

SAINT MICHAEL COLLEGE OF CARAGA

ONLINE REQUEST OF CREDENTIALS FOR SAINT MICHAEL COLLEGE OF CARAGA

A Capstone Project Presented To
The Faculty of
College of Computing and Information Sciences

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



By

RICEL ADA S. VILLARIN
ANGEL MAE L. BAGUIO
JAY A. BONGADO
ANGELO M. HINAUTAN
ROM JONES Y. SALEM

ADVISER: JESSIE S. MAHINAY

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SAINT MICHAEL COLLEGE OF CARAGA

SAINT MICHAEL COLLEGE OF CARAGA
College Of Computing and Information Sciences

CERTIFICATE OF RESEARCH APPROVAL

This capstone project entitled "**ONLINE REQUEST OF CREDENTIALS FOR SAINT MICHAEL COLLEGE OF CARAGA**" presented and submitted by **RICEL ADA S. VILLARIN, ANGEL MAE L. BAGUIO, JAY A. BONGADO, ANGELO M. HINAUTAN, ROM JONES Y. SALEM** in partial fulfillment of the requirements for the degree of **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY** is hereby accepted and recommended for Oral Examination.

JESSIE S. MAHINAY
Adviser

LEALIL I. PALACIO, MSIT (CAR)
Member

MARISOL S. ROSARIO
Member

MICHELLE ANN G. LUCINO
Member

DAISA O. GUPIT, MIT
Member

MARLON JUHN M. TIMOGAN, MIT
Member

KENNETH IAN B. BARRERA, MA
Chairperson

ACCEPTED as partial fulfillment of the requirements for the degree of Bachelor of Science and Information Technology

APPROVED by the tribunal at the Oral Examination with the grade of _____.

JESSIE S. MAHINAY
Adviser

LEALIL I. PALACIO, MSIT (CAR)
Member

MARISOL S. ROSARIO
Member

MICHELLE ANN G. LUCINO
Member

DAISA O. GUPIT, MIT
Member

MARLON JUHN M. TIMOGAN, MIT
Member

KENNETH IAN B. BARRERA, MA
Chairperson



COLLEGE OF COMPUTING AND INFORMATION SCIENCES

ABSTRACT

TITLE:	Online Request of Credentials for Saint Michael College of Caraga
AUTHOR:	Ricel Ada S. Villarin, Angel Mae L. Baguio, Jay A. Bongado, Angelo M. Hinautan, Rom Jones Y. Salem
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ADVISER:	Jessie S. Mahinay
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DEVELOPMENTAL RESEARCH

I. OBJECTIVES

This study aimed to design, develop, and implement a web-based system titled “Online Request of Credentials for Saint Michael College of Caraga.” The primary objectives of the project were to streamline the credential request process by allowing students and alumni to submit and track their requests online; to integrate a tracking feature that enabled real-time monitoring of request statuses by both users and key personnel such as the Cashier, Head of the LRC, Dean/Principal, and Registrar Staff; and to establish a secure validation process for uploaded identification documents to ensure the authenticity of each request. This system minimized manual workload, reduced processing time, and enhanced the efficiency, transparency, and reliability of academic service delivery.

II. METHODOLOGY

The study adopted the Software Development Life Cycle (SDLC) as the primary methodology, specifically utilizing the Waterfall Model to guide each development phase in a linear and structured manner. The process began with requirements gathering, where the researchers conducted interviews and observations with the SMCC Registrar’s Office to identify the current challenges in processing credential requests. The layout, user interface, and system



architecture were planned in the system design phase to ensure user-friendliness and functionality. The development phase involved coding and system implementation using modern web development technologies. Once developed, the system underwent testing to identify and correct bugs and validate system features such as online request submission, tracking, and document validation. In the final deployment phase, the system was launched within a controlled environment in the Registrar's Office to evaluate real-world usability and performance. Feedback was collected for future enhancements.

III. FINDINGS

The Online Request of Credentials System received high ratings across functional suitability, performance efficiency, and usability based on ISO 25010 standards. It earned a total weighted mean of 3.60 in functionality, 3.57 in performance efficiency, and 3.67 in usability, which were classified as "Very Functional," "Very Efficient," and "Very Usable," respectively. These results confirmed the system's effectiveness, reliability, and user-friendliness, with participants recognizing its precision, speed, and intuitive design. Continuous enhancements were recommended to ensure adaptability and maintain high standards.

IV. RECOMMENDATIONS

To enhance the system's effectiveness, future efforts should focus on expanding user access for scalability, integrating advanced data validation and security features, improving the real-time tracking interface, offering user training for seamless navigation, and incorporating analytics for monitoring request trends. These improvements would further strengthen efficiency, reliability, and user satisfaction in processing academic credentials.

KEYWORDS: *Online Credential Request, Web-Based System, Real-Time Tracking, System Usability,*

Functional Suitability



DEDICATION

This capstone research is dedicated with heartfelt appreciation to all individuals who played a meaningful role in the journey and success of this endeavor.

To the families of the researchers, sincere gratitude is extended for their unwavering love, patience, and support. Their constant encouragement and understanding served as a source of strength and inspiration, especially during the most challenging phases of this academic pursuit.

To Mr. Jessie S. Mahinay, the project adviser, the researchers express deep appreciation for his guidance, patience, and insightful contributions. His constructive feedback and steadfast support were crucial in shaping the direction and outcomes of this study. His commitment has greatly influenced the academic growth and confidence of the researchers as emerging professionals.

This project is also the result of collective effort, determination, and collaboration among the research team members. Every contribution, whether large or small, played a vital role in the successful development of a system designed to enhance the institution's academic services and support the needs of the Michaelinian community.

The completion of this capstone research would not have been possible without those who provided support throughout the journey. Their presence and encouragement are deeply appreciated.



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CHAPTER 1

INTRODUCTION

1.1 Project Context

The Office of the Registrar aids students, faculty, staff, and alumni in various academic tasks, such as overseeing academic policies and procedures, managing student records, facilitating student registration, handling transcripts, coordinating course scheduling, providing commencement services, performing degree audits, offering assessment and reporting, and ensuring institutional compliance. The SMCC Registrar's Office continues to process requests for academic credentials; however, it has become increasingly burdensome for the staff, mainly because of the time-consuming manual processing and the high volume of requests they manage. As the number of credential requests grows, the risk of errors and delays also increases, further restraining the resources available.

According to Devikah et al., educational institutions frequently must provide academic transcripts and certificates upon student request, as these documents are essential for applying to new programs and job placements. Doing this manually can be time-consuming and require much work [1]. Also, fulfilling requests on the agency side can be just as frustrating as asking for them on the constituent side [2].

In today's digital era, technological advancements are essential in shaping credential management, as mentioned by I. E. Khairuddin et al. [3]. Additionally, K. I. R. Abang et al. stated that in any bustling institution, it is essential that each accomplished student's request be prompt and efficient [4]. To cope with these challenges, they need to grab the opportunities that technology can offer and test innovations that are not only in response to the global threat challenges but also to the future [5]. Thus, making a system that provides an online requisition of



credentials is wiser. In this case, embracing more effective methods in today's advancing technological landscape can aid in maintaining organization and improving productivity [4].

Throughout the years, manual credential requests have been carried out across most educational institutions, specifically at the Office of the Registrar in Saint Michael College of Caraga. The current system for requesting academic credentials at SMCC heavily relies on manual methods. Students and alumni must submit requests in person or through physical forms, leading to inefficiencies and delays in processing.

To address the issue of inefficient and cumbersome credential requests at the SMCC Registrar, an essential solution is to create a web-based system that simplifies the process of requesting academic credentials. This system can facilitate the quick and secure issuance of credentials in the Registrar's office. Students and alumni could submit requests electronically, track their status in real time, and experience reduced wait times and increased transparency. The online platform would automate much of the manual processing for administrative staff, reducing paperwork and streamlining workflow. Thus, it makes processes more accessible and convenient for everyone.

The SMCC registrar needs to implement and optimize the online request system to address existing problems in the institution. Implementing an online request system can significantly enhance the efficiency and effectiveness of administrative processes within educational institutions. The system automates the request management process, making tracking and fulfilling requests more streamlined. This transition from a paper-based system to a digital platform not only improves accessibility for students but also fosters a more organized and transparent workflow for administrative staff.



1.2 Objective of the Study

The researchers' study aimed to design, develop, and implement an Online Request for Credentials for Saint Michael College of Caraga.

Specifically, it aimed to:

1. Generate comprehensive reports on request volumes and processing times for transparency and ongoing process improvements.
2. Develop a tracking feature that enables users to monitor the real-time status of their credential requests while allowing key personnel, such as the Cashier, Head of the LRC, Dean/Principal, and Registrar Staff, to review and confirm requests with incomplete or pending requirements for clearance purposes.
3. Establish a validation process for verifying the validity of the uploaded identification document.

1.3 Scope and Limitations

The Online Request of Credentials System was specifically designed for Saint Michael College of Caraga. The system accommodated a single administrator account (Head of the Registrar's Office), along with designated key personnel, including the Cashier, Head of the LRC, Dean/Principal, and Registrar Staff, all authorized staff members. The admin had full access to all system features, including viewing and verifying the entire process. At the same time, the key personnel verified the requirements for credential requests.

The capstone project did not support credential requests from institutions outside the project. The daily request processing limit was set at 10, deferring additional requests to the following day. Although it incorporated necessary security features, the system did not include a detailed review or update of institutional data protection practices. Limitations also included specific software and hardware requirements, such as adequate RAM, processor capability,



storage, and compatibility with modern web browsers and development platforms. Furthermore, the system's functionality was restricted to processing credential requests, excluding other administrative tasks.

1.4 Definition of Terms

The terms defined below explain the basic concepts and factors discussed during the conceptualization and development of the Online Request of Credentials System and provide contextual information on how the researchers applied these concepts in their study.

Access Control – Mechanisms within the Online Request of Credentials System that regulate who can view, modify, or manage different aspects of the system, ensuring that only authorized personnel have access to sensitive functions and data.

Admin – A user role within the Online Request of Credentials System with comprehensive access to all system features. The admin can view, verify, and manage all aspects of the credential request process, including user management.

Request Tracking — This feature within the Online Request of Credentials System allows users to monitor the status of their credential requests in real time, including progress updates and estimated completion times.

User Validation – This ensures that user inputs are accurate, secure, and complete before processing any request. In ORCSMCC, it includes validating the essential information provided by end-users during the sign-up and log-in processes.

Web-Based System – A platform accessible through internet browsers, enabling users to interact with the system remotely without installing specific software.

Workflow Automation – The use of automated processes within the Online Request of Credentials System to handle repetitive tasks, such as routing requests and updating status, thereby improving efficiency.



CHAPTER 2

REVIEW OF RELATED LITERATURE

This chapter shows the literature related to the researchers' study to address the existing problems encountered. It focuses on the need to implement the researchers' proposed software application, its benefits, and the issues it addresses. The literature comes from electronic materials, e-books, websites, articles, and journals.

Efficiency and Transparency in Credential Request Systems

The shift towards digitizing administrative processes in educational institutions has led to the development of online credential request systems, enhancing the issuance, verification, and management of academic credentials. These systems address the inefficiencies of manual processes, offering improved accuracy and speed. However, they also bring challenges related to data security, system compatibility, and user privacy.

The advancements in online credential request systems have transformed how credentials are created, managed, and verified, enhancing trust and efficiency in various sectors. These systems facilitate the issuance of digital credentials, allowing for interoperability and recognition across borders, which is crucial in a globalized job market [6].

According to K. I. R. Abang et al., the transition from manual to online credential request systems in higher education has notably reduced administrative bottlenecks. For instance, the City College of Tagaytay (CCT) implemented an online credential request system during the pandemic, providing a safer, faster, and more efficient solution for students and administrators [4]. However, M. Chase et al. emphasized that challenges such as ensuring data trustworthiness, managing user privacy, and maintaining usability persist [7], and institutions must address issues related to data security, particularly when handling sensitive information, to prevent potential breaches [8]. Furthermore, G.W. Matkin also concluded that institutions must adapt to these



changes, balancing the needs of students and employers while navigating the complexities of digital credentialing [9].

A similar system was developed by Alegado et al. for NUEST, where they introduced a web-based chat box request system to facilitate online document requests. Built using web technologies like HTML, CSS, PHP, and MySQL, this system simplified the request process, reducing the time and effort required for both the user and staff. It garnered positive feedback, with experts and users rating its effectiveness highly [10]. Despite these advantages, the issue of data privacy and security remains crucial, particularly given the increasing dependence on digital platforms in educational settings.

Heather Flanagan's insight on digital identity systems underscores the importance of security in such platforms. Flanagan notes that while digital credentials open opportunities for innovation and efficiency, they also come with inherent risks. Addressing the risks involves implementing comprehensive security and privacy that balance the needs of various stakeholders [11]. Also, ensuring user data privacy during verification processes is crucial, as systems must balance transparency with confidentiality [12]. This highlights the need for similar security protocols in the online credential request system to protect sensitive student information and comply with evolving digital identity standards [11].

I. Keck et al.'s study further discusses the technical challenges, such as system incompatibilities and the need for specialized personnel to manage the transitions. Their study emphasizes the importance of ensuring that such systems are user-friendly. They propose a framework for evaluating credential systems' effectiveness and ensuring their sustainability in the long term [13].

Rassameeroj et al. explored the impact of online systems on reducing errors and enhancing accuracy in credential processing. They found that automated systems significantly



reduced manual errors in document handling and data entry, leading to faster and more reliable services for students. However, they also raised concerns about system downtimes and the need for continuous software updates to maintain reliability [14].

The literature reflects a consensus on the potential benefits of online credential request systems, particularly regarding efficiency, accuracy, and accessibility. However, as Mishra R. et al. noted, these systems also require ongoing investment in infrastructure, security, and training to meet the evolving needs of both institutions and users. Moreover, the study emphasized the importance of ensuring data protection compliance [15].

While online credential request systems offer significant benefits to higher education institutions, including faster processing times and enhanced accuracy, their implementation requires careful consideration of technical, security, and operational challenges. The transition from manual to online systems represents a paradigm shift that can improve academic institutions' overall efficiency. Still, regular updates, proper staff training, and stringent data security measures must accompany it.

Credential Request Processes Through Automation and Real-Time Tracking

The transition to digitized credential request and approval processes has revolutionized administrative workflows in educational and professional institutions. These systems offer increased efficiency, accessibility, and security, enabling users to request, process, and verify credentials seamlessly. It highlights the critical verification steps, eligibility assessment, and the authorities' role in ensuring compliance with institutional standards. The process typically involves multiple steps, including documentation review, verification of qualifications, and recommendations from authorized personnel.

According to Gaikwad et al., institutions are moving towards digitizing the credential request systems to streamline administrative processes, thereby increasing convenience for



students and alumni. Online platforms allow users to submit requests for academic documents, such as transcripts and certificates, at any time and location, significantly reducing barriers [16]. Gune et al. explained that the approval process for credential requests involves several key steps and methodologies that ensure efficiency and security. Initially, a request is submitted and categorized based on type to determine the appropriate approver. This is facilitated by systems that utilize visual representations of approval elements, allowing users to define their processes effectively [17]. Chiahsin et al. also stated that credential verification may involve multiple service providers, ensuring that the requested credentials are validated securely [18].

Integrating digital certificates and facial recognition technology can streamline verification, reduce administrative burdens, and enhance security against counterfeiting [19]. Furthermore, non-fungible tokens (NFTs) and blockchain technology provide a decentralized, secure method for issuing and validating academic credentials, ensuring compliance with regulations like GDPR [20]. Blockchain solutions can accelerate verification processes by approximately 8% while maintaining data integrity [21]. Countries like China and the U.S. offer valuable insights into competency validation, which can be adapted to improve systems in other regions [22]. Lastly, a design thinking approach to distributed ledger technology can revolutionize credential verification, ensuring transparency and fraud prevention [23].

A web-based system can streamline the approval request process, making it more efficient. While these systems enhance the approval process, challenges such as manual errors and inefficiencies in traditional methods persist, highlighting the need for continuous improvement in approval workflows.

Validation of Uploaded Documents through Admin Review in Online Credential Systems

Document validation is a crucial element in online credential systems. Effective document verification processes ensure that uploaded documents, such as identification cards and receipts,



adhere to institutional requirements, safeguarding the integrity and security of transactions. As the rapid development of information sharing and exchange continues, an increasing number of businesses and individual users are adopting digital documents due to their convenience and efficiency [24]. However, while digital documents simplify accessibility, verifying their authenticity remains a significant challenge [25].

The implication arising from the problem of fake documentation is that it is causing serious and alarming impacts and needs to be urgently considered. This technological revolution, while enabling greater flexibility in document handling, has also introduced vulnerabilities. Validating documents remains laborious and time-consuming, further exacerbating concerns about fraudulent documents [26]. The implications of counterfeit documents are severe, posing risks to security, institutional trust, and transactional integrity. Addressing this issue requires immediate attention and adopting modern, robust methods for issuing and verifying significant documents to safeguard against potential misuse [27].

According to Hamidi, H., inaccurate verification methods can lead to significant security vulnerabilities, allowing unauthorized access to sensitive information and systems. High error rates in scanned identity verification may increase susceptibility to identity theft and other fraudulent activities, underscoring the necessity of precise assessments [28]. However, C. Avram et al. stated that using uploaded IDs and documents for validation enhances security. This process helps reduce identity theft and unauthorized access to sensitive information, creating a safer online environment [29]. Using copies of official documents, such as birth certificates or government IDs, allows organizations to validate users' identities effectively [30].

According to Alsulaiman, A., utilizing user-centric design in credential verification also indirectly supports security. When users find the design intuitive, they are less likely to make errors that could compromise their credentials during the verification process. User-friendly



interfaces can guide individuals through complex security steps, ensuring that security protocols are followed without frustrating users [31]. Additionally, the studies of C. Avram et al. and M. Schmitt et al. also stated that uploaded ID validation simplifies the user experience by allowing for quick and easy verification. Users can upload their identification documents directly from their mobile devices, which minimizes the time spent manually entering data. This convenience increases user satisfaction rates as the process becomes hassle-free and efficient [29], [32].

The validation of identification documents, through optimized admin review and advanced technological solutions, is vital for securing online credential systems. Institutions can effectively address challenges like fraudulent documentation and enhance overall system reliability by leveraging robust verification methods, user-centric designs, and emerging technologies. These advancements protect sensitive information and foster user trust and satisfaction, paving the way for more efficient and secure digital transactions in the future.



CHAPTER 3

SOFTWARE REQUIREMENTS AND DESIGN SPECIFICATION

3.1 System Architecture

This chapter presents a detailed analysis of the technical components in designing and developing the proposed system, including software and hardware requirements specifications. Additionally, it provides a thorough overview of the functionality of the Online Request for Credentials System (ORCS).

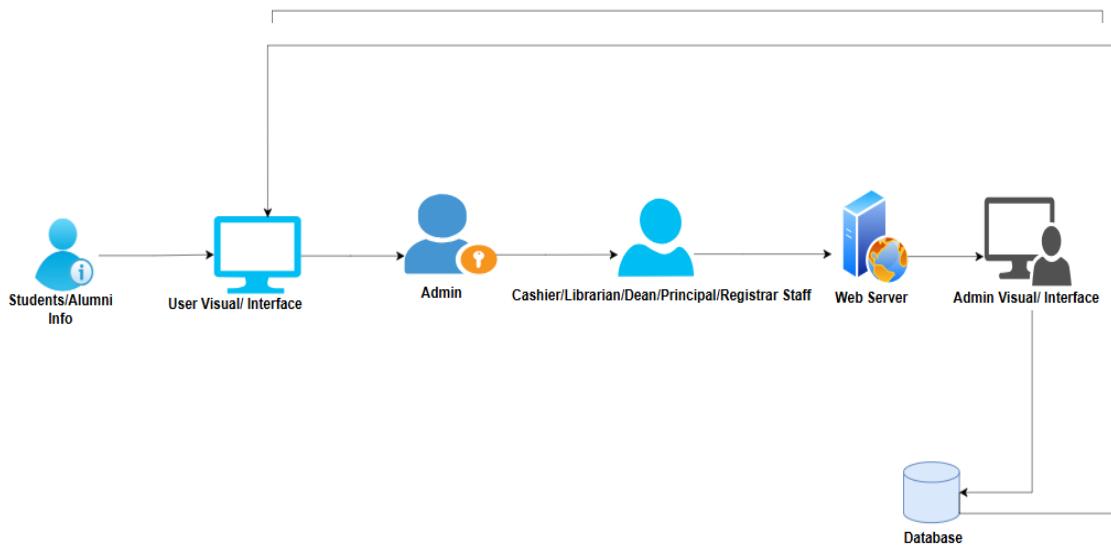


Figure 1. System Architecture

Figure 1 illustrates the fundamental process of the Online Request of Credentials System (ORCS). This system facilitates user interaction among various roles, including the administrator (Head of the Registrar's Office), users (Registrar Staff, Cashier, Head of the LRC, and Dean/Principal), as well as students and alumni, all of whom can access the platform via the Internet. End-users must create an account to use the leading platform. The Cashier, Head of the LRC, Dean/Principal, and Registrar Staff review student requests seeking credentials by checking their backgrounds and approving clearance. Meanwhile, the administrator manages credential



requests by validating user requirements and ensuring all necessary approvals are in place.

3.2 Conceptual Diagram

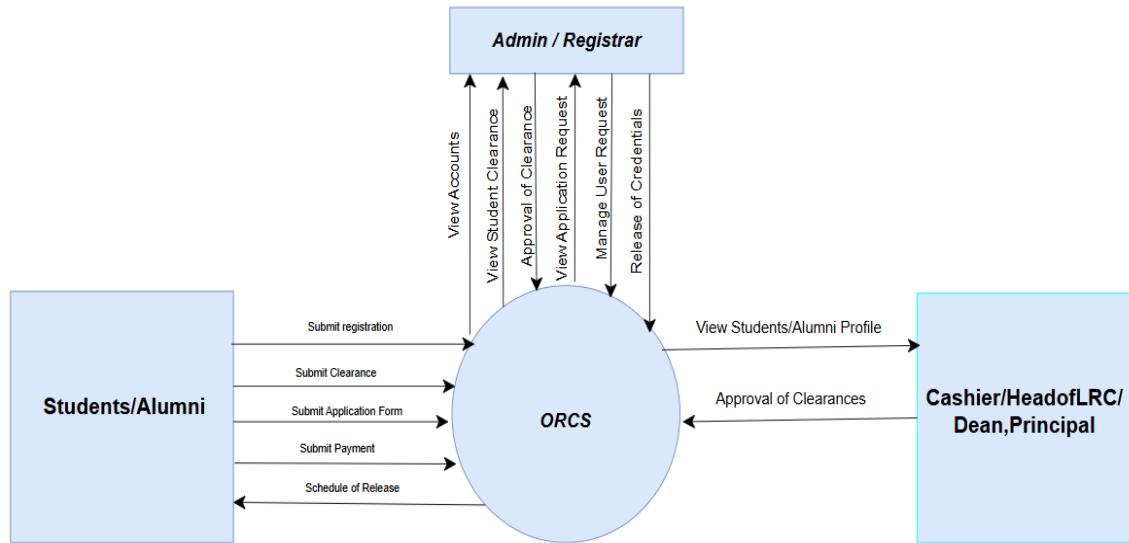


Figure 2. Conceptual Diagram (DFD Level 0)

Figure 2 illustrates the operational capabilities assigned to different users within the ORCS architecture. The admin has the authority to review and manage the credential requests submitted by students and alumni. Additionally, they can perform functions such as validating requirements. Conversely, the Cashier and other offices are responsible for maintaining a list of individuals who have requested credentials and their associated duties within the ORCS.



3.3 Use Case Diagram

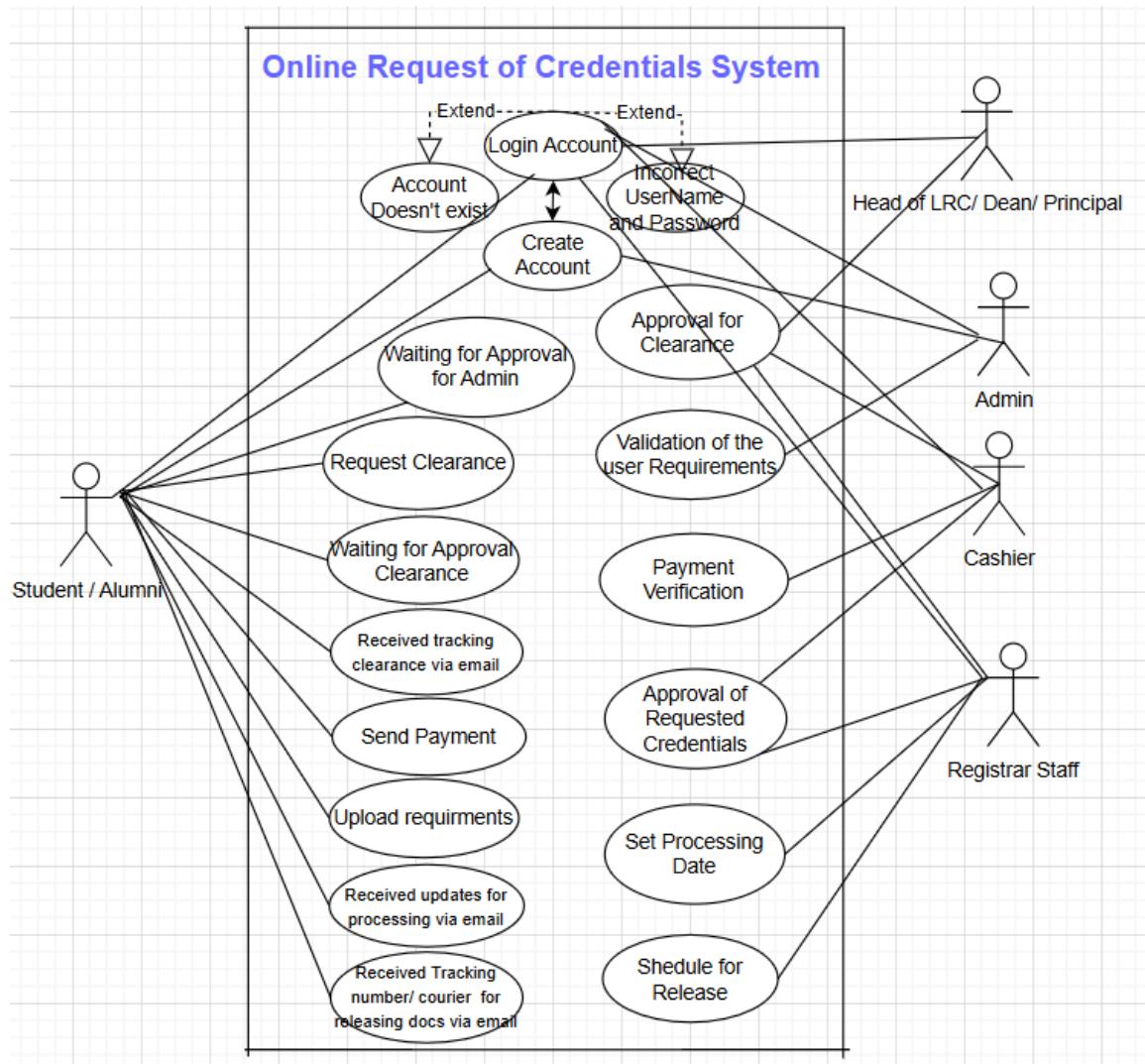


Figure 3. Use Case Diagram

Figure 3 outlines the key features available to each type of user and their roles within the system. The administrator is responsible for validating user requirements and creating accounts for system users such as the Cashier, Head of the LRC, Dean/Principal, and Registrar Staff, as they do not have self-registration privileges. Students and alumni must create an account before logging in and are responsible for completing their request forms. The Registrar Staff manages the approval and release of the requested documents. The system also generates a schedule for



issuing credentials, with appointments available from Monday to Friday. The Cashier is responsible for verifying clearance and payment for the requested credentials. Similarly, the Head of the LRC and the Dean/Principal are tasked with reviewing and confirming requests that have incomplete or pending requirements for clearance purposes.

3.4 Activity Diagram

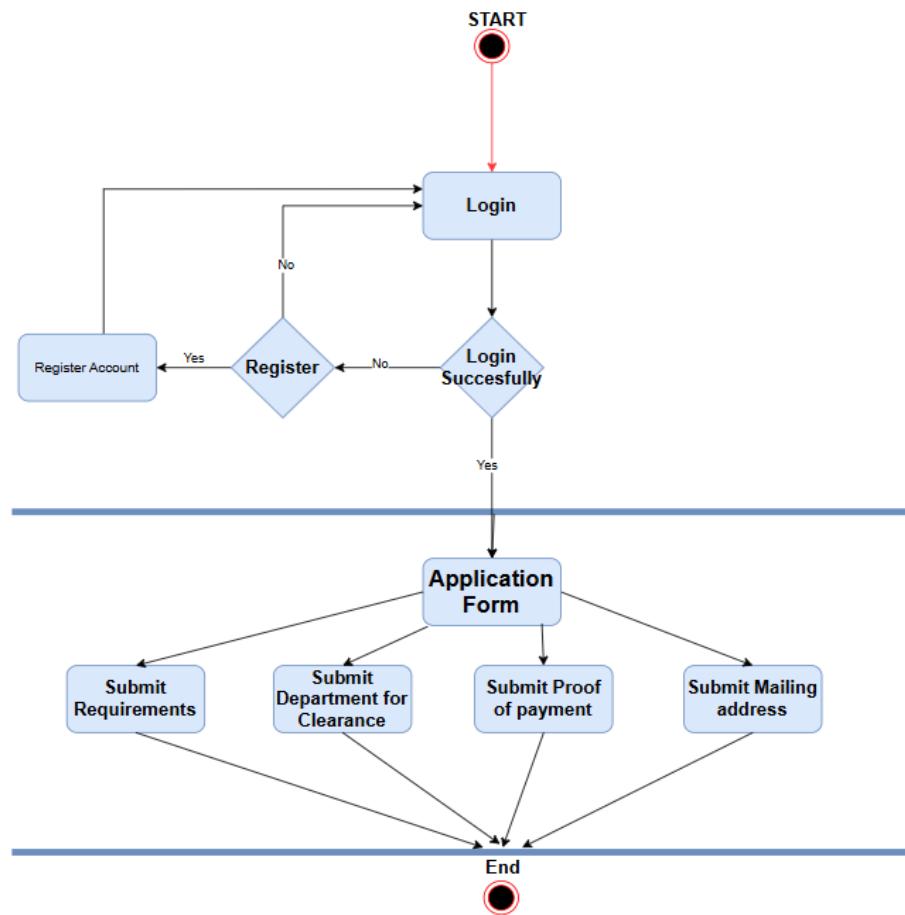


Figure 4. Activity Diagram – Students/Alumni

Figure 4 illustrates the series of activities available to students within the system. It begins with the login page. If a user does not have an account, they can create one before returning to the login interface. Once logged in successfully, students and alumni are directed to the ORCS homepage, where they can view and select various forms, including the student/alumni request



form, requirements form, and release schedule form (note that only students from SMCC are eligible for the release schedule form). Additionally, users can log out of their accounts from this page.

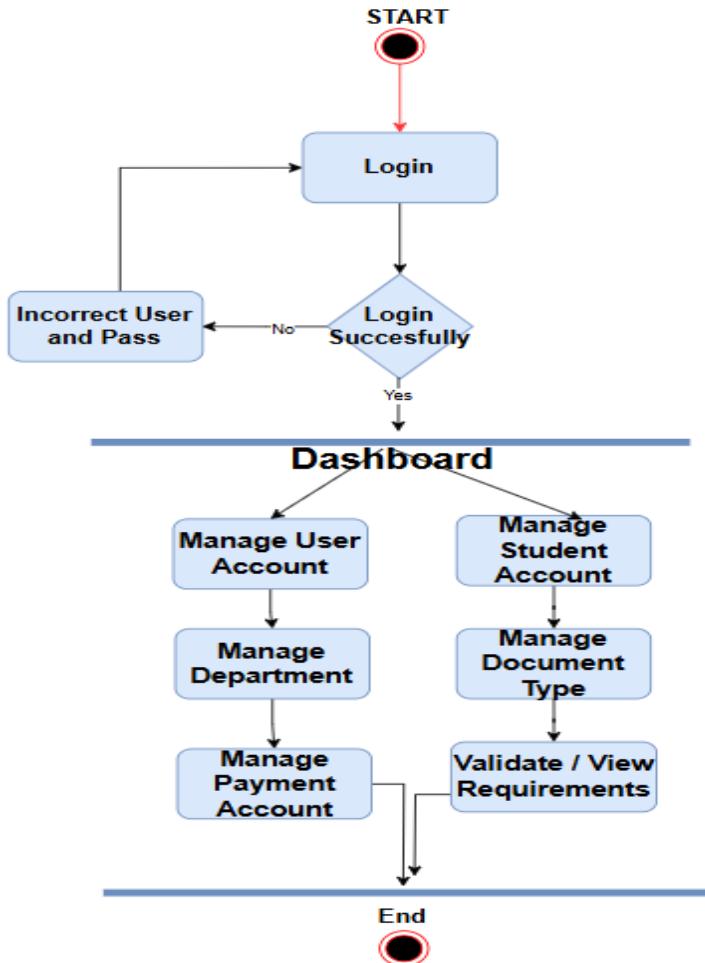


Figure 5. Activity Diagram - Admin

Figure 5 illustrates the system's administrative functions. After a successful login, the administrator gains access to the dashboard, which provides an overview of key metrics, including the number of users, students, pending requests, and completed requests. The administrator manages user and student accounts, configures the payment account, adds departments and document types, and validates or views user requirements. These functions allow the administrator to maintain and oversee the overall operation of the system efficiently.

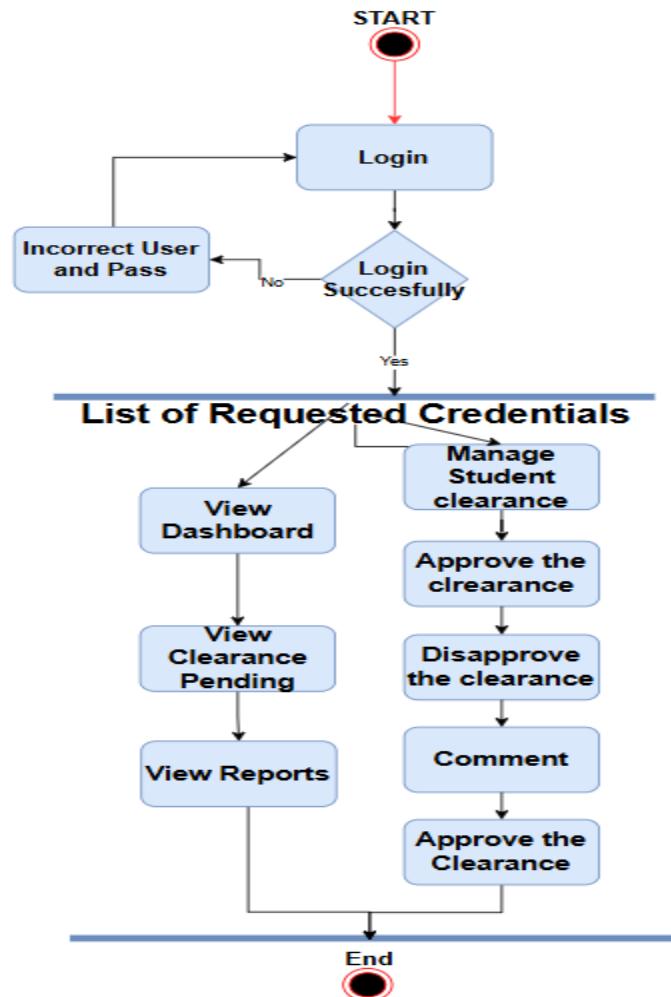


Figure 6. Activity Diagram – Head of LRC/Dean and Principal

Figure 6 illustrates the series of activities available to the user. If a user does not have an account, they cannot access the homepage on the login page. The administrator can register accounts for the Head of the LRC, the Principal, and the Deans. Once logged in successfully, the user's capabilities are limited to viewing and managing the list of individuals who have filled out the form. This includes checking backgrounds, approving clearances, and adding comments if the students have not completed the clearance requirements.

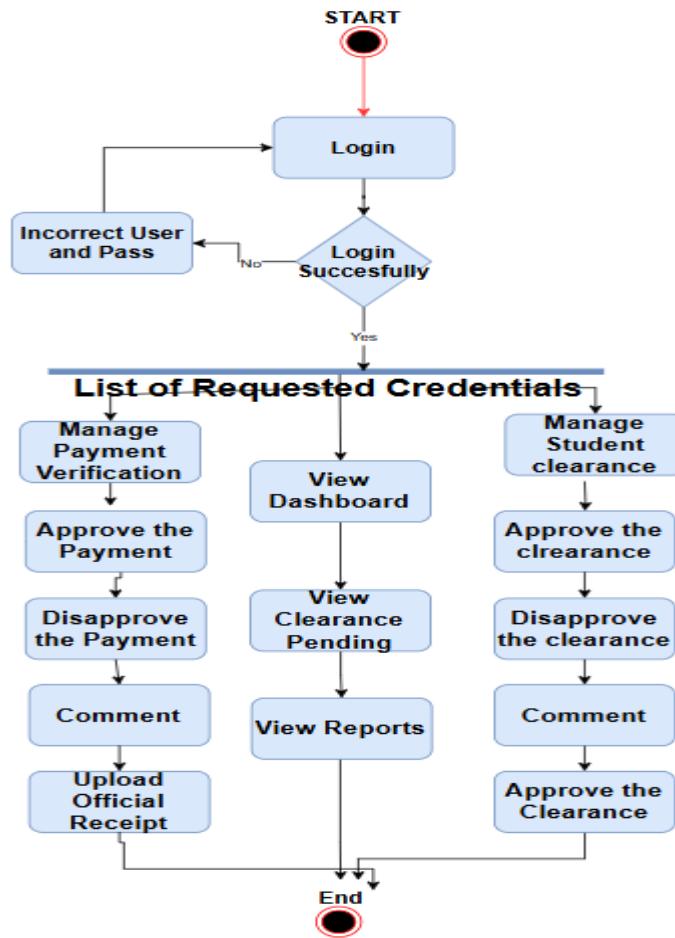


Figure 7. Activity Diagram – Cashier

Figure 7 illustrates the series of activities available to users, focusing on the cashier's role within the system. On the login page, a user without an account cannot proceed to the homepage or access the system, as only the administrator has the authority to create accounts for personnel such as the cashier. Once successfully logged in, the cashier can approve or disapprove clearance requests. If a request is disapproved, the cashier can provide comments, particularly if the requester has an outstanding balance. The cashier is also responsible for validating student payments during the payment verification. After validation, the cashier uploads the official receipt to confirm that the user has completed the payment.

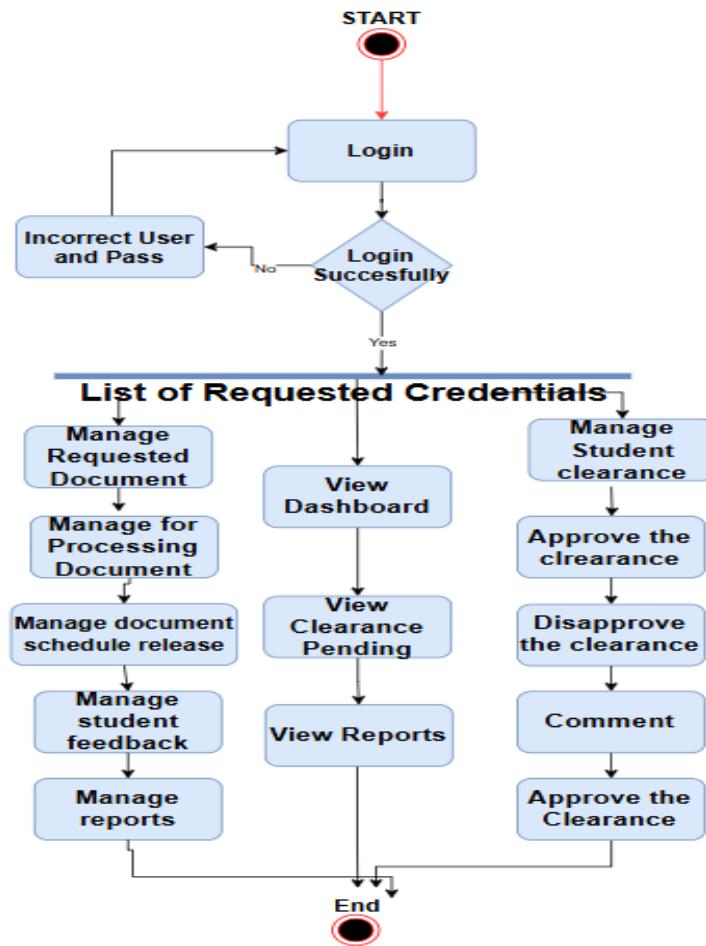


Figure 8. Activity Diagram – Registrar Staff

Figure 8 illustrates the series of activities available to the user, explicitly focusing on the role of the registrar staff. Users without an account cannot access the homepage on the login page, as only the administrator has the authority to create accounts for registrar staff. Once successfully logged in, the registrar staff can view and manage the list of individuals who have submitted request forms. Their tasks include approving clearances, managing requested documents, and adding comments if students have not completed the necessary clearance requirements. The registrar staff also sets the processing date, and once the document is processed, the request is scheduled for release. The user is then notified that their requested document will be available for pickup as soon as possible.



3.5 Sequence Diagram

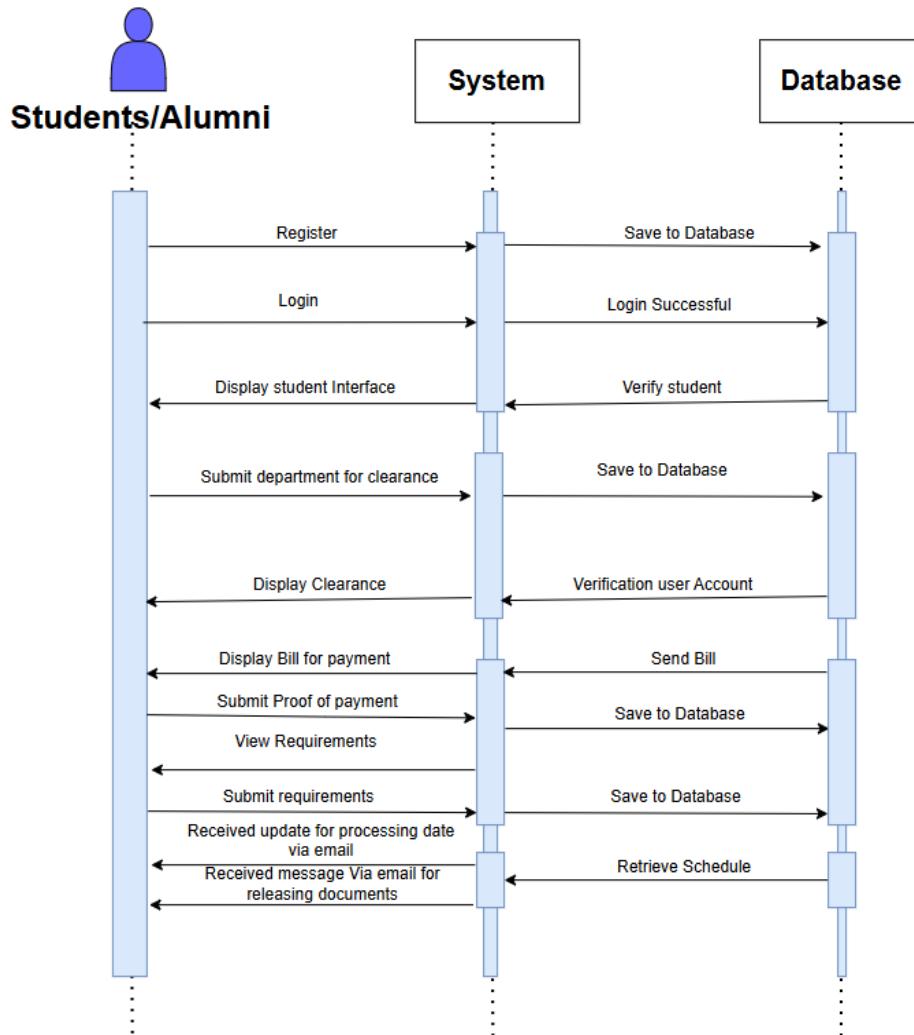


Figure 9. Sequence Diagram – Students/Alumni

Figure 9 illustrates the procedural steps available to students and alumni. After successfully registering, users can start using the login interface. Once logged in, students and alumni can access various functions, such as submitting request forms and requirements forms for database storage. Additionally, the system is designed to send mail to inform students that their documents are being processed. After completing the requirements, users are expected to receive their credentials.

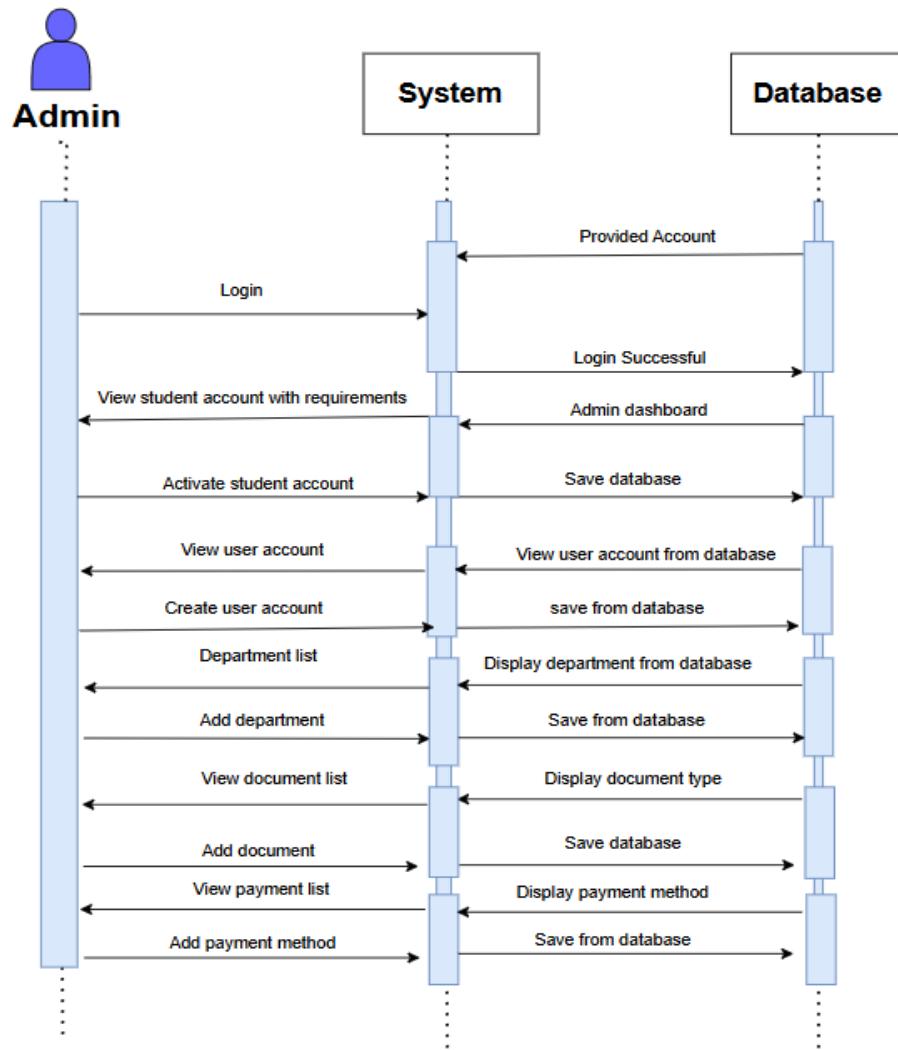


Figure 10. Sequence Diagram – Admin

Figure 10 illustrates the procedural steps available to the administrator. They can utilize the login interface to create an account in the SQL database for enhanced system security. Upon successful login, administrators access the dashboard, which displays the number of active users, students, and alumni who have created accounts. The administrator can also manage accounts for students, alumni, and users. Additionally, they can access and manage the list of document types stored in the database, set the payment method, and designate the department responsible for approving student clearances.

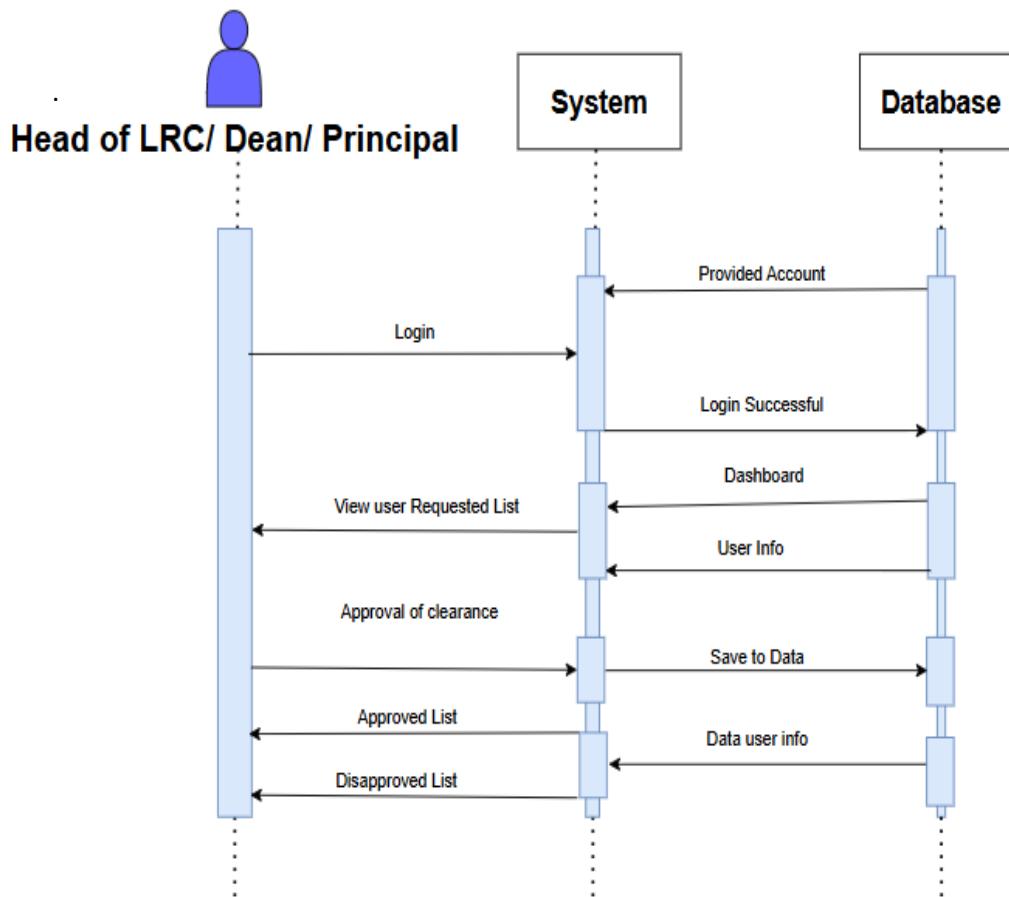


Figure 11. Sequence Diagram – Head of LRC/Dean and Principal

Figure 11 illustrates the procedural steps available to users. The user can use the login interface to complete the login process, which an admin-provided account facilitates. Once the login is successful, the user can access the requested list or user information, allowing them to approve the clearance.

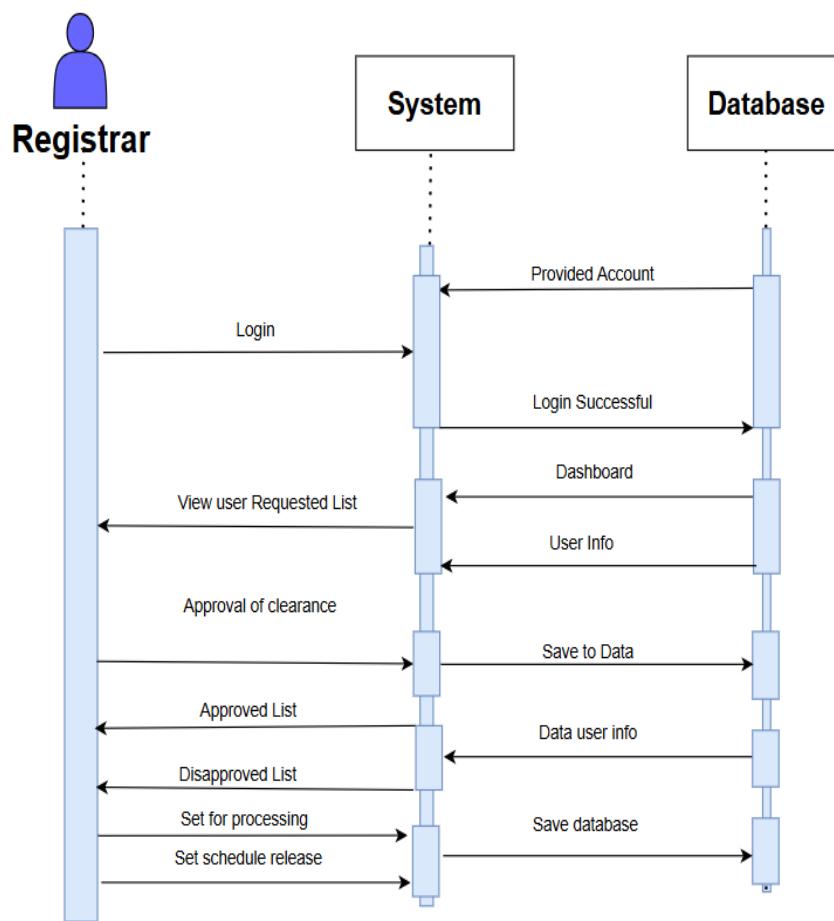


Figure 12. Sequence Diagram – Registrar Staff

Figure 12 illustrates the procedural steps available to users. The user can access the login interface to complete the login process, which an account provided by the administrator facilitates. Once logged in successfully, the user can access the dashboard to view the list of pending clearances and approve the requests listed. The registrar staff reviews the requested credentials, processes the document type requests made by students or alumni, and sets a schedule for the release date along with a tracking number. Finally, the registrar sends an email to inform the user that their document will be available for pickup soon.



3.6 ERD (Database Design)

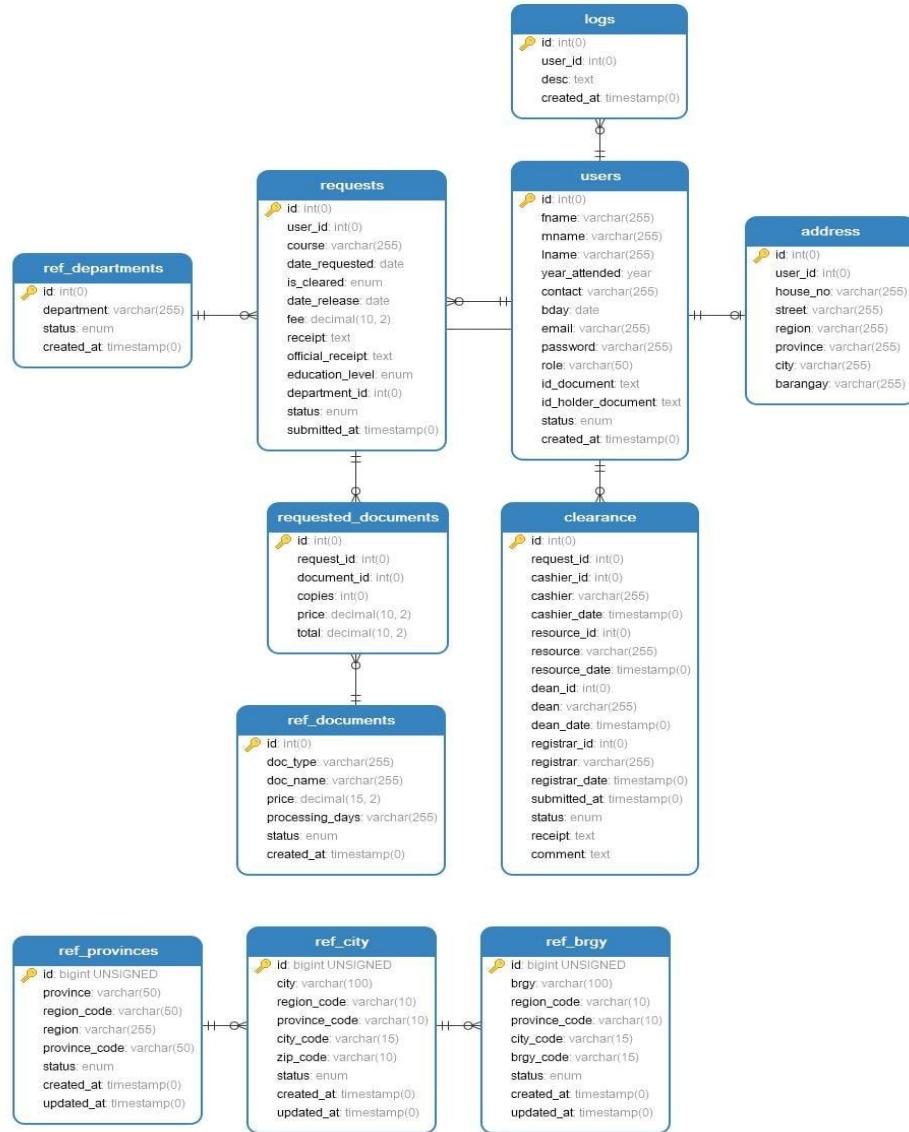


Figure 13. Entity Relationship Diagram – Database Design

Figure 13 shows each data processing step and how the data is processed and stored. The attached file is the ERD, which illustrates the contents of each table, as well as the primary key and foreign key. It also illustrates how the tables of the system's database are connected.



3.7. User Interface Design (Prototype)

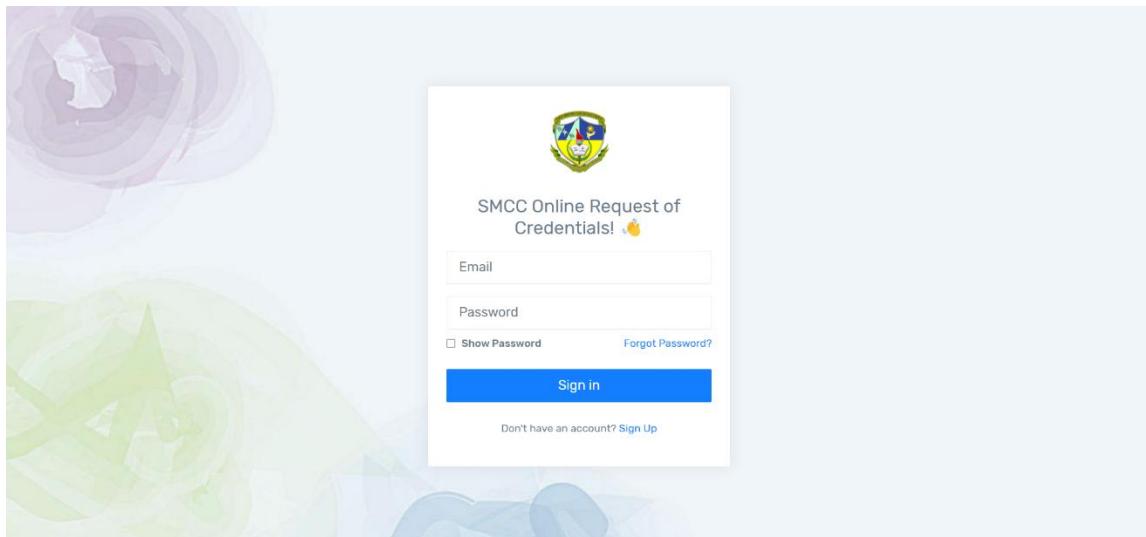


Figure 14. Admin/All Users - Login Page (User Interface Design)

Figure 14 displays the login page of the Online Request of Credential System (ORCS), designed for secure and user-friendly access. It includes fields for username and password and a Forgot Password option for account recovery. The system supports role-based access: students and alumni must create their accounts, while staff users, such as Cashiers, Head of LRC, Registrar Staff, and Deans/Principals, receive accounts from the administrator. Upon login, the system automatically identifies the user's role and displays the corresponding interface.

A screenshot of the SMCC Online Request of Credentials sign-up page. The page has a light gray background with a decorative floral watermark on the left. At the top center is the college's crest. Below it, the title "SMCC Online Request of Credentials!" is displayed with a small hand icon. The form consists of several input fields: "First Name *" (Ricel Ada), "Middle Name" (Salutis), "Last Name *" (Villarin), and "Ext *" (N/A). There is a checked checkbox for "Has Middle Name". Below these are "Birthdate *" (01/11/2003) and "Last School Year Attended *" (2025). To the right are "Contact *" (09705366534) and "Email*" (adangvillarin@gmail.com). Further down are "House No. & Street *" (D-6), "Province *" (AGUSAN DEL NORTE), "Municipality / City *" (NASIPIT), and "Barangay *" (Camagong). There are two file upload fields: "Upload Valid ID *" (Choose File: Valid ID.jpg) and "Upload a photo holding your valid ID *" (Choose File: Holding with valid ID.jpg). Both fields specify allowed file types: png, jpg, jpeg, pdf. A note below says "Please upload any valid government ID (Driver's License, Passport, etc.)". At the bottom is a large blue "Sign Up" button, and a smaller link "Already have an account? Sign In instead".

Figure 15. Students/Alumni - Sign-Up Page (User Interface Design)

Figure 15 presents the sign-up page enabling new users (students and alumni) to create an account. The interface includes fields for essential information such as Name (with separate inputs for last, first, and middle names), school year, course, contact number, address, and username, with a confirmation field for added security. The password will be emailed after the admin validates the user's information. A prominent 'Sign Up' button completes the form, leading users to the next step in the registration process.

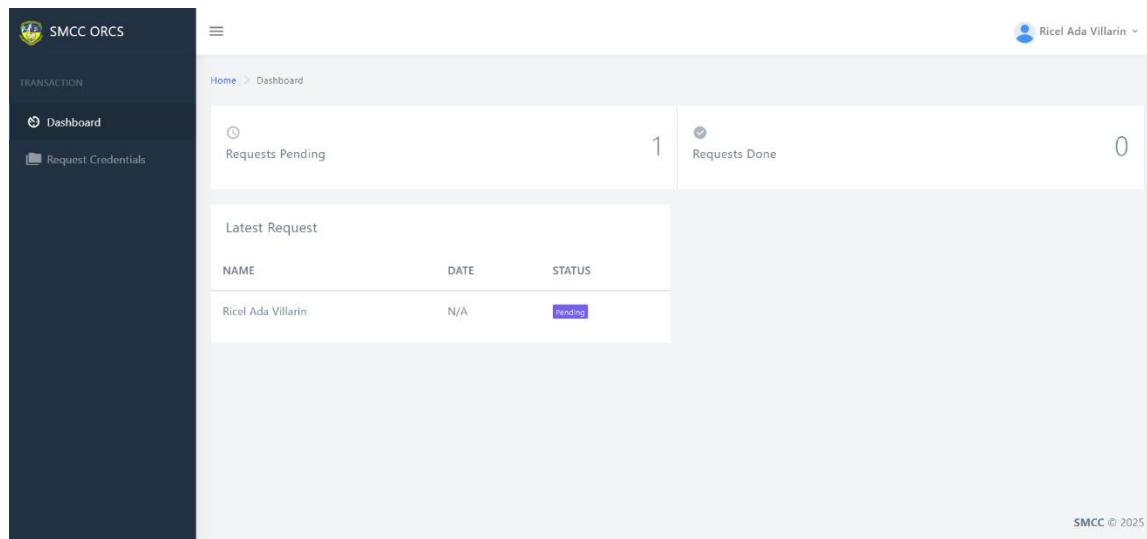


Figure 16. Students/Alumni- Dashboard (User Interface Design)

Figure 16 displays the dashboard of the SMCC Credentials system, where students and alumni can view the status of their credential requests. The dashboard shows the number of requests pending and completed. It also lists the latest requests with details such as the requester's name, date of request, and current status (e.g., *For Processing*, *Released*). Users must fulfill all request requirements to proceed to the following processing stage.



The screenshot shows a user interface for requesting clearance. At the top right, there is a profile picture and the name "Ricel Ada Villarin". Below the header, a button labeled "Request Clearance" is visible. A modal window titled "Clearance Form" is open in the center. Inside the modal, the name "Ricel Ada Villarin" is displayed above a search bar. There are dropdown menus for "Department" (set to CCIS) and "Course" (set to BSIT). Below these dropdowns are two buttons: "Close" and "Submit". A message "No data available in table" is shown below the dropdowns. At the bottom of the modal, it says "Showing 0 to 0 of 0 entries". On the far right of the main page, there is a table with columns "Total", "Status", and "Action". The footer of the page includes the text "SMCC © 2025".

Figure 17. Students/Alumni – Request Clearance (User Interface Design)

Figure 17 displays the ‘Request Clearance’ interface page. The Request Clearance button opens a clearance form, where the student can request clearance by selecting their department and course, then submitting the form.

The screenshot shows a payment interface. At the top right, there is a profile picture and the name "Ricel Ada Villarin". Below the header, a button labeled "Request Clearance" is visible. A modal window titled "Upload Receipt" is open in the center. It has sections for "Payment Method:" and "Proof of Payment:". Under "Payment Method:", there are three options: "BDO" (with account details: Name: Saint Michael College of Caraga, Account Number: 040558000114), "GCash" (with account details: Name: Saint Michael College of Caraga, Account Number: 09098549424), and "Maybank" (with account details: Name: Saint Michael College of Caraga, Account Number: 500000098291). Under "Proof of Payment:", there is a file input field with the file name "gcash image.png" and a note that only png, jpg, jpeg files are allowed. At the bottom of the modal, there are "Close" and "Save changes" buttons. On the far right of the main page, there is a table with columns "Action", "Previous", and "Next". The footer of the page includes the text "SMCC © 2025".

Figure 18. Students/Alumni - Payment for Clearance (User Interface Design)

Figure 18 shows the interface page for payment of clearance requirements. This interface is essential for requesters, especially those with outstanding balances at the school. Requesters



must complete the payment for clearance requirements before their request can be processed.

The system also provides an option to upload proof of payment.

The screenshot shows the 'Payment Details' section of the SMCC ORCS system. It displays three payment method options: BPI (Bank of the Philippine Islands), BDO, and GCash. Each method has its account name, account number, and account number. Below these, the 'Total Price' is listed as ₱1855.00. A 'Proof of Payment*' section includes a 'Choose File' button with 'No file chosen' and 'Allowed file types: png, jpg, jpeg'. At the bottom right are 'Close' and 'Save changes' buttons.

Figure 19. Students/Alumni - Payment for Requested Credentials (User Interface Design)

Figure 19 illustrates the interface page for the payment of requested documents. Students and alumni must complete the payment for requested credentials before processing can begin. The system allows users to upload proof of payment as part of their application.

The screenshot shows the 'Clearance Status - No. 1' section. It displays a message from 'Head, Learning Resource Center' stating: 'You have an unreturned library item. You are advised to return it.' Below this, there is a link: 'Please send your message here for further assistance: Click here'. On the left, there are notifications for 'Cashier' (May 4, 2025) and 'Dean / Principal'. On the right, there is a notification for 'School Registrar'. At the bottom right are 'Close', 'Previous', 'Next', and 'Action' buttons.

Figure 20. Students/Alumni - Clearance Status (User Interface Design)



Figure 20 displays the 'Clearance Status' page, part of the credential request system for students and alumni at Saint Michael College of Caraga. This interface allows users to track the approval status from various departments for their requested documents. If a section is marked as "DISAPPROVED," a comment box appears with additional requirements the requester must comply with. The system uses color-coded indicators, green for "Approved," blue for "Pending," and red for "Disapproved", for easy visual tracking of progress.

The screenshot shows the SMCC ORCS interface. On the left, there's a sidebar with 'TRANSACTION' and 'Request Credentials' options. The main area has a header 'Home > Request Credentials'. Below it is a table titled 'My Request List' with columns 'ID' and 'Date Requested'. A single row is shown with ID 1 and a date of 2025. To the right is a large 'Application Form' window. It includes fields for 'Name' (Ricel Ada Villarin), 'Are you a graduate?' (radio buttons for Yes or No, with Yes selected), 'Date Requested' (04/05/2025), 'Mailing Address' (House No. & Street: D-1, Province: SURIGAO DEL NORTE, Municipality / City: ALEGRIA, Barangay: Alipao), and dropdown menus for 'Others' (Honorable Dismissal, Reissuance of Diploma, School Form 10). At the bottom of the form are checkboxes for 'Certificate' (General Weighted Average, Certificate of Honors, Transcript of Record - Employment Purpose) and 'TOR' (Transcript of Record - Board Exam Purpose, Transcript of Records - Transfer Credential). Buttons for 'Close' and 'Submit' are at the bottom right. The top right of the main screen shows a user profile for Ricel Ada Villarin and a 'Request Clearance' button. The bottom right corner of the main screen says 'SMCC © 2025'.

Figure 21. Students/Alumni – Application Form (User Interface Design)

Figure 21 displays the 'Application Form' interface that students or alumni use to request credentials. Before submitting the form, requesters can specify whether they are graduates, enter their personal and address details, and select the type of credentials they need, such as certificates or transcripts, along with the purpose for each request.



The screenshot shows a feedback form titled 'Feedback Form' with instructions: 'Read each statement below. Check the appropriate column that corresponds to your rating. [Ganit ang kasangkuran; susha ang angay nga kolum ngakatumbas sa imong rating.]'. It includes a scale from 'VS-Very Satisfied' to 'VD-Very Dissatisfied' for five categories: Staff Appearance, Staff Helpfulness, Speed/Efficiency, Job Knowledge, and Quality of Service. Below the form is a text area for comments with placeholder text: 'I already received the credentials. Thank you for your service.' At the bottom, there is a footer with form details: Form Code No. FM-OCM-SMCC-HOF-01, Issue Month 02, Revision No. 01, Date Effective 14 September 2023, Approved by President, and buttons for Close and Submit.

Figure 22. Students/Alumni – Feedback Form (User Interface Design)

Figure 22 displays the ‘Feedback Form’ page. This form allows students or alumni to provide feedback on the quality of services received from the institution. Users are asked to rate five key service areas: Staff Appearance, Staff Helpfulness, Speed/Efficiency, Job Knowledge, and Overall Quality of Service. Each criterion can be rated using a four-point scale: Very Satisfied (VS), Satisfied (S), Dissatisfied (D), and Very Dissatisfied (VD) with corresponding radio buttons for easy selection.

The form also includes a text box where users can add comments, suggestions, or complaints for more detailed feedback. Located at the bottom are ‘Submit’ and ‘Close’ buttons, enabling users to either finalize and send their feedback or exit the form without submitting.



The screenshot shows the 'Activity Logs' section of the SMCC ORCS application. The table displays the following data:

ID	Description	TimeStamp
1017	Registration added: Riel Ada Villarin	2025-05-04 16:57:54
1021	Logged In	2025-05-04 17:38:08
1022	Changed Password user #7	2025-05-04 17:38:21
1023	Added clearance request # 1	2025-05-04 17:42:54

Showing 21 to 24 of 24 entries

Previous 1 2 3 Next

SMCC © 2025

Figure 23. All Users – Activity Logs (User Interface Design)

Figure 23 displays the profile interface, where all users can view activity logs showing each action's ID, description, and timestamp. Through this interface, users can identify the actions they have taken along with the corresponding timestamps.

The screenshot shows the 'Dashboard' section of the SMCC ORCS application for an admin user. The summary statistics are:

- Users: 6
- Students: 1
- Requests Pending: 0
- Requests Done: 0

Latest Request

NAME	DATE	STATUS
------	------	--------

SMCC © 2025

Figure 24. Admin - Dashboard (User Interface Design)

Figure 24 displays the 'Dashboard' interface, where the admin can view summary statistics, including the total number of users, students, pending requests, and completed



requests. The 'Latest Request' section shows recent transactions, including the requester's name, date, and current status, such as 'For Processing' or 'Released'.

The screenshot shows the 'Requesters' list page in the SMCC ORCS system. The left sidebar contains navigation links for Dashboard, Requesters, Users, References, Department, Course, Document Type, Payment Account, and ISO Form Code. The main content area displays a table titled 'Student List' with one entry:

ID	Name	Year Attended	Contact	Email	Status
7	Villarin, Richel Ada	2025	09705366534	adangvillarin@gmail.com	Pending

Below the table, it says 'Showing 1 to 1 of 1 entries'. To the right of the table is a vertical sidebar with actions: View Upload, Activate Account, Disapprove Account, and Reset Password. At the bottom right is the copyright notice 'SMCC © 2025'.

Figure 25. Admin – Requesters List (User Interface Design)

Figure 25 displays a list of requesters who have created accounts, along with details such as their names, year attended, department, contact information, educational level, and account status. This interface also provides actions for viewing the requirements uploaded by students or alumni during sign-up. Additionally, administrators have the option to activate or disapprove accounts and to reset passwords.



The screenshot shows the 'User List' page. The table contains the following data:

ID	First Name	Middle Name	Last Name	Email	Role	Department	Status	Action
2	Darlene	Registrar	Alag	ricelada_villarin@smccnasipit.edu.ph	Registrar	Registrar	Active	Action
3	Noel	Cashier	Baja	popohinautan45@gmail.com	Cashier	Cashier	Active	Action
4	Renel	Librarian	Maneda	rjsgwapof23@gmail.com	Librarian	Learning Resource Center	Active	Action
5	Daisa	DeanCCIS	Gupit	angelmaebaguio16@gmail.com	Dean	CCIS	Active	Action
6	Rene	Principal JHS	Japitana	angelo_hinautan@smccnasipit.edu.ph	Principal	JHS	Active	Action

Showing 1 to 5 of 5 entries

Figure 26. Admin – Users List (User Interface Design)

Figure 26 displays the Users List interface, showing roles such as Cashier, Head of LRC, Deans, and Principals responsible for clearance approvals. The admin creates their accounts and can edit users via the “Action” button or add new users using the “Add Users” button.

The screenshot shows the 'Department List' page. The table contains the following data:

ID	Department	Facebook Link	Status	Action
1	Elementary	https://www.facebook.com/smccelementarydepartment	Active	Edit
2	JHS	https://www.facebook.com/SMCCJuniorHighSchool	Active	Edit
3	SHS	https://www.facebook.com/SMCCSHSOfficial	Active	Edit
4	CCIS	https://www.facebook.com/CCISofSMCCNasipit	Active	Edit
5	CCIE	https://www.facebook.com/smccorim	Active	Edit
6	CBM	https://www.facebook.com/SMCCCMBM	Active	Edit
7	CTHM	https://www.facebook.com/profile.php?id=100095316962172	Active	Edit
8	CTE	https://www.facebook.com/smcccollegeofteachereducation	Active	Edit
9	GAS	https://www.facebook.com/SMCCCCAS	Active	Edit
10	Learning Resource Center	https://www.facebook.com/LRCSMCC	Active	Edit

Showing 1 to 10 of 13 entries

Figure 27. Admin – Department List (User Interface Design)

Figure 27 displays the ‘Department List’ page for administrators in the ORCS. This interface allows admins to view and manage department records, including the department name and



associated Facebook link. Each department entry is marked with a status (e.g., Active) and includes an Edit button for making changes. An Add Department button at the top-right corner enables the addition of new departments. The page also has a Search bar and pagination controls for easy navigation.

The screenshot shows a web-based administrative interface for managing courses. On the left is a dark sidebar menu with options like Dashboard, Requests, Users, Department, Course, Document Type, Payment Account, and ISO Form Code. The main content area has a header with 'Home', 'Reference', and 'Course' tabs, and a search bar. A blue 'Add Course' button is in the top right. Below is a table titled 'Course List' with columns: ID, Department, Course, Status, and Action (with an 'Edit' button). The table contains 10 entries, with 34 total entries shown. The data includes courses like BSIT, BSIS, DIT, and Grade 1-5, categorized under CCIS and Elementary departments, all marked as 'Active'.

ID	Department	Course	Status	Action
1	CCIS	BSIT	Active	Edit
2	CCIS	BSCS	Active	Edit
3	CCIS	BLIS	Active	Edit
4	CCIS	BSIS	Active	Edit
5	CCIS	DIT	Active	Edit
6	Elementary	Grade 1	Active	Edit
7	Elementary	Grade 2	Active	Edit
8	Elementary	Grade 3	Active	Edit
9	Elementary	Grade 4	Active	Edit
10	Elementary	Grade 5	Active	Edit

Figure 28. Admin – Course List (User Interface Design)

Figure 28 displays the ‘Course List’ page for administrators in the ORCS. This interface allows admins to manage courses under various departments. Each entry shows the department, course name, status (e.g., Active), and an Edit button for modifications. A Search bar and an Add Course button are also available for quick access and updates.



The screenshot shows a table titled "Document Type List" with 10 entries. The columns are: ID, Document Type, Document Name, Price, Processing Days, With Doc Stamp?, Status, and Action. The entries are:

ID	Document Type	Document Name	Price	Processing Days	With Doc Stamp?	Status	Action
1	TOR	Transcript of Record - Board Exam Purpose	1050.00	3-5 working days	Yes	Active	Edit
2	TOR	Transcript of Record - Employment Purpose	1050.00	3-5 working days	Yes	Active	Edit
3	TOR	Transcript of Records - Transfer Credential	1050.00	3-5 working days	Yes	Active	Edit
4	Certificate	Certificate - General Weighted Average	200.00	1-2 working days	Yes	Active	Edit
5	Certificate	Certificate of Honors	200.00	1-2 working days	Yes	Active	Edit
6	Certificate	Certification of Enrollment	200.00	1-2 working days	Yes	Active	Edit
7	Certificate	Certificate (English as a medium of instruction)	200.00	1-2 working days	No	Inactive	Edit
8	Certificate	Certificate of Units Earned	100.00	1-2 working days	Yes	Active	Edit
9	Certificate	Certification of Graduation	100.00	1-2 working days	Yes	Active	Edit
10	Others	School Form 10	300.00	3-5 working days	Yes	Active	Edit

Showing 1 to 10 of 14 entries

Figure 29. Admin – Document Type List (User Interface Design)

Figure 29 displays a list of document types available for student-requested credentials.

The admin can manage document types in this section by editing existing entries. The list includes key details such as the document type, name, price, processing time (in days), and status. The 'Add Document Type' button allows admins to add new document categories as needed.

The screenshot shows a table titled "Payment Account List" with 3 entries. The columns are: ID, Account Name, Account Number, Picture, Status, and Action. The entries are:

ID	Account Name	Account Number	Picture	Status	Action
1	Saint Michael College of Caraga	500000098291		Active	Edit
2	Saint Michael College of Caraga	040558000114		Active	Edit
3	Saint Michael College of Caraga	09098549424		Active	Edit

Showing 1 to 3 of 3 entries

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Figure 30. Admin – Payment Account (User Interface Design)

Figure 30 displays a list of available payment account methods within the system. This



interface allows the administrator to manage various payment options efficiently. It includes key details such as the payment name, account number, payment logo, status, and an action button for modifications.

The administrator can use the 'Add Payment Account' button to register new payment methods, providing flexibility in handling transactions. The 'Edit' button enables updates to existing payment details, including account information, status changes, and payment logo replacements. Additionally, the system supports search, sorting, and pagination features to enhance navigation and management of payment accounts.

The screenshot shows the 'ISO Form Code List' page. The table has the following data:

ID	Form Name	Form Code No.	Issue Status	Revision No.	Date Effective	Approved	Status	Action
1	Feedback Form	FM-OCM-SMCC-HCF-01	02	03	2023-09-14	President	Active	<button>Edit</button>

Below the table, it says 'Showing 1 to 1 of 1 entries'. At the top right, there is a 'Search:' input field and a 'Previous' button. At the bottom right, it says 'SMCC © 2025'.

Figure 31. Admin- ISO Form Code (User Interface Design)

Figure 31 shows the 'ISO Form Code' interface page, where the admin can add and edit ISO form codes for reports or other forms provided by the ISO. Each form entry includes its corresponding form number, issue status, revision number, effective date, and the name of the approving authority.



The screenshot shows the SMCC ORCS dashboard. On the left sidebar, there are links for Dashboard, Clearance (Clearance List, Clearance Disapproved List), Requests (Payment Verification), and Reports (Clearance Report, Credentials Report). The main content area shows a summary of pending requests: 'Clearance Pending' (1) and 'Requests Pending' (0). Below this, a table titled 'Latest Request' lists a single entry: Ricel Ada Villarin, N/A, Pending.

Figure 32. User (Cashier) - Dashboard (User Interface Design)

Figure 32 shows the ‘Dashboard’ interface, which enables the Cashier to view credential requests, including pending clearances, completed requests, and recent request transactions, along with their statuses.

The screenshot shows the 'Clearance List' page. The sidebar includes links for Dashboard, Clearance (Clearance List, Clearance Disapproved List), Requests (Payment Verification), and Reports (Clearance Report, Credentials Report). The main content displays a table with one row for Ricel Ada Villarin, dated May 4, 2025. The 'Is Cleared?' column shows 'No'. A message in the 'Comment' column states: 'You have an outstanding balance of 5,000. Please pay it first.' Action buttons 'For Cashier' and 'Action' are present, along with 'View Receipt' and 'Approve' or 'Disapprove' options. Navigation buttons for 'Previous' and 'Next' are at the bottom.

Figure 33. User (Cashier) – Clearance List (User Interface Design)

Figure 33 shows the clearance approval section for the cashier, which enables authorized users to review, approve, or disapprove clearance requests. Each request includes an action button that allows staff to take appropriate action. Upon approval, a message prompt notifies the



requester of any outstanding requirements, such as institutional balances, ensuring transparency and proper processing. Once a student fulfills the requirements, the interface provides an action button that allows the cashier to approve the request again. The system also features a searchable and sortable table for efficient management of clearance requests.

ID	Name	Date Submitted	Is Cleared?	Comment	Status	Action
1	Ridel Ada Villarin	May 4, 2025	No.	You have an outstanding balance of 5,000. Please pay it first.	For Uploading	

Figure 34. User (Cashier) – Clearance Disapproved List (User Interface Design)

Figure 34 shows the ‘Cashier Clearance Disapproved List’ interface. This page displays clearance requests that have been disapproved and are pending student compliance with specific requirements.



A screenshot of the SMCC ORCS software interface. The left sidebar shows navigation options: Dashboard, CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Payment Verification checked), and REPORTS (Clearance Report, Credentials Report). The main content area is titled 'Verify Payments' and shows a 'Payment List'. A table displays one entry: ID 1, Name Ricel Ada Villarin, Date Requested May 4, 2025, Is Cleared? Yes, Date Release (empty), Total 1855.00, Status For verification. Action buttons include View Receipt, Approve (highlighted in blue), and Disapprove. Navigation at the bottom shows 'Showing 1 to 1 of 1 entries' and buttons for Previous (1) and Next.

Figure 35. User (Cashier) – Payment Verification (User Interface Design)

Figure 35 shows the Payment List's 'Payment Verification' interface, which allows the cashier to manage and validate students' credential payments efficiently. This ensures students have paid the required amount by reviewing the uploaded proof of payment. The interface features a six-column table displaying each student's ID number, name, course and year, date requested, status, and actions. In the Action column, the 'View Payment' button lets the cashier verify the payment. Once validated, the cashier can send the official receipt to confirm and approve the payment of the student's credentials.





SMCC ORCS

- [Dashboard](#)
- [CLEARANCE](#)
 - [Clearance List](#)
 - [Clearance Disapproved List](#)
- [REQUESTS](#)
- [REPORTS](#)
 - [Payment Verification](#)
 - [Clearance Report](#)
 - [Credentials Report](#)

PRINT

Home > Report > Clearance Report

From * To *

01/05/2025 05/05/2025

Department *

All Departments

Print Report

Show 10 entries

#	Name	Department	Course	Receipt	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	View Receipt	May 5, 2025	Approved

Showing 1 to 1 of 1 entries

Search:

Previous **1** Next

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CLEARANCE REPORT
 Period: May 01, 2025 - May 05, 2025
 Cashier Office

#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 05, 2025	Approved

Prepared by:

 Noel Baja

Figure 36. User (Cashier) – Report for Clearance (User Interface Design)

Figure 36 shows the completed clearance report interface designed for the cashier. The interface allows the cashier to monitor and manage clearance requests that have been reviewed and approved. Users can filter the report based on a specific date range and department to locate particular records easily. Additionally, it features a “View Receipt” button, enabling the cashier to view the uploaded payment receipt submitted by the requester, especially when an outstanding balance needs verification.



The screenshot shows the SMCC ORCS dashboard. On the left, a sidebar menu includes 'Dashboard', 'CLEARANCE' (with 'Clearance List' and 'Clearance Disapproved List' options), and 'REPORTS' (with 'Clearance Report'). The main content area shows a 'Home > Dashboard' breadcrumb. A prominent message 'Clearance Pending' with a count of '1' is displayed. The bottom right corner of the page footer says 'SMCC © 2025'.

Figure 37. User (Dean/Principal / Head of LRC) – Dashboard (User Interface Design)

Figure 37 illustrates the dashboard for the Head of LRC, Dean, or Principal, which displays pending clearance requests and the number of students seeking clearance. This dashboard interface is consistent across all users in these roles and specifically highlights pending requests to notify them that students are awaiting clearance approval.

The screenshot shows the 'Clearance List' page. The sidebar menu is identical to Figure 37. The main content area shows a table titled 'Clearance List' with one entry:

ID	Name	Date Submitted	Is Cleared?	Comment	Status	Action
1	Ricel Ada Villarin	May 4, 2025	No		For Resource	Action

Below the table, it says 'Showing 1 to 1 of 1 entries'. The bottom right corner of the page footer says 'SMCC © 2025'.

Figure 38. User (Dean/Principal / Head of LRC) – Clearance List (User Interface Design)

Figure 38 shows the clearance list for the Head of LRC, Dean, or Principal, displaying a list of students requesting clearance. All users in these roles share the same interface, which includes



columns for ID, Name, Date Submitted, Is Cleared, Comments, Status, and an Action column with Approve and Disapprove buttons. If the student or alumni has completed all requirements and there are no issues, the clearance can be approved following validation. However, the clearance request will be disapproved if there are pending requirements.

ID	Name	Date Submitted	Is Cleared?	Comment	Status	Action
1	Ricel Ada Villarin	May 4, 2025	No	You have an unreturned library item. You are advised to return it.	Disapproved	<input type="button" value="Action"/> <input type="button" value="Approve"/>

Figure 39. User (Dean/Principal / Head of LRC) – Clearance Disapprove List (User Interface Design)

Figure 39 illustrates the ‘Disapproved Clearance’ requests interface, where the Head of LRC, Dean, or Principal can review clearance requests previously disapproved due to incomplete compliance with requirements. This interface provides a clear overview of requests that require further action, particularly for students or alumni who have chosen to fulfill their requirements online.

The Disapproved Clearance Requests list includes the same columns as the Approved Clearance Requests list: ID #, Name, Date Submitted, Is Cleared, Comment, and Status, but also features an additional Action column with an Approve button. Once the student or alumnus has fulfilled all requirements, the Head of LRC, Dean, or Principal can approve the clearance request following a validation process.



The screenshot shows the 'Clearance Report' page of the SMCC ORCS system. The report table displays the following data:

#	Name	Department	Course	Date Approved	Status
1	Rigel Ada Villarin	CCIS	BSIT	May 5, 2025	Approved

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www.smccnaiso.edu.ph

CLEARANCE REPORT
Period: May 01, 2025 - May 05, 2025
Librarian Office

#	Name	Department	Course	Date Approved	Status
1	Rigel Ada Villarin	CCIS	BSIT	May 05, 2025	Approved

Prepared by:

Renel Maneda

Figure 40. User (Dean/Principal / Head of LRC) – Report for Clearance (User Interface Design)

Figure 40 shows the completed clearance report interface for Deans, Principals, or Heads of LRC. It allows users to filter approved clearance records by date and department, revealing key details like name, department, course, approval date, and status for easy monitoring.



The screenshot shows the SMCC ORCS dashboard. On the left is a sidebar with navigation links: SMCC ORCS, Dashboard, CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Requester, For Processing, Schedule Release Date, Feedback List), and REPORTS (Clearance Report, Credentials Report, Request History Report). The main area displays a summary of requests: Clearance Pending (1), Requests Pending (0), and Request for Processing (0). Below this is a 'Latest Request' table with columns NAME, DATE, and STATUS, showing a single entry for Riel Ada Villarin with N/A for DATE and Pending for STATUS. The bottom right corner shows 'SMCC © 2025'.

Figure 41. User (Registrar Staff) – Dashboard (User Interface Design)

Figure 41 shows the registrar's 'Dashboard' interface, providing an overview of credential requests, including pending clearances, submitted requests, and recent transaction activity.

The screenshot shows the SMCC ORCS Clearance List page. The sidebar is identical to Figure 41. The main area is titled 'Clearance List' and shows a table of clearance requests. The table has columns: ID, Name, Date Submitted, Is Cleared?, Comment, Status, and Action. One row is shown for Riel Ada Villarin, with May 4, 2025 in the Date Submitted column, No in the Is Cleared? column, and a blue 'For Review' button in the Status column. The Action column contains a dropdown menu with 'Approve' and 'Disapprove' options. The bottom of the page shows a message 'Showing 1 to 1 of 1 entries' and navigation buttons for Previous and Next. The bottom right corner shows 'SMCC © 2025'.

Figure 42. User (Registrar Staff) – Clearance List (User Interface Design)

Figure 42 illustrates the registrar's clearance list, displaying students requesting clearance along with their ID, name, date submitted, clearance status, comments, and overall status. The Action column includes Approve and Disapprove buttons. Clearances can be approved after validation if all requirements are met; otherwise, they will be disapproved.



The screenshot shows the 'Disapproved List' page of the SMCC ORCS software. The left sidebar contains navigation links for Dashboard, Clearance (Clearance List, Clearance Disapproved List), Requests (Requester, For Processing, Schedule Release Date, Feedback List), and Reports (Clearance Report, Credentials Report, Request History Report). The main content area has a header 'Disapproved List' with a search bar. Below it is a table with columns: ID, Name, Date Submitted, Is Cleared?, Comment, Status, and Action. A single entry is listed: ID 1, Name Rigel Ada Villarin, Date Submitted May 4, 2025, Is Cleared? No, Comment 'You lack credentials in the registrars office, which is a School Form 10. You are advised to comply with it first.', Status 'Disapproved', and Action buttons for 'Action' (dropdown) and 'Approve'. Navigation buttons for Previous and Next are at the bottom.

ID	Name	Date Submitted	Is Cleared?	Comment	Status	Action
1	Rigel Ada Villarin	May 4, 2025	No	You lack credentials in the registrars office, which is a School Form 10. You are advised to comply with it first.	Disapproved	Action Approve

Figure 43. User (Registrar Staff) – Clearance Disapprove List (User Interface Design)

Figure 43 illustrates the ‘Disapproved Clearance’ requests interface, where the registrar reviews requests initially disapproved due to incomplete requirements. The list displays the same columns as the Approved Requests: ID #, Name, Date Submitted, Is Cleared, Comment, and Status, with an additional Action column for approval. Once students or alumni fulfill the requirements, the registrar can validate and approve the request.




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- [CLEARANCE](#)
 - [Clearance List](#)
 - [X Clearance Disapproved List](#)
- [REQUESTS](#)
 - [Requester](#)
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 - [Schedule Release Date](#)
 - [Feedback List](#)
- [REPORTS](#)
 - [Clearance Report](#)
 - [Credentials Report](#)
 - [Request History Report](#)

Home > Requested Documents

List of Requested Documents

Show 10 entries

ID	Name	Department	Course	Date Requested	Graduate?	Year Attended / Graduated	Status	Action
1	Ricel Ada Villarin	CCIS	BSIT	May 4, 2025	Yes	2025	Pending	Details Deny Request

Showing 1 to 1 of 1 entries

Search:

Previous [1](#) Next

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 - [Credentials Report](#)
 - [Request History Report](#)

Request Details

#	Document Type	Document Name	Number of Copies	Doc Stamp	Price	Total
1	Certificate	Certificate - General Weighted Average	<input type="text" value="1"/>	<input type="text" value="35.00"/>	<input type="text" value="200.00"/>	235.00
2	Certificate	Certificate of Honors	<input type="text" value="1"/>	<input type="text" value="0.00"/>	<input type="text" value="200.00"/>	200.00
3	Certificate	Certification of Graduation	<input type="text" value="1"/>	<input type="text" value="35.00"/>	<input type="text" value="100.00"/>	135.00
4	TOR	Transcript of Record - Employment Purpose	<input type="text" value="1"/>	<input type="text" value="35.00"/>	<input type="text" value="1050.00"/>	1085.00

Search:

Action [Action](#)

Previous [1](#) Next

Shipping Fee:

Total:

[Close](#) [Save Changes](#)

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Figure 44. User (Registrar Staff) – Request Details (User Interface Design)

Figure 44 illustrates the ‘Request Details’ interface, where the registrar can view the details and types of documents requested by students or alumni. By clicking the ‘Save’ button, the registrar notifies them to proceed with the payment for the total amount of the requested credentials. The registrar also has the right to deny the request if the credential is unavailable in the registrar's office.



The screenshot shows the 'Documents Awaiting Processing' section of the SMCC ORCS system. A modal dialog box titled 'For Processing' is open, prompting the user to 'Please enter how many days' with a text input field containing '3-5 working days'. Below the input field are 'Submit' and 'Cancel' buttons. The main table lists one document entry: ID 1, Name Ricel Ada Villarin, Department CCIS, Year Attended / Graduated 2025, Status 'For Processing', and Action button.

Figure 45. User (Registrar Staff) – Processing of Documents (User Interface Design)

Figure 45 illustrates the ‘Processing Documents’ interface, where the registrar can view document requests from students or alumni after payment has been made. The interface displays the request details and student information. The registrar can use the action button to notify the requester that their credentials are being processed.

The screenshot shows the 'Schedule Release Date' section of the SMCC ORCS system. A modal dialog box titled 'Schedule Release Date' is open, prompting the user to enter 'Release Date*' (05/05/2025), 'Estimated Delivery*' (5 - 7 days), 'Courier Name*' (J&T), 'Reference Number*' (930000123456), and 'Mailing Address*' (D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE). Below the input fields are 'Close' and 'Save changes' buttons. The main table lists one document entry: ID 1, Name Ricel Ada Villarin, Status 'Processing', and Action button.

Figure 46. User (Registrar Staff) – Schedule Release Date (User Interface Design)

Figure 46 illustrates the list of scheduled release dates for the documents interface, where the registrar can view the details and types of documents requested. The registrar can also check



the official receipt to verify that the student or alumni has completed the payment for the requested credentials. A modal input form opens by clicking the action button, allowing the registrar to inform the student or alumni that their request is in transit. Once the process is complete, the registrar can email the tracking number and courier details.

The screenshot shows the 'Feedback List' page of the SMCC Online Credential System. On the left is a sidebar with navigation links: Dashboard, CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Requester, For Processing, Schedule Release Date, Feedback List), and REPORTS (Clearance Report, Credentials Report, Request History Report). The main area displays a table titled 'Feedback List' with one entry:

ID	Date Requested	Date Approved	Date Released	Name	Feedback	Status
1	May 4, 2025	May 4, 2025	May 4, 2025	Ricel Ada Villarin	View	Done

Below the table, it says 'Showing 1 to 1 of 1 entries'. At the bottom right are 'Previous' and 'Next' buttons. The top right shows a user profile for Darlene Alag. The bottom right corner of the main window says 'SMCC © 2025'.

On the right side, a 'Print' dialog box is open. It includes fields for 'Destination' (EPSON L120 Series), 'Pages' (All), 'Copies' (1), 'Layout' (Portrait), and 'Color' (Color). There are also 'More settings' and 'Print' (blue) and 'Cancel' buttons. The print preview shows the feedback form with various rating scales and a signature field.

Figure 47. User (Registrar Staff) – Feedback List (User Interface Design)

Figure 47 illustrates the 'Feedback List' interface, where the registrar can view and print the feedback form of the requesters after the credentials have been released.



SMCC ORCS

Dashboard

CLEARANCE

- Clearance List
- Clearance Disapproved List

REQUESTS

- Requester
- For Processing
- Schedule Release Date
- Feedback List

REPORTS

- Clearance Report
- Credentials Report
- Request History Report

Home > Report > Clearance Report

From * To *

01/05/2025 04/05/2025

Department *

All Departments Print Report

Show 10 entries Search:

#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 4, 2025	Approved

Showing 1 to 1 of 1 entries Previous 1 Next

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CLEARANCE REPORT
 Period: May 01, 2025 - May 04, 2025
 Registrar Office

#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 04, 2025	Approved

Prepared by:
 Darlene Alag

Figure 48. User (Registrar Staff) – Report for Clearance (User Interface Design)

Figure 48 displays the ‘Clearance Report’ page for registrar staff. The registrar can filter clearance records by date and department and generate a printable report. The table shows relevant details such as Name, Department, Course, Date Approved, and Status. A search bar and pagination controls support easy navigation.



SMCC ORCS

Dashboard

CLEARANCE

Clearance List

Clearance Disapproved List

REQUESTS

Requester

For Processing

Schedule Release Date

Feedback List

REPORTS

Clearance Report

Credentials Report

Request History Report

From * 05/05/2025 To * 05/05/2025

Department * All Departments Document Type * All Documents Search Name *

Print Report

Show 10 entries

#	Name	Department	Course	Document Type	Mailing Address	Date Released	Status
1	Ricel Ada Villarin	CCIS	BSIT	Certificate - General Weighted Average	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
2	Ricel Ada Villarin	CCIS	BSIT	Certificate of Honors	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
3	Ricel Ada Villarin	CCIS	BSIT	Certification of Graduation	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
4	Ricel Ada Villarin	CCIS	BSIT	Transcript of Record - Employment Purpose	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done

Showing 1 to 4 of 4 entries

Previous 1 Next

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CREDENTIALS REPORT

Period: May 05, 2025 - May 05, 2025

Registrar Office

#	Name	Department	Course	Document Type	Mailing Address	Date Released	Status
1	Ricel Ada Villarin	CCIS	BSIT	Certificate - General Weighted Average	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
2	Ricel Ada Villarin	CCIS	BSIT	Certificate of Honors	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
3	Ricel Ada Villarin	CCIS	BSIT	Certification of Graduation	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
4	Ricel Ada Villarin	CCIS	BSIT	Transcript of Record - Employment Purpose	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done

Prepared by:

Darlene Alag

Approved by:

Cecilio C. Ariolla

Figure 49. User (Registrar Staff) – Report for Requested Credentials (User Interface Design)

Figure 49 shows the ‘Requested Credentials Report’ page used by registrar staff. It enables users to generate reports by filtering requests through date range, department, document type, and student name. The table displays key information, including the requester’s name, course, type of document requested, mailing address, approval date, and current status. A “Print Report” button is provided for quick printing, search, and pagination features for efficient navigation.



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- [REPORTS](#)
 - [Clearance Report](#)
 - [Credentials Report](#)
 - [Request History Report](#)

Home > Report > Request History Report

From *

To *

Department *

Search Name *

#	Name	Application Form	Mailing Address	Date Released	Status
1	Ricel Ada Villarin		D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done

Showing 1 to 1 of 1 entries

Previous
1
Next

Darlene Alag

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Tel. No. (085) 300-2932 | www.smccnasipit.edu.ph

APPLICATION FORM

Name: Ricel AdaVillarin

Department: CCIS

SY: 2025

Date: May 4, 2025

Course: BSIT

Document Name

Document Name	Amount
Certificate - General Weighted Average	200.00
Certificate of Honors	200.00
Certification of Graduation	100.00
Transcript of Record - Employment Purpose	1050.00
Total	1550.00

0917 707 6630 | SMCC Registrar | registrar@smcc.nasipit.edu.ph

Previous
1
Next

Darlene Alag

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Figure 50. User (Registrar Staff) – Request History Report (User Interface Design)

Figure 50 shows the ‘Request History Report’ interface, where the registrar can filter and view records of document requests submitted by students or alumni. The list displays the requester’s name, mailing address, date released, and status. Each entry allows viewing the corresponding application form containing the requester’s information and request details.



3.8 Software Platforms, Development Environment, and Tools

Table 1

Software Requirements

Components	Specification	Usage
Internet Browser	Any	The internet browser simplifies access to web pages and enables users to navigate the World Wide Web. It connects to the web server, which links users to the GCMS and grants access to its features after a successful login.
Front-end	HTML CSS JavaScript Bootstrap jQuery	<p>HTML serves as the structural foundation of web pages, enabling the organization and arrangement of content components such as text, images, and forms.</p> <p>CSS enhances the visual design of HTML elements, allowing developers to customize layouts, colors, fonts, and spacing, which results in aesthetically pleasing and responsive designs.</p> <p>JavaScript adds functionality and interactivity to web pages, empowering developers to implement features such as animations and quick updates that respond to user input.</p> <p>Bootstrap is an HTML, CSS, and JS library that focuses on simplifying the development of informative web pages (as opposed to web applications).</p> <p>jQuery is a fast, lightweight JavaScript library that simplifies HTML document traversal, event handling, animation, and AJAX interactions to make web development easier and more efficient.</p>



Back-end	MySQL (Database) PHP	MySQL is an open-source software that offers various features for efficient data management. phpMyAdmin provides a user-friendly interface for tasks like managing databases and running queries. PHP, a server-side programming language, enables dynamic content generation from static web pages and connects the front end to the backend (database) through an MVC architectural design.
Server	Apache	The XAMPP Control Panel manages XAMPP components, ensuring smooth operation and easy access to Apache and MySQL servers.

3.9 Hardware Requirements

Table 2

Hardware Requirements

Components	Specification	Usage
Device	RAM Processor HDD SSD Flash Storage	Electronic devices like computers, laptops, smartphones, and tablets use Random Access Memory (RAM) to quickly access stored information and serve as temporary storage. The Central Processing Unit (CPU) is the brain of a computing device, responsible for processing data and executing instructions. It has multiple cores for handling different tasks simultaneously. Computers and laptops use Hard Disk Drives (HDD) or Solid State Drives (SSD) for storage, while mobile devices rely on flash storage for applications, multimedia, and operating systems.
Printer	Any Ink Jet Printer Units	An inkjet printer is a device that prints text, images, and graphics on paper using ink. It is commonly used and usually more affordable than other types of printers. This reliable option is perfect for everyday printing tasks, as it can produce high-quality prints for a variety of documents and images.



3.10 Ethical Standard

This research, entitled "Online Request of Credentials for Saint Michael College of Caraga," addressed several ethical considerations to ensure that the study met the required standards for research integrity and participant protection.

A. Protection of Intellectual Property Rights (IPR)

The "Online Request of Credentials for Saint Michael College of Caraga" system incorporated innovative processes to streamline the credential request procedure. All materials produced during this project, including system documentation, source code, and technical designs, were safeguarded through copyright protection to ensure proper attribution and prevent unauthorized use. The logo of Saint Michael College of Caraga was used in the system to represent the institution and was protected under applicable trademark and copyright laws to prevent misuse. Proper permissions were secured to ensure compliance with intellectual property standards.

B. Informed Consent

The capstone project involved conducting interviews with key stakeholders including office heads such as the Registrar, Cashier, LRC personnel, Deans, and Principals, as well as students and alumni, to gather relevant feedback for the development of a web-based system aimed at enhancing the online credential request process at Saint Michael College of Caraga. The interview guide was carefully designed based on the study's objectives and the specific data required to achieve them. It focused on key themes such as existing workflows, encountered challenges, user experiences, and confidentiality practices. Participants were informed about the study's objectives, procedures, minimal risks, and potential benefits, particularly how their feedback would improve the system's functionality. Before conducting the interviews, a letter of consent was provided and secured to ensure that participants fully understood the purpose of the study and voluntarily agreed to participate. Participants were also informed of their right to withdraw from the study at any time



without facing any consequences. All information collected during the interviews was treated with strict confidentiality and used solely for system development and academic research.

C. Data Privacy and Confidentiality

The system ensured data protection by implementing strong security measures, including encryption and Role-Based Access Control (RBAC). Access to sensitive information, such as student credentials and request statuses, was restricted to authorized personnel only. User data was safeguarded and not disclosed to any unauthorized individuals. For performance analysis, anonymized and aggregated data were utilized while maintaining strict confidentiality for all users, upholding privacy and ethical standards throughout system operations.

D. Voluntary Participation and Freedom to Withdraw

Participation in developing and testing the Online Request of Credentials System was entirely voluntary. Participants were fully informed of their right to withdraw from the project without impacting their professional roles or standing. To uphold the integrity of the research process, no coercion, undue influence, or financial incentives were employed, ensuring that participation remained completely voluntary and free from bias. Clear and transparent communication regarding the study's objectives, procedures, and participants' rights was consistently provided. This approach fostered mutual respect and understanding, promoting ethical engagement and cooperation throughout the project.

E. Minimization of Harm and Risk Management

The research team remained committed to ensuring the safety and well-being of all participants by minimizing potential risks throughout the development and implementation of the Online Request of Credentials System. Careful consideration was given to addressing technical, emotional, or social concerns that could arise during system testing or user feedback collection. If participants encountered difficulties, the research team and designated support personnel were



readily available to provide assistance and user guidance to help them navigate the system effectively. Furthermore, all collected data, including user inputs and records, were securely stored and handled with strict confidentiality to prevent unauthorized access. These measures ensured that no participant experienced adverse consequences due to their involvement in the project. As the study did not involve animal subjects, applying the 3Rs principle (Replacement, Reduction, and Refinement) was not applicable.

F. Beneficence and Contribution to Knowledge

The development of the Online Credential Request System aimed to improve the efficiency of requesting and processing academic records at Saint Michael College of Caraga, benefiting students, alumni, and the Office of the Registrar. By reducing processing time and minimizing errors, the system enhanced service delivery. It provided a more user-friendly and accurate experience, aligning with the institution's commitment to technological innovation and modernized administrative processes.

Upon request, participants were provided with a summary of the findings and improvements to the system. The project was presented through a comprehensive dissemination strategy, including demonstrations and informational materials, to raise awareness of the system's purpose and benefits and address concerns.

G. Justice and Fair Participant Selection

Participants were selected through a fair and transparent process that promoted inclusiveness and diversity. Selection was based on predefined criteria and focused on individuals from key stakeholder groups, including students, alumni, and staff from the Office of the Registrar, Office of the Learning Resource Center, Office of the Cashier, and the offices of the Deans or Principals. This ensured that participants could provide valuable insights for system development.



The process avoided discrimination and included individuals from various backgrounds, giving all stakeholders an equal opportunity to contribute meaningfully.

H. Data Integrity and Accuracy

All data related to the design, testing, and evaluation of the Online Request of Credentials System were collected with high standards of accuracy and integrity. Standardized procedures ensured that feedback and performance data were documented correctly and interpreted. ChatGPT was used during the preliminary analysis to organize ideas and summarize insights, while Grammarly helped ensure clarity and grammatical accuracy. All AI-generated content was reviewed and validated by the research team. No potential biases, errors, or limitations were identified or documented, as the tools were used only to support the study's accuracy and reliability.

I. Transparency and Honesty in Reporting

All findings, including system performance data and user feedback, were accurately reported without manipulation to preserve the study's credibility. Any potential conflicts of interest were openly disclosed to ensure transparency. Third-party sources, such as research papers, tools, and frameworks, were properly cited to maintain academic integrity and uphold ethical standards in reporting. Furthermore, the documentation process was supported by using artificial intelligence tools to enhance clarity, consistency, and accuracy. This comprehensive approach helped ensure the results remained objective, reliable, and informative for all stakeholders.

J. Use of Patented or Copyrighted Materials

The project did not involve using any patented technologies, so no clearance from patent holders was required. It focused on developing a web-based system to enhance the credential request process using open-source and standard technologies that did not require proprietary rights. Additionally, the study utilized copyrighted materials, such as literature and previous research, all of which were cited correctly to ensure due credit was given to the original authors,



thereby upholding intellectual property rights and ethical research standards.

K. Ethical Considerations for Animal and Human Trials

The project involved human participants, specifically teachers, students, and alumni, who were fully informed about their rights, the minimal risks involved, and the benefits of their participation. Ethical clearance for the use of animals was not applicable, as no animals were involved in the study. To ensure confidentiality and protect the professional standing of the participants, all feedback provided by teachers, students, and alumni was anonymized, upholding ethical standards throughout the research process.

L. Responsible Use of AI and Other Related Technologies

AI tools like Grammarly, paraphrasing tools, and ChatGPT were used to improve the quality of the written content. Grammarly helped correct grammar and syntax errors, ensuring accuracy throughout the text. Paraphrasing tools enhance readability by rephrasing sentences for better clarity. ChatGPT contributed by generating ideas, refining wording, and suggesting alternative content presentations. Together, these tools ensured the paper was clear, professional, and well-organized, allowing the research team to focus more on the technical aspects of the study.

M. Ethical Clearance and Institutional Approval

The capstone project was granted ethical approval by the Institutional Review Board of Saint Michael College of Caraga. This approval process ensured that the study complied with recognized ethical standards by safeguarding the rights of participants, maintaining data confidentiality, and protecting intellectual property. The necessary clearance was secured before the project began, ensuring that all research activities were conducted responsibly and complied with institutional policies and ethical guidelines.



CHAPTER 4

SOFTWARE DEVELOPMENT AND TESTING

This chapter describes the main activities regarding the design and testing of the Online Request of Credentials System (ORCS). It sets forth the strategies used in the system's developmental process, defines the specific steps taken during its construction, and mentions activities done to preserve the system throughout its lifecycle.

4.1 Development Process

The systematic software development process of the Online Request of Credentials System (ORCS) is illustrated through the input-process-output diagram shown in Figure 51.

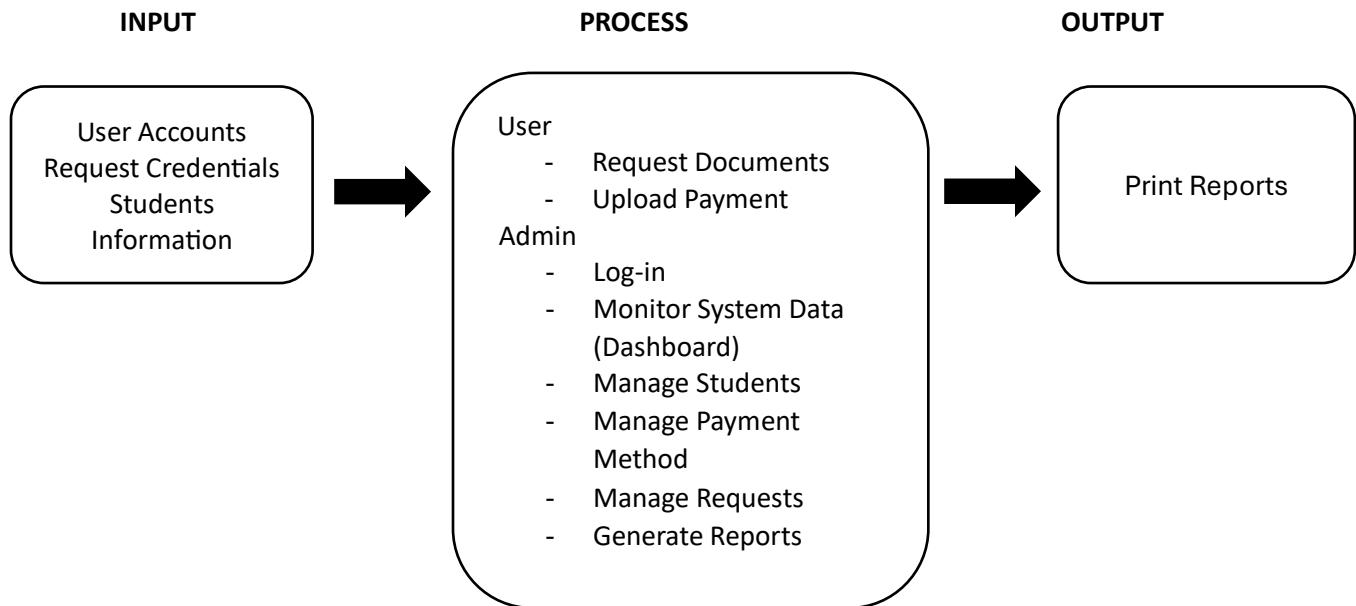


Figure 51. Input-Process-Output Diagram

Input

The input "User Accounts," "Requested Credentials," and "Students Information" represent the data that is provided to a system for processing. User Accounts refer to unique profiles or identities created for individual users in the system. The requested credentials are the



authentication details, usernames, and passwords that should be user-specific and would verify and allow entry to the system. Alongside the data about students, such as names, grades, or courses specific to students, they are entered or retrieved for many purposes. The above inputs thus authenticate users, manage access, and process student-related data for the system.

Process

Various actions are involved in the system's processes depending on user roles. For the User, the process consists of Requesting Documents, where he/she can ask for necessary files, and Upload Payment, wherein he/she inputs payment particulars. Admin processes include several functions: logging in to verify access rights, monitoring system data on a dashboard to view system performance, managing students by viewing their information, managing payment methods to make payment options available, managing requests to respond to user requests, and generating reports on the performance and insights from the data thereof. These processes help the system function smoothly and manage itself.

Pop-up alert for success or a different message for failure. If an error occurs, it logs the details to the console for debugging.

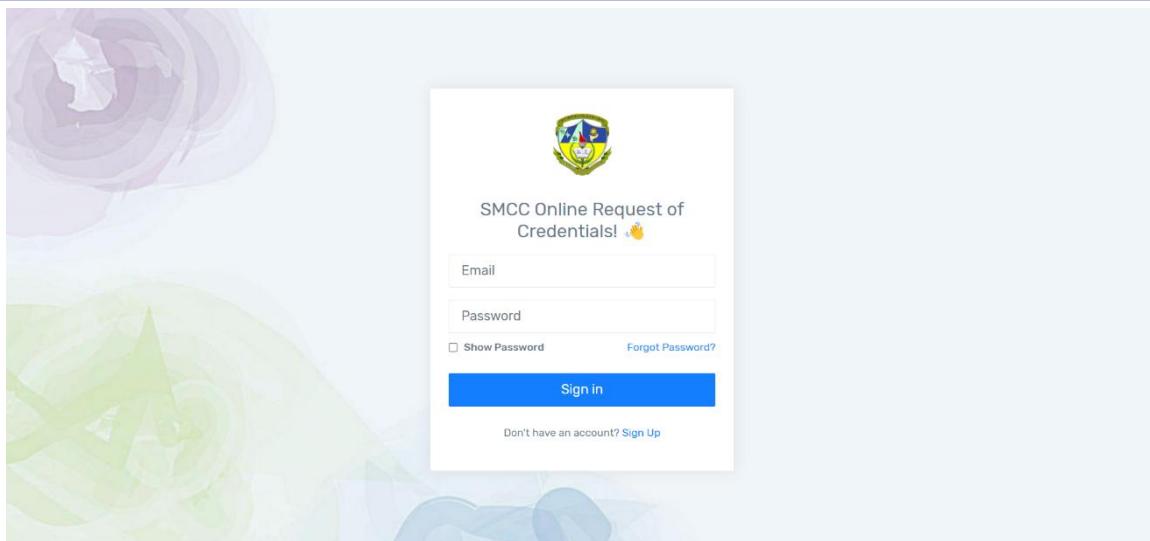


Figure 52. Admin/All Users – Login Page

Figure 52 shows the first thing Users see when they access the system. To access the system, users enter the username and password of their respective accounts.

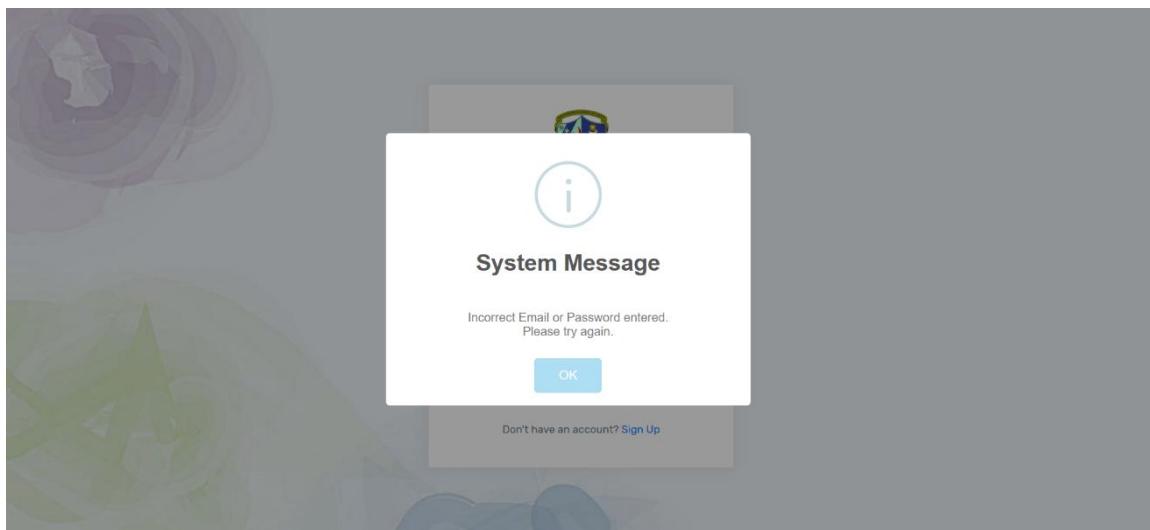


Figure 53. Admin/All Users – Login Error Notification

Figure 53 displays a modal dialog box (pop-up window) over a login or sign-in screen. It alerts users when they input incorrect login credentials.



```

dbassets > login.php
1 <?php
2     require_once ('connection.php');
3     include 'functions.php';
4     session_start();
5
6     $email = mysqli_real_escape_string($connection, $_GET["email"]);
7     $password = mysqli_real_escape_string($connection, $_GET["password"]);
8
9     // Query to get the user record based on the email
10    $query = mysqli_query($connection, "SELECT u.*, d.department FROM users u
11                                LEFT JOIN ref_departments d ON u.department_id = d.id
12                                WHERE email = '$email' AND u.`status` != 'Verify Email';") or die(mysqli_error($connection));
13
14    $row = mysqli_fetch_array($query);
15
16    // If user exists
17    if ($row) {
18        $user_status = $row['status'];
19        $id = $row['id'];
20        $_SESSION['id'] = $row['id'];
21        $_SESSION['fname'] = $row['fname'];
22        $_SESSION['mname'] = $row['mname'];
23        $_SESSION['lname'] = $row['lname'];
24        $_SESSION['name'] = $row['fname'] . ' ' . $row['lname'];
25        $_SESSION['email'] = $row['email'];
26        $_SESSION['role'] = $row['role'];
27
28        if ($row['role'] != 'Client') {
29            $department_id = $row['department_id'];
30            $_SESSION['department_id'] = $row['department_id'];
31
32            $queryDepartment = mysqli_query($connection, "SELECT * FROM ref_departments WHERE id = '$department_id';") or die(mysqli_error($connection));
33            $departmentRow = mysqli_fetch_array($queryDepartment);
34            $_SESSION['department'] = $departmentRow['department'];
35        }
36
37        // First, check if the user account is active
38        if ($user_status == 'Active') {
39            // Then verify the password using password_verify()
40            if (password_verify($password, $row['password'])) {
41                log_action($id, 'Logged In', $connection);
42                echo 'success';
43            } else {
44                echo "Incorrect Email or Password entered. \nPlease try again.";
45            }
46        } else {
47            echo 'User account deactivated! Please contact system administrator for further assistance.';
48        }
49
50    } else {
51        echo "Incorrect Email or Password entered. \nPlease try again.";
52    }
53 ?>

```

Figure 54. Code Snippet for Admin/Users – login.php

Figure 54 illustrates a PHP backend code snippet that handles user authentication by validating email and password credentials provided via GET parameters. This script is initiated by including two essential external files: connection.php for database connectivity and functions.php, likely for utility functions such as log_action. The session_start() function initializes a session, enabling the script to store and retrieve user-specific data throughout the session lifecycle.

Key to the login mechanism is the data sanitization step using mysqli_real_escape_string() on both the email and password inputs (\$_GET["email"] and \$_GET["password"]), protecting against SQL injection



vulnerabilities. These sanitized inputs are then used in a `SELECT SQL` query, which fetches the user details from the `users` table and joins the `ref_departments` table to retrieve associated department data. Notably, the condition `u.status != 'Verify Email'` ensures that users without email verification are excluded from the login process.

If a matching user record is found, the script proceeds to extract user information into session variables such as `$_SESSION["id"]`, `$_SESSION["fname"]`, `$_SESSION["lname"]`, and more, which are essential for maintaining state across the application. An additional check determines if the user's role is not 'Client', and if so, it performs a secondary query to retrieve the department name from the `ref_departments` table using the `department_id`, then stores it in the session as `$_SESSION["department"]`.

Following session initialization, the script performs two critical validations: first, it checks if the user's status is 'Active', ensuring that only active accounts can proceed. Second, it uses `password_verify($password, $row['password'])` — a crucial security function — to compare the entered password with the hashed password stored in the database. If successful, the `log_action()` function logs the login activity, and the string 'success' is echoed back, signaling the frontend that the login was successful.

If any stage fails, such as an incorrect password, inactive account, or no matching user, the script responds with a meaningful error message like "Incorrect Email or Password entered" or "User account deactivated!", which is likely displayed to the user, as shown in the modal alert from the earlier image.




SMCC Online Request of Credentials! 🌟

First Name *	Middle Name	Last Name *	Ext *
Ricel Ada	Salutis <input checked="" type="checkbox"/> Has Middle Name	Villarin	N/A
Birthday *	Last School Year Attended *	Contact *	Email *
01/11/2003	2025	09705366534	adangvillarin@gmail.com
House No. & Street *	Province *		
D-6	AGUSAN DEL NORTE		
Municipality / City *	Barangay *		
NASIPIT	Carmagong		
Upload Valid ID *	Upload a photo holding your valid ID *		
<input type="button" value="Choose File"/> Valid ID.jpg	<input type="button" value="Choose File"/> Holding with valid ID.jpg		
<small>Allowed file types: png, jpg, jpeg, pdf. Please upload any valid government ID (Driver's License, Passport, etc.)</small>			
Sign Up			
<small>Already have an account? Sign In instead</small>			

Figure 55. Students/Alumni – Sign Up Page

Figure 55 shows the signup page, where students can input all the necessary information to create an account.

```

46 iv class="form-group row mb-3">
47   <div class="col-md-4">
48     <label for="fname">First Name <span class="text-danger">*</span></label>
49     <input type="text" class="form-control form-control-lg" id="fname" name="fname" placeholder="Enter your first name" required autofocus>
50   </div>
51   <div class="col-md-3">
52     <label for="mname">Middle Name</label>
53     <input type="text" class="form-control form-control-lg" id="mname" name="mname" placeholder="Enter your middle name" readonly />
54   </div>
55     | <input type="checkbox" id="editMname" /> <label for="editMname">Has Middle Name</label>
56   </div>
57 </div>
58   <div class="col-md-3">
59     <label for="lname">Last Name <span class="text-danger">*</span></label>
60     <input type="text" class="form-control form-control-lg" id="lname" name="lname" placeholder="Enter your last name" required />
61   </div>
62   <div class="col-md-2">
63     <label for="ext">Ext <span class="text-danger">*</span></label>
64     <select id="ext" name="ext" class="select2 form-control form-control-lg" required>
65       | <option value="N/A">N/A</option>
66       | <option value="JR">JR</option>
67       | <option value="SR">SR</option>
68       | <option value="I">I</option>
69       | <option value="II">II</option>
70       | <option value="III">III</option>
71       | <option value="IV">IV</option>
72       | <option value="V">V</option>
73     </select>
74   </div>
75 
```



```

12   <title>Register | SMCC Online Credentials System</title>
13   <!-- Custom CSS -->
14   <link href="assets/dist/css/style.min.css" rel="stylesheet">
15   <link href="assets/images/smcc-logo.png" rel="icon" type="image/png" sizes="96x96">
16   <!-- <link href="assets/css/sweetalert/sweetalert.css" rel="stylesheet" -->
17   <!-- Sweet Alert -->
18   <link href="assets/css/sweetalert2/sweetalert2.min.css" rel="stylesheet">
19 </head>
20
21 <body>
22   <div class="main-wrapper">
23     <!-- <div class="preloader">
24       <div class="lds-ripple">
25         <div class="lds-pos"></div>
26         <div class="lds-pos"></div>
27       </div>
28     </div> -->
29
30   <div class="auth-wrapper d-flex no-block justify-content-center align-items-center"
31     style="background: url(assets/images/auth-bg2.jpg) no-repeat center center; background-size: cover;">
32
33     <div class="auth-box p-4 bg-white rounded" style="max-width: 1100px;">
34       <div id="loginform">
35         <div class="logo">
36           <span class="db"></span>
37           <br>
38           <br>
39           <h3 class="box-title mb-3">SMCC Online Request of Credentials! 🌟</h3>
40
41         <!-- Form -->
42         <div class="row">
43           <div class="col-12">
44             <form class="form-horizontal m-t-20" id="register-form" autocomplete="off">
45               <!-- First row -->
46
47               <script>
48                 // Set the current year dynamically as max
49                 document.getElementById('yearAttended').max = new Date().getFullYear();
50
51                 document.getElementById('editMname').addEventListener('change', function () {
52                   const mnameInput = document.getElementById('mname');
53                   if (this.checked) {
54                     mnameInput.removeAttribute('readonly'); // Make the input editable
55                   } else {
56                     mnameInput.setAttribute('readonly', true); // Make the input readonly
57                     mnameInput.value = '';
58                   }
59                 });
60
61                 $('#select[name="province"]').on('change', function() {
62                   var province_id = $(this).val();
63                   $.get('dbassets/reference/get_city_by_province.php', { province_id }, function(response) {
64                     var data = JSON.parse(response);
65
66                     var $citySelect = $('select[name="city"]');
67                     $citySelect.empty();
68                     $citySelect.append(
69                       $(<option>).val('').text('Please select')
70                     );
71
72                     // Populate the second select with new options
73                     $.each(data, function(index, item) {
74                       $citySelect.append(
75                         $(<option>).val(item.city_code).text(item.city)
76                       );
77
78                     });
79
80                     // Only proceed if the user clicked "Submit" (i.e., isConfirmed is true)
81                     if (isConfirmed) {
82                       if (userInput) {
83                         validInput = await checkInput(userInput);
84                         console.log('OTP validation result:', validInput);
85
86                         if (validInput) {
87                           // Success - OTP is correct
88                           await Swal.fire({
89                             title: '🌟 OTP Verified!',
90                             text: 'Your OTP is correct! Your account is under review.',
91                             icon: 'success',
92                             confirmButtonText: 'Great, Thanks!',
93                             showCancelButton: true,
94                             customClass: {
95                               popup: 'swal-popup',
96                               title: 'swal-title',
97                               content: 'swal-content',
98                               confirmButton: 'swal-confirm-btn'
99                             },
100                            background: '#f0f0f0'
101                          });
102
103                     }
104
105                   });
106
107                 });
108
109               </script>
110             </div>
111           </div>
112         </div>
113       </div>
114     </div>
115   </div>
116
117   <div class="text-center">
118     <small>Copyright © 2024 Saint Michael College of Caraga. All Rights Reserved.</small>
119   </div>
120
121 </body>
122
123 <!-- Scripts -->
124 <!-- Bootstrap JS -->
125 <!-- Sweet Alert JS -->
126 <!-- Custom JS -->
127 <!-- Register Form JS -->
128 <!-- Validation JS -->
129 <!-- City Selection JS -->
130 <!-- OTP Validation JS -->
131 <!-- User Input JS -->
132 <!-- Confirmation JS -->
133 <!-- Background JS -->
134 <!-- Footer JS -->
135 <!-- Main JS -->
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Figure 56 illustrates a comprehensive user registration form developed using HTML, PHP, JavaScript (with jQuery), and SweetAlert2 for interaction feedback. This form is structured using Bootstrap's grid system, ensuring responsive behavior across devices, and is divided into multiple sections to collect detailed user information.

The form begins with a series of personal input fields such as First Name, Middle Name, Last Name, and Name Extension. A notable feature is the `<input type="checkbox" id="editMname" />` paired with JavaScript logic that toggles the `readonly` attribute of the middle name field (`mname`), ensuring users only provide a middle name if applicable — a small but impactful enhancement to usability and data accuracy.

The dynamic population of address fields demonstrates robust interaction with backend data. Upon changing the Province dropdown (`select[name="province"]`), an **AJAX** call (`$.get`) fetches related City/Municipality options via `get_city_by_province.php`. Similarly, choosing a city triggers another **AJAX** call to populate the Barangay options through `get_barangay_by_city.php`. This technique ensures location consistency by only displaying options relevant to the user's previous selections.

Another significant portion of the code is handling file uploads, where users are required to submit both a valid ID and a photo of themselves holding it. Each file input is constrained to specific **MIME** types (e.g., .png, .jpg, .jpeg, .pdf) using the `accept` attribute, enforcing file type compliance at the client level.

The JavaScript code block at the bottom of the form adds interactivity and asynchronous functionality. The form submission is handled using `$('#register-form').on('submit')`, where a `Swal.fire` loading modal is shown while the form data using `FormData` is sent via **AJAX POST** to `save.php`. This decouples the form from a traditional page reload and provides a modern, user-friendly interface.



Upon successful form submission, the user is prompted to enter a One-Time Password (OTP) through a **SweetAlert2** modal. The function `askForInput()` encapsulates this loop, where the user's OTP input is validated via the `checkInput()` function, which performs a **POST** request to `verify_email.php`. This OTP-based verification adds a crucial security layer before the account is finalized.

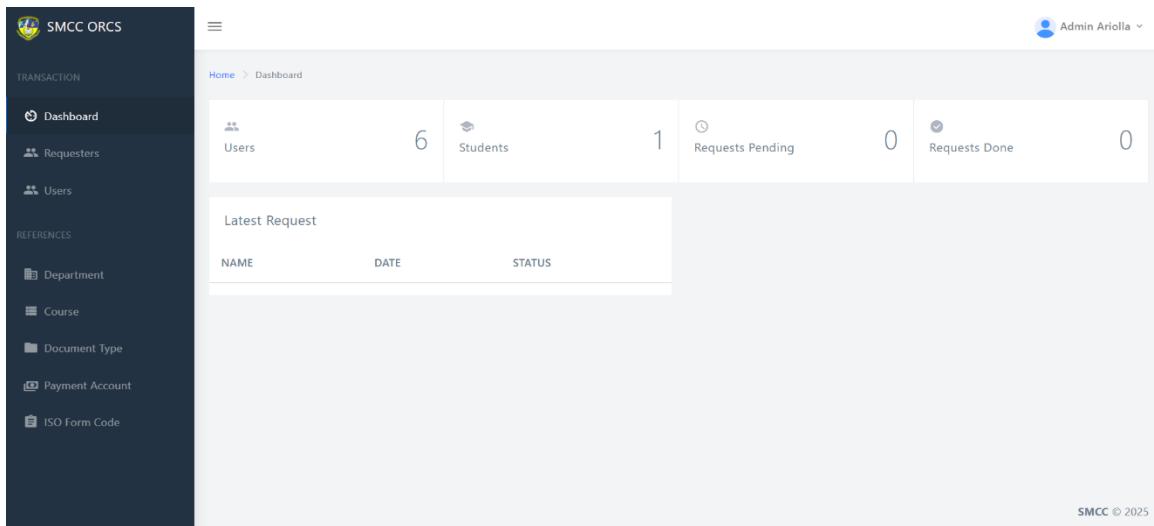


Figure 57. Admin – Dashboard

Figure 57 shows the Dashboard page, which provides an overview of key data in the system.

```

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139
    <?php
        require_once('../dbassets/connection.php');
        $query = "SELECT r.*, u.fname, u.lname FROM requests r
                  JOIN users u ON r.user_id = u.id
                  ORDER BY r.submitted_at DESC
                  LIMIT 5;";
        $result = mysqli_query($connection, $query);
        while($rs = mysqli_fetch_array($result)) {
            // Handle NULL for date_requested
            $date_requested = !is_null($rs['date_requested']) ? date('F j, Y', strtotime($rs['date_requested'])) : 'N/A';

            // Handle NULL for status
            $status = !is_null($rs['status']) ? $rs['status'] : 'Unknown';
            $status_class = ($status == 'Active') ? 'success' : 'primary';
        }
    <?>
    <tr>
        <td><?php echo $rs['fname'].' '.$rs['lname']; ?></td>
        <td><?php echo $date_requested; ?></td>
        <td data-target="status">
            | <span class="badge badge-<?php echo $status_class; ?>"><?php echo $status; ?></span>
        </td>
    </tr>
<?php } ?>
```

Figure 58. Code Snippet for Admin – dashboard_admin.php



Figure 58 illustrates a PHP code snippet in a dashboard interface to display dynamic data about user accounts and service requests within a civil registry management system. The script establishes a database connection using the `require_once('..../dbassets/connection.php')` statement, which grants access to essential MySQL functions. A central component of this functionality is the SQL query executed through `mysqli_query()`, which performs multiple subqueries in a single call to retrieve statistical summaries from the database. Specifically, it counts the total number of users, excluding those with the 'Client' role, assigning the result to the `$users` variable. It then calculates the number of users with the 'Client' role and assigns that to `$students`. Additionally, it gathers the number of ongoing service requests, those whose status is not marked as 'Done', into the `$ongoing` variable, and counts completed service requests (status marked as 'Done') in `$done`.

These retrieved values are rendered dynamically into four Bootstrap card components using `<?php echo $variable; ?>` to inject the data directly into the HTML. Each card is visually represented with appropriate icons and labels, giving administrators a quick overview of current system statistics, such as the total number of system users, students, ongoing requests, and completed requests.

Another portion of the dashboard displays the five most recent service requests. This section begins with a separate SQL query that joins the requests table with the users table using the statement `SELECT r.*, u.fname, u.lname FROM requests r JOIN users u ON r.user_id = u.id ORDER BY rsubmitted_at DESC LIMIT 5`. This **JOIN** operation is essential as it enables the system to pull together request details and user information in a single, efficient operation. The retrieved data is processed inside a while loop, which dynamically creates table rows displaying the requester's full name, the date the request was submitted, and the current status of the request.



To ensure robustness, the code includes conditional checks using `is_null()` to handle any missing values gracefully. For instance, if `date_requested` or `status` fields are null, the code substitutes them with user-friendly defaults such as 'N/A' or 'Unknown'. Additionally, the request status is visually emphasized using Bootstrap badge classes, where the `$status_class` is conditionally set to either 'success' or 'primary', depending on whether the request status is labeled 'Active' or not. This provides a clear and immediate visual cue for the dashboard administrator.

ID	Name	Year Attended	Contact	Email	Status	Action
7	Villarin, Richel Ada	2025	09705366534	adangvillarin@gmail.com	Active	Action

Figure 59. Admin – Requesters List

Figure 59 shows the requester's account list; this interface manages the requester's accounts.

```

89
90 <div class="btn-group">
91   <button type="button" class="btn btn-info">Action</button>
92   <button type="button" class="btn btn-info dropdown-toggle dropdown-toggle-split" data-toggle="dropdown" aria-haspopup="true" aria-ex
93     <span class="sr-only">Toggle Dropdown</span>
94   </button>
95   <div class="dropdown-menu">
96     <a class="dropdown-item" href="javascript:void(0)" data-role='view_image' data-image=<?php echo $rs['id_document']; ?>" data-i
97       <i class="mdi mdi-upload"></i> View Upload</a>
98
99     <?php if ($rs['status'] == 'Pending') { ?>
100      <a class="dropdown-item text-primary" href="javascript:void(0)" data-role='activate' data-id=<?php echo $id; ?>">
101        <i class="mdi mdi-account"></i> Activate Account</a>
102      <a class="dropdown-item text-danger" href="javascript:void(0)" data-role='disapprove' data-id=<?php echo $id; ?>">
103        <i class="mdi mdi-account-minus"></i> Disapprove Account</a>
104    <?php } ?>
105
106      <a class="dropdown-item text-info" href="javascript:void(0)" data-role='reset' data-id=<?php echo $id; ?>">
107        <i class="mdi mdi-lock"></i> Reset Password</a>
108    </div>
109  </div>
110

```



```

157 <script>
158 $(document).ready(function(){
159
160     $(document).on('click', 'button[data-role=edit]', function(){
161         edit = true;
162         var id = $(this).data('id');
163         var fname = $('#' + id).children('td[data-target=fname]').text();
164         var mname = $('#' + id).children('td[data-target=mname]').text();
165         var lname = $('#' + id).children('td[data-target=lname]').text();
166         var email = $('#' + id).children('td[data-target=email]').text();
167         var role = $('#' + id).children('td[data-target=role]').text();
168         var status = $.trim($('#' + id).children('td[data-target=status]').text());
169         $('input[name="fname"]').val(fname);
170         $('input[name="mname"]').val(mname);
171         $('input[name="lname"]').val(lname);
172         $('input[name="email"]').val(email);
173         $('#role').val(role).change();
174         $('#status').val(status).change();
175
176         $('input[name="id"]').val(id);
177         $('#add-modal').modal('toggle');
178     });
179
180     $(document).on('click', 'a[data-role=view_image]', function(){
181         var imagePath = $(this).data('image');
182         var imagePath2 = $(this).data('image2');
183         $('#modalImage').attr('src', './assets' + imagePath);
184         $('#modalImage2').attr('src', './assets' + imagePath2);
185         $('#view-modal').modal('toggle');
186     });
187
188     $(document).on('click', 'a[data-role=activate]', function() {
189         var id = $(this).data('id');
190
191     });
192
193     const url = '../dbassets/user/reset-password.php';
194
195     // Perform the AJAX POST request
196     $.post(url, { id }, (response) => {
197         // Close the loading spinner
198         Swal.close();
199
200         if ($.trim(response) === 'success') {
201             toastrOptions();
202             toastr.success('Reset Successfully!', 'System Message');
203         } else {
204             console.log(response);
205             toastr.error('Failed to reset the password', 'System Message');
206         }
207     }).fail(function() {
208         // In case of any errors with the AJAX request
209         Swal.close();
210         toastr.error('An error occurred while resetting the password', 'System Message');
211     });
212 });

```

Figure 60. Code Snippet for Admin – students.php

Figure 60 presents the Student Account Management interface, a dynamic and user-friendly system component designed to display and manage student accounts. The process starts with establishing a database connection through `require_once ('../dbassets/connection.php');`, followed by an SQL query that fetches all student accounts with a role of "Client" whose status is not "Verify Email". Each user's data is rendered within a table, where `mysqli_fetch_array()` iterates through each row to display key information such as name, year attended, contact, email, and status. The status is



visually marked with dynamic badge colors—green for "Active" and red for others—providing immediate insight into each account's current state.

Administrative controls are provided via an Action dropdown in each row, offering options to view ID uploads, activate or disapprove pending accounts, and reset passwords. These options are powered by data-role attributes that trigger specific JavaScript functions. For example, selecting “View Upload” opens a modal that dynamically loads the student's submitted ID and a photo of them holding it. Account activation and disapproval actions invoke **SweetAlert2** confirmation prompts, followed by **AJAX POST** requests to `activate.php` or `disapprove.php`, with the system responding through success messages and page refreshes. Similarly, password resets prompt confirmation and send a request to `reset-password.php`, with feedback delivered via **Toastr** notifications, ensuring a seamless and responsive admin experience.

The screenshot shows the 'Add / Edit User Information' form. The form fields include Firstname, Middlename, Lastname, Email, Department (set to Elementary), Role (dropdown menu), and Status (set to Active). Below the form is a table listing users with columns for ID, Firstname, Middlename, Lastname, Email, Department, Role, Status, and Action. Each user row has a green 'Active' badge and a blue 'Action' dropdown menu. The sidebar on the left shows navigation links for TRANSACTIONS (Dashboard, Requesters, Users) and REFERENCES (Department, Course, Document type, Payment Account, ISO Form Code).

ID	Firstname	Middlename	Lastname	Email	Department	Role	Status	Action
1	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action
2	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action
3	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action
4	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action
5	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action
6	Enter data here	Enter data here	Enter data here	Enter data here	Elementary	Select a role	Active	Action

Figure 61. Admin – Add User

Figure 61 illustrates the Add User interface, which enables administrators to register new users or staff members who will participate in managing and processing credential requests submitted by students and alumni.



The screenshot shows the 'User List' page of the SMCC ORCS system. The left sidebar includes links for Dashboard, Requesters, Users, Department, Course, Document Type, Payment Account, and ISO Form Code. The main area displays a table with the following data:

ID	First Name	Middle Name	Last Name	Email	Role	Department	Status	Action
2	Darlene	Registrar	Alag	ricelada_villarin@smccnasipit.edu.ph	Registrar	Registrar	Active	Action
3	Noel	Cashier	Baja	popohinautan45@gmail.com	Cashier	Cashier	Active	Action
4	Renel	Librarian	Maneda	rjsgwapo123@gmail.com	Librarian	Learning Resource Center	Active	Edit User
5	Daisa	DeanCCIS	Gupit	angelmaebaguio16@gmail.com	Dean	CCIS	Active	Action
6	Rene	Principal JHS	Japitana	angelo_hinautan@smccnasipit.edu.ph	Principal	JHS	Active	Action

Showing 1 to 5 of 5 entries

Figure 62. Admin – User List

Figure 62 presents the User List interface, where all registered users are displayed for administrative management. The Action button allows the administrator to modify user information when updates are necessary and reset user passwords.

The screenshot shows the 'Add / Edit User Information' modal dialog. The form fields include:

- Firstname: Noel
- Middlename: Cashier
- Lastname: Baja
- Email: popohinautan45@gmail.com
- Department: Cashier
- Role: Cashier
- Status: Active

At the bottom right of the modal are 'Close' and 'Save changes' buttons. The background shows the same User List interface as Figure 62.

Figure 63. Admin – Edit User

Figure 63 illustrates the Edit User interface, which enables administrators to update user information when modifications are required.



The screenshot shows a user list table with columns: ID, First Name, Middle Name, Last Name, Department, Status, and Action. A modal dialog box is overlaid on the table, containing a large exclamation mark icon at the top, followed by the text "Are you sure you want to reset the password?", and two buttons: "Yes" (red) and "No" (gray). The background table shows several users with their details and roles.

ID	First Name	Middle Name	Last Name	Department	Status	Action
2	Darlene	Regis		Registrar	Active	Action
3	Noel	Cashier		Cashier	Active	Action
4	Renel	Librarian		Librarian	Active	Action
5	Daisa	DeanCCIS	Gupit	Dean	CCIS	Action
6	Rene	Principal JHS	Japitana	Principal	JHS	Action

Figure 64. Admin – Reset User Password

Figure 64 shows a SweetAlert confirmation dialog that allows the administrator to reset a user's password in cases where it has been forgotten.

```

73 <?php
74     require_once('../dbassets/connection.php');
75     $session_id = $_SESSION['id'];
76     $query = "SELECT u.*, d.department FROM users u
77             LEFT JOIN ref_departments d ON u.department_id = d.id
78             WHERE u.`role` != 'client' AND u.id != '$session_id';";
79     $result = mysqli_query($connection,$query);
80     while($rs = mysqli_fetch_array($result)) {
81         $id = $rs['id'];
82     }
83     <tr id=<?php echo $id; ?>">
84         <td><?php echo $id; ?></td>
85         <td data-target="fname"><?php echo $rs['fname'];?></td>
86         <td data-target="mname"><?php echo $rs['mname'];?></td>
87         <td data-target="lname"><?php echo $rs['lname'];?></td>
88         <td data-target="email"><?php echo $rs['email'];?></td>
89         <td data-target="role"><?php echo $rs['role'];?></td>
90         <td data-target="department"><?php echo $rs['department'];?></td>
91         <td data-target="status">
92             <span class="badge badge-<?php if ($rs['status'] == 'Active') echo 'success'; else echo 'danger';?>"><?php echo $rs['status'];?>
93         </td>
94     <td>
95         <div class="btn-group">
96             <button type="button" class="btn btn-info">Action</button>
97             <button type="button" class="btn btn-info dropdown-toggle dropdown-toggle-split" data-toggle="dropdown" aria-haspopup="true"
98                 <span class="sr-only">Toggle Dropdown</span>
99             </button>
100            <div class="dropdown-menu">
101                <a class="dropdown-item" href="javascript:void(0)" data-role='edit' data-id=<?php echo $id; ?>">
```



```

122
123    <!-- ADD MODAL -->
124    <div id="add-modal" class="modal fade" tabindex="-1" role="dialog" aria-labelledby="myModalLabel" aria-hidden="true" data-backdrop="static" data-keyboard="false">
125        <div class="modal-dialog modal-lg">
126            <div class="modal-content">
127                <div class="modal-header">
128                    <h4 class="modal-title font-weight-bold" id="myModalLabel">Add / Edit User Information</h4>
129                </div>
130                <form id="user-form" class="form-horizontal m-t-30" autocomplete="off">
131                    <input type="hidden" name="id">
132                    <div class="modal-body">
133                        <div class="form-group">
134                            <label>Firstname <span class="text-danger">*</span></label>
135                            <input type="text" name="fname" class="form-control" placeholder="Enter data here" required>
136                        </div>
137                        <div class="form-group">
138                            <label>Middlename </label>
139                            <input type="text" name="mname" class="form-control" placeholder="Enter data here">
140                        </div>
141                        <div class="form-group">
142                            <label>Lastname <span class="text-danger">*</span></label>
143                            <input type="text" name="lname" class="form-control" placeholder="Enter data here" required>
144                        </div>
145                        <div class="form-group">
146                            <label>Email <span class="text-danger">*</span></label>
147                            <input type="text" name="email" class="form-control" placeholder="Enter data here" required>
148                        </div>
149
150                        <div class="form-group row">
151                            <div class="col-md-12">
152                                <label for="department">Department <span class="text-danger">*</span></label>
153                                <select id="department" name="department" class="form-control">
154                                    <?php
237
238    // SweetAlert2 confirmation dialog
239    Swal.fire({
240        title: "Are you sure you want to reset the password?",
241        icon: "warning",
242        showCancelButton: true,
243        confirmButtonColor: "#0D6B55",
244        confirmButtonText: "Yes",
245        cancelButtonText: "No"
246    }).then((result) => {
247        if (result.isConfirmed) {
248
249            // Show loading state
250            Swal.fire({
251                title: 'Please wait...',
252                text: 'Resetting the password...',
253                icon: 'info',
254                allowOutsideClick: false, // Disable closing by clicking outside
255                allowEscapeKey: false, // Disable closing by pressing ESC
256                didOpen: () => {
257                    Swal.showLoading(); // Show loading spinner
258                }
259            });
260
261            const url = '../dbassets/user/reset-password.php';
262
263            // Perform the AJAX POST request
264            $.post(url, { id }, (response) => {
265                // Close the loading spinner
266                Swal.close();

```

Figure 65. Code Snippet for Admin – users.php

Figure 65 illustrates the code implementation of the User Management Interface, an all-encompassing administrative panel designed to enable system administrators to oversee user accounts involved in managing student and alumni credential requests. This interface combines front-end and back-end technologies like HTML, PHP, MySQL, jQuery, SweetAlert2, and AJAX to provide a dynamic and responsive user experience. The script begins by starting a session with `session_start()` and securing page access using `if (!isset($_SESSION['id']))`,



redirecting unauthenticated users to the login page. A key component of the functionality is the

```
SQL query $query = "SELECT u.*, d.department FROM users u LEFT JOIN
ref_departments d ON u.department_id = d.id WHERE u.role != 'Client' AND u.id != '$session_id';"; This query ensures that only non-client
users, excluding the currently logged-in user, are fetched and displayed in a table. Each user's
record is shown with editable fields and status labels, where the class badge-<?php if
($rs['status'] == 'Active') echo 'success'; else echo 'danger'; ?>
visually represents the account status.
```

A notable feature is the Action Dropdown Menu, which enables administrators to perform actions such as "Edit User" and "Reset Password." The "Edit User" option uses jQuery to extract the existing data from the selected row and populate it into a modal form, enabling real-time updates without page reload. Similarly, the "Reset Password" option triggers a **SweetAlert2** confirmation prompt, and, upon approval, sends an **AJAX POST** request to `reset-password.php`, simplifying the password recovery process while providing immediate feedback via the **toastr library**.

Finally, the modal form for adding or editing user features validated input fields and dynamically populated `<select>` elements for assigning departments and roles. Upon submission, another **AJAX POST** request is sent to `submit.php`, which either creates a new user or updates an existing one. Success or failure messages are returned and displayed using **SweetAlert** dialogs, ensuring a transparent and responsive user interaction flow.



The screenshot shows the 'Add / Edit Department' modal open over a list of existing departments. The modal fields include 'Department*' (Elementary), 'Facebook Link' (Enter data here), and 'Status*' (Active). Below the modal is a table of departments with columns for ID, Department, Facebook Link, Status, and Action (Edit). The table lists six departments: Elementary, JHS, SHS, CCIS, CCJE, and CBM.

ID	Department	Facebook Link	Status	Action
1	Elementary		Active	Edit
2	JHS		Active	Edit
3	SHS	https://www.facebook.com/SMCCSHSOfficial	Active	Edit
4	CCIS	https://www.facebook.com/CCIsOfSMCCNasipit	Active	Edit
5	CCJE	https://www.facebook.com/smcccrim	Active	Edit
6	CBM	https://www.facebook.com/SMCCCCBM	Active	Edit

Figure 66. Admin – Add Department

Figure 66 presents the interface that enables the administrator to add all departments within the institution. This functionality is essential for the clearance process, as it allows the system to identify the specific department to which a student belongs. The designated department will then review and approve the student's request as part of the clearance procedure.

The screenshot shows a table of 10 departments. Each row includes the department name, its Facebook link, status (Active or Inactive), and an 'Edit' button. The departments listed are Elementary, JHS, SHS, CCIS, CCJE, CBM, CTHM, CTE, CAS, and Learning Resource Center.

ID	Department	Facebook Link	Status	Action
1	Elementary	https://www.facebook.com/smccelementarydepartment	Active	Edit
2	JHS	https://www.facebook.com/SMCCJuniorHighSchool	Active	Edit
3	SHS	https://www.facebook.com/SMCCSHSOfficial	Active	Edit
4	CCIS	https://www.facebook.com/CCIsOfSMCCNasipit	Active	Edit
5	CCJE	https://www.facebook.com/smcccrim	Inactive	Edit
6	CBM	https://www.facebook.com/SMCCCCBM	Inactive	Edit
7	CTHM	https://www.facebook.com/profile.php?id=10009316962172	Active	Edit
8	CTE	https://www.facebook.com/smcccollegeofteachereducation	Active	Edit
9	CAS	https://www.facebook.com/SMCCCAS	Active	Edit
10	Learning Resource Center	https://www.facebook.com/LRCSMCC	Active	Edit

Figure 67. Admin – Department List

Figure 67 displays the Department List interface, which presents all departments added by the administrator. This interface includes an edit button for modifying department information if updates or changes are required.



ID	Department	Facebook Link	Status	Action
1	Elementary	https://www.facebook.com/smcelementarydepartment	Active	<button>Edit</button>
2	JHS		Active	<button>Edit</button>
3	SHS	https://www.facebook.com/SMCCSHSOfficial	Active	<button>Edit</button>
4	CCIS	https://www.facebook.com/CCISOfSMCCNasipit	Active	<button>Edit</button>
5	CCJE	https://www.facebook.com/smccrim	Active	<button>Edit</button>
6	CBM	https://www.facebook.com/SMCCCBM	Active	<button>Edit</button>

Figure 68. Admin – Edit Department

Figure 68 illustrates the Edit Department interface, which is accessed through the edit button in the Department List. This interface allows the administrator to update or modify information related to the department within the institution.

```

59 <h3>Department List</h3>
60 <div class="table-responsive">
61   <table id="zero_config" class="table table-hover table-bordered">
62     <thead>
63       <tr>
64         <th>ID</th>
65         <th>Department</th>
66         <th>Facebook Link</th>
67         <th>Status</th>
68         <th>Action</th>
69       </tr>
70     </thead>
71     <tbody>
72       <?php
73         require_once('../dbassets/connection.php');
74         $query = "SELECT * FROM ref_departments";
75         $result = mysqli_query($connection,$query);
76         while($rs = mysqli_fetch_array($result)) {
77           $id = $rs['id'];
78         ?>
79         <tr id="php echo $id; ?&gt;"&gt;
80           &lt;td&gt;<?php echo $id; ?&gt;&lt;/td&gt;
81           &lt;td data-target="department"&gt;&lt;?php echo $rs['department'];?&gt;&lt;/td&gt;
82           &lt;td data-target="fb_link"&gt;&lt;?php echo $rs['fb_link'];?&gt;&lt;/td&gt;
83           &lt;td data-target="status"&gt;
84             &lt;span class="badge badge-&lt;?php if ($rs['status'] == 'Active') echo 'success'; else echo 'danger';?&gt;&gt;&lt;?php echo
85             &lt;/td&gt;
86             &lt;td&gt;&lt;button type='button' data-role='edit' data-id="<?php echo $id; ?&gt;" class="btn waves-effect waves-light btn-infor
87           &lt;/tr&gt;
88         &lt;?php } ?&gt;
</pre

```



```

100   <!-- ADD MODAL -->
101   <div id="add-modal" class="modal fade" tabindex="-1" role="dialog" aria-labelledby="myModalLabel" data-backdrop="static">
102     <div class="modal-dialog">
103       <div class="modal-content">
104         <div class="modal-header">
105           |   <h4 class="modal-title font-weight-bold" id="myModalLabel">Add / Edit Department</h4>
106         </div>
107         <form id="department-form" class="form-horizontal m-t-30" autocomplete="off">
108           <input type="hidden" name="id">
109           <div class="modal-body">
110             <div class="form-group">
111               |   <label>Department<span class="text-danger">*</span></label>
112               |   <input type="text" name="department" class="form-control" placeholder="Enter data here" required>
113             </div>
114             <div class="form-group">
115               |   <label>Facebook Link</label>
116               |   <input type="text" name="fb_link" class="form-control" placeholder="Enter data here">
117             </div>
118             <div class="form-group">
119               |   <label>Status<span class="text-danger">*</span></label>
120               |   <select class="form-control col-12" name="status" id="status" required>
121                 <option value="Active">Active</option>
122                 <option value="Inactive">Inactive</option>
123               </select>
124             </div>
125           </div>
126           <div class="modal-footer">
127             <button type="button" class="btn btn-secondary waves-effect" data-dismiss="modal">Close</button>
128             <button type="submit" class="btn btn-info">Save changes</button>
129           </div>
130         </form>
131     </div>

```



```

166   $('#department-form').submit(function(e){
167     e.preventDefault();
168
169     var id = $('input[name="id"]').val();
170     var department = $('input[name="department"]').val();
171     var fb_link = $('input[name="fb_link"]').val();
172     var status = $('select[name="status"] :selected').val();
173
174     const url = '../dbassets/department/submit.php';
175     $.post(url, {id, department, fb_link, status}, (response) => {
176       if($.trim(response) == 'success') {
177         Swal.fire({
178           title: 'System Message',
179           text: 'Data saved successfully!',
180           icon: 'success',
181           confirmButtonText: 'Okay'
182         }).then((result) => {
183           if (result.isConfirmed) {
184             location.reload();
185           }
186         });
187       } else {
188         Swal.fire({
189           title: 'System Message',
190           text: response,
191           icon: 'info',
192           confirmButtonText: 'Okay'
193         });
194       }

```

Figure 69. Code Snippet for Admin – departments.php

Figure 69 presents the Department Management Interface, which allows administrators to view, add, and edit departmental records within the system. This interface integrates PHP for server-side processing, MySQL for data retrieval, HTML and Bootstrap for structuring and styling, and jQuery with AJAX for dynamic interaction and asynchronous data submission.

The script begins by establishing a session using `session_start()` and restricting unauthorized access through `if (!isset($_SESSION['id']))`, which redirects



unauthenticated users to the login page. This ensures that only logged-in administrators can access and manipulate departmental data.

The central component of the interface is a responsive HTML table dynamically populated by fetching records from the `ref_departments` table via a MySQL query `$query = "SELECT * FROM ref_departments"`. Each row of the table displays the department ID, name, Facebook link, status, and an Edit button. Notably, the status field uses conditional classes such as `badge-success` or `badge-danger` to differentiate between active and inactive departments visually.

When clicking the Edit button, a **jQuery** event handler captures the data from the selected row and pre-fills a modal form. The form fields include inputs for the department name, Facebook link, and a dropdown for status. This interaction enables real-time data editing without requiring a page reload.

The modal form submission is handled by an **AJAX POST** request to `submit.php`, as shown in this javascript. `CopyEdit $.post(url, {id, department, fb_link, status}, (response) => { ... })`; If the request is successful, a **SweetAlert** dialog provides user feedback and reloads the page to reflect the changes. Otherwise, it displays an appropriate message to the administrator, maintaining a user-friendly experience. In addition, clicking the Add Department button triggers the same modal form in reset mode, allowing the administrator to insert a new department entry. The logic is managed by toggling an edit flag and resetting the form's input fields.



The screenshot shows the 'Add or Edit Course' modal. It has fields for 'Department' (set to 'Elementary'), 'Course' (text input field), and 'Status' (set to 'Active'). Below the modal is a table of course entries:

ID	Department	Course	Status	Action
1	CCIS		Active	Edit
2	CCIS		Active	Edit
3	CCIS	BUS	Active	Edit
4	CCIS	BSIS	Active	Edit
5	CCIS	DIT	Active	Edit
6	Elementary	Grade 1	Active	Edit

Figure 70. Admin – Add Course

Figure 70 presents the Add Course modal, which enables the administrator to add and manage all courses offered within the institution.

The screenshot shows the 'Course List' interface. It displays a table of courses with the following data:

ID	Department	Course	Status	Action
1	CCS	BSIT	Active	Edit
2	COS	BSCS	Active	Edit
3	COS	BUS	Active	Edit
4	COS	BSIS	Active	Edit
5	COS	DIT	Active	Edit
6	Elementary	Grade 1	Active	Edit
7	Elementary	Grade 2	Active	Edit
8	Elementary	Grade 3	Active	Edit
9	Elementary	Grade 4	Active	Edit
10	Elementary	Grade 5	Active	Edit

Figure 71. Admin – Course List

Figure 71 displays the Course List interface, where the administrator can view all courses added to the system. These courses play a vital role in identifying the requester's academic program. The interface also includes an edit button, allowing the administrator to update course information when necessary.



ID	Department	Course	Status	Action
1	CCIS	BSIT	Active	<button>Edit</button>
2	CCIS		Active	<button>Edit</button>
3	CCIS	BLIS	Active	<button>Edit</button>
4	CCIS	BSIS	Active	<button>Edit</button>
5	CCIS	DIT	Active	<button>Edit</button>
6	Elementary	Grade 1	Active	<button>Edit</button>

Figure 72. Admin – Edit Course

Figure 72 illustrates the edit course interface, which is accessed through the edit button in the Course List. This interface allows the administrator to update or modify information related to the course within the institution.

```

101 <!-- ADD MODAL -->
102 <div id="add-modal" class="modal fade" tabindex="-1" role="dialog" aria-labelledby="myModalLabel" data-backdrop="static">
103   <div class="modal-dialog">
104     <div class="modal-content">
105       <div class="modal-header">
106         <h4 class="modal-title font-weight-bold" id="myModalLabel">Add or Edit Course</h4>
107       </div>
108       <form id="course-form" class="form-horizontal m-t-30" autocomplete="off">
109         <input type="hidden" name="id">
110         <div class="modal-body">
111           <div class="form-group">
112             <label for="department">Department <span class="text-danger">*</span></label>
113             <select id="department" name="department" class="form-control">
114               <?php
115                 require_once('../dbassets/connection.php');
116                 $query = "SELECT * FROM ref_departments
117                               WHERE `status` = 'Active'
118                               AND department != 'Administrative'
119                               AND department != 'Cashier'
120                               AND department != 'Registrar'
121                               AND department != 'Learning Resource Center' ; ";
122                 $result = mysqli_query($connection, $query);
123                 while($row = mysqli_fetch_array($result)) {
124                   $id = $row['id'];
125                   $department = $row['department'];
126                 ?>
127                   <option value="<?php echo $id?><?php echo $department?>"></option>
128                 <?php } ?>
129             </select>
130           </div>
131           <div class="form-group">
132             <label>Course <span class="text-danger">*</span> </label>
133           </div>

```



```

161 <script>
162     $(document).ready(function(){
163         var edit = false;
164
165         $(document).on('click', 'button[data-role=edit]', function(){
166             edit = true;
167             var id = $(this).data('id');
168             var department = $('#'+id).children('td[data-target=department]').text();
169             var course = $('#'+id).children('td[data-target=course]').text();
170             var status = $.trim($('#'+id).children('td[data-target=status]').text());
171
172             $('select[name="department"] option:contains(' + department + '')').prop('selected', true);
173             $('input[name="course"]').val(course);
174             $('#status').val(status).change();
175             $('input[name="id"]').val(id);
176             $('#add-modal').modal('toggle');
177         });
178
179         $(document).on('click', '#add, #close', function(){
180             edit = false;
181             $('#course-form').trigger("reset");
182             $('#add-modal').modal('toggle');
183         });
184
185         $('#course-form').submit(function(e){
186             e.preventDefault();
187
188             var id = $('input[name="id"]').val();
189             var course = $('input[name="course"]').val();
190             var department_id = $('select[name="department"]').val();
191             var status = $('select[name="status"] :selected').val();
192
193             const url = '../dbassets/course/submit.php';
194             $.post(url, {id, department_id, course, status}, (response) => {
195                 if($.trim(response) == 'success') {
196                     $.post(url, {id, department_id, course, status}, (response) => {
197                         if($.trim(response) == 'success') {
198                             Swal.fire({
199                                 title: 'System Message',
200                                 text: 'Data saved successfully!',
201                                 icon: 'success',
202                                 confirmButtonText: 'Okay'
203                             }).then((result) => {
204                                 if (result.isConfirmed) {
205                                     location.reload();
206                                 }
207                             });
208                         } else {
209                             Swal.fire({
210                                 title: 'System Message',
211                                 text: response,
212                                 icon: 'info',
213                                 confirmButtonText: 'Okay'
214                             });
215                         }
216                     });
217                 });
218             });
219         </script>

```

Figure 73. Code Snippet for Admin – course.php

Figure 73 illustrates the interface and functionality for managing courses within the institution's system. This interface allows administrators to add, view, and edit course records, ensuring they are correctly associated with their respective departments and statuses.

At the beginning of the script, a session is initiated using `session_start()` to maintain access control, ensuring only logged-in users can proceed. The system checks if a session ID exists; if not, the user is redirected to the login page `index.php`, securing the page.



The core of the user interface displays a table populated from the database `ref_courses` using an SQL query that joins department data `ref_departments` to each course using a **LEFT JOIN**. This enables displaying not only the course name but also its affiliated department (`$rs['department']`), a critical feature in identifying each course's academic classification.

An “Add Course” button triggers a modal form (#add-modal) for adding and editing courses. When a course is edited, jQuery dynamically populates the modal with the selected course’s existing data by targeting specific table cells (`data-target="department"`, `data-target="course"`, and `data-target="status"`). This pre-filled data ensures a smooth and error-free editing process.

Inside the modal, a dropdown menu fetches all *active* departments, excluding administrative ones, through a filtered SQL query (excluding departments like ‘Administrative’, ‘Cashier’, and ‘Registrar’). This is done to limit course associations to academic departments only.

Upon form submission, an **AJAX `$.post()`** request sends course details—including course name, selected department ID, and status—to a backend script (`submit.php`) for database insertion or update. If successful, the system uses SweetAlert (`Swal.fire`) to notify the user of the successful operation and refreshes the page to reflect changes.

The conditional badge styling in the status column (`badge-success` for active, `badge-danger` for inactive) provides quick visual feedback about each course’s availability, improving the overall user experience and administrative clarity.



The screenshot shows the 'Add / Edit Document Type Information' modal. It includes fields for 'Document Type*' (with a placeholder 'Enter data here'), 'Document Name*' (placeholder 'Enter data here'), 'Price*' (checkbox 'With Documentary Stamp?'), 'Processing Days*' (placeholder 'Enter data here'), and 'Status *' (dropdown menu showing 'Active'). At the bottom right of the modal are 'Close' and 'Save changes' buttons.

ID	Document Type	Document Name	Price	Processing Days	Status	Action
1	TOR	Transcript of Record - Board Exam Purpose	1050.00	3-5 working days	Yes	Active
2	TOR	Transcript of Record - Employment Purpose	1050.00	3-5 working days	Yes	Active
3	TOR	Transcript of Records - Transfer Credential	1050.00	3-5 working days	Yes	Active
4	Certificate	Certificate - General Weighted Average	200.00	1-2 working days	Yes	Active
5	Certificate	Certificate of Honors	200.00	1-2 working days	Yes	Active
6	Certificate	Certification of Enrollment	200.00	1-2 working days	Yes	Active
7	Certificate	Certificate (English as a medium of instruction)	200.00	1-2 working days	No	Active
8	Certificate	Certificate of Units Earned	100.00	1-2 working days	Yes	Active
9	Certificate	Certification of Graduation	100.00	1-2 working days	Yes	Active
10	Others	School Form 10	300.00	3-5 working days	Yes	Active

Figure 74. Admin – Add Document Type

Figure 74 displays the Add Document Type modal, enabling the administrator to add various documents that students or alumni may request.

The screenshot shows the 'Document Type List' page. It features a table with 10 entries, each representing a different document type. The columns are: ID, Document Type, Document Name, Price, Processing Days, With Doc Stamp?, Status, and Action. The 'Action' column contains 'Edit' buttons for each row. At the bottom of the table, there is a message 'Showing 1 to 10 of 14 entries' and navigation links 'Previous', '1', '2', and 'Next'.

Figure 75. Admin – Document Type List

Figure 75 illustrates the list of document types added by the administrator. Through this interface, the administrator can manage all document types requested by students or alumni.



The screenshot shows the SMCC ORCS software interface. On the left, there is a sidebar with navigation links: SMCC ORCS, TRANSACTION (Dashboard, Students, Users), REFERENCES (Department, Course, Document Type, Payment Account, ISO Form Code). The main area displays a table of document types with columns ID, Status, and Action. A modal window titled "Add / Edit Document Type Information" is open over the table. The modal contains the following fields:

Document Type*	TOR
Document Name*	Transcript of Record - Board Exam Purpose
Price*	350.00
With Documentary Stamp?	<input checked="" type="checkbox"/> 35
Processing Days*	3-5 working days
Status *	Active

At the bottom right of the modal are "Close" and "Save changes" buttons.

Figure 76. Admin - Edit Document Type Information

Figure 76 illustrates the edit document type interface, which is accessed through the edit button in the document type list. This interface allows the administrator to update or modify information related to the course within the institution.



```

55
56
57
58
59
60
61
62    <th>ID</th>
63    <th>Document Type</th>
64    <th>Document Name</th>
65    <th>Price</th>
66    <th>Processing Days</th>
67    <th>With Doc Stamp?</th>
68    <th>Status</th>
69    <th>Action</th>
70
71  </tr>
72 </thead>
73 <tbody>
74  <?php
75      require_once('../dbassets/connection.php');
76      $query = "SELECT * FROM ref_documents d";
77      $result = mysqli_query($connection,$query);
78      while($rs = mysqli_fetch_array($result)) {
79          $id = $rs['id'];
80
81          <tr id=<?php echo $id; ?>>
82              <td><?php echo $id; ?></td>
83              <td data-target="type"><?php echo $rs['doc_type'];?></td>
84              <td data-target="name"><?php echo $rs['doc_name'];?></td>
85              <td data-target="price"><?php echo $rs['price'];?></td>
86              <td data-target="days"><?php echo $rs['processing_days'];?></td>
87              <td data-target="with_stamp"><?php echo $rs['with_stamp'];?></td>
88              <td data-target="status">
89                  <span class="badge badge-<?php if ($rs['status'] == 'Active') echo 'success'; else echo 'danger';?>><?php echo $rs[90
91
92
93
94
95
96
97
98
99
100
101
102
103
104      <!-- ADD MODAL -->
105      <div id="add-modal" class="modal fade" tabindex="-1" role="dialog" aria-labelledby="myModalLabel" aria-hidden="true" data-backdrop="sta
106      <div class="modal-dialog modal-lg">
107          <div class="modal-content">
108              <div class="modal-header">
109                  <h4 class="modal-title font-weight-bold" id="myModalLabel">Add / Edit Document Type Information</h4>
110              </div>
111              <form id="type-form" class="form-horizontal m-t-30" autocomplete="off">
112                  <input type="hidden" name="id">
113                  <div class="modal-body">
114                      <div class="form-group">
115                          <label>Document Type<span class="text-danger"></span> </label>
116                          <input type="text" name="document_type" class="form-control" placeholder="Enter data here" required>
117                      </div>
118                      <div class="form-group">
119                          <label>Document Name<span class="text-danger"></span> </label>
120                          <input type="text" name="document_name" class="form-control" placeholder="Enter data here" required>
121                      </div>
122                      <div class="form-group">
123                          <label>Price<span class="text-danger"></span> </label>
124                          <input type="number" name="price" class="form-control" min=1 required>
125                      </div>
126                      <div class="form-group">
127                          <div class="input-group">
128                              <div class="input-group-prepend">
129                                  <div class="input-group-text">
130                                      <input type="checkbox" name="with_stamp">
131                                      With Documentary Stamp
132                                  </div>
133                              </div>
134                          <input type="number" name="stamp_price" class="form-control" min=1 readonly>
135                      </div>
136                  </div>
137
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142
143
144
145
146
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```

214     $('#type-form').submit(function(e){
215         e.preventDefault();
216
217         var id = $('input[name="id"]').val();
218         var document_type = $('input[name="document_type"]').val();
219         var document_name = $('input[name="document_name"]').val();
220         var price = $('input[name="price"]').val();
221         var with_stamp = $('input[name="with_stamp"]').prop('checked');
222         var stamp_price = $('input[name="stamp_price"]').val();
223         var processing_days = $('input[name="processing_days"]').val();
224         var status = $('select[name="status"] :selected').val();
225
226         const url = '../dbassets/document_type/submit.php';
227         $.post(url, {id, document_type, document_name, price, with_stamp, stamp_price, processing_days, status}, (response) => {
228             if($.trim(response) == 'success') {
229                 Swal.fire({
230                     title: 'System Message',
231                     text: 'Data saved successfully!',
232                     icon: 'success',
233                     confirmButtonText: 'Okay'
234                 }).then((result) => {
235                     if (result.isConfirmed) {
236                         location.reload();
237                     }
238                 });
239             } else {
240                 Swal.fire({
241                     title: 'System Message',
242                     text: response,
243                     icon: 'info',
244                     confirmButtonText: 'Okay'
245                 });
246             }
247         });
248     });

```

Figure 77. Code Snippet for Admin – document_types.php

Figure 77 illustrates the code implementation of the Document Type Management page, which allows administrators to view, add, and modify different document types that users may request, such as students or alumni. At the top of the file, a session validation check ensures that only authenticated users can access the page (`if(!isset($_SESSION['id'])) { header("Location: ../index.php"); }`), thereby enforcing security. The interface contains a button labeled "Add Document Type" (`id="add"`), which triggers a Bootstrap modal allowing data input.

Necessary fields inside the modal form (`id="type-form"`) include `document_type`, `document_name`, `price`, `processing_days`, and `status`. A notable feature is the "With Documentary Stamp?" checkbox (`name="with_stamp"`), which, when selected, activates an input field for the stamp's price (`name="stamp_price"`) and sets it to a default value of 35. This conditional logic is implemented through a `jQuery.change()` event listener that toggles the read-only state of the `stamp_price` input.



The existing document types are displayed using a responsive HTML table, where each row contains an Edit button. When clicked, this button retrieves data from the table row using the assigned `data-target` attributes (`data-target="type"`, `data-target="price"`, etc.), populates the modal form, and toggles its visibility (`$('#add-modal').modal('toggle');`). This functionality enables seamless editing of entries. When the form is submitted, it sends a **POST** request to `submit.php` using jQuery's `$.post()` method. This payload includes all form values, including conditionally rendered ones like `with_stamp` and `stamp_price`. If the response is "success", a **SweetAlert2** modal confirms the operation and reloads the page; otherwise, an error alert is shown.

ID	Account Name	Account Number	Picture	Status	Action
1	Saint Michael College of Caraga	500000098291		Active	Edit
2	Saint Michael College of Caraga	040558000114		Active	Edit
3	Saint Michael College of Caraga	09098549424		Active	Edit

Figure 78. Admin – Payment Account List

Figure 78 presents the Payment List interface, which enables administrators to add and manage school accounts related to student payments. Through this interface, administrators are granted the authority to input all necessary school account details. Additionally, the interface provides functionality for editing existing records, allowing modifications when updates or corrections are required.



```

85     $id = mysqli_real_escape_string($connection, $_POST['request_id']);
86     $imageaccept = ["jpg", "png", "jpeg"];
87     $directory = "upload/payment_receipts";
88     $session_id = $_SESSION["id"];
89
90     // Upload the file and get the file path (assuming the file is always present)
91     $image_path = uploadfile('file', 'file', $imageaccept, $directory);
92
93     // Prepare the query to update the record
94     if ($id) {
95         $query = "SELECT email FROM users WHERE `role` = 'Cashier' AND `status` = 'Active'";
96         $stmt1 = $connection->prepare($query);
97         $stmt1->execute();
98         $result = $stmt1->get_result();
99
100        while ($row = $result->fetch_assoc()) {
101            if (sendEmail($row['email'], $subject, $body)) {
102                // echo "Email successfully sent to: " . $row['email'] . "<br>";
103            }
104        }
105
106        // Update the record in the clearance table
107        $update_query = "UPDATE requests SET receipt = ?, `status` = 'For Verification' WHERE id = ?";
108
109        // Prepare the statement
110        $stmt = $connection->prepare($update_query);
111
112        // Bind the parameters to the placeholders in the query
113        $stmt->bind_param("si", $image_path, $id);
114
115        // Execute the query and check if it was successful
116        if ($stmt && $stmt->execute()) {
117            // Log the action

```

Figure 79. Code Snippet for Admin – payment.php

Figure 79 illustrates the backend PHP script responsible for uploading and processing a payment receipt related to a specific request. This snippet demonstrates several key functionalities that support secure file handling, database updates, and automated email notifications within a student payment system.

The script begins by sanitizing the incoming request_id using mysqli_real_escape_string, ensuring protection against **SQL injection**. This step is crucial as it ensures that only valid, safe data enters the system. It also defines a whitelist of acceptable image file extensions—jpg, png, and jpeg—enforced by the uploadFile() function to prevent malicious file uploads. The receipt image is then saved to the upload/payment_receipts directory, and the file path is stored in the \$image_path variable.

Next, the script checks if a valid request ID exists. If so, it queries the database for all active users with the role of "Cashier". For each cashier found, an email notification is sent using the



sendEmail() function. This notifies them that a receipt has been uploaded and that further verification is needed. The core update operation is handled using a prepared SQL statement, which updates the receipt field and changes the request status to 'For Verification' in the requests table. The line `stmt->bind_param("si", $image_path, $id);` is critical as it binds the file path and request ID to the SQL query, ensuring both data integrity and security through parameterized inputs.

Upon successful execution, the script logs the action via `log_action()`, capturing the session user ID and the nature of the update for audit purposes and returning a success message. If the execution fails or the request ID is missing, appropriate error messages are echoed back to the client.

ID	Form Name	Form Code No.	Issue Status	Revision No.	Date Effective	Approved	Status	Action
1	Feedback Form	FM-OCM-SMCC-HCF-01	02	03	2023-09-14	President	Active	Edit

Figure 80. Admin – ISO Form Code List

Figure 80 shows the ISO Form Code interface page, where the admin can add and edit ISO form codes for reports or other forms provided by the ISO. Each form entry includes its corresponding form number, issue status, revision number, effective date, and the name of the approving authority.



```

57   <h3 class="card-title">ISO Form Code List</h3>
58   <div class="table-responsive">
59     <table id="zero_config" class="table table-hover table-bordered">
60       <thead>
61         <tr>
62           <th>ID</th>
63           <th>Form Name</th>
64           <th>Form Code No.</th>
65           <th>Issue Status</th>
66           <th>Revision No.</th>
67           <th>Date Effective</th>
68           <th>Approved</th>
69           <th>Status</th>
70           <th>Action</th>
71         </tr>
72       </thead>
73       <tbody>
74         <tr>
75           require_once('../dbassets/connection.php');
76           $query = "SELECT * FROM ref_iso_codes";
77           $result = mysqli_query($connection,$query);
78           while($rs = mysqli_fetch_array($result)) {
79             $id = $rs['id'];
80           }
81           <td id="<?php echo $id; ?>">
82             <td><?php echo $id; ?></td>
83             <td data-target="form_name"><?php echo $rs['form_name'];?></td>
84             <td data-target="form_code"><?php echo $rs['form_code'];?></td>
85             <td data-target="issue_status"><?php echo $rs['issue_status'];?></td>
86             <td data-target="revision_no"><?php echo $rs['revision_no'];?></td>
87             <td data-target="date_effective"><?php echo $rs['date_effective'];?></td>
88         </tr>
89       </tbody>
90     </table>
91   </div>
92
93   <script>
94     $(document).ready(function(){
95       var edit = false;
96
97       $(document).on('click', 'button[data-role=edit]', function(){
98         edit = true;
99         var id = $(this).data('id');
100        var form_name = $('#'+id).children('td[data-target=form_name]').text();
101        var form_code = $('#'+id).children('td[data-target=form_code]').text();
102        var issue_status = $('#'+id).children('td[data-target=issue_status]').text();
103        var revision_no = $('#'+id).children('td[data-target=revision_no]').text();
104        var date_effective = $.trim($('#'+id).children('td[data-target=date_effective]').text());
105        var approved_by = $.trim($('#'+id).children('td[data-target=approved_by]').text());
106        var status = $.trim($('#'+id).children('td[data-target=status]').text());
107
108        $('input[name="form_name"]').val(form_name);
109        $('input[name="form_code"]').val(form_code);
110        $('input[name="issue_status"]').val(issue_status);
111        $('input[name="revision_no"]').val(revision_no);
112        $('input[name="date_effective"]').val(date_effective);
113        $('input[name="approved_by"]').val(approved_by);
114
115        $('#status').val(status).change();
116        $('#input[name=id"]').val(id);
117        $('#add-modal').modal('toggle');
118      });
119
120      $(document).on('click', '#add, #close', function(){
121        edit = false;
122        $('#code-form').trigger("reset");
123        $('#add-modal').modal('toggle');
124      });
125
126      $('#code-form').submit(function(e){
127        e.preventDefault();
128
129        var form_data = {
130          id: $('#input[name=id]').val(),
131          form_name: $('#input[name=form_name]').val(),
132          form_code: $('#input[name=form_code]').val(),
133          issue_status: $('#input[name=issue_status]').val(),
134          revision_no: $('#input[name=revision_no]').val(),
135          date_effective: $('#input[name=date_effective]').val(),
136          approved_by: $('#input[name=approved_by]').val(),
137          status: $('#status').val()
138        };
139
140        $.ajax({
141          url: "process_form.php",
142          type: "POST",
143          data: form_data,
144          success: function(response) {
145            if (response === "Success") {
146              $('#add-modal').modal('hide');
147              $('#code-table').DataTable().ajax.reload();
148            } else {
149              alert("Error: " + response);
150            }
151          }
152        });
153      });
154    });
155  </script>
156
```

Figure 81. Code Snippet for Admin – iso_form_code.php

Figure 81 presents a complete implementation of an ISO Form Code management interface, combining PHP for server-side logic with HTML and JavaScript (primarily jQuery) for frontend interaction. This web page enables administrators to manage reference data associated with ISO form documentation, such as form names, codes, revision details, and approval information.



At the beginning of the script, session handling is initiated using `session_start()`, and the user's authentication status is verified via `$_SESSION['id']`. Unauthorized users are redirected to the login page (`../index.php`), ensuring that only authenticated users can access the ISO form code management module. The layout is modular, with headers, navigation bars, and sidebars included through PHP `include()` statements to maintain clean and reusable code.

The page's core content is a dynamic table (`#zero_config`) that fetches ISO form data from the `ref_iso_codes` database table using a SQL query (`SELECT * FROM ref_iso_codes`). Each row in the table displays a single ISO form entry and an "Edit" button containing attributes like `data-role='edit'` and `data-id` for reference. When the Edit button is clicked, JavaScript extracts the current row's content and fills it into a modal form for editing.

A modal dialog (`#add-modal`) is triggered to add new entries and edit existing ones. This modal contains a form (`#code-form`) with input fields such as `form_name`, `form_code`, `issue_status`, `revision_no`, `date_effective`, and `approved_by`. A hidden input field named `id` determines whether the operation is an insertion or an update. When the form is submitted, JavaScript collects the form data and sends it to the server via a `jQuery .post()` function targeting `../dbassets/iso_code/submit.php`. The server-side script processes the submission, and upon receiving a 'success' response, the frontend shows a **SweetAlert** confirmation message and reloads the page.



The screenshot shows the SMCC ORCS Dashboard. On the left sidebar, there are sections for CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Payment Verification), and REPORTS (Clearance Report, Credentials Report). The main content area shows a summary of pending requests: 'Clearance Pending' (1) and 'Requests Pending' (0). Below this, a 'Latest Request' table is displayed with one row for 'Ricel Ada Villarin' with status 'Pending'. The footer of the dashboard includes the text 'SMCC © 2025'.

Figure 82. Cashier – Dashboard

Figure 82 shows the Dashboard interface, which enables the Cashier to view credential requests, including pending clearances, completed requests, and recent request transactions, along with their statuses.

```

79 <?php
80     require_once('../dbassets/connection.php');
81     $query = "SELECT r.*, u.fname, u.lname FROM requests r
82             JOIN users u ON r.user_id = u.id
83             WHERE r.status = 'Pending'
84             ORDER BY r.submitted_at DESC
85             LIMIT 5;";
86     $result = mysqli_query($connection, $query);
87
88     // Check if there are any rows returned
89     if (mysqli_num_rows($result) > 0) {
90         // Loop through the result and display rows
91         while ($rs = mysqli_fetch_array($result)) {
92             // Check if date_requested exists and calculate if it's late
93             $date_requested = $rs['date_requested'];
94             $current_date = date('Y-m-d'); // Current date in Y-m-d format
95             $date_diff = 0; // Default value for date_diff
96             $late_class = ''; // Default class for row
97
98             // Only calculate if date_requested is not null
99             if (!is_null($date_requested)) {
100                 $date_diff = strtotime($current_date) - strtotime($date_requested);
101
102                 // Check if the date_requested is more than 3 days late
103                 if ($date_diff > (3 * 86400)) { // 3 days * 86400 seconds per day
104                     $late_class = 'table-danger'; // Add 'table-danger' class for red row
105                 }
106             }
107         }
108     ?>

```

Figure 83. Code Snippet for Cashier – Dashboard_cashier.php

Figure 83 illustrates a dashboard component that provides real-time insights into system activities, particularly on clearance and request monitoring. This query utilizes two subqueries

```
SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Cashier'
```



and SELECT COUNT(id) FROM `requests` WHERE `status` = 'For Verification' These subqueries respectively count the number of pending clearance records that require the Cashier's attention and the number of requests awaiting verification. The results are fetched and stored in the variables \$clearance and \$requests, which are then dynamically echoed inside two card components to display the total counts on the dashboard visually.

A screenshot of a web-based application interface titled "Clearance List". The page has a header with a user profile for "Noel Baja" and navigation links for "Home" and "Clearance List". Below the header is a search bar labeled "Search:" and a table header with columns: ID, Name, Date Submitted, Is Cleared?, Comment, Status, and Action. The main content area shows a message: "No data available in table". At the bottom, it says "Showing 0 to 0 of 0 entries" and includes "Previous" and "Next" buttons. The footer of the page reads "SMCC © 2025".

Figure 84. Cashier/Head of LRC/Dean/Principal/Registrar – Clearance List

Figure 84 presents the clearance list interface utilized by the Cashier, Head of the Learning Resource Center (LRC), Dean/Principal, and Registrar. Although this is a shared interface among multiple roles, it is designed to ensure role-specific functionality. Requester information is displayed only when it is the corresponding role's turn to take action in the clearance process. Since the system is role-based, the requester's name will appear sequentially according to the designated approval flow. This ensures that users interact only with the requests assigned to their role at the appropriate stage.



```

198     <script>
199     $(document).ready(function(){
200         var edit = false;
201
202         $(document).on('click', 'a[data-role=approve]', function() {
203             var id = $(this).data('id');
204             var email = $(this).data('email');
205             var deanid = $(this).data('deanid');
206             const formData = { id: id, email: email, dean_id: deanid };
207
208             Swal.fire({
209                 title: "Are you sure?",
210                 text: "You are about to approve this transaction.",
211                 icon: "warning",
212                 showCancelButton: true,
213                 confirmButtonColor: "#DD6B55",
214                 confirmButtonText: "Yes",
215             }).then((result) => {
216                 if (result.isConfirmed) {
217                     // Show the loading state
218                     Swal.fire({
219                         title: 'Please wait...',
220                         text: 'Approving transaction...',
221                         icon: 'info',
222                         allowOutsideClick: false, // Prevent clicking outside to close
223                         didOpen: () => {
224                             Swal.showLoading(); // Show the loading spinner
225                         }
226                     });
227
228                     $.post('../dbassets/request/approve.php', formData, (response) => {
229                         console.log(response);
230                         if ($.trim(response) === 'success') {
231                             Swal.fire({
232                                 title: 'System Message',
233                                 text: "The transaction has been approved successfully.",
234                                 icon: 'success',
235                                 confirmButtonText: "Okay"
236                             }).then(() => location.reload());
237                         } else {
238                             Swal.fire('Error', 'There was a problem approving the transaction.', 'error');
239                         }
240                     });
241
242                 }
243             });
244
245             $(document).on('click', 'a[data-role=disapprove]', function() {
246                 var id = $(this).data('id');
247                 var email = $(this).data('email'); // Optional if email is needed
248                 const formData = { id: id, email: email };
249
250                 // Show SweetAlert2 input prompt for feedback
251                 Swal.fire({
252                     title: "Feedback / Remarks",
253                     text: "Please enter reason for disapproval:",
254                     input: 'textarea', // Using a textarea for multi-line input
255                     showCancelButton: true,
256                     inputPlaceholder: "Write something",
257                     preConfirm: (inputValue) => {
258                         // Check if the input is empty and prevent proceeding if it is
259                         if (!inputValue) {
260                             Swal.showValidationMessage("You need to write something!");
261                             return false;
262                         }
263                     }
264                 })
265             });
266
267             $.then((result) => {
268                 if (result.isConfirmed) {
269                     // If the user entered a reason, prepare the form data
270                     formData.input_value = result.value;
271
272                     // Show the loading state
273                     Swal.fire({
274                         title: 'Please wait...',
275                         text: 'Disapproving transaction...',
276                         icon: 'info',
277                         allowOutsideClick: false, // Prevent clicking outside to close
278                         didOpen: () => {
279                             Swal.showLoading(); // Show the loading spinner
280                         }
281                     });
282
283                     $.post('../dbassets/request/disapprove.php', formData, (response) => {
284                         console.log(response);
285                         if ($.trim(response) === 'success') {
286                             Swal.fire({
287                                 title: 'System Message',
288                                 text: "The transaction has been disapproved successfully.",
289                                 icon: 'success',
290                                 confirmButtonText: "Okay"
291                             }).then(() => location.reload()); // Reload the page after success
292                         } else {
293                             Swal.fire('Error', 'There was a problem disapproving the transaction.', 'error');
294                         }
295                     });
296
297                 }
298             });
299
300         });
301     });
302 
```

Figure 85. Code Snippet for Cashier/Head of LRC/Dean/Principal/Registrar – Clearance List



Figure 85 illustrates the server-side and client-side implementation of the Clearance List interface, which serves multiple roles, including Cashier, Librarian, Dean/Principal, and Registrar. The PHP logic dynamically generates the SQL query based on the logged-in user's role, as defined in the `$statusConditions` associative array. For example, if the user has a Cashier role, the condition `c.status = 'For Cashier'` filters the clearance records relevant to the Cashier only. Similarly, the Dean and Principal roles include an additional constraint `c.dean_id = '$sess_id'`, ensuring that only clearances assigned to the specific dean or principal are shown.

The role-based logic ensures users only interact with requests appropriate to their current step in the clearance process. The frontend further enhances role-specific actions with conditionally rendered dropdowns, such as Approve, Disapprove, and View Receipt, based on the clearance's current status. For instance, the receipt view option appears only if the status is For Cashier and a receipt is uploaded (`$rs['receipt']`). The embedded **jQuery** and **SweetAlert2 JavaScript** enhance the user experience by providing confirmation dialogs for approval/disapproval, feedback input on rejection, and modal views for uploaded receipts.

This role-driven workflow not only strengthens access control and accountability but also enforces the sequential approval structure of the clearance process, ensuring each stakeholder fulfills their responsibility at the appropriate stage.

A screenshot of a web-based application interface titled "Disapproved List". The page includes a header with the college's name and logo, a user profile for "Noel Baja", and a navigation breadcrumb "Home > Disapproved List". Below the title is a search bar and a table header with columns: ID, Name, Date Submitted, Is Cleared?, Comment, Status, and Action. A message "No data available in table" is displayed below the table. At the bottom, it shows "Showing 0 to 0 of 0 entries" and navigation links for "Previous" and "Next".

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Figure 86. Cashier/Head of LRC/Dean/Principal/Registrar – Disapproved List

Figure 86 displays the disapproved list for the Cashier, Head of the LRC, Dean/Principal, and Registrar. Although this is a shared interface, it is designed to provide different functionalities based on user roles. A requester will appear on the disapproved list of a specific role (e.g., Cashier) if there are deficiencies in that particular process. However, suppose there are no deficiencies in the processes under the LRC, Dean/Principal, or Registrar. In that case, the requester will not appear on their respective disapproved lists, only on the list of the role where the issue exists.



```

83 // construct the query dynamically
84 $query = "SELECT r.*, u.fname, u.lname, u.email, c.id AS clearance_id, c.dean_id, c.status AS clearance_status, c.receipt, c.comment
85     FROM `requests` r
86     JOIN clearance c ON r.id = c.request_id
87     JOIN users u ON r.user_id = u.id
88     WHERE (c.status = 'For Uploading' OR c.status = 'Disapproved')
89         AND c.disapproved_by_id = '$sess_id';";
90
91 $result = mysqli_query($connection,$query);
92 while($rs = mysqli_fetch_array($result)) {
93     $id = $rs['id'];
94     $email = $rs['email'];
95     $dean_id = $rs['dean_id'];
96     $clearance_status = $rs['clearance_status'];
97     $statusClass = isset($statusClasses[$clearance_status]) ? $statusClasses[$clearance_status] : 'info';
98 }
99
100 <tr id=<?php echo $id; ?>>
101     <td><?php echo $id; ?></td>
102     <td data-target="name"><?php echo $rs['fname'].' '.$rs['lname']; ?></td>
103     <td data-target="submitted_at">
104         <?php echo $rs['submitted_at'] ? date('F j, Y', strtotime($rs['submitted_at'])) : ''; ?>
105     </td>
106     <td data-target="is_cleared">
107         <span class="badge badge-<?php echo $rs['is_cleared'] == 'Yes' ? 'badge-primary' : 'badge-warning'; ?>">
108             <?php echo $rs['is_cleared']; ?>
109         </span>
110     </td>
111     <td data-target="comment"><?php echo $rs['comment']; ?></td>
112     <td data-target="clearance_status">
113         <span class="badge badge-<?php echo $statusClass; ?>"><?php echo $rs['clearance_status']; ?></span>
114
115     <script>
116         $(document).ready(function(){
117
118             $(document).on('click', '[data-role=approve]', function() {
119                 var id = $(this).data('id');
120                 var email = $(this).data('email');
121                 var deanid = $(this).data('deanid');
122                 const formData = { id: id, email: email, dean_id: deanid };
123
124                 Swal.fire({
125                     title: "Are you sure?",
126                     text: "You are about to approve this transaction.",
127                     icon: "warning",
128                     showCancelButton: true,
129                     confirmButtonColor: "#DD6B55",
130                     confirmButtonText: "Yes!",
131                 }).then((result) => {
132                     if (result.isConfirmed) {
133                         // Show the loading state
134                         Swal.fire({
135                             title: 'Please wait...',
136                             text: 'Approving transaction...',
137                             icon: 'info',
138                             allowOutsideClick: false, // Prevent clicking outside to close
139                             didOpen: () => {
140                                 Swal.showLoading(); // Show the loading spinner
141                             }
142                         });
143
144                         $.post('../dbassets/request/approve.php', formData, (response) => {
145                             console.log(response);
146                             if ($.trim(response) === 'success') {
147                                 Swal.fire({
148                                     title: 'System Message',
149                                     text: "The transaction has been approved successfully.",
150                                 });
151                         }
152                     }
153                 });
154             })
155         })
156     </script>
157 
```

Figure 87. Code Snippet for Cashier/Head of LRC/Dean/Principal/Registrar – Disapproved List

Figure 87 presents the implementation of the Disapproved List page in a web-based clearance system. It dynamically displays users whose clearance requests have been disapproved by specific personnel, based on their roles such as Cashier, Head of LRC, Dean/Principal, or Registrar.

The key functionality of role-based display is emphasized in the SQL query section \$query

```
= "SELECT ... WHERE (c.status = 'For Uploading' OR c.status = 'Disapproved') AND c.disapproved_by_id = '$sess_id';" ; This query retrieves records only if they were disapproved by the currently logged-in staff ($sess_id), ensuring
```



that each role sees only the entries they specifically disapproved. This is vital in a role-based system where, for instance, the Cashier should not see disapprovals from the Dean/Principal unless they were the disapproving party.

The table dynamically generates rows with key details such as ID, Name, Date Submitted, Is Cleared, Comment, and Status. Based on the value of \$clearance_status, status labels use conditional styling with classes like 'badge-success', 'badge-warning', and 'badge-danger'. Another role-sensitive condition appears within this block <?php if (\$role != 'Cashier') { ?>

This condition hides the "Approve" action button from Cashiers, emphasizing that only roles such as Dean or LRC Head can approve specific requests. This reinforces role integrity and prevents unauthorized actions within the system.

On the frontend, a JavaScript function listens for the "Approve" action button (for non-Cashier roles). A **SweetAlert** confirmation is triggered upon clicking, followed by a **POST** request to approve.php with the necessary data. Successful approval refreshes the page and updates the table.

This implementation ensures that each user role only interacts with their respective disapproved requests, maintaining a modular, secure, and role-specific workflow in the clearance approval process.

A screenshot of the SMCC ORCS software interface. On the left is a dark sidebar with navigation links: SMCC ORCS, Dashboard, CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Payment Verification, marked with a checkmark), and REPORTS (Clearance Report, Credentials Report). The main content area shows a "Payment List" table with one entry. The table columns are ID, Name, Date Requested, Is Cleared?, Date Release, Total, and Status. The entry details are: ID 1, Name Ricel Ada Villarin, Date Requested May 4, 2025, Is Cleared? Yes, Date Release (empty), Total 1855.00, and Status For verification. To the right of the table are buttons for View Receipt, Approve (highlighted in blue), and Disapprove. Below the table, it says "Showing 1 to 1 of 1 entries". At the bottom right is the copyright notice "SMCC © 2025".

ID	Name	Date Requested	Is Cleared?	Date Release	Total	Status
1	Ricel Ada Villarin	May 4, 2025	Yes		1855.00	For verification

Figure 88. Cashier – Payment List

Figure 88 shows the Payment Verification interface for the Payment List, which allows the cashier to manage and validate students' credential payments efficiently. This ensures students have paid the required amount by reviewing the uploaded proof of payment. The interface features a six-column table displaying each student's ID number, name, course and year, date requested, status, and actions. In the Action column, the 'View Payment' button lets the cashier verify the payment. Once validated, the cashier can send the official receipt to confirm and approve the payment of the student's credentials.



```
80 require_once('../dbassets/connection.php');
81 $query = "SELECT
82     r.*,
83     u.fname,
84     u.lname,
85     u.email,
86     COALESCE(SUM(CASE WHEN r.status = 'For Verification' THEN rd.total ELSE 0 END), 0) + COALESCE(r.fee, 0) AS total_price
87     FROM
88     requests r
89     LEFT JOIN
90     requested_documents rd ON r.id = rd.request_id
91     JOIN
92     users u ON r.user_id = u.id
93     WHERE r.status = 'For Verification'
94     GROUP BY
95     r.id; ";
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Figure 89. Code Snippet for Cashier – Request_verification.php

Figure 89 shows a PHP-embedded HTML page that serves as the *Request Approval* module of a payment verification system. The script begins with `session_start()` and includes a conditional redirection using `if (!isset($_SESSION['id']))` to ensure that only authenticated users can access the page. This initial PHP block is a security measure, preventing unauthorized access to the approval interface.

The main content is enclosed within a `<div class="page-wrapper">`, which contains a breadcrumb navigation for user orientation and a responsive HTML table identified by `<table id="zero_config">`. This table dynamically displays payment-related records retrieved through a MySQL query stored in `$query = "SELECT ... FROM requests r LEFT JOIN requested_documents rd ..."`, a statement that joins the requests,



requested_documents, and users tables. This setup consolidates data such as the request ID, user name, date requested, total price, and status. The COALESCE() function is used within the query to handle NULL values in the price fields, ensuring accurate total price calculations even when some values are missing.

The table rows are dynamically generated using a while loop that calls mysqli_fetch_array(\$result). Each row features action buttons grouped with Bootstrap's dropdown components. These buttons are conditionally displayed based on the request's status and may include options for viewing the receipt (data-role='receipt'), approving the request (data-role='upload'), or disapproving it (data-role='disapprove').

When triggered, the *View Receipt Modal* displays an image using the #modalImage element, whose src attribute is dynamically assigned via **jQuery**. The Upload Modal allows users to upload an official receipt through an HTML form, which is submitted asynchronously using jQuery's \$.ajax({ url: '../dbassets/request/upload_official_receipt.php', ... }). This non-blocking process ensures a smooth and responsive user experience.

SweetAlert2 is used to gather a reason from the user through a text area input for the disapproval process. A key segment of the logic is the use of Swal.fire({ title: "Feedback / Remarks", input: 'textarea', ... }).then((result) => { if (result.isConfirmed) { ... \$.post('../dbassets/request/deny_payment.php', formData, ...); } })



}); . This ensures that user input is validated before sending a POST request to the server, enabling the system to handle disapprovals securely and responsibly.

The screenshot shows the 'Clearance Report' page of the SMCC ORCS system. The left sidebar has navigation links for Dashboard, Clearance (Clearance List, Clearance Disapproved List), Requests (Payment Verification), Reports (Clearance Report, Credentials Report), and a Print button. The main area shows a search form with 'From' (01/05/2025) and 'To' (05/05/2025) dates, a 'Department' dropdown set to 'All Departments', and a 'Print Report' button. Below is a table with one entry:

#	Name	Department	Course	Receipt	Date Approved	Status
1	Richel Ada Villarin	CCIS	BSIT	View Receipt	May 5, 2025	Approved

At the bottom, it says 'Showing 1 to 1 of 1 entries' and has 'Previous' and 'Next' buttons. The footer says 'SMCC © 2025'.

Saint Michael College of Caraga
Brgy. 4, Nasipit, Agana Norte, Philippines
District 6, Brgy. Triangulo, Nasipit, Agana Norte, Philippines
Tel. Nos. +63 085 343-5201, 283-3113 | Fax: +63 085 898-0892
www.smccnasiol.edu.ph

CLEARANCE REPORT
Period: May 01, 2025 - May 05, 2025
Cashier Office

#	Name	Department	Course	Date Approved	Status
1	Richel Ada Villarin	CCIS	BSIT	May 05, 2025	Approved

Prepared by:
Noel Baja

Figure 90. Cashier – Clearance Report

Figure 90 shows the Completed Clearance Report interface designed for the cashier. The interface allows the cashier to monitor and manage clearance requests that have been reviewed and approved. Users can filter the report based on a specific date range and department to locate particular records easily. Additionally, it features a “View Receipt” button, enabling the cashier to view the uploaded payment receipt submitted by the requester, especially when an outstanding balance needs verification.



```

235     <script>
236     $(document).ready(function(){
237
238         $('#fromDate, #toDate, #department').change(function() {
239             var fromDate = $('#fromDate').val();
240             var toDate = $('#toDate').val();
241             var department = $('#department').val();
242
243             if (new Date(fromDate) > new Date(toDate)) {
244                 Swal.fire({
245                     title: 'Error',
246                     text: 'The "From" date must be earlier than the "To" date.',
247                     icon: 'error',
248                     confirmButtonText: 'OK'
249                 });
250
251                 // Optionally, clear the "From" date or reset it
252                 $('#fromDate').val('');
253             }
254             else {
255                 getData(fromDate, toDate, department);
256             }
257         });
258
259         function getData(fromDate, toDate, department) {
260             const url = '../dbassets/report/clearance_cashier.php';
261
262             var table = $('.report-table').DataTable();
263             table.clear().draw();
264             $.get(url, { fromDate, toDate, department }, (response) => {
265                 console.log(response);
266                 const rows = JSON.parse(response);
267                 if (rows.message) {
268                     alert('No data available');
269                 }
270             });
271
272             $('#printReport').click(function(event) {
273                 event.preventDefault(); // Prevent form submission
274
275                 var fromDate = $('#fromDate').val();
276                 var toDate = $('#toDate').val();
277                 var department = $('#department').val();
278
279                 if (!fromDate || !toDate) {
280                     Swal.fire('System Message', "Please enter both From Date and To Date.", 'info');
281                     return;
282                 }
283
284                 if (new Date(fromDate) > new Date(toDate)) {
285                     Swal.fire('System Message', "From Date cannot be after To Date.", 'info');
286                     return;
287                 }
288
289                 $('#periodText').text(moment(fromDate).format('MMMM DD, YYYY') + ' - ' + moment(toDate).format('MMMM DD, YYYY'));
290                 fetchReportData(fromDate, toDate, department);
291
292                 setTimeout(() => {
293                     // $('#report-modal').modal('toggle');
294                     let css =
295                         '@media print {
296                             @page {
297                                 size: A4 landscape; /* Ensure page size is A4 in landscape orientation */
298                             }
299                         }';
300
301                     }
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```



A key part of the functionality is the dropdown menu for department selection, which dynamically loads data from the database (`ref_departments`) while excluding specific departments like *Administrative*, *Cashier*, *Registrar*, and *Learning Resource Center*. This is done through a SQL query inside a PHP block and is critical for filtering relevant clearance data.

Below the filters is a `DataTable (#zero_config)` that is initially empty and later populated dynamically using **jQuery** and **AJAX**. When the date range or department is changed, the `getData()` function is triggered. This function sends a **GET** request to `clearance_cashier.php` to fetch filtered data and populates the table with the resulting **JSON**. Each row contains the student's name, department, course, approval date, and a conditional button to view receipts using a modal (`#view-modal`).

Another necessary functionality is the Print Report button. When clicked, it validates date fields and calls the `fetchReportData()` function, which builds a printable report table using the selected filters. The report is styled for landscape A4 paper using inline CSS within a dynamically opened browser window. This window loads the report's content and a linked CSS stylesheet for formatting, then automatically prints it.

Lastly, the modals serve interactive purposes: `#report-modal` displays the formatted clearance report with institutional branding and preparer's name (`<?php echo $_SESSION['name']; ?>`), while `#view-modal` shows an image of the receipt. The script also handles validation using **SweetAlert** for user-friendly alerts when date inputs are incorrect.



A screenshot of the SMCC ORCS (Online Registration and Clearance System) dashboard. The left sidebar has a dark blue background with white text and icons. It includes sections for "CLEARANCE" (Clearance List, Clearance Disapproved List) and "REPORTS" (Clearance Report). The main content area shows a "Home > Dashboard" breadcrumb. A large card displays the message "Clearance Pending" with a small document icon. In the top right corner, there is a user profile for "Renel Maneda" with a dropdown arrow. The bottom right corner of the page has the text "SMCC © 2025".

Figure 92. Head of LRC/ Dean/Principal – Dashboard

Figure 92 illustrates the dashboard for the Head of LRC, Dean, or Principal, which displays pending clearance requests and the number of students seeking clearance. This dashboard interface is consistent across all users in these roles and specifically highlights pending requests to notify them that students are awaiting clearance approval.



```

1  <?php
2    require_once ('../dbassets/connection.php');
3    $session_id = $_SESSION['id'];
4    $role = $_SESSION['role'];
5
6    if ($role == 'Librarian') {
7      $query = mysqli_query($connection, "SELECT
8        COUNT(id) AS clearance
9        (SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Resource') AS `clearance`;"
10     or die(mysqli_error($connection)));
11   } elseif ($role == 'Dean') {
12     $query = mysqli_query($connection, "SELECT
13        COUNT(id) AS clearance
14        (SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Dean' AND `dean_id` = '$session_
15     or die(mysqli_error($connection)));
16   } elseif ($role == 'Principal') {
17     $query = mysqli_query($connection, "SELECT
18        COUNT(id) AS clearance
19        (SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Principal' AND `dean_id` = '$ses
20     or die(mysqli_error($connection)));
21
22   $row = mysqli_fetch_array($query);
23   $clearance = $row['clearance'];
24
25   <div class="card-group">
26     <!-- Column -->
27     <div class="card">
28       <div class="card-body">
29         <div class="row">
30           <div class="col-md-12">
31             <div class="d-flex no-block align-items-center">
32               <div>
33                 <i class="mdi mdi-file-check font-20 text-muted"></i>
34                 <p class="font-16 m-b-5">Clearance Pending</p>
35               </div>
36               <div class="ml-auto">
37                 <h1 class="font-light text-pink"><?php echo $clearance; ?></h1>
38               </div>
39             </div>
40           </div>
41         </div>
42       </div>
43     </div>
44   </div>
45 
```

Figure 93. Code Snippet for Head of LRC / Dean/Principal – dashboard_others.php

Figure 93 illustrates a PHP code snippet that dynamically displays the number of pending clearance requests based on the user's role within an academic system. The code begins by including a database connection file (`(require_once ('../dbassets/connection.php'));`) to establish access to the MySQL database. Then, it retrieves the currently logged-in user's session ID and role using `$_SESSION['id']` and `$_SESSION['role']`, which serve as the basis for conditional logic.

Depending on the user's role—Librarian, Dean, or Principal—the code executes a specific SQL query to count the number of clearance records with a matching status and role-specific criteria. For instance, if the user is a Librarian, the subquery `(SELECT COUNT(id) FROM clearance WHERE status = 'For Resource')`, Line 7, counts all clearances awaiting resource approval. For a Dean, the query becomes more restrictive, filtering not only by `status = 'For Dean'` but also ensuring the `dean_id` matches the current user's session ID Line 10,



thus personalizing the data. Similarly, for a Principal, the condition changes to status = 'For Principal' with the same `dean_id` filter on Line 14.

After executing the query with `mysqli_query()`, the result is fetched using `mysqli_fetch_array($query)` and stored in the `$clearance` variable on Line 18. This value is rendered in the HTML structure inside a styled card component. Within the `<h1>` tag (Figure 1, Line 27), `<?php echo $clearance; ?>` dynamically inserts the clearance count, enabling real-time display of pending requests specific to the user's role. The card is visually enhanced with a Material Design icon (`mdi-file-check`) and a descriptive label ("Clearance Pending"), providing a straightforward and user-friendly interface.

#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 5, 2025	Approved

Figure 94. Head of LRC/ Dean/Principal – Clearance Report

Figure 94 presents the clearance report interface designed for the Head of the Learning Resource Center (LRC) and the Dean or Principal. Although this interface is shared, it remains role-based, meaning the clearance report will only be displayed to the user once the assigned personnel or staff have completed the corresponding process or responsibility.



```

238     function getData(fromDate, toDate, department) {
239         const url = '../dbassets/report/clearance_librarian.php';
240
241         var table = $('.report-table').DataTable();
242         table.clear().draw();
243         $.get(url, { fromDate, toDate, department }, (response) => {
244             console.log(response);
245             const rows = JSON.parse(response);
246             if (rows.message) {
247                 alert('No data available');
248             }
249             else {
250                 rows.forEach((row, index) => {
251                     table.row.add($('
252                         <tr>
253                             <td>' + (index + 1) + '</td>
254                             <td>' + row.fname + ' ' + row.lname + '</td>
255                             <td>' + row.department + '</td>
256                             <td>' + (row.course || '-') + '</td>
257                             <td>' + moment(row.resource_date).format('MMMM D, YYYY') + '</td>
258                             <td>' + row.status + '</td>
259                         </tr>')).draw();
260                 });
261             }
262         });
263
264         $(document).on('click', 'a[data-role=receipt]', function(){
265             var imagePath = $(this).data('image');
266             $('#modalImage').attr('src', '..assets' + imagePath);
267             $('#view-modal').modal('toggle');
268         });
269
270         $('#printReport').click(function(event) {
271             event.preventDefault(); // Prevent form submission
272
273             var fromDate = $('#fromDate').val();
274             var toDate = $('#toDate').val();
275             var department = $('#department').val();
276
277             if (!fromDate || !toDate) {
278                 Swal.fire('System Message', "Please enter both From Date and To Date.", 'info');
279                 return;
280             }
281
282             if (new Date(fromDate) > new Date(toDate)) {
283                 Swal.fire('System Message', "From Date cannot be after To Date.", 'info');
284                 return;
285             }
286
287             $('#periodText').text(moment(fromDate).format('MMMM DD, YYYY') + ' - ' + moment(toDate).format('MMMM DD, YYYY'));
288             fetchReportData(fromDate, toDate, department);
289
290             setTimeout(() => {
291                 // $('#report-modal').modal('toggle');
292                 let css =
293                     `@media print {
294                         @page {
295                             size: A4 landscape; /* Ensure page size is A4 in landscape orientation */
296                         }
297                     }`;
298
299             });
300

```

Figure 95. Code Snippet for Head of LRC – report_clearance_librarian.php

Figure 95 illustrates a comprehensive PHP-based web application page designed to generate a "Clearance Report" for the librarian's office of Saint Michael College of Caraga. The PHP script begins by starting a session using `session_start()` and checking if a user session exists via `if (!isset($_SESSION['id']))`, redirecting unauthenticated users to the login page (`index.php`)—ensuring secure access. Within the main content, the user interface allows report filtering using HTML `<input type="date">` fields for the "From" and "To" date



ranges, and a <select> dropdown for choosing a department. This dropdown is dynamically populated by querying the database with `SELECT * FROM ref_departments WHERE status = 'Active'...`, which excludes specific departments (e.g., 'Administrative', 'Cashier') to refine the report scope.

Client-side interactivity is implemented using jQuery. When any filter input changes (`($('#fromDate, #toDate, #department').change())`), the script validates the date logic (if `(new Date(fromDate) > new Date(toDate))`) and either alerts the user or proceeds to fetch data via `getData(fromDate, toDate, department)`. The `getData` function sends a GET request to `../dbassets/report/clearance_librarian.php`, receives JSON data, and dynamically populates a `DataTable` (`($('.report-table').DataTable())`) with rows rendered inside a `<tbody>` element.

The "Print Report" functionality is handled by the `#printReport` click event, which first validates input dates and sets the report period text with `($('#periodText').text(...))`. It then constructs a printable version of the report by opening a new browser window and writing the content of the `#report-form` div. A key styling enhancement is the addition of a media print rule: `@media print { @page { size: A4 landscape; } }` to ensure proper formatting during printing. Lastly, `fetchReportData(fromDate, toDate, department)` prepares the table content inside the modal by resetting the header and body, and appending new `<tr>` and `<td>` elements based on the fetched data. A fallback message, "No data available!" is inserted if no records are found. Overall, this snippet integrates authentication, data filtering, dynamic UI rendering, and printable reporting in a cohesive and modular way.



```
214
215     <script>
216         $(document).ready(function(){
217
218             $('#fromDate', '#toDate', '#department').change(function() {
219                 var fromDate = $('#fromDate').val();
220                 var toDate = $('#toDate').val();
221                 var department = $('#department').val();
222
223                 if (new Date(fromDate) > new Date(toDate)) {
224                     Swal.fire({
225                         title: "Error",
226                         text: 'The "From" date must be earlier than the "To" date.',
227                         icon: "error",
228                         confirmButtonText: 'OK'
229                     });
230
231                     // Optionally, clear the "From" date or reset it
232                     $('#fromDate').val('');
233                 } else {
234                     getData(fromDate, toDate, department);
235                 }
236             });
237
238             function getData(fromDate, toDate, department) {
239                 const url = '../dbassets/report/clearance_dean.php';
240
241                 var table = $('.report-table').DataTable();
242                 table.clear().draw();
243                 $.get(url, { fromDate, toDate, department }, (response) => {
244                     console.log(response);
245                     const rows = JSON.parse(response);
246                     if (rows.message) {
247                         alert('No data available');
248                     }
249                 });
250             }
251
252             $.ajaxSetup({async: false});
253             $.get(url, { fromDate, toDate, department }, (response) => {
254                 console.log(response);
255                 const rows = JSON.parse(response);
256                 if (rows.length === 0) {
257                     template += `<tr>`;
258                     template += `<td colspan=6>No data available!</td>`;
259                     template += `</tr>`;
260                 }
261                 else {
262                     rows.forEach((row, index) => {
263                         const { fname, lname, department, course, resource_date, status } = row;
264
265                         template += `<tr>`;
266                         template += `<td>${index + 1}</td>`;
267                         template += `<td>${fname} ${lname}</td>`;
268                         template += `<td>${department}</td>`;
269                         template += `<td>${course} || '-'</td>`;
270                         template += `<td>${moment(resource_date).format('MMMM DD, YYYY')}</td>`;
271                         template += `<td>${status}</td>`;
272                         template += `</tr>`;
273                     });
274                 }
275             });
276         });
277     </script>
```

Figure 96. Code Snippet for Dean/Principal – report_clearance_dean.php

Figure 96 demonstrates a dynamic web page built with PHP, HTML, and JavaScript that serves as a *Clearance Report* interface for authenticated users. The script begins with `session_start()` to initialize session handling, followed by a conditional redirect using `if(!isset($_SESSION['id']))` to ensure only logged-in users can access the page. This is a critical security step to protect the report data.

The user interface contains date input fields and a dropdown for selecting a department. The department dropdown is dynamically populated from a MySQL database using a query inside



a PHP while loop, which excludes non-academic departments such as 'Administrative', 'Cashier', and others using the condition WHERE status = 'Active' AND department != ... When users change the date or department selections (#fromDate, #toDate, #department), the getData() function is triggered via **jQuery**. This function uses an **HTTP GET** request to clearance_dean.php, sending the selected filters and populating a DataTable dynamically with the result. Each row in the table displays details like name, department, course, approval date, and status.

The Print Report button, defined as <button id="printReport">, validates input and displays the filtered report inside a modal. This modal (#report-modal) is styled to resemble an official document, including a logo, institutional address, and preparer's name pulled from \$_SESSION['name']. The fetchReportData() function loads this data, while a setTimeout() opens a print-friendly tab containing styled HTML generated with JavaScript.

JavaScript libraries such as **jQuery**, **DataTables**, **Moment.js**, and **SweetAlert** are used for AJAX handling, table management, date formatting, and user-friendly alerts, respectively. For instance, moment(row.resource_date).format('MMMM D, YYYY') ensures readable date output in the report.

This integrated code effectively manages back-end and front-end operations for clearance reporting, offering print-ready outputs, dynamic filtering, and secure access.

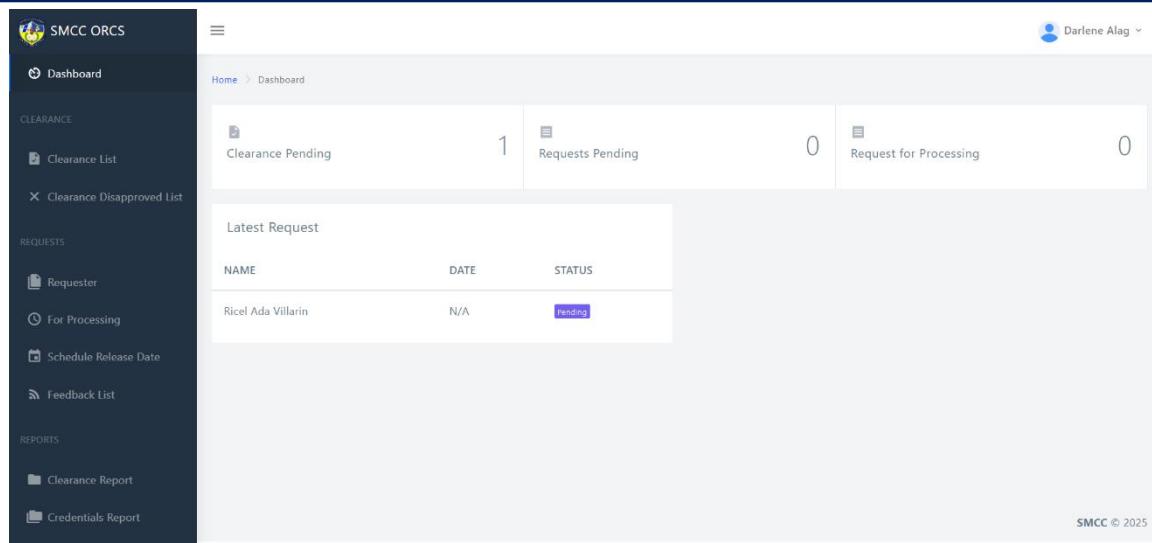


Figure 97. Registrar – Dashboard

Figure 97 shows the Registrar Dashboard interface, providing an overview of credential requests, including pending clearances, submitted requests, and recent transaction activity.



```

1 <?php
2     require_once ('../dbassets/connection.php');
3     $session_id = $_SESSION['id'];
4     $role = $_SESSION['role'];
5
6     if ($role == 'Cashier') {
7         $query = mysqli_query($connection, "SELECT
8             (SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Cashier') AS `clearance`,
9             (SELECT COUNT(id) FROM `requests` WHERE `status` = 'For Verification') AS `requests`;");
10        or die(mysqli_error($connection));
11    } elseif ($role == 'Registrar') {
12        $query = mysqli_query($connection, "SELECT
13            (SELECT COUNT(id) FROM `clearance` WHERE `status` = 'For Registrar') AS `clearance`,
14            (SELECT COUNT(id) FROM `requests` WHERE `status` = 'Pending' AND `is_cleared` = 'Yes') AS
15            (SELECT COUNT(id) FROM `requests` WHERE `status` = 'For Processing') AS `processing`;
16        or die(mysqli_error($connection));
17    }
18
19    $row = mysqli_fetch_array($query);
20    $clearance = $row['clearance'];
21    $requests = $row['requests'];
22    $processing = $row['processing'];
23 ?>

```



```

116 // check if there are any rows returned
117 if (mysqli_num_rows($result) > 0) {
118     // Loop through the result and display rows
119     while ($rs = mysqli_fetch_array($result)) {
120         // Check if date_requested exists and calculate if it's late
121         $date_requested = $rs['date_requested'];
122         $current_date = date('Y-m-d'); // Current date in Y-m-d format
123         $date_diff = 0; // Default value for date_diff
124         $late_class = ''; // Default class for row
125
126         // Only calculate if date_requested is not null
127         if (!is_null($date_requested)) {
128             $date_diff = strtotime($current_date) - strtotime($date_requested);
129
130             // Check if the date_requested is more than 3 days late
131             if ($date_diff > (3 * 86400)) { // 3 days * 86400 seconds per day
132                 $late_class = 'table-danger'; // Add 'table-danger' class for red row
133             }
134         }
135     }
136 ?>
137     <tr class="<?php echo $late_class; ?>">
138         <td><?php echo $rs['fname']. ' ' . $rs['lname']; ?></td>
139         <td><?php echo !is_null($date_requested) ? date('F j, Y', strtotime($rs['date_requested'])) : 'N/A'; ?></td>
140         <td data-target="status">
141             <span class="badge badge-<?php echo ($rs['status'] == 'Active') ? 'success' : 'primary';?>">
142                 <?php echo $rs['status']; ?>
143             </span>
144         </td>
145     </tr>

```

Figure 98. Code Snippet for Registrar – dashboard_registar_php

Figure 98 presents a PHP-driven dashboard that displays real-time summaries of clearance and request statuses based on user roles (e.g., *Cashier* or *Registrar*). The script starts by accessing the session variables using `$_SESSION['id']` and `$_SESSION['role']`, which determine the authenticated user's identity and access level. Depending on the role, different SQL queries are executed using `mysqli_query()` to fetch count values from the clearance and requests tables. For instance, Cashiers retrieve the number of clearances with the status 'For



Cashier', while Registrars obtain data for '*For Registrar*', '*Pending*' (with clearance), and '*For Processing*' statuses.

These count values—\$clearance, \$requests, and \$processing—are stored after fetching results with `mysqli_fetch_array($query)`. They are then embedded dynamically into visually styled cards using `<?php echo $clearance; ?>`, showcasing real-time numerical summaries in the dashboard (e.g., “Clearance Pending” and “Requests Pending”).

The following section introduces a data table under the “Latest Request” card. This is constructed using a query that joins the requests and users tables via `JOIN users u ON r.user_id = u.id`, and limits the output to the five most recent pending requests using `LIMIT 5`. Each row of the table displays the requester's name, the date of request, and the status. A notable functionality is the highlighting of delayed requests. The script calculates the time difference between the current and the previous date and flags rows with a delay of over three days by assigning a Bootstrap class `table-danger`, creating a red background. This visual alert draws attention to overdue items, enhancing user awareness.

To ensure a user-friendly status display, the status column uses dynamic badge classes: `badge-success` for “Active” statuses and `badge-primary` otherwise. This makes it easy to identify the progress of each request at a glance.



ID	Name	Department	Course	Date Requested	Graduate?	Year Attended / Graduated	Status	Action
1	Richel Ada Villarin	CCIS	BSIT	May 4, 2025	Yes	2025	Pending	<button>Action</button>

Figure 99. Registrar -List of Requested Documents

Figure 99 shows the list of requested documents, where users can view all requesters along with the details of their requested documents.

#	Document Type	Document Name	Number of Copies	Doc Stamp	Price	Total
1	Certificate	Certificate - General Weighted Average	1	35.00	200.00	235.00
2	Certificate	Certificate of Honors	1	0.00	200.00	200.00
3	Certificate	Certification of Graduation	1	35.00	100.00	135.00
4	TOR	Transcript of Record - Employment Purpose	1	35.00	1050.00	1085.00

Shipping Fee: 200.00

Total: 1855.00

Close Save Changes

Figure 100. Registrar – Request Details

Figure 100 shows the request details, where the user or registrar staff can set or modify the price of a specific document requested by the requester.



```

187 <script>
188 $(document).ready(function(){
189
190     $(document).on('click', '[data-role=denied]', function() {
191         var requestId = $(this).data('id');
192         var email = $(this).data('email');
193         const formData = { request_id: requestId, email: email };
194
195         // Show SweetAlert2 input prompt for feedback
196         Swal.fire({
197             title: "Deny Request",
198             text: "Please enter reason for denial:",
199             input: 'textarea', // Using a textarea for multi-line input
200             showCancelButton: true,
201             inputPlaceholder: "Write something",
202             preConfirm: (inputValue) => {
203                 // Check if the input is empty and prevent proceeding if it is
204                 if (!inputValue) {
205                     Swal.showValidationMessage("You need to write something!");
206                     return false;
207                 }
208                 return inputValue;
209             }
210         }).then(result) => {
211             if (result.isConfirmed) {
212                 // If the user entered a reason, prepare the form data
213                 formData.input_value = result.value;
214
215                 // Show the loading state
216                 Swal.fire({
217                     title: 'Please wait...',
218                     text: 'Denying transaction...',
219                     icon: 'info',
220                     allowOutsideClick: false, // Prevent clicking outside to close
221                     didOpen: () => {
222
223                         // Send the disapproval request via $.post()
224                         $.post('../dbassets/request/denied.php', formData, (response) => {
225                             console.log(response);
226                             if ($.trim(response) === 'success') {
227                                 Swal.fire({
228                                     title: 'System Message',
229                                     text: "The transaction has been disapproved successfully.",
230                                     icon: 'success',
231                                     confirmButtonText: "Okay"
232                                 }).then(() => location.reload()); // Reload the page after success
233                             } else {
234                                 Swal.fire('Error', 'There was a problem disapproving the transaction.', 'error');
235                             }
236                         });
237                     });
238                 }
239             }
240         });
241     });
242 });
243
244 $('#saveButton').on('click', async function(e) {
245     e.preventDefault();
246
247     var requestId = $('input[name="request_id"]').val();
248     var email = $('input[name="email"]').val();
249     var shippingFee = parseFloat($('.shipping-fee-input').val());
250
251     // Create an array to hold all the data we want to save
252     var dataToSend = [];
253
254     $('#detailsData').on('click', async function(e) {
255         e.preventDefault();
256
257         var requestId = $('input[name="request_id"]').val();
258         var email = $('input[name="email"]').val();
259         var shippingFee = parseFloat($('.shipping-fee-input').val());
260
261         // Create an array to hold all the data we want to save
262         var dataToSend = [];
263
264         // Loop through each row in the table
265         $('#detailsData tr[data-row-index]').each(function() {
266             var rowIndex = $(this).data('id');
267             var copies = parseFloat($(this).find('.copies-input').val());
268             var stamp = parseFloat($(this).find('.stamp-input').val());
269             var price = parseFloat($(this).find('.price-input').val());
270             var total = parseFloat($(this).find('.total').text());
271
272             // Check if copies, price, and total are valid numbers
273             if (!isNaN(copies) && !isNaN(price) && !isNaN(total)) {
274                 // Add the row data to the array, including the total
275                 dataToSend.push({
276                     index: rowIndex, // Add any identifier if needed (e.g., document ID)
277                     copies: copies,
278                     stamp: stamp,
279                     price: price,
280                     total: total // Include the total for this row
281                 });
282             }
283         });
284     });
285 });

```



```
276 const result = await Swal.fire({
277   title: "Are you sure?",
278   text: "You are about to save this transaction.",
279   icon: "warning",
280   showCancelButton: true,
281   confirmButtonColor: "#DD6B55",
282   confirmButtonText: "Yes!",
283 });
284
285 if (result.isConfirmed) {
286   // Show the loading state and ensure it's shown before continuing
287   Swal.fire({
288     title: 'Please wait...',
289     text: 'Saving transaction...',
290     icon: 'info',
291     allowOutsideClick: false, // Prevent clicking outside to close
292     didOpen: () => {
293       Swal.showLoading(); // Show the loading spinner
294     }
295   });
296
297   // Prepare the data to send
298   const formData = {
299     data: JSON.stringify(dataToSend),
300     shipping_fee: shippingFee,
301     request_id: requestId,
302     email: email
303   };
304 }
305
306
373 // Fetch the shipping fee from the API
374 $get('../databases/request/get_shipping_fee.php', (shippingResponse) => {
375   var data = JSON.parse(shippingResponse)[0];
376   var shippingFee = parseFloat(data.price); // Assuming the API returns a number or a string that can be parsed into a number
377   if (!isNaN(shippingFee)) {
378
379     // Append a row for the shipping fee with an editable input field
380     $('#detailsData').append(
381       <tr id="shippingRow">
382         <td colspan="6" class="text-right"><strong>Shipping Fee:</strong></td>
383         <td>
384           <input type="number" value="${shippingFee.toFixed(2)}" min="0" class="form-control shipping-fee-input">
385         </td>
386       </tr>
387     );
388     // Update the grand total to include the shipping fee
389     updateGrandTotal(shippingFee);
390   } else {
391     console.log('else');
392     // Handle the case where the shipping fee isn't valid (optional)
393     $('#detailsData').append(
394       <tr id="shippingRow">
395         <td colspan="6" class="text-right"><strong>Shipping Fee:</strong></td>
396         <td>
397           <input type="number" value="0.00" min="0" class="form-control shipping-fee-input">
398         </td>
399       </tr>
400     );
401   }
402 }
```

Figure 101. Code Snippet for Registrar – request_document.php

Figure 101 represents a dynamic PHP and JavaScript-based system that manages and displays student document requests within a registrar's web portal. It integrates database queries, status handling, modal data manipulation, and AJAX-based form submission for a smooth user experience.

At the top of the PHP section, the associative array `$statusClasses` maps status values such as 'Done', 'Pending', and 'Inactive' to Bootstrap badge classes



('success', 'warning', and 'danger') to dynamically style the status badge for each request row. This ensures users can easily identify the state of each request via visual color cues. The SQL query inside `mysqli_query()` joins the requests, users, and `ref_departments` tables to retrieve detailed request data, such as student names, departments, and courses. However, it only selects records with 'Pending' status and a non-null request date. Each result is looped through and displayed in a table, with columns like name, department, course, and dynamically formatted date using PHP's `date()` function.

A noteworthy UI functionality is handled in the JavaScript section, particularly with the event listeners such as `$(document).on('click', 'a[data-role=denied]', ...)`. This function uses SweetAlert2 to prompt the user for a reason before denying a request. It then submits this data to a PHP endpoint (`denied.php`) via `$.post()` and gives feedback on the result, ensuring proper validation using `preConfirm`.

Additionally, the Details Modal allows administrators to view and update request specifics. When the Details button is clicked (`a[data-role=details]`), the script makes a GET request to retrieve the request's associated documents. These are populated into a dynamic table using `$('#detailsData').append(...)`, each row including fields like document type, name, price, copies, and total.

The `#saveButton` click event gathers these fields, calculates totals, and sends them as a **JSON** string to `save_details.php` using an asynchronous `$.post()` request. Before submission, the action is confirmed with a SweetAlert dialog. The logic ensures form integrity by validating numeric inputs and updating the total, including document costs and a fetched shipping fee (`get_shipping_fee.php`).



Functions like `updateGrandTotal(shippingFee)` recalculate the final amount based on the document details and shipping fee, ensuring real-time feedback as users adjust values.

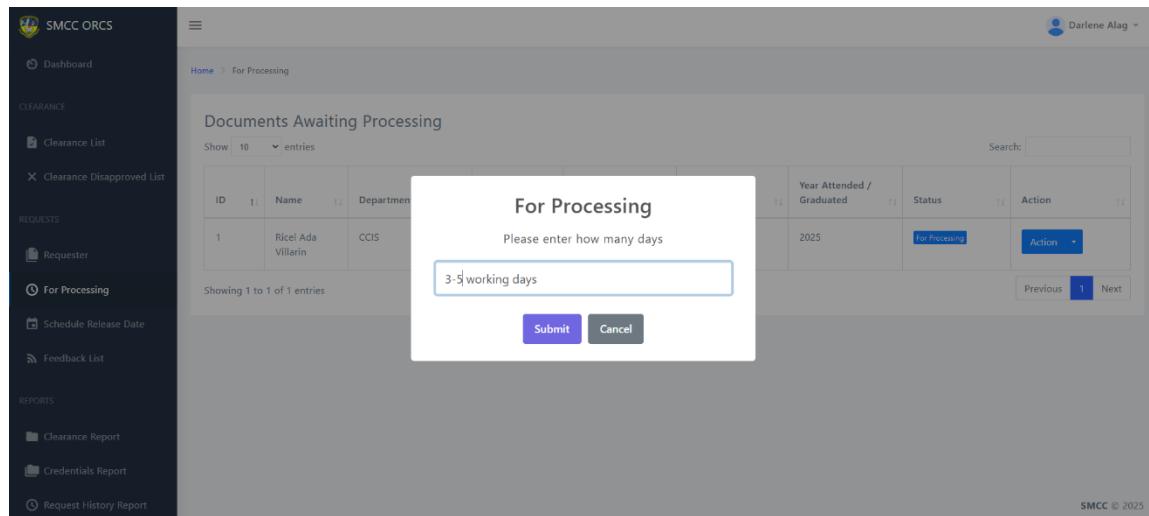


Figure 102. Registrar – For Processing

Figure 102 illustrates the Processing Documents interface, where the registrar can view document requests from students or alumni after payment. The interface displays the request details and student information. The registrar can use the action button to notify the requester that their credentials are being processed.

```

197 | <script>
198 | $(document).ready(function(){
199 |
200 |     $(document).on('click', '[data-role=process]', function() {
201 |         var id = $(this).data('id');
202 |         var email = $(this).data('email');
203 |         var days = $(this).data('days');
204 |         const formData = { id: id, email: email };
205 |
206 |         var defaultValue = days;
207 |
208 |         // Show SweetAlert2 input prompt for feedback (as a text input instead of textarea)
209 |         swal.fire({
210 |             title: "For Processing",
211 |             text: "Please enter how many days",
212 |             input: 'text',
213 |             inputPlaceholder: "Write something",
214 |             inputValue: defaultValue,
215 |             showCancelButton: true,
216 |             confirmButtonText: 'Submit',
217 |             cancelButtonText: 'Cancel',
218 |             preConfirm: (inputValue) => {
219 |                 if (!inputValue) {
220 |                     Swal.showValidationMessage('You need to enter something!');
221 |                     return false;
222 |                 }
223 |                 return inputValue;
224 |             }
225 |         })
226 |     });
227 | });
228 |
229 | 
```



```

250
251     $(document).on('click', 'a[data-role-details]', function() {
252         var id = $(this).data('id');
253         var email = $(this).data('email');
254         $('input[name="request_id"]').val(id);
255         $('input[name="email"]').val(email);
256         var status = $(this).data('status');
257         var saveButton = document.getElementById('saveButton');
258
259         // Check the status and hide the button if it's 'No Upload'
260         if (status != 'Pending') {
261             saveButton.style.display = 'none';
262         } else {
263             saveButton.style.display = 'inline'; // or 'block' depending on your layout
264         }
265
266         $.ajaxSetup({ async: false });
267         $.get('../dbassets/request/get_details.php', {id}, (response) => {
268             $('#detailsData').empty();
269             var rows = JSON.parse(response);
270             var shippingFee = parseFloat(rows[0].fee);
271
272             rows.forEach((row, index) => {
273                 $('#detailsData').append(
274                     <tr data-row-index="${index}" data-id="${row.id}">
275                         <td>${index + 1}</td>
276                         <td>${row.doc_type}</td>
277                         <td>${row.doc_name}</td>
278                         <td>
279                             <input type="number" value="${row.copies}" min="1" class="form-control copies-input" data-index="${index}" required>
280                         </td>
281                         <td>
282                             <input type="number" value="${row.stamp_price}" class="form-control stamp-input" data-index="${index}" readonly>
283                         </td>
284                     </tr>
285                 );
286             });
287         });
288     });

```

Figure 103. Code Snippet for Registar – for_processing.php

Figure 103 illustrates the implementation of a document processing system where pending document requests are displayed in a structured table format and processed through interactive modal prompts and **AJAX** transactions. The system leverages a combination of PHP, MySQL, JavaScript, and SweetAlert2 to allow dynamic interaction and secure handling of user-submitted data.

At the beginning of the script, the session management block (`session_start()` and `session checking`) ensures that only authenticated users can access the page, redirecting unauthenticated users to the login page (`../index.php`) — a crucial security measure. The page also includes reusable components (navbar, sidebar, footer) through include statements for consistent UI rendering.

The core of this snippet lies in the table element with ID `zero_config`, which dynamically lists pending document requests using data fetched from the database (`SELECT r.* , ... FROM requests r JOIN ... WHERE r.status = 'For Processing'`). Notably,



it ensures one row per request, and ORDER BY max_processing_days DESC prioritizes items with the longest processing time, emphasizing urgency.

One crucial functionality occurs in the <button> under the “Action” column, which includes two dropdown items: Details – triggers a modal showing document breakdown (#details-modal) via the **AJAX** request to get_details.php. Process Documents – opens a SweetAlert2 prompt to input processing days and sends data to processing.php.

Another vital feature is the JavaScript function updateGrandTotal(), which calculates and updates the total cost of requested documents, including stamp fees and shipping. It iterates over the total cells and combines them with the shipping fee to compute a real-time display of the total.

Figure 104. Registrar – Schedule Release Date

Figure 104 illustrates the List of Scheduled Release Dates for Documents interface, where the registrar can view the details and types of documents requested. The registrar can also check the official receipt to verify that the student or alumni has completed the payment for the requested credentials. A modal input form opens by clicking the action button, allowing the registrar to inform the student or alumni that their request is in transit.



```

221 | <script>
222 | $(document).ready(function(){
223 |   var edit = false;
224 |   $('#input[name="date_release"]').val(new Date().toISOString().split('T')[0]);
225 |
226 |   $(document).on('click', 'button[data-role=receipt]', function(){
227 |     var imagePath = $(this).data('image');
228 |     $('#modalImage').attr('src', '../assets' + imagePath);
229 |     $('#view-modal').modal('toggle');
230 |   });
231 |
232 |   $(document).on('click', 'a[data-role=schedule]', function(){
233 |     var id = $(this).data('id');
234 |     var email = $(this).data('email');
235 |     var address = $(this).data('address');
236 |     $('#input[name="id"]').val(id);
237 |     $('#input[name="email"]').val(email);
238 |     $('#input[name="address"]').val(address);
239 |     $('#schedule-modal').modal('toggle');
240 |   });
241 |
242 |   $('#schedule-form').submit(function(e){
243 |     e.preventDefault();
244 |
245 |     var id = $('#input[name="id"]').val();
246 |     var email = $('#input[name="email"]').val();
247 |     var courier = $('#input[name="courier"]').val();
248 |     var referenceNo = $('#input[name="reference_no"]').val();
249 |     var dateRelease = $('#input[name="date_release"]').val();
250 |     var expectedDelivery = $('#input[name="expected_delivery"]').val();
251 |     var address = $('#input[name="address"]').val();
252 |
253 |     const url = '../dbassets/request/release.php';
  
```

Figure 105. Code Snippet for Registrar – schedule_release.php

Figure 105 presents a web interface designed to schedule the release date of requested academic credentials. The main interface is a responsive table (<table id="zero_config">) that displays credential requests with the status “Processing.” Each table row is dynamically populated from the database using a complex SQL JOIN query that pulls user information from related tables (users, address, ref_city, ref_provinces, ref_brgy) and merges it with the requests table. This multi-table query ensures that each request includes full user details such as name, email, and complete mailing address.

Each record includes an Action column containing a dropdown menu with a “Schedule Date” option. This item triggers a JavaScript function bound to data-role="schedule" which captures important attributes (id, email, address) and opens the #schedule-modal form for inputting shipment details.

The schedule modal form (#schedule-modal) is prefilled with the current date (\$('input[name="date_release"]').val(new



Date().toISOString().split('T')[0]);) and collects additional release information including estimated delivery days, courier name, reference number, and complete address. When submitted, the form sends the data via **AJAX POST** to ../dbassets/request/release.php. During the process, a SweetAlert2 loading modal appears (Swal.fire({ ... showLoading(); })), and upon success, another SweetAlert confirms the data was saved (Swal.fire(... 'Data saved successfully' ...)), followed by a page refresh.

Additionally, the “View Receipt” functionality enhances administrative verification. When a user clicks the receipt button (data-role="receipt"), it fetches the uploaded image path and displays the official receipt in a modal (#view-modal) using jQuery's \$('#modalImage').attr('src', ...).

The screenshot shows the 'Feedback List' section of the SMCC ORCS application. The left sidebar has categories like CLEARANCE, REQUESTS, and REPORTS. The main area shows a table with one row of data:

ID	Date Requested	Date Approved	Date Released	Name	Feedback	Status
1	May 4, 2025	May 4, 2025	May 4, 2025	Ricel Ada Villarin	View	Done

Below the table, it says "Showing 1 to 1 of 1 entries". The top right corner shows the user Darlene Alag.

Figure 106. Registrar – Feedback List

Figure 106 presents the feedback list, where the staff or registrar can view responses submitted by requesters. This allows them to address any concerns or inconveniences and use the feedback to improve future services.



```

213 | <script>
214 | $(document).ready(function(){
215 |     $(document).on('click', 'button[data-role=view]', function(){
216 |         var request_id = $(this).data('id');
217 |         fetchFeedbackData(request_id);
218 |         setTimeout(() => {
219 |             var toPrint = document.getElementById('report-form');
220 |
221 |             // if ($('#request-table tbody').children().length === 0) {
222 |             //     alert('No data available to generate report.');
223 |             //     return; // Stop the printing if no data is available
224 |             // }
225 |
226 |             var newTab = window.open('', '_blank');
227 |             newTab.document.write('<html><head><title>' + document.title + '</title>');
228 |
229 |             // Link to an external CSS file
230 |             newTab.document.write('<link rel="stylesheet" type="text/css" href="../assets/css/feedback_report.css?v=' + new Date(
231 |
232 |             newTab.document.write('</head><body>');
233 |             newTab.document.write(toPrint.innerHTML);
234 |             newTab.document.write('</body></html>');
235 |
236 |             newTab.document.close();
237 |             // Wait for the CSS and other resources to fully load before printing
238 |             newTab.onload = function() {
239 |                 newTab.print();
240 |             };
241 |
242 |             // Focus on the new tab
243 |             newTab.focus();
244 |         }, 500); // Delay of 500 milliseconds (0.5 seconds)
245 |
246 |     });

```

Figure 107. Code Snippet for Registrar – request.php

Figure 107 illustrates the process of retrieving feedback from metadata from the database, displaying the form details, and dynamically generating a printable report based on user interaction. The first PHP block begins by including a database connection file using `require_once('../dbassets/connection.php')`, ensuring the script can securely access the database. The SQL query `SELECT * FROM ref_iso_codes WHERE form_name = 'Feedback Form'`; fetches all details related to the feedback form from the `ref_iso_codes` table. The while loop then extracts specific fields like `form_code`, `issue_status`, `revision_no`, `date_effective`, and `approved_by`, echoing in the subsequent HTML `<table>` structure to render the form metadata visibly on the webpage.

The JavaScript section plays a pivotal role in the interactivity of the report. It binds a click event to a button with the `data-role="view"` attribute. Upon clicking, the function retrieves the `request_id` and invokes `fetchFeedbackData(request_id)` to fetch detailed feedback data via an **AJAX GET** request to `../dbassets/request/get_feedback.php`.



Inside this function, the response is parsed to build an HTML template showing instructions, a rating scale, and responses for five service criteria: Staff Appearance, Staff Helpfulness, Speed/Efficiency, Job Knowledge, and Quality of Service. The user's ratings are visually displayed using checkmarks based on the returned data values (e.g., VS, S, D, or VD), highlighting satisfaction levels.

An additional feature is the ability to print the feedback report. After populating the data, a new browser tab is opened using `window.open()`, and the complete report content is injected into the new document. The `print()` function is then triggered within `newTab.onload` to allow printing after all resources, including a linked stylesheet (`feedback_report.css`), are loaded.

A screenshot of the SMCC ORCS application interface. The left sidebar has a dark theme with white icons and text. It includes sections for CLEARANCE (Clearance List, Clearance Disapproved List), REQUESTS (Requester, For Processing, Schedule Release Date, Feedback List), and REPORTS (Clearance Report, Credentials Report, Request History Report). The main content area shows a "Clearance Report" page with a header "Home > Report > Clearance Report". It has date filters ("From: 01/05/2025" and "To: 05/05/2025"), a department dropdown ("All Departments"), and a "Print Report" button. Below these are buttons for "Show 10 entries" and "Search". A table displays one entry: #1, Name: Ricel Ada Villarin, Department: CCIS, Course: BSIT, Date Approved: May 5, 2025, Status: Approved. At the bottom, it says "Showing 1 to 1 of 1 entries" and has "Previous" and "Next" buttons. The footer says "SMCC © 2025".

#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 5, 2025	Approved



PRINT

Saint Michael College of Caraga					
District 8, Brgy. Triangulo, Nasipit, Agusan del Norte, Philippines					
Tel. Nos. +63 085 343-5231; 283-3113 Fax: +63 085 898-0892					
www.smcncaagp.edu.ph					
CLEARANCE REPORT					
Period: May 01, 2024 - May 05, 2024					
Registrar Office					
#	Name	Department	Course	Date Approved	Status
1	Ricel Ada Villarin	CCIS	BSIT	May 05, 2024	Approved

Prepared by:

Darlene Alag

Figure 108. Registrar – Clearance Report

Figure 108 displays the ‘Clearance Report’ page for registrar staff. The registrar can filter clearance records by date and department and generate a printable report. The table shows relevant details such as Name, Department, Course, Date Approved, and Status. A search bar and pagination controls support easy navigation.

```

214 <script>
215   $(document).ready(function(){
216
217     $('#fromDate, #toDate, #department').change(function() {
218       var fromDate = $('#fromDate').val();
219       var toDate = $('#toDate').val();
220       var department = $('#department').val();
221
222       if (new Date(fromDate) > new Date(toDate)) {
223         Swal.fire({
224           title: 'Error',
225           text: 'The "From" date must be earlier than the "To" date.',
226           icon: 'error',
227           confirmButtonText: 'OK'
228         });
229
230         // Optionally, clear the "From" date or reset it
231         $('#fromDate').val('');
232       }
233       else {
234         getData(fromDate, toDate, department);
235       }
236     });
237
238     function getData(fromDate, toDate, department) {
239       const url = '../dbassets/report/clearance_registrar.php';
240
241       var table = $('.report-table').DataTable();
242       table.clear().draw();
243       $.get(url, { fromDate, toDate, department }, (response) => {
244         console.log(response);
245         const rows = JSON.parse(response);
246         if (rows.message) {
247           alert('No data available');
248         }
249       });
250     }
251   });
252 
```



```

270
271     $('#printReport').click(function(event) {
272         event.preventDefault(); // Prevent form submission
273
274         var fromDate = $('#fromDate').val();
275         var toDate = $('#toDate').val();
276         var department = $('#department').val();
277
278         if (!fromDate || !toDate) {
279             Swal.fire('System Message', "Please enter both From Date and To Date.", 'info');
280             return;
281         }
282
283         if (new Date(fromDate) > new Date(toDate)) {
284             Swal.fire('System Message', "From Date cannot be after To Date.", 'info');
285             return;
286         }
287
288         $('#periodText').text(moment(fromDate).format('MMMM DD, YYYY') + ' - ' + moment(toDate).format('MMMM DD, YYYY'));
289         fetchReportData(fromDate, toDate, department);
290
291         setTimeout(() => {
292             // $('#report-modal').modal('toggle');
293             let css =
294                 '@media print {
295                     @page {
296                         size: A4 landscape; /* Ensure page size is A4 in landscape orientation */
297                     }
298                 }';
299

```

Figure 109. Code snippet for Registrar – report_clearance_registrar.php

Figure 109 presents a PHP and JavaScript-driven web interface for generating a Clearance Report within a student information system. It begins with PHP session handling (`session_start()` and `$_SESSION['id']`) to ensure the user is authenticated before accessing the page. If the session ID is missing, the script redirects the user to the login page, enforcing access control (`if (!isset($_SESSION['id'])) { header("Location: ../../index.php"); }`).

The form section allows users to filter report data by date range (`fromDate`, `toDate`) and department (`department`). These filters trigger a jQuery change event, which validates the date range and calls the `getData()` function. This function uses an **AJAX GET** request to `clearance_registrar.php`, retrieving JSON-formatted clearance data based on the selected filters. A conditional block inside `getData()` processes the data and dynamically populates the `.report-table` using DataTables, enabling search, sort, and pagination capabilities.

A key feature is the printable modal report. When the "Print Report" button is clicked (`#printReport`), the script validates inputs again and uses `fetchReportData()` to fill the



printable report table (#report-table) . It then opens a new browser tab, dynamically injects styles including the A4 landscape print layout, and automatically triggers the print dialog using `window.print()` after a short timeout.

Additionally, PHP is used within the HTML modal template to personalize the “Prepared by” section (<?php echo \$_SESSION['name']; ?>) , ensuring accountability.

#	Name	Department	Course	Document Type	Mailing Address	Date Released	Status
1	Rigel Ada Villarin	CCIS	BSIT	Certificate - General Weighted Average	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
2	Rigel Ada Villarin	CCIS	BSIT	Certificate of Honors	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
3	Rigel Ada Villarin	CCIS	BSIT	Certification of Graduation	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done
4	Rigel Ada Villarin	CCIS	BSIT	Transcript of Record - Employment Purpose	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done

#	Name	Department	Course	Document Type	Mailing Address	Date Released	Status
1	Rigel Ada Villarin	CCIS	BSIT	Certificate - General Weighted Average	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
2	Rigel Ada Villarin	CCIS	BSIT	Certificate of Honors	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
3	Rigel Ada Villarin	CCIS	BSIT	Certification of Graduation	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done
4	Rigel Ada Villarin	CCIS	BSIT	Transcript of Record - Employment Purpose	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 05, 2025	Done

Figure 110. Registrar – Report Requested Credentials

Figure 110 shows the ‘Requested Credentials Report’ page used by registrar staff. It enables users to generate reports by filtering requests through date range, department,



document type, and student name. The table displays key information, including the requester's name, course, type of document requested, mailing address, approval date, and current status. A "Print Report" button is provided for quick printing, search, and pagination features for efficient navigation.

```
258 <script>
259     $(document).ready(function(){
260
261         $('#search_name').on('keypress', function(e) {
262             if (e.which === 13) { // 13 is the Enter key
263                 e.preventDefault(); // optional: prevents form submission if inside a form
264
265                 var fromDate = $('#fromDate').val();
266                 var toDate = $('#toDate').val();
267                 var department = $('#department').val();
268                 var document_type = $('#document_type').val();
269                 var search_name = $('#search_name').val();
270
271                 // You may want to add some validation or further checks for search_name if necessary
272                 getData(fromDate, toDate, department, document_type, search_name);
273
274             }
275         });
276
277         $('#fromDate, #toDate, #department, #document_type').change(function() {
278             var fromDate = $('#fromDate').val();
279             var toDate = $('#toDate').val();
280             var department = $('#department').val();
281             var document_type = $('#document_type').val();
282             var search_name = $('#search_name').val();
283
284             if (new Date(fromDate) > new Date(toDate)) {
285                 Swal.fire({
286                     title: 'Error',
287                     text: 'The "From" date must be earlier than the "To" date.',
288                     icon: 'error',
289                     confirmButtonText: 'OK'
290                 });
291             }
292         });
293     });
294 
```

```
295     else {
296         getData(fromDate, toDate, department, document_type, search_name);
297     }
298 });
299
300 $('#search_name').on('blur', function() {
301     var fromDate = $('#fromDate').val();
302     var toDate = $('#toDate').val();
303     var department = $('#department').val();
304     var document_type = $('#document_type').val();
305     var search_name = $('#search_name').val();
306
307     // You may want to add some validation or further checks for search_name if necessary
308     getData(fromDate, toDate, department, document_type, search_name);
309 });
310
311 function getData(fromDate, toDate, department, document_type, search_name) {
312     const url = '../dbassets/report/credentials_registrar.php';
313
314     var table = $('.report-table').DataTable();
315     table.clear().draw();
316     $.get(url, { fromDate, toDate, department, document_type, search_name }, (response) =>
317         console.log(response);
318         const rows = JSON.parse(response);
319         if (rows.message) {
320             alert('No data available');
321         }
322         else {
323             rows.forEach((row, index) => {
324                 table.row.add($('|'
|  |

```



Figure 111. Code Snippet for Registrar – report_credential_registar.php

Figure 111 presents a full-featured web interface that integrates HTML, PHP, and JavaScript to handle a dynamic credential reporting system. At the core is the `<div id="report-modal" class="modal fade">`, which structures a large modal dialog containing institutional information and a credential report section. Within it, a custom-styled button (`<button class="btnPrint" ... onclick="window.print()">`) allows users to print the displayed report content immediately. The modal includes the official logo and details of the Saint Michael College of Caraga and dynamically shows the report period through ``. At the bottom of the modal, PHP displays the preparer's name via `<?php echo $_SESSION['name']; ?>`, personalizing the document output. Another modal, identified by `<div id="view-modal" class="modal fade">`, provides a simple image preview feature for user-uploaded receipts using `$('#modalImage').attr('src', '../assets' + imagePath);`. The interactivity of this system relies on jQuery, particularly in event listeners attached to input fields like



#search_name, #fromDate, #toDate, and select dropdowns. When any of these inputs change or receive an Enter keypress, the getData() function sends a request to credentials_registrar.php using \$.get() and then populates a DataTable (\$.report-table).DataTable()) with the returned results. For printing, the #printReport button validates the input dates, then calls fetchReportData() to structure the report. A temporary print window is created with window.open(), and the formatted content from #report-form is inserted into this new document. The line newTab.document.write('<link rel="stylesheet" type="text/css" href="../assets/css/report.css?v=' + new Date().getTime() + '">'); ensures that updated print styles are applied. The report contains a table with columns such as Name, Department, Course, Document Type, Mailing Address, Date Released, and Status, all generated through a template string filled with values parsed from the **JSON** response. This figure efficiently demonstrates dynamic data retrieval, user filtering, document previewing, and print formatting, all essential for a digital registrar system.



SMCC ORCS Darlene Alag

CLEARANCE

- Clearance List
- Clearance Disapproved List

REQUESTS

- Requester
- For Processing
- Schedule Release Date
- Feedback List

REPORTS

- Clearance Report
- Credentials Report
- Request History Report

Home Report Request History Report

From * To *

01/05/2025 05/05/2025

Department * Search Name *

All Departments Search by Name Print Report

Show 10 entries

#	Name	Application Form	Mailing Address	Date Released	Status
1	Ricel Ada Villarin	View	D-1, Alipao, ALEGRIA, SURIGAO DEL NORTE	May 5, 2025	Done

Showing 1 to 1 of 1 entries Previous 1 Next

SMCC © 2025

SMCC ORCS Darlene Alag

CLEARANCE

- Clearance List
- Clearance Disapproved List

REQUESTS

- Requester
- For Processing
- Schedule Release Date
- Feedback List

REPORTS

- Clearance Report
- Credentials Report
- Request History Report

Home Report Request History Report

From * Department *

01/05/2025 All Departments

PRINT

SAINT MICHAEL COLLEGE OF CARAGA INC
Brgy. 4, Nasipit, Agusan del Norte, Philippines
Tel. No. (085) 300-2932 | www.smccnasipit.edu.ph

APPLICATION FORM

Name: Ricel AdaVillarin SY: 2025
Department: CCIS

Document Name	Amount
Certificate - General Weighted Average	200.00
Certificate of Honors	200.00
Certification of Graduation	100.00
Transcript of Record - Employment Purpose	1050.00
Total	1550.00

0917 707 6630 SMCC Registrar registrar@smcc.nasipit.edu.ph

Released Status

Showing 1 to 1 of 1 entries Previous 1 Next

SMCC © 2025

Figure 112. Registrar – Request History Report

Figure 112 shows the Request History Report interface, where the registrar can filter and view records of document requests submitted by students or alumni. The list displays the requester's name, mailing address, date released, and status. Each entry provides an option to view the corresponding application form containing the requester's information and request details.



Figure 113. Code Snippet for Registrar – Report_request_registrar.php

Figure 113 illustrates a JavaScript-driven reporting system that enhances user interactivity through dynamic filtering, data validation, modal display, and print functionality for credential records. The core script begins by binding a keypress event to the #search_name input field. Pressing the Enter key (`e.which === 13`) triggers the `getData()` function using the input values for fromDate, toDate, department, and search_name. This allows for quick searches without the need for a submit button.

A vital part of the code is the conditional validation embedded in the `change()` event listener attached to `#fromDate`, `#toDate`, and `#department`. The script checks if the "From Date" is later than the "To Date" and uses `SweetAlert (Swal.fire(...))` to show a user-friendly error message. If dates are valid, the `getData()` function calls an endpoint (`request_registrar.php`) via `$.get()` to retrieve and parse data into a `DataTable`, with the row template built dynamically using values like `row.fname`, `row.lname`, `row.status`, and formatted dates (`moment(row.date_release).format(...)`). Further interactivity is provided through a delegated click handler on buttons with `data-role="application"`.



When clicked, this extracts specific data-* attributes from the button—such as data-id, data-name, and data-graduated—and populates the modal with corresponding request data. It also fetches related documents from get_requested_documents.php using the request_id.

Printing functionalities are split into two sections: for the main report and individual application forms. The #printReport button validates inputs before generating a printable view of #report-form. A temporary window is created via window.open(), and CSS is applied to enforce an A4 landscape layout, ensuring compatibility across browsers. It uses the line newTab.document.write('<link rel="stylesheet" type="text/css" href="../../assets/css/report.css?v=' + new Date().getTime() + '">'); This ensures that the latest version of the report stylesheet is applied without cache issues.

The fetchReportData() function structures the content for the report table with key fields such as Name, Documents, Mailing Address, Date Released, and Status. It dynamically builds the header (#report-table thead) and populates the body (#report-table tbody) based on the fetched JSON response.

Finally, the .btnPrintApplication click event mirrors the print logic but targets #view-form, tailored for individual credential application records. Both printing methods utilize a delay (setTimeout(..., 500)) to ensure modal rendering completes before triggering the print dialog.

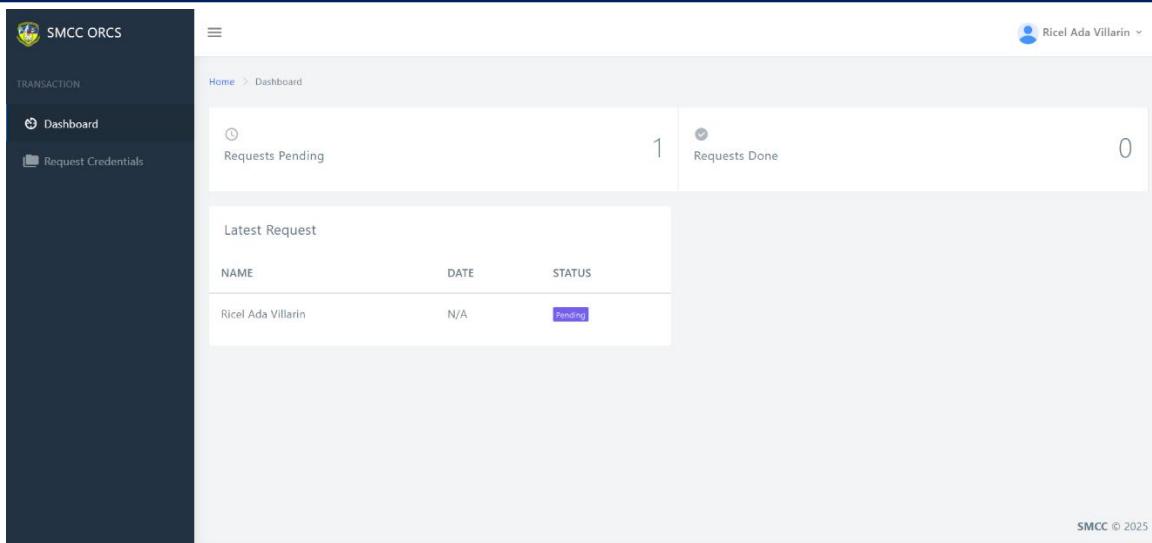


Figure 114. Students/Alumni – Dashboard

Figure 114 displays the students and alumni dashboard. This interface allows students and alumni to view the status of their requests, enhancing management efficiency.

```

1  <?php
2      require_once ('../dbassets/connection.php');
3      $session_id = $_SESSION['id'];
4      $query = mysqli_query($connection, "SELECT
5          (SELECT COUNT(id) FROM `requests` WHERE user_id = '$session_id' AND `status` != 'Done') AS `c`,
6          (SELECT COUNT(id) FROM `requests` WHERE user_id = '$session_id' AND `status` = 'Done') AS `d`,
7      or die(mysqli_error($connection));
8      $row = mysqli_fetch_array($query);
9      $ongoing = $row['ongoing'];
10     $done = $row['done'];
11  ?>
12
13
14
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80
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83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

```

Figure 115. Code Snippet for Students/Alumni – Dashboard_students.php



Figure 115 illustrates a dashboard section displaying student and alumni request data.

Initially, the PHP code establishes a connection to the database and retrieves the status of requests submitted by the currently logged-in user. The code utilizes the `$_SESSION['id']` to identify the user and runs two subqueries to count the number of ongoing and completed requests from the requests table. The query results are fetched and stored in the `$ongoing` and `$done` variables, which are then used in the HTML to display the respective request statuses.

The first part of the display is composed of two cards showing the counts of pending ("Requests Pending") and completed ("Requests Done") requests, which are dynamically populated with the values stored in `$ongoing` and `$done`. The card structure uses Bootstrap's grid system to create a visually appealing layout, and the data is shown with significant text elements (`<h1 class="font-light text-right">`) to highlight the numbers.

Additionally, the code includes another section displaying the user's latest five requests in a table format. This is done through another **SQL** query that joins the requests table with the users table to fetch the user's first and last name and the request details. The query results are processed in a loop, displaying the name, the date of the request, and the status of each request. In cases where the `date_requested` or `status` is null, default values such as 'N/A' and 'Unknown' are displayed. The status is highlighted with a color-coded badge using Bootstrap's badge class. The status of each request is dynamically determined, and the badge color changes based on whether the status is 'Active' (green) or another status (blue).



The screenshot shows a modal window titled "Clearance Form". Inside, the name "Ricel Ada Villarin" is displayed. Below it, there are two dropdown menus: "Department *" set to "CCIS" and "Course" set to "BSIT". At the bottom of the modal are "Close" and "Submit" buttons. A message "No data available in table" is shown below the modal. The background shows a dark interface with a sidebar labeled "TRANSACTION" containing "Dashboard" and "Request Credentials". The top right corner shows a user profile for "Ricel Ada Villarin" and a "Request Clearance" button. The footer says "SMCC © 2025".

Figure 116. Students/Alumni – Clearance Form (Department and Course Identification)

Figure 116 illustrates the modal used for department and course identification for clearance purposes. This process assists the system in determining which department or administrative staff will be responsible for approving students' clearance.

The screenshot shows a modal window titled "Clearance Status - No. 1". It displays one entry for "Ricel Ada Villarin". The entry details are: 1. Cashier (May 4, 2025), 2. Head, Learning Resource Center (May 4, 2025), 3. Dean / Principal (May 4, 2025), and 4. School Registrar (May 4, 2025). At the bottom of the modal is a "Close" button. The background shows a dark interface with a sidebar labeled "TRANSACTION" containing "Dashboard" and "Request Credentials". The top right corner shows a user profile for "Ricel Ada Villarin" and a "Request Clearance" button. The footer says "SMCC © 2025".

Figure 117. Students/Alumni – Clearance Status

Figure 117 displays the clearance status interface, accessible through the action button. This feature allows students and alumni to track the progress of their requests and view their clearance status.





SMCC ORCS

TRANSACTION

- [Dashboard](#)
- [Request Credentials](#)

Home > Request Credentials

[Request Clearance](#)

My Request List

Show 10 entries

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status	Action
1								0.00		Action

Showing 1 to 1 of 1 entries

Previous 1 Next

Search:

Application Form

Name: Riel Ada Villarin

Are you a graduate? *

Yes
 No

Year Graduated
2025

Mailing Address:

House No. & Street *
D-1

Municipality / City *
ALEGRA

Province *
SURIGAO DEL NORTE

Barangay *
Alipao

Certificate
 Certificate (English as a medium of instruction)
 Certificate - General Weighted Average
 Certificate - GWA for ELEMENTARY
 Certificate of Honors
 Certificate of Honors (ELEMENTARY)
 Certificate of Units Earned
 Certification of Enrollment
 Certification of Graduation

TOR
 Transcript of Record - Board Exam Purpose
 Transcript of Record - Employment Purpose
 Transcript of Records - Transfer Credential

Date Requested *

04/05/2025

Total Status Action

0.00 [Action](#)

Previous 1 Next

Search:

Figure 118. Students/Alumni – Request Form

Figure 118 illustrates the request form interface, which becomes accessible through the “Action” button once the student or alumnus has completed the clearance process. This form is designed to collect essential personal information from the requester and specify the type of credential or document they want to request.



The screenshot shows the 'Payment Details' section of the SMCC ORCS system. It displays three payment method options: BDO, GCash, and another unnamed account. The total price is listed as ₱1855.00. A file upload input field is present for proof of payment, with a placeholder 'Choose file' and a note about allowed file types (png, jpg, jpeg). Below the form are buttons for 'Close', 'Save changes', and navigation links for 'Previous' and 'Next'.

Figure 119. Students/ Alumni – Payment Details

Figure 119 presents the payment details interface, where students and alumni can view the available payment methods provided by the school. Additionally, this interface allows users to upload their payment receipts for verification by the staff or cashier.

The screenshot shows the 'Feedback Form' section of the SMCC ORCS system. It includes a satisfaction survey with five-point Likert scale options (VS, S, D, VS) for various service aspects like Staff Appearance, Staff Helpfulness, Speed/Efficiency, Job Knowledge, and Quality of Service. Below the survey is a text area for comments/complaints, which contains the message: 'I already received the credentials. Thank you for your service.' At the bottom, there is a footer with form code information: Form Code No. FM-OCM-SMCC-HCF-01, Issue Status 02, Record No. 03, Date Effective 14 September 2023, and Approved by President. Action buttons for 'Close' and 'Submit' are also visible.

Figure 120. Students/Alumni – Feedback Form

Figure 120 displays the feedback form interface, which appears after the successful delivery of a document when the user clicks the "Received Document" action button to confirm



receipt. This feedback form serves as a medium for collecting user input regarding system performance and identifying areas for future improvement.

```

353 <script>
354 $(document).ready(function(){
355     var edit = false;
356
357     function getType() {
358         var template = "";
359         var doc_type = "";
360         var counter = 0;
361
362         $.ajaxSetup({async: false });
363         $.get('../dbassets/request/get_type.php', {response} => {
364             console.log(response);
365             var rows = JSON.parse(response);
366
367             rows.forEach((row, index) => {
368                 // Add the doc_type checkbox
369                 if (counter % 2 === 0) {
370                     template += "<div class='form-group row mb-3'>"; // open new row every 2nd group
371                 }
372
373                 template += `<div class='col-md-6'>
374                     <div class='form-check'>
375                         <input type='checkbox' class='form-check-input' id='selectionType${(row.doc_type)}' data-doc-type='${row.doc_type}'>
376                         <label class='form-check-label' for='selectionType${(row.doc_type)}'>${row.doc_type}</label>
377                     </div>
378                 `;
379
380                 doc_type = row.doc_type;
381
382                 // Get the documents for this doc_type
383                 $.get('../dbassets/request/get_document_by_type.php', { doc_type }, {response} => {
384                     var rows = JSON.parse(response);
385                     rows.forEach((row, index) => {
386                         // Add the document checkboxes under this doc_type with indentation
387                         template += `
```

```

434     getType();
435
436     $('input[name="has_graduated"]').change(function() {
437         if($('input[name="has_graduated"]').is(':checked')) {
438             $('.attendedText').text('Year Graduated');
439             $('input[name="year_attended"]').val('');
440         } else {
441             $('.attendedText').text('Year Attended');
442             $('input[name="year_attended"]').val('');
443         }
444     });
445
446     $('select[name="clearance_department"]').on('change', function() {
447         var department_id = $(this).val();
448         $.get('../dbassets/reference/get_course_by_department.php', { department_id }, function(response) {
449             console.log(response);
450             // Parse the JSON response
451             var data = JSON.parse(response);
452
453             var $courseSelect = $('select[name="course"]');
454             $courseSelect.empty();
455             $courseSelect.append(
456                 $(<option>).val('').text('Please select')
457             );
458
459             // Populate the second select with new options
460             $.each(data, function(index, item) {
461                 $courseSelect.append(
462                     $(<option>).val(item.course).text(item.course)
463                 );
464             });
465         });

```

```

466     $('select[name="clearance_department"]').trigger('change');
467
468     $(document).on('click', '[data-role=add], #close', function(){
469         var id = $(this).data('id');
470         $('#request-form').trigger("reset");
471         $('#input[name="id"]').val(id);
472         $('#input[name="date_requested"]').val(new Date().toISOString().split('T')[0]);
473         $('#select[name="course"]').trigger('change');
474         $('#add-modal').modal('toggle');
475     });
476
477     $('#request_clearance').click(function() {
478
479         $.get('../dbassets/request/checker.php', function(response) {
480             var data = JSON.parse(response);
481             console.log(data);
482             if (data.length != 0) {
483                 if (data[0]['status'] == 'Released' && data[0]['with_feedback'] == 'No') {
484                     $('#input[name="request_id"]').val(data[0]['id']);
485                     $('#feedback-modal').modal('toggle');
486                 }
487                 else {
488                     $('#clearance-form-modal').modal('toggle');
489                 }
490             }
491             else {
492                 $('#clearance-form-modal').modal('toggle');
493             }
494         });
495     });

```



```

500  $('#clearance-form').submit(function(e){
501      e.preventDefault();
502
503      var clearance_department = $('select[name="clearance_department"]').val();
504      var course = $('select[name="course"]').val();
505
506      const url = './dbassets/request/submit_clearance.php';
507      $.post(url, { department: clearance_department, course }, (response) => {
508          if ($.trim(response) == 'success') {
509              Swal.fire({
510                  title: 'System Message',
511                  text: "Request submitted successfully. Await clearance validation. You'll receive further instructions via email.",
512                  icon: 'success',
513                  confirmButtonText: "Okay"
514              }).then((result) => {
515                  if (result.isConfirmed) {
516                      location.reload();
517                  }
518              });
519          } else {
520              Swal.fire('System Message', response, 'info');
521          }
522      });
523  });
524
525
526  $('#request-form').submit(function(e){
527      e.preventDefault();
528
529      var id = $('input[name="id"]').val();
530      var has_graduated = $('input[name="has_graduated"]:checked').val();
531      var year_attended = $('input[name="year_attended"]').val();
532      var date_requested = $('input[name="date_requested"]').val();
533      var street = $('input[name="street"]').val();
534      var province = $('select[name="province"]').val();
535      var city = $('select[name="city"]').val();
536      var brgy = $('select[name="brgy"]').val();
537
538      var selectedDocs = [];
539
540      $('input[type="checkbox"]:checked').each(function() {
541          if ($(this).prop('id').startsWith('selectionDoc')) {
542              selectedDocs.push($(this).val());
543          }
544      });
545
546      if (selectedDocs.length === 0) {
547          alert('Please select documents!');
548          return;
549      }
550
551      const url = './dbassets/request/submit.php';
552      $.post(url, {id, has_graduated, year_attended, date_requested, selectedDocs, street, province, city, brgy}, (data) => {
553          const response = JSON.parse(data);
554          if ($.trim(response.status) == 'success') {
555              Swal.fire({
556                  title: 'System Message',
557                  text: "Request submitted successfully. Await clearance validation. You'll receive further instructions via email."
558              });
559          } else {
560              Swal.fire('System Message', response.message, 'info');
561          }
562      });
563  });
564
565
566
567
568
569
570

```

Figure 121. Code Snippet for Students/Alumni – request.php



Figure 121 presents a jQuery-based JavaScript script for handling dynamic interactions and form submissions within the SMCC Online Request and Clearance System interface. One of the core functions, `getType()`, initiates an asynchronous retrieval of document types via a GET request to `get_type.php`. It dynamically builds checkboxes for each document type and their respective options by sending subsequent requests to `get_document_by_type.php`. The logic includes grouping inputs in rows, enabling or disabling child checkboxes based on the selected document type, and appending the final HTML template to the container with the ID `containerID`.

A vital part of the form logic lies in the checkbox change event listener. This manages the relationship between the parent (document type) and the child (individual documents) checkboxes. Specifically, when a document type is selected, its associated documents are enabled for selection; if it is unchecked, all related documents are disabled and unchecked for clarity and validation control.

Another notable functionality is the dynamic population of course options based on the selected department using a **GET** request to `get_course_by_department.php`. This is triggered when the `clearance_department` dropdown changes and is crucial for ensuring that the course list is relevant to the selected department.

When clicking the Request Clearance button (`#request_clearance`), the system first verifies if the user has a pending feedback requirement using `checker.php`. If feedback is pending (i.e., the last request was "Released" but no feedback was given), the feedback modal is shown. Otherwise, the clearance form modal is displayed to proceed with a new request.

The `#clearance-form` submission is handled using an **AJAX POST** request to `submit_clearance.php`, which includes department and course data. A successful submission triggers a **SweetAlert** confirmation and page reload. Similarly, the `#request-form`



submission processes a more detailed data set, including graduation status, year attended, complete address, and selected document IDs. It validates that at least one document is selected and sends the request via `submit.php`. Upon a successful response, it notifies the user with another **SweetAlert** dialog and reloads the page for a clean user state.



4.2 Testing Process

The testing process outlines the various procedures to assess the system's accuracy, functionality, and overall performance. To evaluate its effectiveness, efficiency, and reliability, the researchers utilized a survey instrument based on the system usability, functionality, and efficiency scale test. This instrument was adapted from the ISO 25010 Software Product Quality Standards. The test scale provided respondents with four rating options, where 4 represented the highest score and one the lowest.

The collected data were analyzed and interpreted according to the following parameters:

Table 3

Functional Suitability

Adjectival Rating	Scale Range (Mean)	Verbal Interpretation
4	3.50 – 4.0	Very Functional
3	2.50 – 3.49	Functional
2	1.50 – 2.49	Moderately Functional
1	1.0 – 1.49	Poorly Functional

Table 3 represents the parameters to which a product or system provides functions that meet stated and implied needs when used under specified conditions.

Table 4

Performance Efficiency

Adjectival Rating	Scale Range (Mean)	Verbal Interpretation
4	3.50 – 4.0	Very Efficient
3	2.50 – 3.49	Efficient



2	1.50 – 2.49	Moderately Efficient
1	1.0 – 1.49	Poorly Efficient

Table 4 represents the performance relative to the resources used under stated conditions.

Table 5**Usability**

Adjectival Rating	Scale Range (Mean)	Verbal Interpretation
4	3.50 – 4.0	Very Usable
3	2.50 – 3.49	Usable
2	1.50 – 2.49	Moderately Usable
1	1.0 – 1.49	Poorly Usable

Table 5 represents the parameters to which specified users can use a product or system to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use.

Table 6**Respondent's Distribution**

Online Request of Credentials for Saint Michael College of Caraga		
Position	N (Population)	Percentage (%)
Student	1	10
Alumni	1	10
Registrar Staff	3	30
Dean	1	10
Cashier Staff	1	10
Principal	2	20
Librarian	1	10



Total	10	100
--------------	-----------	------------

The respondents included students, alumni, registrar and cashier staff, the dean, the principal, and the librarian of Saint Michael College of Caraga. The researchers employed purposive sampling techniques to conduct the survey.

The primary data was gathered directly from the respondents. Survey instruments were distributed, completed, collected, and recorded for analysis. The collected data was then analyzed and interpreted to support the project's development.

To ensure the validity of the results, the researchers also conducted a focus group discussion and a project demonstration. Participants tested and evaluated the system to assess its effectiveness.

Descriptive Statistics Result

Table 7
Functional Suitability

A. Functional Suitability	MEAN	VERBAL INTERPRETATION
1. Functional completeness - Degree to which the set of functions covers all the specified tasks and user objectives	3.60	VF
2. Functional correctness - Degree to which a product or system provides the correct results with the needed degree of precision.	3.60	VF
3. Functional appropriateness - Degree to which the functions facilitate the accomplishment of specified tasks and objectives.	3.60	VF
Weighted Mean	3.60	VF

Legend:

VF – Very Functional (3.50 – 4.0)

F – Functional (2.50 – 3.49)

MF – Moderately Functional (1.50 – 2.49)

PF – Poorly Functional (1.0 – 1.49)



Table 7 presents the mean distribution and verbal interpretation of Functional Suitability.

With a weighted mean of 3.60, it is categorized as "Very Functional" (VF). This indicates that users perceive the system as highly effective in fulfilling its intended functions.

Each functional aspect—completeness, correctness, and appropriateness—received an equal mean score of 3.60, signifying that the system comprehensively meets user objectives, provides accurate results, and efficiently facilitates task accomplishment.

The results suggest that the system delivers a seamless and user-friendly experience, making it highly accessible and reliable for users to perform tasks, manage data, and generate reports. The high rating in Functional Correctness further reinforces that the system consistently produces precise and accurate outputs, ensuring trust in its performance.

Table 8

Performance Efficiency

B. Performance Efficiency	MEAN	VERBAL INTERPRETATION
1. Time behaviour - Degree to which the response and processing times and throughput rates of a system, when performing its functions, meet requirements.	3.60	VE
2. Resource utilization - Degree to which the amounts and types of resources used by a system, when performing its functions, meet requirements.	3.60	VE
3. Capacity - Degree to which the maximum limits of a product or system parameter meet requirements.	3.50	VE
Weighted Mean	3.57	VE

Legend:

VE – Very Efficient (3.50 – 4.0)

E – Efficient (2.50 – 3.49)

ME – Moderately Efficient (1.50 – 2.49)

PE – Poorly Efficient (1.0 – 1.49)



Table 8 presents the mean distribution and verbal description of "Performance Efficiency," with a total mean of 3.57, classified as "Very Efficient." "Time Behaviour" and "Resource Utilization" achieved the highest mean of 3.60, indicating that the system efficiently delivers responses, processes data, handles workloads within the required time constraints, and optimally utilizes resources.

Table 9**Usability**

C. Usability	MEAN	VERBAL INTERPRETATION
1. Appropriateness recognizability - Degree to which users can recognize whether a system is appropriate for their needs.	3.70	VU
2. Learnability - Degree to which a system can be used by specified users to achieve specified goals of learning to use the product or system with effectiveness, efficiency, freedom from risk and satisfaction in a specified context of use.	3.70	VU
3. Operability - Degree to which a system has attributes that make it easy to operate and control.	3.70	VU
4. User error protection - Degree to which a system protects users against making errors.	3.60	U
5. User interface aesthetics - Degree to which a user interface enables pleasing and satisfying interaction for the user.	3.60	VU
6. Accessibility - Degree to which a system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.	3.70	VU
Weighted Mean	3.67	VU



Legend:

VU – Very Usable (3.50 – 4.0)
U – Usable (2.50 – 3.49)

MU – Moderately Usable (1.50 – 2.49)
PU – Poorly Usable (1.0 – 1.49)

Table 9 presents the mean distribution and verbal description of "Usability," with a total mean of 3.67, classified as "Very Usable." The highest scores were in "Appropriateness Recognizability," "Learnability," "Operability," and "Accessibility," all with a mean of 3.70. This indicates that the system is highly usable, allowing users to recognize its suitability, learn and operate it efficiently, and access it regardless of their characteristics and capabilities.

Table 10**Summary Table of the Overall Mean and Grand Distribution of the Acceptability Level**

Acceptability Level of the System in terms of:	Over-all Mean	Rating
Functional Suitability	3.60	SA
Performance Efficiency	3.57	SA
Usability	3.67	SA
Grand Mean	3.61	SA

Legend:

SA – Strongly Acceptable (3.50 – 4.0)
A – Acceptable (2.50 – 3.49)

U – Unacceptable (1.50 – 2.49)
SU – Strongly Unacceptable (1.0 – 1.49)

The system demonstrates strong overall acceptance, particularly in Usability, which received the highest rating of "Strongly Acceptable." Functional Suitability and Performance Efficiency also fall under "Strongly Acceptable," reflecting the system's effectiveness and efficiency. With a Grand Mean of 3.61, the system is well-received, though there may still be room for further refinements to enhance user experience.



CHAPTER 5

SUMMARY, CONCLUSION, AND RECOMMENDATION

This chapter summarizes the research's key findings, draws conclusions from the results, and suggests recommendations for future enhancements or further studies. It highlights the project's accomplishments, considers its implications, and offers practical insights into improving the system and expanding its potential applications.

5.1. Summary of Findings

Based on the testing process, the Online Request of Credentials for Saint Michael College of Caraga was evaluated for its accuracy, functionality, and overall performance using a survey instrument adapted from the ISO 25010 Software Product Quality Standards. The evaluation focused on three significant aspects: functional suitability, performance efficiency, and usability.

The evaluation results revealed that the system was "Very Functional" with a mean score of 3.60. This indicated that it effectively met the specific tasks and objectives required for its implementation. The system scored highly in functional completeness, correctness, and appropriateness, ensuring users received accurate results and a seamless operational experience.

Regarding performance efficiency, the system was rated as "Very Efficient," with a mean score of 3.57. It excelled in time behavior and resource utilization, demonstrating its capability to process requests promptly while efficiently utilizing system resources. However, there was room for improvement in capacity management to ensure optimal performance during peak usage periods.

The system's usability was rated as "Very Usable," with a mean score of 3.67. It performed best in appropriateness, recognizability, learnability, and accessibility, indicating that users could easily recognize its purpose, learn how to use it, and easily access it. However, user error protection and interface aesthetics could have been further refined to improve user experience.



Overall, the system received a "Strongly Acceptable" rating with a grand mean of 3.61, indicating that it was well-received by its users and aligned effectively with their functionality, efficiency, and usability needs.

5.2. Conclusion

In conclusion, the Online Request of Credentials system for Saint Michael College of Caraga demonstrated strong functional suitability, high performance efficiency, and excellent usability, making it a highly valuable tool for its intended purpose. The system effectively delivered accurate results, handled requests promptly, and provided a user-friendly interface that supported students and staff in processing credential requests. Furthermore, all the objectives set for the development and implementation of the system were successfully met, confirming its effectiveness and alignment with institutional goals.

The evaluation results affirmed that the system met its functional requirements, utilized resources efficiently, and was easy to learn and operate. These strengths made the system highly reliable and convenient for users. However, despite these strengths, areas could be improved further to enhance the system's overall quality and user satisfaction.

Specifically, capacity management needed to be optimized to ensure stable performance during peak usage. Additionally, usability enhancements such as improving operability, interface aesthetics, and user error protection would have contributed to a smoother and more intuitive experience. Despite these minor areas for improvement, the system remained highly effective, dependable, and well-suited to meet the needs of its users.



5.3. Recommendation/s

To further improve the system's overall performance and user satisfaction, it is recommended that capacity optimization be focused on. This involves enhancing the system's ability to handle more users and requests during peak times, ensuring consistent performance and responsiveness without resource strain.

Additionally, efforts should be made to enhance the user experience by refining error-handling mechanisms and improving interface aesthetics. Providing users with better visual cues, streamlined navigation, and error feedback will make the system more intuitive and reduce the likelihood of mistakes during use.

Finally, integrating advanced features such as real-time request tracking, automated notifications, and analytics dashboards can add value to the user experience and administrative oversight. These enhancements would improve operational efficiency and support data-driven decision-making, ensuring the system remains relevant, sustainable, and scalable in the long term.

For the SMCC Registrar's Office, it is recommended to continue collaborating closely with IT staff to monitor system usage trends, address user feedback promptly, and plan for future updates based on institutional needs. Additionally, future researchers are encouraged to explore areas such as mobile optimization, integration with other academic systems (e.g., student information systems), and the application of artificial intelligence for predictive analytics. These directions will help ensure the system's continuous growth, relevance, and adaptability in supporting academic operations.



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APPENDICES

A. System Source Code

Database Connection

```

1 <?php
2
3
4 $server_name = "localhost";
5 $db_username = "root";
6 $db_password = "";
7 $db_name = "db_orc";
8
9 $connection = mysqli_connect($server_name,$db_username,$db_password,$db_name);
10 ?>

```

functions.php

```

1 <?php
2 define("BASE_DIR", '../assets'); // Define a base directory constant
3
4 // Ensure you have a valid database connection before using this function.
5 function log_action($user_id, $description, $connection) {
6     // Prepare the SQL query to insert the log entry
7     $query = "INSERT INTO logs ('user_id', 'desc', created_at) VALUES (?, ?, NOW())";
8
9     // Prepare the statement
10    $stmt = $connection->prepare($query);
11
12    // Bind the parameters: user_id is an integer, description is a string
13    $stmt->bind_param("is", $user_id, $description);
14
15    // Execute the query
16    $stmt->execute() or die($stmt->error);
17
18    // Close the statement
19    $stmt->close();
20 }
21
22 function uploadFile($fileKey, $prefix, $imageaccept, $directory) {
23     if (!isset($_FILES[$fileKey]) && $_FILES[$fileKey]['tmp_name'] != '') {
24         // Get the file extension and make it lowercase for comparison
25         $ext = strtolower(pathinfo($_FILES[$fileKey]['name'], PATHINFO_EXTENSION));
26
27         // Check if the file extension is in the accepted formats
28         if (in_array($ext, $imageaccept)) {
29             // Create a unique file name for the uploaded file
30             $file_path = '/' . $directory . '/' . uniqid($prefix . '_') . '.' . $ext;
31
32             // Ensure the full directory path exists
33             $fullDirPath = BASE_DIR . '/' . $directory;
34             if (!file_exists($fullDirPath)) {
35                 mkdir($fullDirPath, 0777, true); // Create the directory if it doesn't exist
36             }
37
38             // Move the uploaded file to the target directory
39             $move = move_uploaded_file($_FILES[$fileKey]['tmp_name'], BASE_DIR . $file_path);
40
41             // Check if the file move was successful
42             if (!$move) {
43                 echo "Error moving the file!";
44                 exit();
45             }
46             return $file_path; // Return the file path if successful
47         } else {
48             echo "File not accepted! Allowed formats: " . implode(", ", $imageaccept);
49             exit();
50         }
51     } else {
52         echo "File not accepted! Allowed formats: " . implode(", ", $imageaccept);
53         exit();
54     }
55 }
56
57 ?>

```



login.php

```

1 <?php
2     require_once ('connection.php');
3     include 'Functions.php';
4     session_start();
5
6     $email = mysqli_real_escape_string($connection, $_GET["email"]);
7     $password = mysqli_real_escape_string($connection, $_GET["password"]);
8
9     // Query to get the user record based on the email
10    $query = mysqli_query($connection, "SELECT u.*, d.department FROM users
11                                LEFT JOIN ref_departments d ON u.department_id = d.id
12                                WHERE email = '$email' AND u.status != 'Verify Email';") or die(mysqli_error($connection));
13
14    $row = mysqli_fetch_array($query);
15
16    // If user exists
17    if ($row) {
18        $user_status = $row['status'];
19        $id = $row['id'];
20        $SESSION['id'] = $row['id'];
21        $SESSION['fname'] = $row['fname'];
22        $SESSION['mname'] = $row['mname'];
23        $SESSION['lname'] = $row['lname'];
24        $SESSION['name'] = $row['fname'] . ' ' . $row['lname'];
25        $SESSION['email'] = $row['email'];
26        $SESSION['role'] = $row['role'];
27
28        if ($row['role'] != 'Client') {
29            $department_id = $row['department_id'];
30            $SESSION['department_id'] = $row['department_id'];
31
32            $queryDepartment = mysqli_query($connection, "SELECT * FROM ref_departments WHERE id = '$department_id';") or die(mysqli_error($connection));
33            $departmentRow = mysqli_fetch_array($queryDepartment);
34            $SESSION['department'] = $departmentRow['department'];
35        }
36
37        // First, check if the user account is active
38        if ($user_status == 'Active') {
39            // Then verify the password using password_verify()
40            if (password_verify($password, $row['password'])) {
41                log_action($id, 'Logged In', $connection);
42                echo 'success';
43            } else {
44                echo "Incorrect Email or Password entered. \nPlease try again.";
45            }
46        } else {
47            echo 'User account deactivated! Please contact system administrator for further assistance.';
48        }
49
50    } else {
51        echo "Incorrect Email or Password entered. \nPlease try again.";
52    }
53 ?>

```

logout.php

```

1 <?php
2     require_once ('connection.php');
3
4     session_start();
5     $id = $SESSION['id'];
6     $connection->query("INSERT INTO logs ('user_id', 'desc', created_at) VALUES( '$id', 'Logged Out', NOW() );"
7                         or die (mysqli_error($connection)));
8
9     session_destroy();
10    echo '<script type = "text/javascript">window.location = "../index.php";</script>';
11 ?>

```

get_requested_documents.php

```

1 <?php
2     require_once ('../connection.php');
3
4     $id = $_GET['request_id'];
5
6     // Prepare and execute the query
7     $stmt = $connection->prepare("SELECT * FROM `requested_documents` rd
8                                 JOIN ref_documents d ON rd.document_id = d.id
9                                 WHERE rd.request_id = ?");
10    $stmt->bind_param("i", $id);
11    $stmt->execute();
12
13    // Get the result and output as JSON
14    echo json_encode($stmt->get_result()->fetch_all(MYSQLI_ASSOC));
15
16    // Close the statement and connection
17    $stmt->close();
18    $connection->close();
19
20 ?>

```



received.php

```

1 <?php
2 require_once('../connection.php');
3 session_start();
4
5 $id = mysqli_real_escape_string($connection, $_POST['request_id']);
6 $serviceOne = mysqli_real_escape_string($connection, $_POST['serviceOne']);
7 $serviceTwo = mysqli_real_escape_string($connection, $_POST['serviceTwo']);
8 $serviceThree = mysqli_real_escape_string($connection, $_POST['serviceThree']);
9 $serviceFour = mysqli_real_escape_string($connection, $_POST['serviceFour']);
10 $serviceFive = mysqli_real_escape_string($connection, $_POST['serviceFive']);
11 $Suggestions = mysqli_real_escape_string($connection, $_POST['suggestions']);
12 $session_id = $_SESSION['id'];
13
14 $update_query =
15     "UPDATE `requests`"
16     . "SET"
17     . "    service_one = ?,
18     .     service_two = ?,
19     .     service_three = ?,
20     .     service_four = ?,
21     .     service_five = ?,
22     .     suggestions = ?,
23     .     with_feedback = 'Yes',
24     .     status = 'Done'
25     . WHERE id = ?"
26 ;
27
28 $stmt = mysqli_prepare($connection, $update_query);
29
30 // Assuming all fields are strings except 'rating' (int) and 'id' (int)
31 mysqli_stmt_bind_param(
32     $stmt,
33     'sssssi',
34     $serviceOne,
35     $serviceTwo,
36     $serviceThree,
37     $serviceFour,
38     $serviceFive,
39     $Suggestions,
40     $id
41 );
42
43 mysqli_stmt_execute($stmt) or die(mysqli_error($connection));
44 mysqli_stmt_close($stmt);
45
46 echo 'success';
47 ?>

```

submit.php (payment)

```

1 <?php
2 require_once('../connection.php');
3 include '../functions.php';
4
5 session_start();
6
7 $id = mysqli_real_escape_string($connection, $_POST['id']);
8 $pay_name = mysqli_real_escape_string($connection, $_POST['pay_name']);
9 $pay_number = mysqli_real_escape_string($connection, $_POST['pay_number']);
10
11 $imageaccept = ["jpg", "png", "jpeg"];
12
13 $session_id = $_SESSION['id'];
14 $image_path = '';
15
16 $directory = "upload/payment_receipts";
17
18 // Handle file upload if present
19 if (isset($_FILES['file']) && $_FILES['file']['error'] === UPLOAD_ERR_OK) {
20     $image_path = uploadFile('file', 'file', $imageaccept, $directory);
21 }
22
23 // Prepare the query
24 if ($id) {
25     $status = mysqli_real_escape_string($connection, $_POST['status']);
26
27     // Update the record
28     $update_query = "UPDATE ref_payments SET pay_name = ?, pay_number = ?, status = ?" . ($image_path ? ", 'picture' = ?" : "") . " WHERE id = ?";
29     $stmt = $connection->prepare($update_query);
30
31     // Bind parameters
32     if ($image_path) {
33         $stmt->bind_param("ssssi", $pay_name, $pay_number, $status, $image_path, $id);
34     } else {
35         $stmt->bind_param("sssi", $pay_name, $pay_number, $status, $id);
36     }
37
38     $action = "Updated";
39 } else {
40     // Insert new record
41     $insert_query = "INSERT INTO ref_payments (pay_name, pay_number, picture, status) VALUES(?, ?, ?, 'Active')";
42     $stmt = $connection->prepare($insert_query);
43     $stmt->bind_param("sss", $pay_name, $pay_number, $image_path);
44     $action = "Added";
45 }
46
47 if ($stmt && $stmt->execute()) {
48     log_action($session_id, "$action Payment Account: " . $pay_name, $connection);
49     echo 'success';
50 } else {
51     echo 'Error, please try again.';
52 }
53
54 $stmt->close();
55 ?>

```



get_barangay_by_city.php

```

1 <?php
2
3     require_once ('../connection.php');
4
5     $city_id = mysqli_real_escape_string($connection, $_GET['city_id']);
6
7     $query = "SELECT brgy_code, brgy FROM ref_brgy WHERE city_code = '$city_id' ORDER BY brgy ASC";
8     $result = mysqli_query($connection, $query);
9
10    if(!$result) {
11        die('Query Failed'. mysqli_error($connection));
12    }
13
14    // Fetch all rows as an associative array
15    $rows = mysqli_fetch_all($result, MYSQLI_ASSOC);
16
17    // Encode the result into a JSON string
18    echo json_encode($rows);
19 ?>

```

get_city_by_province.php

```

1 <?php
2
3     require_once ('../connection.php');
4
5     $province_id = mysqli_real_escape_string($connection, $_GET['province_id']);
6
7     $query = "SELECT city_code, city FROM ref_city WHERE province_code = '$province_id' ORDER BY city ASC";
8     $result = mysqli_query($connection, $query);
9
10    if(!$result) {
11        die('Query Failed'. mysqli_error($connection));
12    }
13
14    // Fetch all rows as an associative array
15    $rows = mysqli_fetch_all($result, MYSQLI_ASSOC);
16
17    // Encode the result into a JSON string
18    echo json_encode($rows);
19 ?>

```

get_course_by_department.php

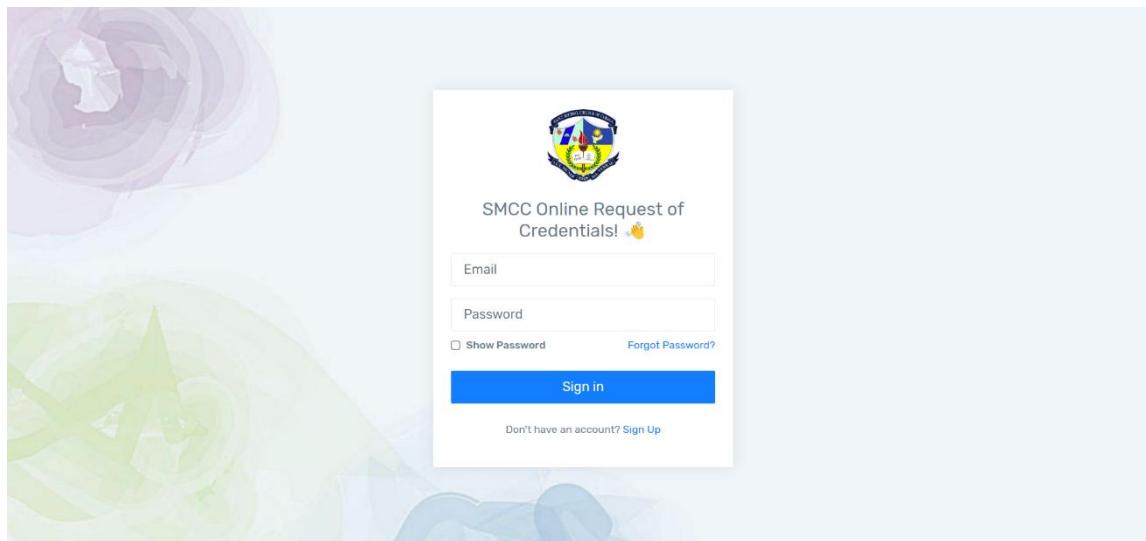
```

1 <?php
2
3     require_once ('../connection.php');
4
5     $department_id = mysqli_real_escape_string($connection, $_GET['department_id']);
6
7     $query = "SELECT course FROM ref_courses WHERE department_id = '$department_id' ";
8     $result = mysqli_query($connection, $query);
9
10    if(!$result) {
11        die('Query Failed'. mysqli_error($connection));
12    }
13
14    // Fetch all rows as an associative array
15    $rows = mysqli_fetch_all($result, MYSQLI_ASSOC);
16
17    // Encode the result into a JSON string
18    echo json_encode($rows);
19 ?>

```



B. User's Manual



This is the login page for all users. Key personnel such as the cashier, head of LRC, dean/principal, and registrar staff can only access the system if the admin has created an account for them. This security measure helps prevent unauthorized users from accessing the organization or ORC system.

First Name *	Middle Name	Last Name *	Ext *
Ricel Ada	Salutis	Villarin	N/A

Has Middle Name

Birthdate *	Last School Year Attended *	Contact *	Email *
01/11/2003	2025	09705366534	adangvillarin@gmail.com

House No. & Street *	Province *
D-6	AGUASAN DEL NORTE

Municipality / City *	Barangay *
NASIPIT	Caramagong

Upload Valid ID *

<input type="file"/> Valid ID.jpg	<input type="file"/> Holding with valid ID.jpg
-----------------------------------	--

Allowed file types: png, jpg, jpeg, pdf.
Please upload any valid government ID (Driver's License, Passport, etc.)

[Sign Up](#)

Already have an account? [Sign In instead](#)

This sign-up page is designed for new users, specifically students and alumni, to create an account and gain access to the SMCC Online Request of Credentials system. To complete the registration, you must provide accurate personal information, including your first name, middle



name (optional), last name, and any applicable name extensions. Additional required details include your birthdate (selected via a date picker), the last school year attended, a valid contact number, and an active email address. You are also required to enter your complete address, including house number and street, province, municipality or city, and barangay. For identity verification, the system requires two uploads: a valid government-issued ID (such as a Driver's License or Passport) and a photo of yourself holding the same ID. Supported file formats for uploads are PNG, JPG, JPEG, and PDF. Once all required fields are completed and documents are uploaded, you can click the "Sign Up" button to submit your registration. If you already have an account, a "Sign In" link is available at the bottom of the page. This sign-up process ensures secure and verified access to the system for all users.

The screenshot shows the 'My Request List' page of the SMCC ORCS system. At the top right, there is a user profile for 'Ricel Ada Villarin'. Below it is a blue button labeled 'Request Clearance' with a red arrow pointing to it. On the far right, there is a dropdown menu labeled 'Action' with a red arrow pointing to it, and a status indicator 'Pending' with a red arrow pointing to it. The main table has columns for ID, Date Requested, Date Approved, Is Cleared?, Requested Documents, Date Release, Reference, Comment, Total, and Status. The first row shows an entry with 'Is Cleared?' set to 'No'. The bottom right corner of the page says 'SMCC © 2025'.

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status
1			No					0.00	Pending

The My Request List page provides you with a detailed overview of your submitted credential requests. Once you have signed in, this page displays a list of all your requests along with relevant information to help you track the progress and status of each one. (1) The Request Clearance button at the top right of the page allows you to request clearance, an essential step before documents can be processed. (2) The Clearance option in the Action dropdown button enables you to track the current status of your clearance.



This screenshot shows the 'Request Credentials' section of the SMCC ORCS system. The user, Rielc Ada Villarin, has one request listed. The request details are as follows:

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status	Action
1			No				You have an outstanding of 5,000. Please pay it first.	0.00	Pending	Action

The 'Action' button for this row contains two options: 'Pay Balance' and 'Clearance'. A red arrow points from the text 'The Pay Balance option in the Action button allows you to pay their balance using their preferred payment method.' to the 'Pay Balance' button.

This is the UI for balance payment when the Office of the Cashier disapproves a requester's clearance due to an outstanding institutional balance. (1) The Pay Balance option in the Action button allows you to pay their balance using their preferred payment method.

This screenshot shows the 'Request Credentials' section of the SMCC ORCS system. The user, Rielc Ada Villarin, has one request listed. The request details are as follows:

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status	Action
1			Yes					0.00	Pending	Action

The 'Action' button for this row contains two options: 'Request Credentials' and 'Clearance'. A red arrow points from the text 'The Request Credentials option under the Action button allows you to fill out an application to request the necessary credentials.' to the 'Request Credentials' button.

This is the user interface for applying and submitting credential requests. (1) The Clearance option under the Action button must be thoroughly checked to determine whether you have completed the clearance process or still have any pending requirements that need to be fulfilled. (2) The Request Credentials option under the Action button allows you to fill out an application to request the necessary credentials.



My Request List

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status	Action
1	April 30, 2025	April 30, 2025	ISSUED	Certificate - General Weighted Average, Certificate of Honors, Certification of Graduation , Transcript of Record - Employment Purpose				1855.00	For Payment	Action

Showing 1 to 1 of 1 entries

After the registrar confirms your request details, you can: (1) view the total price of all the documents you requested, (2) see the breakdown of your requested documents and their corresponding prices under the Details option, and (3) proceed with the payment for your requested credentials.

My Request List

ID	Date Requested	Date Approved	Is Cleared?	Requested Documents	Date Release	Reference	Comment	Total	Status	Action
1	April 30, 2025	April 30, 2025	ISSUED	Certificate - General Weighted Average, Certificate of Honors, Certification of Graduation , Transcript of Record - Employment Purpose	April 30, 2025	1234567890		1855.00	Released	Action

Showing 1 to 1 of 1 entries

After the cashier verifies your payment and the registrar processes your documents and schedules a release date, you can: (1) view the release date and (2) reference or tracking number in this user interface. Then, (3) under the Received Documents option in the Action button, you must fill out a feedback form once your documents have successfully arrived at your location.



C. Letter of Permission

December 11, 2024

Mr. Cecilio C. Arriola
Head of Registrar's Office
Saint Michael College of Caraga
Nasipit, Agusan del Norte, 8602

Dear Mr. Arriola,

Greetings!

We hope this letter finds you well. We are third-year Bachelor of Science in Information Technology students at Saint Michael College of Caraga, currently working on our research study entitled "**Online Request of Credentials for Saint Michael College of Caraga.**"

We are writing to formally request your permission and seek your collaboration for the development and implementation of this system. Our study aims to design and build an efficient online platform for requesting credentials, intended to streamline and modernize the current process.

As part of this initiative, we kindly request your support, particularly in the form of [access to relevant data, institutional policies, or feedback from your office/team], which are essential to the success of our research. We assure you that all information shared will be handled with the highest level of confidentiality and used strictly for academic purposes, in compliance with your office's guidelines.

We believe that this system will significantly improve the credential request process, aligning with the institution's commitment to innovation and academic excellence. Additionally, it may serve as a model for future digital transformation initiatives in similar institutions.

Thank you for considering our request. We look forward to your positive response and would be glad to discuss this project further at your convenience.

Sincerely Yours,
Ricel Ada S. Villarin

Research Leader

Received by:

Cecilio C. Arriola
Head, SMCC Registrar

Scanned with CamScanner



D. Documented Undertakings



The researchers successfully passed the title hearing and now working on the formulation of Chapters 1 and 2.



The researchers designing the system's user interface, creating diagrams, and specifying software and hardware requirements for Chapter 3, while also consulting with their adviser in preparation for the proposal defense.



Following the successful defense of Chapters 1 to 3 during the proposal defense, the researcher now proceeds with revising the manuscript in preparation for routing.



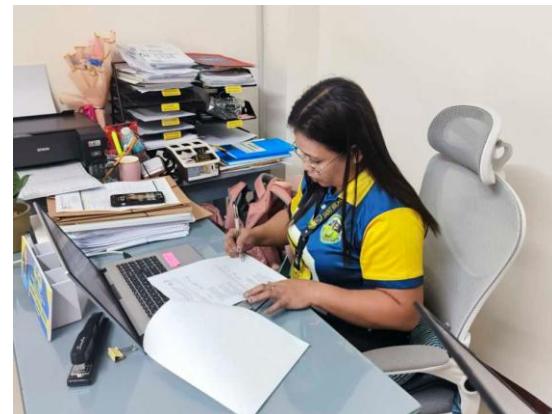
Researchers during the development of the system focused on implementing its core functionality by writing and refining the necessary code. They integrated key features, ensured smooth interactions, and conducted tests to identify and resolve any issues.



Researchers finalizing the system's user interface by refining layouts, visuals, and navigation based on initial checks and feedback from their beneficiaries. At the same time, they drafted the manuscript, detailing design decisions, implementation steps, and including annotated screenshots to explain the interface's functionality and its corresponding code snippets in Chapter 4.



Researchers consulting with their adviser and beneficiary to gather feedback on the system's progress. These discussions focused on identifying areas for improvement, refining features, and incorporating suggestions to better meet user needs. By integrating this feedback, they ensured the system's design aligned with both academic standards and practical requirements.



Researchers during the testing process worked closely with corresponding end users to evaluate the system's functionality and usability. They observed user interactions, gathered performance metrics, and collected feedback on any pain points or errors encountered. End users were provided with a questionnaire to evaluate the software's quality.



Researchers during the finalization of Chapters 4 and 5 included the code discussion, tallied end-user evaluation results, and synthesized the study's findings to draw conclusions and make clear recommendations. They also examined test data for key insights, suggested practical improvements or future research directions, and practiced debugging their code in preparation for the final defense.



Following the successful final oral defense, the researcher began revising the manuscript for routing, covering Chapters 1 to 5.



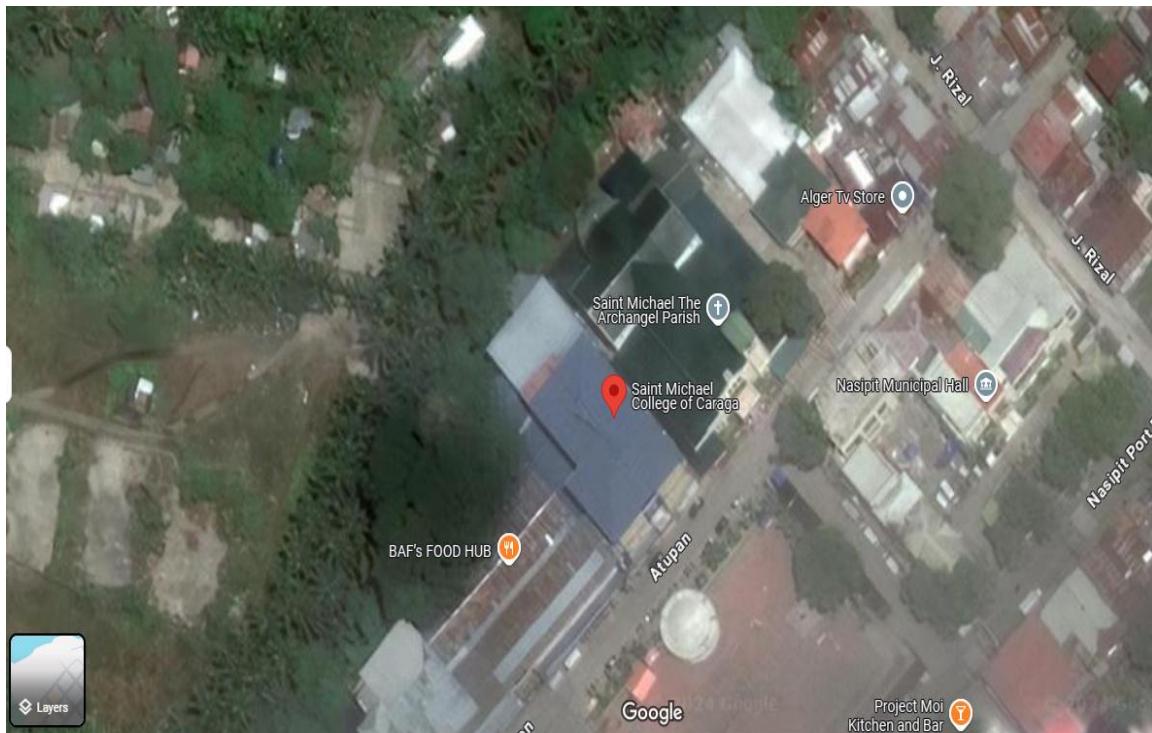
The researchers successfully deployed their system at the Electronic Data Processing (EDP) Office of Saint Michael College of Caraga, where it was formally acknowledged and signed by Mr. John Louie R. Abobo (MIS In-Charge) and Engr. Marisol S. Rosario (EDP Head).

**E. Certificate of Implementation**



F. Map of the Research Locale

SAINT MICHAEL COLLEGE OF CARAGA



Saint Michael College of Caraga, or SMCC, is a private Catholic school in Nasipit, Agusan del Norte, managed by the Roman Catholic Diocese of Butuan. It was founded in 1948 by the Missionaries of the Sacred Heart (MSC) fathers. The institution offers both basic and higher education, with its main campus located on Atupan Street, Barangay 4 Poblacion, Nasipit, Agusan del Norte. Its elementary and senior high school departments are housed on a separate campus in Barangay Triangulo.

**G. Curriculum Vitae**

Name : Ricel Ada S. Villarin

Address : D-6 Camagong, Nasipit, Agusan Del Norte

Email : adangvillarin@gmail.com

**Personal Information**

Sex : Female

Date of birth : November 1, 2003

Height : 155cm

Weight : 53kg

Civil Status : Single

Educational Attainment

Elementary : Camagong Elementary School

Secondary : Saint Michael College of Caraga

Tertiary : Saint Michael College of Caraga

Membership/Affiliations

ORGANIZATION	POSITIONS HELD
Michaelinian Cybersecurity Guild (2024-2025)	Member

**G. Curriculum Vitae**

Name : Angel Mae L. Baguio

Address : D-2 Camagong, Nasipit, Agusan Del Norte

Email : angelmaebaguio16@gmail.com

**Personal Information**

Sex : Female

Date of birth : February 21, 2004

Height : 160cm

Weight : 45kg

Civil Status : Single

Educational Attainment

Elementary : Camagong Elementary School

Secondary : Nasipit National Vocational School

Tertiary : Saint Michael College of Caraga

Membership/Affiliations

ORGANIZATION	POSITIONS HELD
N/A	

**G. Curriculum Vitae**

Name : Jay A. Bongado

Address : D-5 Punta, Nasipit, Agusan del Norte

Email : jbongado5@gmail.com

**Personal Information**

Sex : Male

Date of birth : January 25, 2004

Height : 168cm

Weight : 50kg

Civil Status : Single

Educational Attainment

Elementary : Nasipit Central Elementary School

Secondary : Northwestern Agusan Colleges

Tertiary : Saint Michael College of Caraga

Membership/Affiliations

ORGANIZATION	POSITIONS HELD
N/A	

**G. Curriculum Vitae**

Name : Angelo M. Hinautan

Address : Barangay 4, Nasipit, Agusan del Norte

Email : angelohinautan45@gmail.com

**Personal Information**

Sex : Male

Date of birth : November 23, 2000

Height : 170cm

Weight : 70kg

Civil Status : Single

Educational Attainment

Elementary : Libertad Central Elementary School

Secondary : Libertad National High School

Tertiary : Saint Michael College of Caraga

Membership/Affiliations

ORGANIZATION	POSITIONS HELD
N/A	

**G. Curriculum Vitae**

Name : Rom Jones Y. Salem

Address : Barangay 2, Nasipit, Agusan del Norte

Email : rjsgwapo123@gmail.com

**Personal Information**

Sex : Male

Date of birth : May 20, 2003

Height : 163cm

Weight : 63 kg

Civil Status : Single

Educational Attainment

Elementary : Nasipit Central Elementary School

Secondary : Nasipit National Vocational School

Tertiary : Saint Michael College of Caraga

Membership/Affiliations

ORGANIZATION	POSITIONS HELD
N/A	



CERTIFICATE OF TECHNOLOGY BASED ASSESSMENT



Saint Michael College of Caraga
Brgy. 4, Nasipit, Agusan del Norte, Philippines
Tel. Nos. +63 085 343-3251 / +63 085 283-3113
www.smccenasipit.edu.ph



TEST RESULT

TECHNOLOGY-BASED QUALITY ASSURANCE

Date of Test	MAY 16, 2025	Control number	RBSIT124004
Research Title	ONLINE REQUEST OF CREDENTIALS FOR SAINT MICHAEL COLLEGE OF CARAGA		
Author (s)	1 RICEL ADA S. VILLARIN	ORCID No.	0009-0002-6584-0222
	2 ANGELO M. HINAUTAN	ORCID No.	0009-0007-1796-8930
	3 ANGEL MAE L. BAGUIO	ORCID No.	0009-0008-0448-7596
	4 ROM JONES Y. SALEM	ORCID No.	0009-0000-2929-6202
	5 JAY A. BONGADO	ORCID No.	0009-0001-1581-3114
Co-author (s)	1 JESSIE S. MAHINAY	ORCID No.	0009-0005-4827-9033

Contact Person	RICEL ADA S. VILLARIN				
Address	D-6 CAMAGONG, NASIPIT, ADN				
Mobile Number	'09060088210				

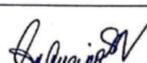
Test subject	Chapters 1-5				
Total number of words	20,150	Sentences	1,215	Characters	141,710

	Test Area	Score	Required	Remarks
(1) Plagiarism	98	90%	PASSED	
(2) Grammar	98	95%	PASSED	
(3) Readability Score	25	25	PASSED	
(4) Reliability (<i>Test Instrument only</i>)	N/A	N/A		

FINDING(S) & RECOMMENDATION(S)

SEE HUMAN GRAMMARIAN FOR THE REVISE SENTENCES

Evaluated by:



MICHELLE ANN G. LUCINO
Signature over Printed Name

Approved by:



KENNETH IAN B. BARRERA, MA
Head of Research

Member:



info@smccenasipit.edu.ph



Saint Michael College of Caraga
Atupan St., Nasipit, Agusan del Norte, Philippines



Certificate of Human Grammarians

This is to certify that the research titled

Online Request of Credentials for Saint Michael College of Caraga

with authors

Villarin, Ridel Ada S., Bagwio, Angel Mae L., Hinautan, Angelo M., Bongado, Jay A.,
Salem, Rom Jones Y.

had passed the evaluation by the undersigned as the **HUMAN GRAMMARIAN** and
recommended for approval.

This certificate is given on the 20th day of May 2025 at Research and
Instructional Innovation Department.

Quinnagan
WENDELL B. GONZAGA

Human Grammarians
Saint Michael College of Caraga

Member:



PHILIPPINE
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QUALITY, INC.
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info@smccnasipit.edu.ph



CERTIFICATE OF AUTHENTIC AUTHORSHIP

This is to certify that I/we, the undersigned author(s), have solely and honestly written the entire paper titled: "**Online Request of Credentials for Saint Michael College of Caraga**" All contents, ideas, data, and analysis presented in this paper are the results of my/our own diligent work and intellectual effort. The paper has been crafted to the best of my/our abilities, in full compliance with academic integrity standards and ethical research practices.

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Signed this

Date: May 5, 2025

Location: Saint Michael College of Caraga

Author(s):

RICEL ADA S. VILLARIN

Author

ANGEL MAE L. BAGUIO

Author

JAY A. BONGADO

Author

ANGELO M. HINAUTAN

Author

ROM JONES Y. SALEM

Author