name	System Login	Test Evaluation Date:	
Description:	Testing the user login		03-06-24
Pre-condition	Input correct email and password (Registered user)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the login button		Login form will appear.	Passed
2	Enter username and password	Non-registered User Account		Passed
3	Click “continue”		Users will not login into the system.	Passed
4	Click the login button		Login form will appear.	Passed
5	Enter username and password	Registered user account		Passed
6	Click “continue”		Users will login into the system.	Passed
Post-condition: The user will logged on into the system				

Table 6. Test Case 2. Forgot Password

Test Title	Forgot Password		
Test Case No:	2	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	Forgot Password	Test Evaluation Date:	03-06-24
Description:	Testing the user Forgot password		
Pre-condition	Input correct email (Registered)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1.	Click Login button		Login form modal will pop up	Passed
2.	Click forgot password		User will be redirected to Reset password page	Passed
3.	Enter email and click the “Send Verification Code” Button	Non-registered user account	An error message stating ‘We can't find a user associated with that email address.’ will display.	Passed
4.	Click Login button		Login form modal will pop up	Passed
5.	Click forgot password		User will be redirected to Reset password page	Passed

6.	Enter email and click the “Send Verification Code” Button	Registered user account	User will receive an email containing the password reset link.	Passed
7.	Enter new password Two times		Successfully reset password for the account	Passed
Post-condition: Successfully updated the password.				

Table 7. Test Case 3. Viewing of personnel

Test Title	Viewing of OSA Personnel		
Test Case No:	3	Test Executed By: Lyka Ann Casita	Test Evaluation Date: 03-06-24
Test Priority (Low/Medium/High):	Medium		
Module Name	Personnel		
Description:	Testing of the view OSA Personnel		
Pre-condition	Users must view the OSA Personnel.		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “About Us” Navigational Button		User will be redirected to About Us page	Passed
Post-condition: Successfully shows the OSA Personnel.				

Table 8. Test Case 4. Adding of OSA Personnel

Test Title	Adding of OSA Personnel		
Test Case No:	4	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	Personnel	Test Evaluation Date:	
Description:	Testing of the adding of OSA personnel	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “About Us” Navigational button		User will be redirected to About Us page	Passed
2	Click “Add Personnel” button		Modal form will appear	Passed
3.	Input personnel information	Personnel Info	Filled personnel form	Passed
4	Click the “Add” button		New Personnel will be added.	Passed
Post-condition: Successfully added personnel.				

Table 9. Test Case 5. Updating of OSA Personnel

Test Title	Updating of OSA Personnel		
Test Case No:	5	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	Personnel	Test Evaluation Date:	
Description:	Testing of Update OSA personnel	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “About Us” Navigational Button		User will be redirected to About Us page	Passed
2	Hover the cursor to the image of the personnel. Click the “Update” icon		Update form will appear with pre-filled fields.	Passed
3.	Input modified personnel information	Personne l Info	Filled personnel form	Passed
4	Click the “Update” button		Personnel Information will be updated.	Passed
Post-condition: Successfully updated personnel details.				

Table 10. Test Case 6. Archiving of OSA Personnel

Test Title	Archiving of OSA Personnel		
Test Case No:	6	Test Executed By:	
Test Priority (Low/Medium/High):	Medium	Lyka Ann Casita	
Module Name	Personnel	Test Evaluation Date:	
Description:	Testing of Archiving of OSA personnel	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “About Us” Navigational Button		User will be redirected to About Us page	Passed
2	Hover the cursor to the image of the personnel. Click the “Archive” icon		Archive confirmation will appear	Passed
3	Click the “Archive” button		The personnel will be archived	Passed
Post-condition: Successfully archived the personnel and will be moved to the ‘Archives’ navigational tab.				

Table 11. Test Case 7. Unarchiving of OSA Personnel

Test Title	Archiving of OSA Personnel	
Test Case No:	7	Test Executed By:
Test Priority (Low/Medium/High):	Medium	Lyka Ann Casita
Module Name	Personnel	Test Evaluation Date:
Description:	Testing of Unarchiving OSA personnel	03-06-24
Pre-condition	Log in an account (Admin)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigationa l Button		User will be redirected to Archives page	Passed
2	Select ‘Personnel’ on the select option		Table will appear containing the archived personnel	Passed
3	Click the “Unarchive ” icon	Archived Personnel	The personnel will be unarchived	Passed
Post-condition: Successfully unarchived the personnel.				

Table 12. Test Case 8. Viewing of News

Test Title	Viewing of News		
Test Case No:	8	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	News	Test Evaluation Date:	
Description:	Testing of the viewing of News	03-06-24	
Pre-condition	Users must view the news details.		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Home” Navigational Button		User will be redirected to home page	Passed
2	Click the ‘Read more...’ of the news		User will be redirected to another page containing news details	Passed
3.	Click the ‘View More News’ button under the news		User will be redirected to another page containing other news.	Passed
Post-condition: Successfully viewed the news details.				

Table 13. Test Case 9. Adding of News

Test Title	Adding of News		
Test Case No:	9	Test Executed By:	
Test Priority (Low/Medium/High):	Medium	Lyka Ann Casita	
Module Name	News	Test Evaluation Date:	
Description:	Testing of the Adding News	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Navigate to the homepage and click the ‘View More News’. After redirection, click “Add News Post” button		Modal form will appear	Passed
2	Input News information	News information	Filled news form	Passed
3	Click the “Add” button		New news will be added	Passed
Post-condition: Successfully added news.				

Table 14. Test Case 10. Updating of News

Test Title	Updating of News		
Test Case No:	10	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	News	Test Evaluation Date:	
Description:	Testing of the Updating News	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the news		User will be redirected to News Details page	Passed
2.	Under the details of the news, click the “Update” button		Modal form will appear with pre-filled fields	Passed
3.	Input the updated news information	News updated information	Filled news form	Passed
4.	Click “Update” Button		News details will be updated	Passed
Post-condition: Successfully updated news.				

Table 15. Test Case 11. Archiving of News

Test Title	Archiving of News		
Test Case No:	11	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	News	Test Evaluation Date:	03-06-24
Description:	Testing of the Archiving News		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the news		User will be redirected to News Details page	Passed
2	Under the details of the news, click the “Archive” button		The Archive confirmation will appear	Passed
3	Click “Archive” button		The News will be archived	Passed
Post-condition: Successfully archived the news and will be moved to the ‘Archives’ tab.				

Table 16. Test Case 12. Unarchiving of News

Test Title	Unarchiving of News		
Test Case No:	12	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High):	Medium		
Module Name	News	Test Evaluation Date:	
Description:	Testing of the Unarchiving News	03-06-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigation al Button		User will be redirected to Archives page	Passed
2	Select ‘News’ on the select option		Table will appear containing the archived news	Passed
3	Click the “Unarchiv e” icon	Archived News	The news will be unarchived	Passed
Post-condition: Successfully unarchived the news.				

Table 17. Test Case 13. Viewing of Student Handbook

Test Title	Viewing of Student Handbook		
Test Case No:	13	Test Executed By:	Lyka Ann Casita
Test Priority (Low/Medium/High) :	Medium		
Module Name	Handbook	Test Evaluation Date:	
Description:	Testing of the view Student Handbook	03-06-24	
Pre-condition	Log in an account (Admin and Registered user)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigational Button		User will be redirected to IMPU page	Passed
2	Click “View” Button in Student Handbook under Publications section		New tab will be opened containing the handbook details	Passed
Post-condition: Successfully viewed the student handbook.				

Table 18. Test Case 14. Uploading of Student Handbook

Test Title	Uploading of Student Handbook		
Test Case No:	14	Test Executed By: Lyka Ann Casita	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Handbook	Test Evaluation Date: 03-06-24	
Description:	Testing of Upload Student Handbook		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigational button		User will be redirected to IMPU page	Passed
2	Click “Upload Handbook” Button under Publications section		Modal will appear	Passed
3	Fill student handbook form	Student handbook details	Filled form	Passed
4	Click “Upload” button		Student Handbook will be uploaded successfully	Passed
Post-condition: Successfully uploaded the handbook.				

Table 19. Test Case 15. Downloading of Student Handbook

Test Title	Downloading Student Handbook	
Test Case No:	15	Test Executed By: Lyka Ann Casita
Test Priority (Low/Medium/High) :	Medium	
Module Name	Handbook	Test Evaluation Date: 03-06-24
Description:	Testing of Downloadin g Student Handbook	
Pre-condition	Log in an account (Registered User)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigationa l Button		User will be redirected to IMPU page	Passed
2	Click “Download Handbook” button under Publications section		Student Handbook will be Downloaded	Passed
Post-condition: Successfully downloaded the student handbook				

Table 20. Test Case 16. Viewing of Publication Pages

Test Title	Viewing of Publication Page		
Test Case No:	16	Test Executed By:	Lyka Ann C. Casita
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Page	Test Evaluation Date:	03-06-24
Description:	Testing of the view Publication Pages		
Pre-condition	User must view all publication pages.		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigational Button		User will be redirected to IMPU page	Passed
2	Click “View all publication pages” under Publications section		User will view all publication pages	Passed
Post-condition: Successfully viewed Publication Pages.				

Table 21. Test Case 17. Adding of Publication Page

Test Title	Adding of Publication Page				
Test Case No:	17	Test Executed By: Lyka Ann C. Casita			
Test Priority (Low/Medium/High) :	Medium				
Module Name	Publication Page	Test Evaluation Date: 03-06-24			
Description:	Testing of Adding Publication Page				
Pre-condition	Log in an account (Admin)				

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigational Button		User will be redirected to Publication page	Passed
2.	Click “View All Publication Pages” under Publications section		User will view all publication pages	Passed
3	Click “Add Publication Page” button		Modal form will appear	Passed
4	Input Publication Page Information	Publication Page Information	Filled publication page form	Passed
5	Click “Add” button		New publication page will be added	Passed
Post-condition: Successfully added a new Publication Page.				

Table 22. Test Case 18. Updating of Publication Page

Test Title	Adding of Publication Page	
Test Case No:	18	Test Executed By: Lyka Ann C. casita
Test Priority (Low/Medium/High) :	Medium	
Module Name	Publication Page	Test Evaluation Date: 03-06-24
Description:	Testing of Updating Publication Page	
Pre-condition	Log in an account (Admin)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Hover over the created publication page.		The update and archive icons button will appear	Passed
2	Click the “Update” icon button		Modal will appear with pre-filled form	Passed
3	Input new Publication Page Information	New Publication Page Information	Filled Publication Page form	Passed
4	Click “Update” button		Publication Page information will be updated.	Passed
Post-condition: Successfully updated Publication Page.				

Table 23. Test Case 19. Archiving of Publication Page

Test Title	Archiving of Publication Page		
Test Case No:	19	Test Executed By:	Lyka Ann C. Casita
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Page	Test Evaluation Date:	03-06-24
Description:	Testing of Archiving Publication Page		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Hover over the created publication page.		The update and archive icons button will appear	Passed
2	Click the “Archive” icon button		The Archive confirmation will appear	Passed
3	Click “Archive” button		Publication Page will be archived.	Passed
Post-condition: Successfully archived the publication page and will be moved to the ‘Archives’ tab.				

Table 24. Test Case 20. Unarchiving of Publication Page

Test Title	Unarchiving of Publication Page		
Test Case No:	20	Test Executed By:	Lyka Ann C. Casita
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Page	Test Evaluation Date:	03-06-24
Description:	Testing of Unarchive Publication Page		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigationa l Button		User will be redirected to Archives page	Passed
2	Select ‘Publication Page’ on the select option		Table will appear containing the archived publication page	Passed
3	Click the “Unarchive” icon	Archi ved Public ation Page	The publication page will be unarchived	Passed
Post-condition: Successfully unarchiving the publication page.				

Table 25. Test Case 21. Viewing of Publication Posts

Test Title	Adding of Publication Page		
Test Case No:	21	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Post	Test Evaluation Date: 03-07-24	
Description:	Testing of Viewing Publication Page		
Pre-condition	User must view the publication posts.		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the Publication Page		User will view all publication posts of the publication page	Passed
2	Click the publication post		User will view the details of publication post	Passed
Post-condition: Successfully viewed publication posts.				

Table 26. Test Case 22. Adding of Publication Posts

Test Title	Adding of Publication Posts		
Test Case No:	22	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Posts	Test Evaluation Date: 03-07-24	
Description:	Testing of Adding Publication Posts		
Pre-condition	Log in an account (Admin) and there must be Publication Page record in the system		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the publication page		User will be redirected to another page containing publication posts	Passed
2	Click “Add Post” button		Modal form will appear	Passed
3	Input Publication News Information	Publication News Information	Filled publication post form	Passed
4	Click “Add” button		New publication post will be added	Passed
Post-condition: Successfully added a publication post.				

Table 27. Test Case 23. Updating of Publication Posts

Test Title	Updating of Publication Posts		
Test Case No:	23	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Posts	Test Evaluation Date: 03-07-24	
Description:	Testing of Updating Publication Posts		
Pre-condition	Log in an account (Admin) and there must be Publication Page record in the system		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	View the publication post		User will view the details of publication post	Passed
2	Click the “Update” button under the details		Modal form will appear with pre-filled fields	Passed
3	Input new Publication Post Information	New Publication Post Information	Filled publication post form	Passed
4	Click “Update” button		The publication post will be updated	Passed
Post-condition: The updated news will be able to view inside the created publication pages				

Table 28. Test Case 24. Archiving of Publication Posts

Test Title	Archiving of Publication News		
Test Case No:	24	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Publication Interface	Test Evaluation Date: 03-07-24	
Description:	Testing of Archiving Publication News		
Pre-condition	Log in an account (Admin) and there must be a Publication Page record in the system.		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	View the publication post		User will view the details of publication posts	Passed
2	Click the “Archive” button under the details	Publication post data	The Archive confirmation will appear	Passed
3	Click “Archive” button		The Publication post will be archived	Passed
Post-condition: Successfully archived the publication page and will be moved to the ‘Archives’ tab.				

Table 29. Test Case 25. Unarchiving of Publication Posts

Test Title	Unarchiving of Publication Posts		
Test Case No:	25	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	Medium		
Module Name	Archives Interface	Test Evaluation Date: 03-07-24T	
Description:	Testing of Unarchive Publication Posts		
Pre-condition	Log in an account (Admin) and there must be Publication Page record in the system		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigation al Button		User will be redirected to Archives page	Passed
2	Select ‘Publication Posts’ on the select option		Table will appear containing the archived publication posts	Passed
3	Click the “Unarchive ” icon	Archived Publication post	The publication post will be unarchived	Passed
Post-condition: Successfully unarchiving the publication post.				

Table 30. Test Case 26. Viewing of Spectrum Newsletter

Test Title	Viewing of Spectrum Newsletter		
Test Case No:	26	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High):	Medium		
Module Name	Spectrum Newsletter	Test Evaluation Date: 03-08-24	
Description:	Testing of the view Spectrum Newsletter		
Pre-condition	User must view newsletters		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “IMPU” Navigational Button		User will be redirected to IMPU page	Passed
2.	Under Spectrum section, click ‘View All Newsletters’		User will see all newsletter	Passed
Post-condition: Successfully viewed the newsletters.				

Table 31. Test Case 27. Adding of Spectrum Newsletter

Test Title	Adding of Spectrum Newsletter		
Test Case No:	27	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High):	Medium		
Module Name	Spectrum Newsletter	Test Evaluation Date:	03-08-24
Description:	Testing of Adding Spectrum Newsletter		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click “Add Newsletter” button		Modal form will appear	Passed
2	Input Newsletter Information	Newsletter Information	Filled newsletter form	Passed
3	Click “Add” button		New newsletter will be added	Passed
Post-condition: Successfully added a newsletter.				

Table 32. Test Case 28. Updating of Spectrum Newsletter

Test Title	Updating of Spectrum Newsletter		
Test Case No:	28	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	Medium		
Module Name	Spectrum Newsletter	Test Evaluation Date:	03-08-24
Description:	Testing of Updating Spectrum Newsletter		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Hover over the newsletter		The update and archive icon button will appear	Passed
2	Click the “Update” icon button		Form will appear with pre-filled fields	Passed
3	Input new Newsletter Information	New Newsletter Information	Filled newsletter form	Passed
4	Click “Update” button		Newsletter details will be updated	Passed
Post-condition: Successfully updated the newsletter.				

Table 33. Test Case 29. Archiving of Spectrum Newsletter

Test Title	Archiving of Spectrum Newsletter		
Test Case No:	29	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	Medium		
Module Name	Spectrum Newsletter	Test Evaluation Date:	03-08-24
Description:	Testing of Archiving Spectrum Newsletter		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Hover over the newsletter		The update and archive icon button will appear	Passed
2	Click the “Archive” icon button	Newsletter data	Archive confirmation will appear	Passed
3	Click “Archive” button		The newsletter will be archived	Passed
Post-condition: Successfully archived the newsletter and will be moved to the ‘Archives’ tab.				

Table 34. Test Case 30. Unarchiving of Spectrum Newsletter

Test Title	Unarchiving of Spectrum Newsletter		
Test Case No:	30	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	Medium		
Module Name	Spectrum Newsletter	Test Evaluation Date:	03-08-24
Description:	Testing of Unarchive Spectrum Newsletter		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigationa l Button		User will be redirected to Archives page	Passed
2	Select ‘Spectrum’ on the select option		Table will appear containing the archived newsletter	Passed
3	Click the “Unarchive ” icon	Archived newsletter	The newsletter will be unarchived	Passed
Post-condition: Successfully unarchiving the newsletter.				

Table 35. Test Case 31. Creating Evaluation

Test Title	Creating Evaluation		
Test Case No:	31	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High		
Module Name	Evaluation	Test Evaluation Date:	
Description:	Testing of Creating Evaluation		03-10-24
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Navigate to IMPU tab and click ‘View all Research & Evaluation’ button under Research and Evaluation section		User will be redirected to Evaluation List page	Passed
2	Click “Add New” button		Modal form will appear	Passed
3	Input Evaluation Data needed	Evaluation Data	Filled evaluation form	Passed
4	Click “Add” button		New evaluation will be added	Passed
Post-condition: Successfully added a new evaluation.				

Table 36. Test Case 32. Updating Evaluation Status

Test Title	Updating Evaluation Status		
Test Case No:	32	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High		
Module Name	Evaluation	Test Evaluation Date:	03-10-24
Description:	Testing of Updating Evaluation		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click “Update” icon button inside the under Action column		Form will appear with pre-filled fields	Passed
2	Input Evaluation Data needed	Updated Evaluation Data	Filled evaluation form	Passed
3	Click “Update” button		Evaluation details will be updated	Passed
Post-condition: Successfully updated the evaluation.				

Table 37. Test Case 33. Archive Evaluation

Test Title	Archive Evaluation		
Test Case No:	33	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High		
Module Name	Evaluation	Test Evaluation Date:	
Description:	Testing of Archive Evaluation	03-10-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click “Archive” icon button inside the under Action column	Evaluation data	Archive confirmation will appear	Passed
2	Click “Archive” button		Evaluation will be archived	Passed
Post-condition: Successfully archived the evaluation and will be moved to the ‘Archives’ tab.				

Table 38. Test Case 34. Unarchive Evaluation

Test Title	Unarchive Evaluation		
Test Case No:	34	Test Executed By: Shane Yvonne Cunanan	
Test Priority (Low/Medium/High) :	High		
Module Name	Archive	Test Evaluation Date: 03-10-24	
Description:	Testing of Unarchive Evaluation		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Click the “Archives” Navigational Button		User will be redirected to Archives page	Passed
2	Select ‘Research and Evaluation’ on the select option		Table will appear containing the archived evaluation	Passed
3	Click the “Unarchive” icon	Archived evaluation	The newsletter will be unarchived	Passed
Post-condition: Successfully unarchiving the evaluation.				

Table 39. Test Case 35. Adding of Evaluation Criteria

Test Title	Adding of Evaluation Criteria		
Test Case No:	34	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High		
Module Name	Evaluation	Test Evaluation Date:	
Description:	Testing of Adding Evaluation Criteria	03-10-24	
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page. Click the “Questionnaires” on the side menu		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage” button inside the action column		User will be redirected to Adding of criteria and question page	Passed
3	Click the icon button beside select criteria option		Modal form will appear	Passed
4	Input the criteria details	Evaluation criteria details	Filled criteria form	Passed
5	Click “Add” button		Evaluation criteria will be added.	Passed
Post-condition: Successfully added a criteria.				

Table 40. Test Case 36. Updating of Evaluation Criteria

Test Title	Updating of Evaluation Criteria		
Test Case No:	36	Test Executed By:	Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High		
Module Name	Evaluation	Test Evaluation Date: 03-10-24	
Description:	Testing of Updating Evaluation Criteria		
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page. Click the “Questionnaires” on the side menu		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage” button inside the action column		User will be redirected to Adding of criteria and question page	Passed
3	On the right column, click the update icon		Modal form will appear with pre-filled fields	Passed

4	Input the criteria details	Evaluation criteria details	Filled criteria form	Passed
5	Click “Update” button		Evaluation criteria will be updated.	Passed
Post-condition: Successfully updated a criteria.				

Table 41. Test Case 37. Deleting of Evaluation Criteria

Test Title	Deleting of Evaluation Criteria	
Test Case No:	37	Test Executed By: Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High	
Module Name	Evaluation	Test Evaluation Date: 03-10-24
Description:	Testing of Deleting Evaluation Criteria	
Pre-condition	Log in an account (Admin)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page. Click the “Questionnaires” on the side menu		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage” button inside the action column		User will be redirected to Adding of criteria and question page	Passed

4	On the right column, click the delete icon		Confirmation modal will appear	Passed
5	Click “Delete” button	Evaluation questionnaire	Evaluation criteria will be deleted.	Passed
Post-condition: Successfully deleted a criteria.				

Table 42. Test Case 38. Adding of Evaluation Question

Test Title	Adding of Evaluation Question	
Test Case No:	38	Test Executed By: Shane Yvonne Cunanan
Test Priority (Low/Medium/High):	High	
Module Name	Evaluation	Test Evaluation Date: 03-10-24
Description:	Testing of Adding Evaluation Question	
Pre-condition	Log in an account (Admin) and there must be an added criteria	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page Click the “Questionnaires”		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage” button inside the action table		User will be redirected to Adding of question page	Passed
3	Select a criteria on the option		Selected criteria	Passed
4	Input the question details under the select option	Evaluation question data	Filled question form	Passed

5	Click “Add” button		Evaluation question will be added.	Passed
Post-condition: Successfully added a question.				

Table 43. Test Case 39. Updating of Evaluation Question

Test Title	Updating of Evaluation Question			
Test Case No:	39	Test Executed By:		
Test Priority (Low/Medium/High):	High	Shane Yvonne Cunanan		
Module Name	Evaluation	Test Evaluation Date:		
Description:	Testing of Updating Evaluation Question	03-10-24		
Pre-condition	Log in an account (Admin)			
Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page Click the “Questionnaires”		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage” button inside the		User will be redirected to questionnaires page	Paased

	action table			
3	Click the “edit” icon on question you want to edit		Update question form will appear with pre-filled fields	Passed
4	Input updated question	Evaluation questionnaire data	Filled question form	Passed
5	Click the update button		Question will be updated	Passed
Post-condition: Successfully updated a question				

Table 44. Test Case 40. Deleting of Evaluation Question

Test Title	Deleting of Evaluation Question		
Test Case No:	40	Test Executed By:	
Test Priority (Low/Medium/High) :	High		Shane Yvonne Cunanan
Module Name	Evaluation	Test Evaluation Date:	
Description:	Testing of Deleting Evaluation Question		03-10-24
Pre-condition	Log in an account (Admin)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page Click the “Questionnaires”		User will be redirected to Manage Questionnaires page	Passed
2	Click “Manage”		User will be redirected to	Paased

	button inside the action table		questionnaire s page	
3	Click the “delete” icon on question you want to edit		Confirmation modal will appear	Passed
4	Click the delete button	Evaluation questionnaire data	Question will be deleted	Passed
Post-condition: Successfully deleted a question				

Table 45. Test Case 41. Answer an evaluation

Test Title	Answer evaluation		
Test Case No:	41	Test Executed By:	
Test Priority (Low/Medium/High) :	High	Shane Yvonne Cunanan	
Module Name	Evaluation	Test Evaluation Date:	
Description:	Testing of Download Report	03-12-24	
Pre-condition	Log in an account (Registered User)		

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page. Click		User will be redirected to	Passed

	'Evaluate Now'		Evaluation questionnaire	
2	Fill all the radio buttons and comment box		Filled evaluation and comment	Passed
3	Click submit		Evaluation will be answered	Passed
Post-condition: Successfully answered an evaluation.				

Table 46. Test Case 42. View Evaluation Report Summary Data

Test Title	View Evaluation Report Summary Data	
Test Case No:	42	Test Executed By: Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High	
Module Name	Evaluation	Test Evaluation Date: 03-12-24
Description:	Testing of View Evaluation Report Summary Data	
Pre-condition	Log in an account (Admin)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page. Click the “Evaluation Report”		User will be redirected to Evaluation	Passed

			Report page	
2	Select an evaluation		Selected Evaluation	Passed
Post-condition: Successfully viewed evaluation report summary data				

Table 47. Test Case 43. Download Report

Test Title	Download Report	
Test Case No:	43	Test Executed By: Shane Yvonne Cunanan
Test Priority (Low/Medium/High) :	High	
Module Name	Evaluation	Test Evaluation Date: 03-12-24
Description:	Testing of Download Report	
Pre-condition	Log in an account (Admin)	

Step	Test Steps	Test Data	Expected Result	Status (Passed/Failed)
1	Go to Evaluation page Click the “Evaluation Report”		User will be redirected to Evaluation Report page	Passed

2	Click the “Download Report” button		Evaluation list will appear	Passed
3	Click the pdf or Excel file to download the evaluation report and list of respondents	Generated Results of Osa Activities Evaluation	The summary of the report and respondent s’ list will be downloaded through PDF and excel file	Passed
Post-condition: Successfully downloaded files.				

APPENDICES

Appendix C

DATA GATHERING

SENIOR HIGH SCHOOL STUDENT PERMANENT RECORD

DEVELOPMENT OF CLSU-OA WEB PORTAL FOR THE ENHANCE ACCESSIBILITY OF STUDENT SERVICES AND WELFARE PROGRAMS (IS MODULE FOR THE INFORMATION MANAGEMENT AND PUBLICATION UNIT)

Name: Laurence Lingat Occupation/Role: IMPU Coordinator / Instructor
Age: 23 Computer Literate: YES _ NO

What methods or channels are available for students to access important information and resources from the Office of Student Affairs?
Facebook → Google Drive

Can you describe the current process for gathering feedback from students about their academic experiences and the facilities at the university?
When it comes to feedback, we only have for specific activities, CTEC - For faculty and students evaluation

Can you describe the important roles and duties in the present process, such as who handles queries, announcements, and feedback? - Feedback (GSU and IMPU)
Head [] GAV - Guidance Services Unit
[] CDSU - Career Development and Employment services Unit
[] GSOU - Student Organizations Unit

What do you think are some of the common challenges or issues faced by students when interacting with the Office of Student Affairs under the current process?
Not all announcement and concerns are directly given online.

Are there any significant pain points or areas where you believe the present procedure may be modified to better serve the needs of students and the office?
Laging available or accessible online, lalo na including procedures and requirements.

Is there any computer equipment in the office?
YES

ELIGIBILITY FOR SHS ENROLMENT

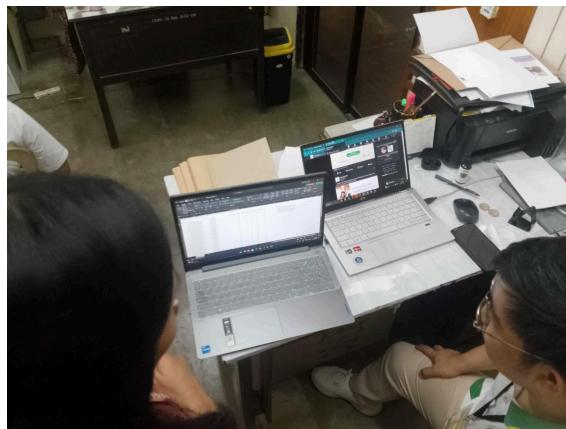
Eligible High School Completed Gen Ave 34
NESTORIAN SCHOOL, INC.

School Address: SCIENCE CITY OF MINDANAO, NEVA ECUADOR

DEVELOPMENT OF CLSU-OA WEB PORTAL FOR THE ENHANCE ACCESSIBILITY OF STUDENT SERVICES AND WELFARE PROGRAMS (IS MODULE FOR THE INFORMATION MANAGEMENT AND PUBLICATION UNIT)

How familiar are employees with the use of web-based tools and applications for work-related tasks?
Yes but not everyone.

Are staff members willing to receive training or guidance on how to use new digital tools or systems introduced in the department or office?
Yes but not everyone.



APPENDICES

Appendix D

EVALUATION TOOL OR TEST DATA

Evaluation Tool for User Acceptability																																																						
<p>IS Module for the Information Management and Publication Unit</p> <p>Respondent's Profile</p> <p>Name: _____</p> <p>Position: _____</p> <p>Department: _____</p> <p>Years in Service: _____</p> <hr/> <p>Instructions</p> <p>Please indicate a check mark (<input checked="" type="checkbox"/>) under the column that best describes your responses for each item about the IS Module for the Information Management and Publication Unit. Use the following ratings:</p> <p>1 = Very Unsatisfied, 2 = Unsatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied</p> <p> _____ _____ _____ _____ _____ </p> <hr/> <p>Evaluation Criteria</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 2px;">Criteria</th> <th style="text-align: center; padding: 2px;">Rating</th> <th style="text-align: center; padding: 2px;">1</th> <th style="text-align: center; padding: 2px;">2</th> <th style="text-align: center; padding: 2px;">3</th> <th style="text-align: center; padding: 2px;">4</th> <th style="text-align: center; padding: 2px;">5</th> </tr> </thead> <tbody> <tr> <td colspan="7" style="text-align: center; padding: 2px;">USABILITY</td> </tr> <tr> <td style="padding: 2px;">Login Process:</td> <td colspan="6" style="border-top: none;"></td> </tr> <tr> <td style="padding: 2px;">o How straightforward is the login process?</td> <td style="border-top: none;"></td> </tr> <tr> <td style="padding: 2px;">o Is it intuitive and user-friendly?</td> <td style="border-top: none;"></td> </tr> <tr> <td style="padding: 2px;">Navigation:</td> <td colspan="6" style="border-top: none;"></td> </tr> <tr> <td style="padding: 2px;">o Are menus and navigation paths logically organized?</td> <td style="border-top: none;"></td> </tr> </tbody> </table> <hr/> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Data Entry and Retrieval:</p> <ul style="list-style-type: none"> o Can you easily find the features or sections you need? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Error Handling:</p> <ul style="list-style-type: none"> o How well does the system handle errors or invalid inputs? o Are error messages clear and helpful? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>RELIABILITY</p> <p>System Downtime:</p> <ul style="list-style-type: none"> o How often does the system experience unplanned downtime? o Are there scheduled maintenance windows communicated in advance? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Data Integrity:</p> <ul style="list-style-type: none"> o Has there been any data loss or corruption incidents? o How confident are you in the accuracy of the data stored in the system? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Response Time:</p> <ul style="list-style-type: none"> o Does the system respond promptly to user requests? o Are there delays or lags during peak usage times? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Access Control:</p> <ul style="list-style-type: none"> o How well is user access controlled? o Are permissions appropriately assigned? </div> <div style="flex: 1; border-top: none;"></div> </div> <hr/> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>PORTABILITY</p> <p>Compatibility:</p> <ul style="list-style-type: none"> o Can the system run on different devices (e.g., desktop, mobile)? o Is it compatible with various web browsers? </div> <div style="flex: 1; border-top: none;"></div> </div> <div style="display: flex; justify-content: space-between;"> <div style="flex: 1;"> <p>Data Export/Import:</p> <ul style="list-style-type: none"> o Can data be exported from the system in standard formats o Is there a straightforward process for importing data? </div> <div style="flex: 1; border-top: none;"></div> </div>						Criteria	Rating	1	2	3	4	5	USABILITY							Login Process:							o How straightforward is the login process?							o Is it intuitive and user-friendly?							Navigation:							o Are menus and navigation paths logically organized?						
Criteria	Rating	1	2	3	4	5																																																
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Login Process:																																																						
o How straightforward is the login process?																																																						
o Is it intuitive and user-friendly?																																																						
Navigation:																																																						
o Are menus and navigation paths logically organized?																																																						

Figure 0. Sample Non-IT Questionnaire

Evaluation Tool for User Acceptability					
IS Module for the Information Management and Publication Unit					
Respondent's Profile					
Name:	Laurence Lingat				
Position:	Instructor				
Department:	OSA Information Management and Publication Unit				
Years in Service:	7 months				
Instructions					
Please indicate a check mark (✓) under the column that best describes your response for each item about the IS Module for the Information Management and Publication Unit. Use the following ratings:					
1 = Very Unsatisfied, 2 = Satisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied					
Evaluation Criteria					
Criteria	Rating				
	1	2	3	4	5
USABILITY					
Login Process:	<ul style="list-style-type: none"> o How straightforward is the login process? o Is it intuitive and user-friendly? 				
Navigation:	<ul style="list-style-type: none"> o Are menus and navigation paths logically organized? 				
RELIABILITY					
Data Entry and Retrieval:	<ul style="list-style-type: none"> o Can you easily find the features or sections you need? o How simple is it to input data into the system? o Is searching for information straightforward? 				
Error Handling:	<ul style="list-style-type: none"> o How well does the system handle errors or invalid inputs? o Are error messages clear and helpful? 				
System Downtime:	<ul style="list-style-type: none"> o How often does the system experience unplanned downtime? o Are there scheduled maintenance windows communicated in advance? 				
Data Integrity:	<ul style="list-style-type: none"> o Has there been any data loss or corruption incidents? o How confident are you in the accuracy of the data stored in the system? 				
Response Time:	<ul style="list-style-type: none"> o Does the system respond promptly to user requests? o Are there delays or lags during peak usage times? 				
Access Control:	<ul style="list-style-type: none"> o How well is user access controlled? o Are permissions appropriately assigned? 				
PORTABILITY					
Data Encryption:	<ul style="list-style-type: none"> o Is there multi-factor authentication (MFA) for critical actions? o Is data transmitted and stored securely using encryption? o Are there protocols in place to prevent unauthorized access? 				
Audit Trails:	<ul style="list-style-type: none"> o Are user actions logged for auditing purposes? o Can you trace who accessed or modified specific records? 				
Compatibility:	<ul style="list-style-type: none"> o Can the system run on different devices (e.g., desktop, mobile)? o Is it compatible with various web browsers? 				
Data Export/Import:	<ul style="list-style-type: none"> o Can data be exported from the system in standard formats? o Is there a straightforward process for importing data? 				

Figure 0. Non-IT Questionnaire: Sir Laurence's

Evaluation Tool for User Acceptability

IS Module for the Information Management and Publication Unit

Respondent's Profile

Name: _____

Course, Year & Section: _____

Instructions

Please indicate a check mark () under the column that best describes your responses for each item about the **IS Module for the Information Management and Publication Unit**. Use the following ratings:

1 = Very Unsatisfied, 2 = Unsatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied

Evaluation Criteria

Criteria	Rating				
	1	2	3	4	5
USABILITY					
Login Process:	<ul style="list-style-type: none"> <input type="checkbox"/> How straightforward is the login process? <input type="checkbox"/> Is it intuitive and user-friendly? 				
Navigation:	<ul style="list-style-type: none"> <input type="checkbox"/> Are menus and navigation paths logically organized? <input type="checkbox"/> Can you easily find the features or sections you need? 				
Data Entry and Retrieval:	<ul style="list-style-type: none"> <input type="checkbox"/> How simple is it to input data into the system? 				
RELIABILITY					
Error Handling:	<ul style="list-style-type: none"> <input type="checkbox"/> How well does the system handle errors or invalid inputs? <input type="checkbox"/> Are error messages clear and helpful? 				
System Downtime:	<ul style="list-style-type: none"> <input type="checkbox"/> How often does the system experience unplanned downtime? <input type="checkbox"/> Are there scheduled maintenance windows communicated in advance? 				
Data Integrity:	<ul style="list-style-type: none"> <input type="checkbox"/> Has there been any data loss or corruption incidents? <input type="checkbox"/> How confident are you in the accuracy of the data stored in the system? 				
Response Time:	<ul style="list-style-type: none"> <input type="checkbox"/> Does the system respond promptly to user requests? <input type="checkbox"/> Are there delays or lags during peak usage times? 				
Data Encryption:	<ul style="list-style-type: none"> <input type="checkbox"/> Are there protocols in place to prevent unauthorized access? 				
PORATABILITY					
Compatibility:	<ul style="list-style-type: none"> <input type="checkbox"/> Can the system run on different devices (e.g., desktop, mobile)? <input type="checkbox"/> Is it compatible with various web browsers? 				
Comments or Suggestions:					

Figure 0. Sample Student Questionnaire

Evaluation Tool for User Acceptability					
IS Module for the Information Management and Publication Unit					
Respondent's Profile					
Name:	Noaim	Phone:			
Course, Year & Section: GIT 2-2					
Instructions					
<p>Please indicate a check mark (✓) under the column that best describes your responses for each item about the IS Module for the Information Management and Publication Unit. Use the following ratings:</p> <p>1 = Very Unsatisfied, 2 = Unsatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied</p>					
Evaluation Criteria					
Criteria		Rating			
		1	2	3	4
		5			
USABILITY					
Login Process: <ul style="list-style-type: none"> <input type="checkbox"/> How straightforward is the login process? <input checked="" type="checkbox"/> Is it intuitive and user-friendly? 					
Navigation: <ul style="list-style-type: none"> <input type="checkbox"/> Are menus and navigation paths logically organized? <input checked="" type="checkbox"/> Can you easily find the features or sections you need? 					
Data Entry and Retrieval: <ul style="list-style-type: none"> <input type="checkbox"/> How simple is it to input data into the system? <input checked="" type="checkbox"/> Is searching for information straightforward? 					
Error Handling: <ul style="list-style-type: none"> <input type="checkbox"/> How well does the system handle errors or invalid inputs? <input checked="" type="checkbox"/> Are error messages clear and helpful? 					
RELIABILITY					
System Downtime: <ul style="list-style-type: none"> <input type="checkbox"/> How often does the system experience unplanned downtime? <input checked="" type="checkbox"/> Are there scheduled maintenance windows communicated in advance? 					
Data Integrity: <ul style="list-style-type: none"> <input type="checkbox"/> Has there been any data loss or corruption incidents? <input checked="" type="checkbox"/> How confident are you in the accuracy of the data stored in the system? 					
Response Time: <ul style="list-style-type: none"> <input type="checkbox"/> Does the system respond promptly to user requests? <input checked="" type="checkbox"/> Are there delays or lags during peak usage times? 					
Data Encryption: <ul style="list-style-type: none"> <input type="checkbox"/> Are there protocols in place to prevent unauthorized access? 					
PORTABILITY					
Compatibility: <ul style="list-style-type: none"> <input type="checkbox"/> Can the system run on different devices (e.g., desktop, mobile)? <input checked="" type="checkbox"/> Is it compatible with various web browsers? 					
Comments or Suggestions:					

Figure 30. Student Questionnaire: Noaim

Evaluation Tool for User Acceptability (IT Experts)

(Adapted from ISO 25010)

IS Module for the Information Management and Publication Unit

Respondents Profile

Name:

Position:

Department:

Years in Service:

QUESTIONNAIRE

Please indicate a check mark () under the column that best describes your responses for each item about the **IS Module for the Information Management and Publication Unit**

Please use the ratings below:

1 = Very Unsatisfied, 2 = UnSatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied

Criteria	Rating				
	1	2	3	4	5
FUNCTIONAL SUITABILITY					
Functional Completeness: The system performs the specified task and user objectives.					
Functional Correctness: The system displays precise and equitable reports					
Functional Appropriateness: The system performs the task effortlessly.					

PERFORMANCE EFFICIENCY					
Criteria	Rating				
	1	2	3	4	5
USABILITY					
Appropriateness Recognizability: The system provides straightforward functions.					
Learnability: The system can be used and analyzed easily					
Operability: The system is friendly to all type of users					
User Error Protection: The program is simple enough to direct users away from any error.					
User Interface Aesthetics: The system's user interface is easy to understand.					
Accessibility: The system can access different user accounts in one computer.					
RELIABILITY					
Maturity: The system can be used in daily security routine.					
Availability: The system is always ready to use.					
Fault Tolerance: Despite hardware or software faults, the system works as intended.					
Recoverability: In case of an interruption or failure, the system can recover the directly affected data and restore the system's desired status.					
SECURITY					
Confidentiality: The system assures that the data logs are only accessible to the administrators.					
Integrity: The system has a login page that can only be accessed by the authorized person.					
PORATABILITY					
Adaptability: The system can be used in different versions of Windows.					

Figure 0). Sample IT Expert Questionnaire

Evaluation Tool for User Acceptability (IT Experts)																																																																																																																																																								
(Adapted from ISO 25010)																																																																																																																																																								
IS Module for the Information Management and Publication Unit																																																																																																																																																								
Respondent's Profile																																																																																																																																																								
Name:	KARL VINCENT R. ALMAG																																																																																																																																																							
Position:	TEACHER II																																																																																																																																																							
Department:	Mathematics																																																																																																																																																							
Years in Service:	6 YEARS																																																																																																																																																							
QUESTIONNAIRE																																																																																																																																																								
<p>Please indicate a check mark (✓) under the column that best describes your responses for each item about the IS Module for the Information Management and Publication Unit.</p> <p>Please use the ratings below:</p> <p>1 = Very Unsatisfied, 2 = Satisfied, 3 = Neutral, 4 = Satisfied, 5 = Very Satisfied</p>																																																																																																																																																								
Criteria		Rating																																																																																																																																																						
FUNCTIONAL SUITABILITY		1	2	3	4	5																																																																																																																																																		
Functional Completeness: The system performs the specified task and user objectives.		✓																																																																																																																																																						
Functional Correctness: The system displays precise and meaningful information.		✓																																																																																																																																																						
Functional Appropriateness: The system performs the task effortlessly.		✓																																																																																																																																																						
PERFORMANCE EFFICIENCY																																																																																																																																																								
Time Behavior: The system reads and displays data swiftly.		✓																																																																																																																																																						
Resource Utilization: The system requires minimal requirement to function.		✓																																																																																																																																																						
Capacity: The system is not affected by the data it holds.		✓																																																																																																																																																						
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Figure 30. IT Expert Questionnaire: Sir Karl's

APPENDICES

Appendix D

TESTING AND EVALUATION



