



Republic of the Philippines
POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
Office of the Vice President for Academic Affairs
College of Computer and Information Sciences

DTS #:

October 17, 2023

DR. ANNA RUBY P. GAPASIN
Vice President for Research, Extension and Development

Dear Dr. Gapasin:

Good day!

We, the students of Bachelor of Science in Information Technology (BSIT) Section 4-5, are currently enrolled in Capstone Project 2.

We are writing to formally request ethical clearance for our research study, entitled "Implementing Learning Management System for Enhanced Academic Management and Learning".

We are fully aware of the significance of obtaining an Ethical Clearance to ensure the responsible and ethical conduct of our research. Our unwavering commitment lies in safeguarding the rights, dignity, and safety of all participants involved in our study. Furthermore, we pledge to adhere strictly to ethical principles in collecting and using all data gathered throughout the research process.

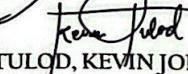
Our sincerest gratitude and we look forward to your kind consideration and favorable response on the matter.

Respectfully,


ABAD, IRISHA A.


ROSALIA, SHARMAINE V.

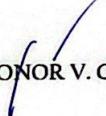

QUINTANA, KRISSIA ANN C.


TULOD, KEVIN JOHN L.

Noted:


MARIA ESPERANZA H. REYES
Research Adviser

Endorsed by:


DR. BENILDA ELEONOR V. COMENDADOR
Dean

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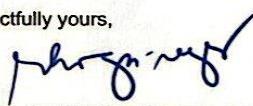
October 26, 2023

**Research Ethics Center
Research Management Office
Polytechnic University of the Philippines**

Dear Madam/Sir:

This is to certify that the survey questionnaire for **IMPLEMENTING LEARNING MANAGEMENT SYSTEM FOR ENHANCED ACADEMIC MANAGEMENT AND LEARNING** has been reviewed and validated to be correct.

Respectfully yours,


MARIA ESPERANZA HOGAR-REYES
Teacher-in-Charge
BSIT 4-5

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**PUP-UNIVERSITY RESEARCH ETHICS CENTER****APPLICATION FOR ETHICS REVIEW OF A
NEW PROTOCOL**

UREC Form No.

9

Version No.

1

Instructions to the Researcher: Please accomplish this form and ensure that you have included in your submission the documents that you checked in Section 2 (Checklist of Documents).

1. General Information

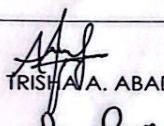
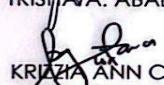
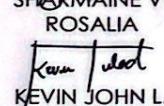
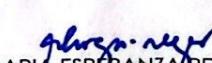
*Title of Study	Implementing Learning Management System for Enhanced Academic Management and Learning		
*UREC Code/REC Panel Code (To be provided by UREC/REC)		*Study Site	Sta. Lucia Senior High School
*Name of Researcher	Abad, Trisha A. Quintana Krizza Ann C. Rosalia, Sharmaine V. Tulod, Kevin John L.	Contact Information	*Tel No: N/A
*Name of Co-researcher/s (if any)			*Mobile No: 09991771854 09632149989 09770612370 09395480070
			*Email: Trishaabad59@gmail.com rosalia.sharmaine@gmail.com kevinjohnkulod017@gmail.com quintanakrizzaann@gmail.com
*Institution/College/Department	Polytechnic University of the Philippines – Main Campus College of Computer and Information Sciences		
*Address of Institution	5th Floor South Wing, PUP A. Mabini Campus, Anonas Street, Sta. Mesa, Manila 1016		
*Field of Study (Please check one)	<input type="checkbox"/> Education <input checked="" type="checkbox"/> Computer Science and Information System Technology <input type="checkbox"/> Engineering, Architecture, and Design <input type="checkbox"/> Humanities, Language, and Communication <input type="checkbox"/> Business <input type="checkbox"/> Social Sciences <input type="checkbox"/> Science, Mathematics, and Statistics		
*Source of Funding (Please check one)	<input checked="" type="checkbox"/> Self-funded <input type="checkbox"/> Government-funded <input type="checkbox"/> Scholarship/Research Grant <input type="checkbox"/> Institution-funded <input type="checkbox"/> Sponsored by a Pharmaceutical Company <input type="checkbox"/> Others		

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		UREC Form No.	9	
		Version No.	1	
*Duration of the Study:	Start Date: March 2023	End Date: February 2024	No. of Participants: 84	
2. Checklist of Documents				
Basic Requirements:	<input checked="" type="checkbox"/> Study Protocol	Supplementary Requirements:	<input type="checkbox"/> Co-authorship Agreement (For multiple Authorship)	
	<input checked="" type="checkbox"/> Informed Consent Form		<input checked="" type="checkbox"/> Notice to Proceed/ Ethical Clearance (For external researchers or Non-PUPian)	
	<input checked="" type="checkbox"/> English version		<input type="checkbox"/> Others (Please specify)	
	<input type="checkbox"/> Filipino Version			
Assent Form (If applicable)				
<input checked="" type="checkbox"/> English version				
<input type="checkbox"/> Filipino Version				
<input checked="" type="checkbox"/> Research Questionnaire				
To be filled out by the applicant		To be filled out by the Immediate Supervisor		
Accomplished by: As the researcher of this study, I hereby confirm that the information stated above is true. I understand that my study protocol shall be reviewed by the UREC/REC, and I shall abide by the rules and regulations set forth by the Polytechnic University of the Philippines.		Endorsed by: As the Research Adviser/Program Chair/ Dean, I hereby confirm that I have read this application and confirm to supervise the conduct of this study. Further, I confirm that the ethical standards set by the University shall be followed.		
Date	 TRISHA A. ABAD  KRIKZIA ANN C. QUINTANA  SHARMAINE V. ROSLIA  KEVIN JOHN L. TULOD Signature over printed Name of the Researchers	Date	 PROF. MARIA ESPERANZA REYES Faculty in-charge	
To be filled out by the UREC				

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	APPLICATION FOR ETHICS REVIEW OF A NEW PROTOCOL		UREC Form No. 9 Version No. 1
Completeness of Document	<input type="checkbox"/> Complete <input type="checkbox"/> Incomplete	Remarks:	
Received by:			
Date Received:			
Approved for Ethical Review			
Date	Research Management Office - Research Ethics Center		

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(1) Program / Project Title
Implementing Learning Management System for Enhanced Academic Management and Learning
(2) Program/Project Proponent
Tulod, Kevin John L. Male / 09395480070 / kevinjohntulod017@gmail.com / Undergraduate Bachelor of Science in Information Technology
(3) Program/Project Co-proponent and Research Assistant/s
Abad, Trisha A. Female / 09991771854 / trishaabad59@gmail.com / Undergraduate Bachelor of Science in Information Technology
Quintana, Krizza Ann C. Female / 09632149989 / quintanakrizzaann@gmail.com / Undergraduate Bachelor of Science in Information Technology
Rosalia, Sharmaine V. Female / 09770612370 / rosalia.sharmaine@gmail.com / Undergraduate Bachelor of Science in Information Technology
(4) Program/Project Proponent's Department/College/Office
Department of Information Technology, College of Computer and Information Sciences - Polytechnic University of the Philippines – Manila, Sta. Mesa
(5) Background and Significance
The research project is driven by a compelling rationale that reflects the evolving educational landscape in the context of the COVID-19 pandemic. It recognizes the pandemic's significant impact on traditional education and aims to provide a comprehensive solution. This project seeks to enhance educational accessibility by developing a web-based Learning Management System (LMS) tailored to the needs of teachers, students, and administrators. It addresses the pressing need to make education accessible, irrespective of geographical constraints or pandemic-induced disruptions.
Furthermore, the project emphasizes the importance of fostering interactive learning experiences, striving to simplify, collaborate, and engage students and teachers. By offering features such as interactive quizzes and assignments, it aims to create a dynamic and engaging educational environment. Additionally, the project aspires to improve upon existing LMS platforms by integrating new features that enhance teaching and learning methods, thereby contributing to the ongoing evolution of educational technology and management systems.

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The user-centric approach is a key element, assuming active utilization by administrators, instructors, and students, making it a practical and relevant solution for real-world educational scenarios. Moreover, the project acknowledges the necessity of ensuring educational continuity during uncertain times and offers a web-based platform to enable schools to adapt and continue their activities in a remote learning environment. Finally, by developing an innovative LMS, this research project contributes to the broader discourse on enhancing learning capabilities and school management, serving as a valuable resource for future investigations in the field of education and technology.

(6) Objectives

General Objective

- Construct an intuitive and efficient online learning platform aimed at enhancing educational accessibility and communication, and facilitating interactive teaching through the adept utilization of technology.

Specific Objective

Specifically, this study aims to:

- Enhance collaboration and communication between students and teachers.
- Reduce paper-based submission process.
- Integration of interactive content.
- Support blended/hybrid mode of learning.
- Integration of different academic usage and platforms to simplify processes.
- Improve the accessibility of educational resources within the institution.

(7) Materials and Methods

A. Study Design

The research will use a probability-based sampling strategy, specifically stratified random sampling, in order to guarantee the selection of a sample that accurately represents the members of the Sta. Lucia Senior High School, that consist of faculty members, administrator, learning resource and information system coordinator, and students. The scope of this study is centered on the population of the Sta. Lucia Senior High School (SLSHS), which has a documented population exceeding 732.

Estimated Sample Size: With a confidence level of 90% and a margin of error set at 10%, the estimated sample size is approximately 84.

In order to ensure a well-rounded representation of key stakeholders within the institutional bodies of SLSHS, the sample will be stratified into three groups: administrators and coordinators, faculty members, and students. The allocation of the sample among these strata will be proportional to their respective sizes in the overall population.

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The primary tool for data collection will be a survey questionnaire specifically designed to assess and evaluate the performance and quality of the Learning Management System at Sta. Lucia Senior High School. This questionnaire will adhere to ISO/IEC 25010 standards, encompassing a range of facets, including system functionality, performance, compatibility, usability, reliability, security, maintainability, and portability.

With this, we can proceed with the evaluation of the SLSHS LMS's performance and quality based on ISO/IEC 25010 standards, and asses the user acceptance and satisfaction among the respondents and institutional bodes, including members of the faculty, administrators, and students.

B. Study Population

The study population includes the school principal, teachers, students, LIS (information system) coordinator, and LR (learning resource) coordinator at Sta. Lucia Senior High School. Notably, age and gender are considered non-influential factors in this study.

The testing will be monitored within a week and after testing and using the functions of the system, survey and interview will be conducted to gather feedback, and quantitative information from the involved users.

Inclusion Criteria:

- Administrator, LIS, and LR coordinator of SLSHS.
- Faculty members of SLSHS.
- Currently enrolled SLSHS students, Grade 11 and Grade 12.

Exclusion Criteria:

- Individuals who are not affiliated with SLSHS.
- Participants who do not consent to take part in the study.
- Participants that are unwilling to participate and test the system.
- Individuals who are not involved in the learning functions of the school.

C. Assessment of Resources

In our commitment to enhance academic management and learning at Sta. Lucia Senior High School, our study ensures access to the study population through close collaboration with school administrators and faculty members, who have access to critical student and faculty records.

Our study has been thoughtfully scheduled over a 12-month period, aligned with the academic year, to provide ample time for comprehensive data collection and analysis. This timeline allows for a thorough study without interfering with the academic commitments of students and faculty.

The researchers will effectively explain and communicate the research project's objectives and significance to the involved parties and the institution itself. This transparent communication is aimed at securing the support and collaboration of these entities, ensuring their willingness to participate in the project and grant access to pertinent data.

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<p>Prior to testing and data collection from the involved parties and users, a consent form will be obtained from them to ensure that these participants are voluntarily participating in the research process. This will also assure the participants that their sensitive information will be stored confidentially and used solely for the purpose of the research.</p> <p>All staff members involved in our study have received training on the research protocol, ensuring their familiarity with research-related duties and procedures. Regular refresher sessions and ongoing support mechanisms will be implemented to address any questions or concerns, ensuring that the study is executed with precision and consistency.</p> <p>These comprehensive resource considerations aim to facilitate a successful and well-executed study conducted by the researchers to fulfill the study's objectives.</p>			
<p>D. Study Procedures</p> <p>The study procedure involves a series of at least five meetings. Each meeting serves a distinct purpose in achieving the study's objectives. The first meeting, involves introducing the research project and engaging school administrators, faculty, and students in discussions about the project's goals and objectives. The second meeting is aimed at gathering insights, expectations, and specific requirements from school stakeholders, with an estimated duration of one to two hours. Following this, the third meeting, focuses on customizing and aligning the Learning Management System (LMS) to meet the school's unique needs. The fourth meeting marks the deployment and launch of the customized LMS in collaboration with school administrators and IT personnel. Alongside these meetings, a standardized survey will be distributed to school administrators, faculty, and students to collect feedback and insights about the LMS.</p> <p>The survey, created by our research team, that adheres with the ISO/IEC 25010 standards will be distributed while maintaining confidentiality of information. Once the data is collected, it will be analyzed to assess the effectiveness of the LMS in enhancing academic management and learning. The study's findings will be compiled into a comprehensive report, outlining the impact of the LMS within the school. This structured procedure ensures that all aspects of the study are meticulously conducted to achieve the research objectives.</p> <p>The survey will be made available in two different formats:</p> <ul style="list-style-type: none"> • For participants involved in physical assessments, a printed questionnaire will be provided for their responses. • For participants involved in online assessments, they will be able to access the survey through an online link using Google Forms. <p>We want to assure that the confidentiality of participants' personal information is of utmost importance. All personal data will be treated with the highest level of security and care, with stringent measures in place for handling and storage. Upon the study's conclusion, all personal information will be securely and completely destroyed.</p> <p>E. Data Collection</p> <p>The process of collecting data will encompass the compilation of demographic details, user opinions, statistics related to system usage, and qualitative perspectives regarding the module's usability. The research tools have been meticulously developed and verified in</p>			

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alignment with the principles set forth in ISO 25010 standards. To gain a comprehensive understanding of the data to be collected, here is the outline:

- Demographic information – these includes data such as name, gender, age, and user type (teacher, student, administrators/coordinates). This will give information about the environment of the study.
- Data related to the usage of the SLSHS LMS will be gathered. This includes the data within the used functions within the system such as user registration, managing assignments, quizzes, exams, grading, and other system functions.
- A survey questionnaire will be distributed to gather data about the system's performance. The survey will adhere to the standards of IS/IEC 20510.
- Participant's overall feedback regarding with the usability and overall performance of the system will be gathered as well.

F. Data Analysis

• Sample Size Considerations

The study will use a stratified random sampling technique to ensure the representation of different user groups (administrator, teachers, students) within Sta. Lucia Senior High School.

The sample size was determined based on a 90% confidence level and a 10% margin of error using the following formula: $n = (Z^2 * p(1-p)) / E^2$

Sample Size Calculation:

Confidence Level: 90%

Margin of Error: 10%

Where: Z (Z-score for a 90% confidence level) ≈ 1.645 (standard value for a 90% confidence level).

p (estimated proportion) = 0.5 (maximum variability to get the largest sample size).

E (margin of error) = 0.10 (10%).

(8) Safety and Monitoring Plan (If applicable)

In the context of our study on the Learning Management System (LMS) enhancement, several crucial considerations are in place to ensure the effectiveness, security, and ethical responsibility of the system's operation.

Data Privacy: It is imperative that the LMS provides sophisticated access control mechanisms to safeguard sensitive educational documents. This will guarantee that only authorized users, including school administrators, faculty, and students, have access to confidential academic materials. Achieving this objective can be realized through the implementation of either role-based access control, where access is determined by user roles, or user-based access control, which tailors access rights to specific individuals.

Data Encryption: Security remains paramount, and therefore, the LMS must employ robust data encryption mechanisms for documents, both at rest and in transit. Encryption is a pivotal tool that renders academic data indecipherable, even if unauthorized access is attempted. This safeguard ensures the privacy and security of educational materials shared within the system.

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In the context of our study on the Learning Management System (LMS) enhancement, several Document Disposal: In line with the study's objectives and the retention policies of educational documents, the LMS will automatically archive documents from the system based on their specific retention periods. This ensures that data is stored and disposed of responsibly, adhering to data protection and academic compliance standards.

Backup Recovery Mechanism: The study also recognizes the significance of a backup recovery mechanism within the LMS. This mechanism safeguards critical educational documents from potential loss due to hardware failures, unforeseen disasters, or other unexpected events. To ensure data integrity, the LMS will perform regular backups of documents and data stored within the system.

Security Measures: The LMS will be fortified with robust security measures, safeguarding it with the same level of security as primary data systems. A comprehensive approach to network security, which encompasses technical, administrative, and physical security measures, will be implemented to ensure the protection of academic data. Additionally, symmetric encryption using the Advanced Encryption Standard (AES) will be employed to provide an additional layer of security, particularly for sensitive academic information within the LMS.

These considerations and security measures are integral to our study on enhancing academic communication and learning through the Learning Management System, promoting a responsible, secure, and ethical educational environment for all stakeholders.

(9) Limitations

No limitation applicable to the study

(10) Ethical Considerations

A. Informed Consent (Applies to studies using human subjects)

Informed Assent for Minor Participants:

Given the involvement of minor students in our study, we hold ethical considerations in high regard. Prior to their participation, we acknowledge the importance of informed assent. To this end, we have prepared assent forms that will be provided to both the minor students themselves and their parents or legal guardians. These forms serve as a means to obtain voluntary and informed agreement from the minor students, expressing their willingness to participate in the study. For the parents or legal guardians, the assent forms provide essential information about the study's objectives, procedures, and data collection methods. We emphasize that the participation of minor students will be entirely voluntary, and their decision to participate or abstain will be respected without any form of coercion. Additionally, the assent forms will underscore the confidentiality and privacy of all participants, reiterating our commitment to safeguarding their personal information.

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Data Privacy and Confidentiality:

To ensure the privacy and confidentiality of all participants, we will employ robust data privacy measures. All personal information, survey responses, and other study-related data will be securely stored and maintained. We affirm our commitment to maintaining the anonymity of participants by using unique identifiers rather than personal names. The data collected will be used exclusively for research purposes and will not be disclosed to unauthorized individuals. Moreover, the assent forms will explicitly mention our dedication to data privacy and confidentiality, assuring participants and their parents or guardians of the ethical handling of their information.

Protection of Vulnerable Participants:

As minor students are considered vulnerable participants, additional care will be taken to ensure their well-being and comfort throughout the study. Any queries or apprehensions expressed by the students or their parents or guardians will be addressed promptly and with the utmost sensitivity. It is our ethical responsibility to provide a safe and respectful environment for all participants.

B. Risks and Side Effects (Applies to studies using human subjects)

1. Potential Risks

The study on LMS enhancement carries several potential risks and side effects. Data security risks include the possibility of data breaches or vulnerabilities, which could lead to unauthorized access to sensitive educational data. Privacy concerns may arise as data collected through surveys or interactions within the LMS could inadvertently reveal sensitive information about participants. There is a risk of disruption to regular academic activities, particularly if changes to the LMS lead to user confusion or system downtime. Survey-related risks include potential discomfort or distress to some participants due to the nature of the questions or the time required for completion. Obtaining assent from minor students and consent from their parents or guardians may pose challenges, as some individuals may not fully understand the study's purpose or implications. Technical glitches or system failures during LMS implementation may temporarily disrupt access to educational materials and resources. It's important to note that these risks are carefully considered, and the study is designed to mitigate them through strong security measures, privacy safeguards, comprehensive testing, and ethical practices, all with the aim of improving the academic management and learning experience while minimizing potential negative impacts.

C. Benefits to Subjects (Applies to studies using human subjects)

Participation in the study offers several potential benefits to subjects. Students may experience an improved learning experience with the enhanced LMS, gaining easier access to educational resources, collaborative tools, and a user-friendly interface that can enhance their comprehension of course materials. School administrators and faculty can anticipate better academic communication and collaboration, with the LMS providing efficient channels for information sharing, discussions, and student progress monitoring. The streamlined LMS can save time and resources for both educators and students, contributing to improved time management and resource utilization. Subjects' participation provides valuable data and insights for administrators and educators, informing future decisions and instructional enhancements. Moreover, by engaging in the study, subjects contribute to educational research and have the opportunity to impact the development of more effective educational technologies, potentially benefiting a broader educational community. Ethical considerations and data privacy are paramount, ensuring that

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participants' personal information is handled with the utmost care, reinforcing a positive academic environment.

D. Costs to Subject (Applies to studies using human subjects)

Participants will not be subjected to any financial expenses as a consequence of their involvement. The study has been structured to be completely free of charge for participants, eliminating any financial responsibilities associated with their participation in the research.

E. Compensation to Subject (Applies to studies using human subjects)

Participants will not receive compensation for their involvement in the study. Participation is entirely voluntary and does not include any monetary or non-monetary rewards.

F. Provisions for vulnerable subjects (Applies to studies using human subjects)

While there are no vulnerable subjects expected to partake in this study, all participants will be afforded equal respect and their rights and welfare will be carefully considered throughout the research process.

G. Subject Privacy and Data Confidentiality (Applies to studies using human subjects)

1. Privacy of Participants

The privacy of all participants in the study is of paramount importance. Personal information, such as names, contact details, or any identifiable data, will be securely stored and treated with the utmost confidentiality. To ensure anonymity, participants will be assigned unique identifiers, and these identifiers will be used in all data collection processes. No personally identifiable information will be included in any publications or reports resulting from the study. Informed consent will be obtained from adult participants, outlining the study's objectives, data collection methods, and privacy safeguards. Assent will be sought from minor students, with parental or guardian consent secured. The informed consent process will provide a comprehensive understanding of privacy protections and participants' rights.

2. Confidentiality of Data

Data collected as part of this study will not be disseminated to external parties or organizations outside of our research institution. It will be used exclusively for research and analysis purposes related to the study on Learning Management System (LMS) enhancement. Data confidentiality will be maintained through secure storage on password-protected, encrypted devices within our institution's protected network. Physical storage will be within locked cabinets, accessible only to authorized personnel. Access to the data will be restricted to members of our research team directly involved in the study, with oversight from the IT department to ensure data confidentiality. The results of the data will be used for research purposes, including academic presentations within our institution and submission to professional journals for publication. In all cases, data will be presented in an aggregated, non-identifiable form to protect individual privacy.

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**PUP-UNIVERSITY RESEARCH ETHICS CENTER****Study Protocol /
Research Protocol**UREC Form No. 10
Version No. 1**3. Plan for Record Retention and Disposal**

As part of our data management, research records will be retained for a specified duration, in line with institutional policies and data retention regulations. At the conclusion of this retention period, data records will be securely and permanently disposed of, with all identifying information removed to ensure ongoing privacy and confidentiality. This retention and disposal plan is designed to safeguard both the privacy of participants and the responsible management of research data.

4. Limits to Confidentiality

While every effort will be made to protect the privacy and confidentiality of participants, it's important to acknowledge that legal obligations may impose limits on confidentiality. If the study reveals instances of harm or potential harm to participants or others, the research team is legally bound to report these findings to the relevant authorities to ensure the safety and welfare of all involved parties. These limits to confidentiality will be thoroughly explained to participants during the informed consent process, underlining our commitment to safeguarding their privacy while adhering to legal and ethical responsibilities.

(11) Plan for Dissemination of Findings

To ensure the meaningful distribution of research outcomes, we have developed a comprehensive plan for disseminating our study's findings. This plan includes presenting our results at academic conferences and submitting them to professional journals, with the aim of contributing to the wider educational community. We will also create online resources, and establish feedback forums to engage our academic community and promote discussions about the study's outcomes. Throughout this process, we are committed to upholding privacy and confidentiality by presenting data in an aggregated, non-identifiable form and emphasizing the ethical obligation to respect participants' privacy.

(12) References

ISO/IEC 25010:2011. (n.d.). ISO. <https://www.iso.org/standard/35733.html>

(13) Appendices

See attached files for questionnaires, curriculum vitae, and consent forms.

	(14) Prepared by	(15) Endorsed by
Signature		
Name of proponent	Abad, Trisha A. Quintana, Krizia Ann C. Rosalia, Sharmaine V. Tulod, Kevin John L.	PROF. MARIA ESPERANZA H. REYES
Designation/position	Bachelor of Science in Information Technology – Student/Proponent	Faculty-in-Charge
Date	October 26, 2023	October 26, 2023

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CERTIFICATE NUMBER: SCP000413Q



PUP-UNIVERSITY RESEARCH ETHICS CENTER			
Informed Consent Form	UREC Form No.	11	Version No.
			1

Title of the Research Study	Implementing Learning Management System for Enhanced Academic Management and Learning
Researcher/s	1. Trisha A. Abad 2. Krizzia Ann C. Quintana 3. Sharmaine V. Rosalia 4. Kevin John L. Tulod
Contact Information of the Researcher/s	
Cellphone number	09991771854
Email address	trishaabad59@gmail.com
Cellphone number	09632149989
Email address	quintanakrizziaann@gmail.com
Cellphone number	09770612370
Email address	rosalia.sharmaine@gmail.com
Cellphone number	09395480070
Email address	kevinjohntulod017@gmail.com
Background	<p>The implementation of a web-based Learning Management System at Sta. Lucia Senior High School offers a reduction in paper-based submissions, enhances collaboration between students and teachers, incorporates interactive quizzes that integrate various academic platforms, and provides an electronic library for the effective accessibility of learning materials in the school. Furthermore, it will benefit students, teachers, and all stakeholders. By doing this, we are creating a modern and user-friendly platform that may transform how students and teachers experience education and introduce, promote, and support a hybrid mode of learning to enhance efficiency.</p> <p>This research project will be conducted at Sta. Lucia Senior High School, Novaliches District. This study is intended for students and teachers, with an improved learning management system to facilitate more effective learning and providing better-quality education.</p> <p>The participants in this study are senior high school students, faculty members, and administrators. The aim is to gather their insights and opinions on this learning management system to identify and address the problems and challenges they may encounter in a web-based learning management system.</p>

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Version No.

1

	<p>processes within the institution. We're creating a user-friendly online platform to help students and teachers have a better educational experience. This will also help make teaching and learning methods more effective as we adapt to changes in how we teach and learn.</p>
Procedures of the Study	<p>The study begins by experiencing how inconvenient it is for both students and teachers to use multiple platforms for a single purpose, considering the time it will consume, especially for schools that still don't have a blended/hybrid mode of learning due to their financial capacity. Based on these challenges, we are creating a web-based learning management system with features such as an electronic library, interactive quizzes, and other functionalities of a learning management system to facilitate efficient and effective communication and learning. We will conduct end-to-end testing to ensure that the system works. We will provide training and guidance to the participants before they start testing. Once the testing is done and it works perfectly, the learning management system will be ready for use by teachers, students, and administration.</p> <p>As participants start to test the learning management system, we will gather their feedback to assess how it enhances teaching efficiency and effectiveness for students. All the data gathered will help improve the learning management system.</p> <p>An orientation will be provided to these participants to give them an overview of the functions of the learning management system for different user groups, such as students, teachers, and administrators (lasting about 20 to 40 minutes). Participants will share their experiences and feedback through surveys and interviews. They will also be invited to continue testing the learning management system during the pilot phase. After a successful pilot phase, the Learning Management System will be ready for use.</p>
Benefits	<p>By participating in this research, you contribute to enhancing academic management and learning at Sta. Lucia Senior High School. Participating in this study has personal benefits, such as learning how to navigate the system. For teachers, it enables them to easily monitor their students' performance and reduce paper submissions. For students, they will have a more efficient and effective learning experience. For administrators, it allows them to manage both students and teachers easily. The participation of everyone will contribute to every student at Sta. Lucia Senior High School.</p>
Risks	<p>Participation in this study may have minimal risks, such as the disclosure of some participants' information. You have the option to discontinue your participation at any time without incurring any penalties.</p>

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	Informed Consent Form	UREC Form No.	11
		Version No.	1

Cost of Participation	Participation in this study is voluntary and not compulsory. There are no associated costs during the testing period. However, it is important to note that continuing this system for hosting for future use requires careful consideration.
Payment or Remuneration	As a token of appreciation for your participation, after the testing phase, we will hold a raffle. There will be 6 winners, and they can choose between GCash or a load worth 100 pesos.
Confidentiality	We are committed to protecting your data privacy, and we respect confidentiality. All the information the participants provide and entrust to us is considered confidential. Only authorized researchers can access the data. Furthermore, sensitive data and passwords will be encrypted both during transmission and while at rest. At the end of the testing period, we will dispose of any sensitive data in compliance with data protection regulations and the Data Privacy Act.
Voluntary Participation	Participation in this study is voluntary, and participants have the right to withdraw at any time. Please note that data withdrawal requests will only be considered during the initial day of testing. If you decide to withdraw during the testing phase, please contact us at slshslms@gmail.com.

Contact Information:

If you have questions about this research study, or you experience adverse effects as the result of participating in this study, you may contact the researcher/s whose contact information is provided on the first page.

The plan for this research study has been reviewed by the PUP Research Ethics Committee (PUP-REC). If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the researcher/s, please call us at (02) 5335-1787 local 235.

Consent Statement:

I have read and understood the provided information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Signature over Printed Name of Participant

Date


Trisha A. Abad

10-26-23

Date

Signature over Printed Name of Researcher


Krizua A. Quintana

10-26-23

Date

Signature over Printed Name of Researcher

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[Signature]
Sharmaine V. Recchia

Signature over Printed Name of Researcher

10 - 24 - 23

Date

[Signature]
Kevin John L. Tulod

Signature over Printed Name of Researcher

10 - 26 - 23

Date

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SLSHS LMS Survey					
Demographics					
Name (Optional):	Age:				
User Type: <input type="checkbox"/> Administrator <input type="checkbox"/> Instructor <input type="checkbox"/> Student	Gender <input type="checkbox"/> Male <input type="checkbox"/> Female				
Direction: Please put a check on the criteria of your choice. 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 – Disagree, 1 – Strongly Disagree					
Functional Suitability	5	4	3	2	1
SLSHS LMS effectively fulfills its intended functions and requirements.					
SLSHS LMS includes all the necessary features and capabilities needed for effective learning					
SLSHS LMS aligns with the functional goals and objectives set for educational courses.					
Performance Efficiency	5	4	3	2	1
SLSHS LMS operates with satisfactory speed and responsiveness.					
SLSHS LMS can handle and process multiple users and processes.					
Users experience quick response times when interacting with the SLSHS Learning Management System.					
Compatibility	5	4	3	2	1
The system is compatible with a wide range of web browsers, ensuring a consistent user experience.					
Usability	5	4	3	2	1
Users find the interface intuitive and user-friendly, with easy navigation and clear instructions.					
SLSHS LMS offers a personalized learning experience, allowing users					

to set preferences and track progress easily.					
SLSHS LMS is error-free and available to use anytime.					
Reliability	5	4	3	2	1
SLSHS LMS provides the needs of its users under normal operations.					
SLSHS LMS is operational and accessible at a time needed for use.					
SLSHS LMS can operate with no frequent errors.					
SLSHS LMS has minimal downtime, with a high level of availability, ensuring uninterrupted learning.					
Security	5	4	3	2	1
SLSHS LMS can ensure that user data is securely stored and protected against unauthorized access or breaches.					
SLSHS LMS enforces strong authentication and authorization mechanisms to safeguard user accounts.					
SLSHS LMS account verification is working properly.					
Portability	5	4	3	2	1
The system can be accessed and used across different devices with consistent performance and usability.					
Users can seamlessly switch between different platforms (e.g., desktop, tablet, mobile) without issues.					
Comments and Suggestions:					
_____ Signature			_____ Date		

TRISHA A. ABAD

17B Arty 1 Brgy. Talipapa Novaliches Q.C
Contact Number: 09991771854
Email: trishaabad59@gmail.com



OBJECTIVE:

To actively engage in the learning process by seeking knowledge, developing skills, and fostering personal growth.

PERSONAL DETAILS:

Date of birth:	August 26, 2002	Gender:	Female
Place of birth:	Pasig City	Age:	21 years old
Civil Status:	Single	Citizenship:	Filipino
Linguistic Proficiency:	Tagalog and English	Religion:	Roman Catholic

EDUCATION:

Tertiary:	Polytechnic University of the Philippines (Present)
Secondary:	Mystical Rose School of Caloocan Inc. (June 2018- 2020) Kalayaan National High School (2016-2018) Tandang Sora Nationa High School (2014-2016)
Primary:	Placido Del Mundo Elementary School (2011-2014) Kalayaan Elementary School (2007-2011)

SPECIAL SKILLS:

- Skilled in making videos look great and captivating through editing.
- Familiar with PHP and C#, which can be used to create and improve websites and software.
- Proficient in creating prototypes to effectively convey concepts and ideas.

REFERENCES:

Name	Position	Number
Mr. Loester N. Gallano	Seafarer	09202846604
Ms. Marianne Hipolito Lirio	Master Teacher II	+85252448959
Ms. Ma. Angela C. Barcelona	Master Teacher III	09565283825

I hereby certify that all the information contained in the resume is correct and true to the best of my knowledge and understanding.



TRISHA A. ABAD

KRIZZIA ANN C. QUINTANA

Magsaysay Blvd, Corner Santol St, Santa Mesa, Manila, 1008 Metro Manila
Contact Number: 09632149989
Email: quintanakrizzaann@gmail.com



OBJECTIVE:

To leverage my skills, experience, and passion to excel in a dynamic professional environment, contributing to the success and growth of the organization while continuously expanding my knowledge and expertise.

PERSONAL DETAILS:

Date of birth:	February 25, 2002	Gender:	Female
Place of birth:	Bayambang, Pangasinan	Age:	21 years old
Civil Status:	Single	Citizenship:	Filipino
Linguistic Proficiency:	Filipino and English	Religion:	Roman Catholic

EDUCATION:

Tertiary: Polytechnic University of the Philippines (Present)

Secondary: Bayambang National High School (Senior High School) (June 2018- 2020)
Bayambang National High School (Junior High School) (2014-2018)

Primary: Atainan Elementary School (2008-2014)

SPECIAL SKILLS:

- Proficient in Website Design and Development
- Skilled in Frontend Web Development and User Interface (UI) Design

I hereby certify that all the information contained in the resume is correct and true to the best of my knowledge and understanding.



KRIZZIA ANN C. QUINTANA

SHARMAINE V. ROSALIA

0209 area 5 brgy. Botocan, proj 2 Quezon City.
Contact Number: 09770612370
Email: rosalia.sharmaine@gmail.com



OBJECTIVE:

To secure a position that leverages my skills and knowledge, allowing me to enhance my expertise while contributing to the success and growth of the organization.

PERSONAL DETAILS:

Date of birth:	October 27, 2001	Gender:	Female
Place of birth:	Quezon City	Age:	21 years old
Civil Status:	Single	Citizenship:	Filipino
Linguistic Proficiency:	Tagalog and English	Religion:	Roman Catholic

EDUCATION:

Tertiary: Polytechnic University of the Philippines (Present)

Secondary: Quirino High School (June 2018- 2020)
Grade 12 (Computer Programming (Java) NC III)
Grade 11 (Computer Programming (Oracle) NC III)
Quirino High School (2014-2018)

Primary: Quirino Elementary School (2008-2014)

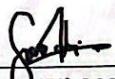
SPECIAL SKILLS:

- Able to do Java, PHP, C, C# Programming.
- Skilled in user-centered UI/UX design to optimize user experience.
- Experienced in wireframing and prototyping for more efficient design visualization.
- Proficient in conducting usability testing to evaluate and enhance design usability.

REFERENCES:

Name	Position	Number
Mr. Reynold Lorens M. Acal	SHS TBL-ICT Teacher I	0945 498 5517
Ms. Marisol Mabazza	MT II - SHS	0995 567 4878
Mr. Rodel Rivera	Master Teacher II	0905 662 7067

I hereby certify that all the information contained in the resume is correct and true to the best of my knowledge and understanding.



SHARMAINE V. ROSALIA

KEVIN JOHN TULOD

Blk. 4 Lot 7 Fidel St. Brgy San Agustin, Novaliches
Quezon City, 1117 Metro Manila
Contact Number: 09395480070
Email: kevinjohnkulod017@gmail.com



OBJECTIVE:

Aspiring and enthusiastic student with a strong interest in programming and software development. Eager to learn and expand my skills in various programming languages, frameworks, and technologies. Proven ability to tackle coding challenges and work on personal projects, showcasing dedication and determination to excel in the field.

PERSONAL DETAILS:

Date of birth:	October 17, 2001	Gender:	Male
Place of birth:	Quezon City	Age:	22 years old
Civil Status:	Single	Citizenship:	Filipino
Linguistic Proficiency:	Tagalog and English	Religion:	Christian

EDUCATION:

Tertiary: Polytechnic University of the Philippines (Present)

Secondary: Springfield School of Novaliches, Inc. (June 2018- 2020)
Grade 12 (STEM)
Grade 11 (STEM)
St. Patrick School of Novaliches, Inc. (2014-2018)

Primary: Brain Integrated School (2008-2014)

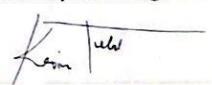
SPECIAL SKILLS:

- UI/UX: I excel in creating user interfaces and experiences that seamlessly blend aesthetics with functionality to enhance user satisfaction and engagement.
- Visual Design: My expertise in visual design enables me to craft captivating and visually appealing graphics and layout that leave a lasting impact.
- Process Flow: I am skilled in optimizing and streamlining workflows and processes, resulting in increased efficiency and productivity within teams and projects.
- Leadership: As a strong leader, I have successfully guided teams, while achieving project goals and exceeding expectations.

REFERENCES:

Name	Position	Number
Mr. Edd Fernan Gonzales	SHS Teacher	0968 536 8474
Ms. Carla S. Halbay	SHS Teacher	0912 339 6022
Ms. Edemsclaire Templo	CNX Team Leader	0956 883 4350

I hereby certify that all the information contained in the resume is correct and true to the best of my knowledge and understanding.


KEVIN JOHN L. TULOD



POLYTECHNIC UNIVERSITY OF THE PHILIPPINES
STA. MESA MANILA
College of Computer and Information Sciences



Informed Parental Consent Form

We invite you and your child to take part in a capstone study being conducted by Trisha Abad, Krizzia Ann Quintana, Sharmaine Rosalia and Kevin John Tulod who are students of the Polytechnic University of the Philippines, as part of their **“Implementing Learning Management System for Enhanced Academic Management and Learning”** capstone research.

We are doing a study to create a special Learning Management System (LMS). It is designed to make learning easier and better for students as well as for their teachers. If you consent for your child to be a part of our study, your child will use the system and give us feedback for the system's continual improvement.

Participation is entirely voluntary. If you give permission for your child to take part of this study, we are very appreciative.

We will take your child's privacy seriously. The information and feedback provided by your child will be kept confidential. The person in charge will not disclose any personal details or data to anyone, including parents, teachers, or other students. Data collected will be used for research purposes only.

Signing here means that you have read and understand this form and give your consent for your child to participate in this study.

Informed Consent Statement

I, _____, give permission for my child, _____ to participate in the research project entitled, **“Implementing Learning Management System for Enhanced Academic Management and Learning”**. I have read and understood the information provided in this consent form. I understand that my child's right to withdraw from participating or refuse to participate will be respected and that his/her responses and identity will be kept confidential. I give this consent voluntarily.

Parent/Guardian Signature:

Signature

Date

Investigator Signature

Date



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STA. MESA MANILA
College of Computer and Information Sciences



Child Assent Form

I have been informed that my parent(s) have given permission for me to participate, if I want to, in a research study about “**Implementing Learning Management System for Enhanced Academic Management and Learning**” My participation in this project is voluntary and I have been told that I may stop my participation in this study at any time. If I choose not to participate, it will not affect my grades in any way.

Name

Date

Signature

Date