PSU-URDANETA IT INTERNSHIP DOCUMENT MANAGEMENT AND TRACKING PORTAL

PROJECT PROPOSAL BY

GORA BELLS
CONSULTING + SOLUTIONS

PREPARED BY
JEFFRICK DANGLAPEN
GABRIEL MARK LIPAYSA
JOHN PERT MILLENA
MARCUS DIETHER QUIBOL

OCTOBER 2025

PSU-Urdaneta IT Internship Document Management and Tracking Portal

A Project Proposal

by

Gora Bells Consulting and Solutions

Prepared by

Jeffrick Danglapen

Gabriel Mark Lipaysa

John Pert Millena

Marcus Diether Quibol

IT-4C

I. Introduction

A. Background of the Firm

Gora Bells Consulting and Solutions aims to be a trusted provider of reliable and effective IT solutions that help organizations make better use of technology in achieving their goals. The company's vision is to support businesses in improving their operations and performance through practical and affordable digital tools and services.

Launched in 2025, the company was founded by Jeffrick Danglapen (Executive), Gabriel Mark Lipaysa (Finance), John Pert Millena (Technology), and Marcus Quibol (Information).

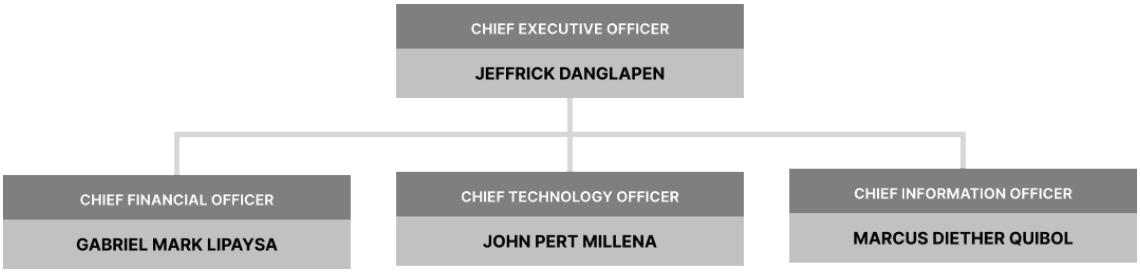

Figure 1. *Organizational Chart of Gora Bells Consulting and Solutions*

B. Purpose of the Proposal

The project proposes to help the client, the Information Technology Department of the Pangasinan State University Urdaneta (PSU Urdaneta), to enable the digitalization of the submission and feedback for all the documents required for the internship of fourth year students. The system will allow students to upload requirements, coordinators to approve or return submissions for further actions, and to monitor all requirements in one digital platform.

C. Significance of the Project

The project aims to address the challenge of manually tracking numerous documents that each student submit for before, during and after internship. While paper submissions will still be required, this system provides a convenient digital platform where students can upload their documents for initial review. Instructors and coordinators can then assess the submissions, label them as “Complied” or “Action Needed,” and provide comments or feedback directly through the system. This reduces the need for frequent in-person follow-ups and streamlines communication among all parties. This project will benefit the following:

Student interns. They will have a more convenient and secure way to submit and monitor their internship documents. The system will help them keep track of deadlines, ensure compliance with requirements, and reduce the risk of misplaced or incomplete submissions. Students will also gain a clearer overview of their progress throughout the internship period.

Instructors and coordinators. They will be able to manage and review student submissions more effectively through centralized tracking and automated updates. The system will help streamline verification, evaluation, and approval processes, saving time and improving accuracy. Instructors and coordinators can also generate reports and maintain records more easily, supporting better decision-making and documentation for academic or institutional purposes.

II. Conceptual Framework

A. Enterprise Architecture Overview

Enterprise Architecture will serve as the foundation for the system's structure, aligning the portal's design with the school's academic workflow. It ensures that all components from data handling to user interface are integrated and adaptable.

B. The Zachman Framework

The Zachman Framework will be used to classify and organize every part of the Internship Portal according to six key questions: What, How, Where, Who, When, and Why.

This approach ensures that every important component such as data, processes, people, and goals is clearly defined and documented.

C. The TOGAF Framework

The TOGAF will guide the process of developing the Internship Portal. It provides the step-by-step method through its Architecture Development Method (ADM) to design, implement, and maintain the system.

Phase 0: Preliminary Phase. In this phase, the project team defines the scope, objectives, and governance structure of the Internship Portal. Stakeholders such as students and coordinators are identified. Roles and responsibilities are assigned to ensure accountability during the project's execution. The team also establishes architectural principles that emphasize usability, data accuracy, and security.

Phase 1: Architecture Vision. At this stage, the team develops a clear vision for the Internship Portal to support the existing paper-based process by providing a digital platform for reviewing, labeling, and giving feedback on student internship documents, lessening the need for frequent in-person submissions, minimize manual

tracking, and enhance communication between students and instructors. The scope of the system includes document submission, review and labeling, feedback, and progress tracking.

Phase 2: Business Architecture. The current manual process is analyzed and converted into a parallel digital workflow. The team models how students submit documents, how coordinators review and approve them. Business rules such as file formats, and approval processes are defined. This phase ensures that the system reflects the university's actual business processes.

Phase 3: Information Systems Architectures. In this phase, the system's overall structure is designed, covering both data and application components. The team defines how documents, user information, and feedback are stored, managed, and accessed within the platform. Interfaces for students, instructors, and coordinators are outlined to ensure a user-friendly and efficient workflow that supports document review, labeling, and tracking.

Phase 4: Technology Architecture. In this phase, the team designs the technical infrastructure that supports the system. The Internship Portal is developed as a web-based application using NodeJS, MongoDB Atlas, and EJS. It is hosted on a cloud platform for accessibility and reliability. Security measures such as password encryption are established to protect user data.

Phase 5: Opportunities and Solutions. After analyzing the business and technical designs, the team identifies areas for improvement and proposes practical solutions. Automated email notifications, document version tracking, and integrated evaluation forms are reviewed for possible addition for enhancements. These

solutions directly address the current issues of lost files, late submissions, and communication delays.

Phase 6: Migration Planning. The project team develops a detailed implementation timeline and transition plan for building the portal. Tasks such as system design, coding, testing, and deployment are arranged into milestones. Team members are assigned to specific responsibilities, and the order of activities is defined to ensure an efficient workflow.

Phase 7: Implementation Governance. During this phase, the team monitors and evaluates the system's actual development. Each module such as user login, document upload, approval, and feedback is tested to ensure that it functions properly and meets the project's standards. All bugs, errors, and feedback from users are recorded and addressed immediately before the final deployment.

Phase 8: Architecture Change Management. Once the system is deployed, the team establishes a maintenance and update process to ensure long-term reliability. A change management policy is implemented for handling future feature requests, bug fixes, or interface improvements. User feedback is collected regularly to guide updates and ensure continuous enhancement of the portal's performance.

D. Integration of Zachman and TOGAF

The integration of the Zachman and TOGAF frameworks provides a comprehensive approach to developing the Internship Portal. While the Zachman Framework ensures that every element of the system, from data and processes to roles and objectives, is clearly defined and organized, TOGAF provides the structured methodology to design, build, and manage these components effectively. Together, they create a balanced framework that aligns

technical development with institutional goals, ensuring that the Internship Portal is both well-structured and adaptable to future needs.

III. Objectives of the Project

The project aims to design and implement a digital Internship Portal that will automate and centralize OJT document handling and communication between students and instructors.

Specifically, the developers aim to achieve the following specific objectives:

1. Classify and organize system data and processes using the Zachman Framework;
2. Design the system's architecture following the TOGAF ADM cycle;
3. Provide user-friendly interfaces for students, instructors and coordinators; and,
4. Establish a secure repository for all internship-related files and transactions.

IV. Methodology

A. Data Gathering and Analysis

To effectively understand and address the requirements for the proposed Internship Portal of the Pangasinan State University – Urdaneta City Campus in the College of Computing, Department of Information Technology, the development team will employ a comprehensive data gathering and analysis approach. Developers will conduct semi-structured interviews with key stakeholders such as internship coordinators and students. These interviews aim to collect detailed insights regarding existing challenges, user expectations, and specific system requirements.

To supplement these firsthand accounts, the developers will gather and review relevant documentation. These include documents used by the students before, during, and after an internship such as record files, waivers, legal agreement forms, etc. These documents will be requested formally through the client's project liaison and accessed via secure file-sharing platforms or on-site reviews, depending on confidentiality requirements. The strategy for document collection will emphasize completeness and version control, ensuring that all materials are current, verified, and relevant to the scope of analysis.

All collected data, whether from interviews or document reviews, will be systematically analyzed to identify patterns, prioritize user needs, and outline key problem areas. The findings will serve as the foundation for defining functional requirements and designing solutions that align with the client's operational objectives.

B. Application of Zachman Framework

Scope Context.

- **What:** List of OJT documents and templates (MOA, DTR, evaluation forms)
- **How:** General OJT document submission process
- **Where:** Web-based platform accessible via browser
- **Who:** Students, Instructors, and Coordinators
- **When:** OJT schedules per semester
- **Why:** Improve efficiency and reduce manual handling

Business Context.

- **What:** Student, Instructor, File, Evaluation

- **How:** Business rules for uploading, approval, and feedback
- **Where:** School website domain and database server
- **Who:** OJT Coordinator, Department Head
- **When:** Weekly report generation and submission deadlines
- **Why:** Promote transparency and faster communication

System Logic.

- **What:** ERD showing data relationships
- **How:** Upload, Review, and Feedback
- **Where:** Logical data flow between users and database
- **Who:** Student, instructor, and coordinator
- **When:** Notification timing (e.g., after upload or review)
- **Why:** Ensure accuracy and data security

Technology Physics.

- **What:** Database schema and storage structure
- **How:** Implementation using NodeJS, EJS, and MongoDB using Atlas
- **Where:** Cloud-based hosting environment
- **Who:** Developers, testers
- **When:** Two-week sprints for feature completion
- **Why:** Maintain scalability and usability

Component Assemblies.

- **What:** Data tables and API endpoints
- **How:** Deployed web modules and features
- **Where:** Production and backup servers

- **Who:** IT support and deployment team
- **When:** System updates and maintenance schedule
- **Why:** Ensure portal reliability

Operational Classes.

- **What:** Real uploaded files and reports
- **How:** Actual use of upload and feedback modules
- **Where:** Accessed via any internet-connected device
- **Who:** Students and faculty users
- **When:** Real-time submission and approval
- **Why:** Achieve digital transformation of OJT workflow

C. Application of TOGAF ADM Phases with Techniques and Diagrams

Preliminary Phase

Stakeholder Map. The Stakeholder Map, seen on Figure 2, identifies all the key individuals or groups who are involved in, affected by, or benefit from the Internship Portal. The matrix classifies each stakeholder based on their power and interest towards the project.

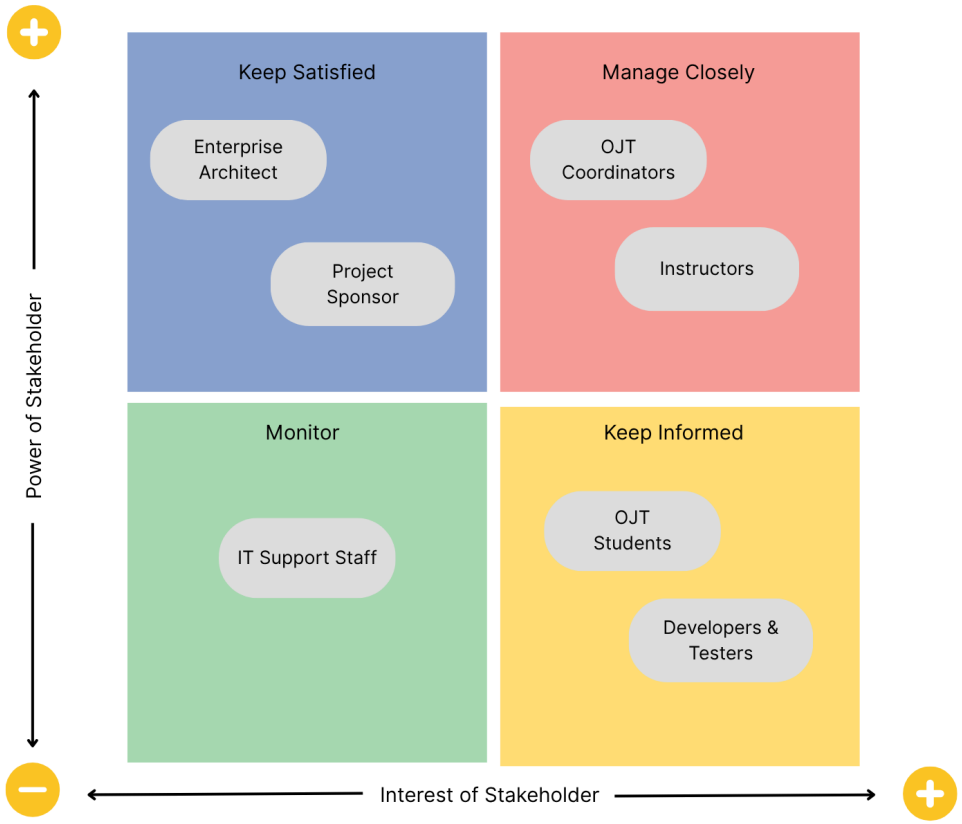

Figure 2. *Stakeholder Map*

A. Manage Closely

Key stakeholders who have a significant influence on the project and are highly invested in its outcome. Their support is crucial for the success of the project, and their opposition can be detrimental.

Project Sponsor. Authorizes funding, sets the project's objectives, and ensures alignment with the institution's strategic goals. Their decisions can make or stop the project, so they must be closely managed and regularly updated.

Enterprise Architect. They ensure that the system complies with technical and institutional standards. They also guide key decisions about the

system’s structure and integration. Because of their dual influence on approval and execution, they fall under this quadrant.

B. Keep Satisfied

These stakeholders have a great deal of power but are not deeply interested in the project's day-to-day details. They can be a major source of risk, as they may use their power to obstruct the project if they become dissatisfied.

OJT Coordinators. They oversee the entire internship program. Their support is critical since they’ll implement the system in actual operations, but they might not need to be involved daily in coding or testing. Ensuring they are satisfied keeps the project aligned with administrative needs.

Instructors. Supervise students’ requirements and evaluations. They influence how the portal will be accepted by faculty, so maintaining their satisfaction ensures user adoption and cooperation during rollout.

C. Keep Informed

These individuals may not have the power to stop a project, but they are highly interested in its progress and outcomes. This group can be a source of valuable insights and can act as supporters for your work.

OJT Students. They are the main users who are directly affected by how the system works, such as: ease of uploading, communication, and notifications. They should be kept informed about updates, deadlines, and system functions to ensure effective use.

Developers and Testers. They are responsible for implementing system requirements but follow the direction set by project leaders. They need consistent communication but don't hold final authority. Keeping them informed helps them build the system correctly.

D. Monitor

This group has minimal influence and little interest in the project. They require the least amount of attention but should not be completely ignored.

IT Support Staff. Individuals who maintain the system post-launch, such as: troubleshooting, backups, and updates. They don't influence early development decisions, but their feedback ensures sustainability later. Thus, they are monitored for emerging concerns but not heavily managed during early stages.

Architecture Vision

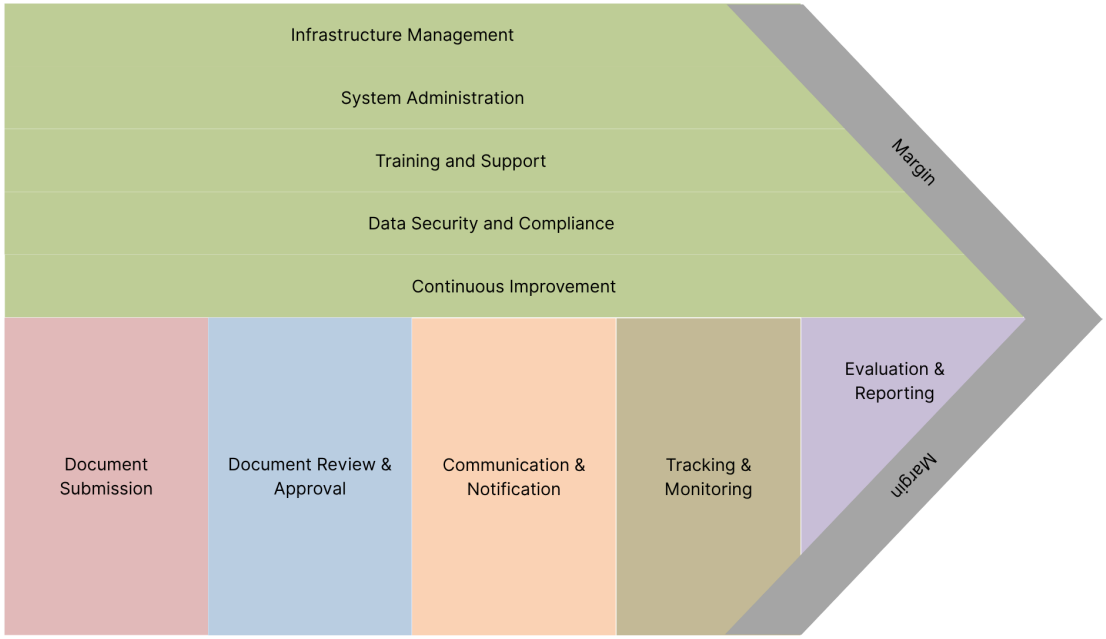

***Figure 3**. IT Value Chain Diagram*

The primary activities include:

1. **Document Submission:** Students upload required OJT documents such as MOA, DTR, and evaluation forms through the online portal.
2. **Document Review and Approval:** Instructors or coordinators review submitted files, provide feedback, and approve requirements through the portal.
3. **Communication and Notification:** Automatic updates are sent to students and instructors regarding document status (approved, pending, needs revision).
4. **Tracking and Monitoring:** Coordinators monitor submission progress and compliance with deadlines.
5. **Evaluation and Reporting:** Instructors and coordinators generate evaluation reports and summaries for each student's OJT performance.

While the supporting activities are the following:

1. **Infrastructure Management:** Ensures stable hosting, server uptime, and database performance for the portal.
2. **System Administration:** Manages user roles, access levels, and permissions for students, instructors, and coordinators.
3. **Training and Support:** Provides orientation and technical help for users to adapt to the new digital process.
4. **Data Security and Compliance:** Protects all uploaded data and ensures compliance with data privacy standards.
5. **Continuous Improvement:** Incorporates user feedback for updates and system enhancements.

Business Architecture

The Business Architecture defines the main functions, processes, and roles that support the Internship Portal's operations and align them with institutional goals. Core functions include Internship Management, Document Processing, Communication and Feedback, and Evaluation and Reporting.

The BPMN, Use Case, and Organizational Structure diagrams collectively model how users and processes interact within the system. The BPMN diagram maps the end-to-end internship workflow—from registration and document submission to review and evaluation. The Use Case diagram highlights user interactions such as uploading, approving, and reporting, while the Organizational Structure diagram

clarifies roles and reporting relationships among students, instructors, coordinators, and administrators.

Together, these models provide a unified view of how business activities, user roles, and system functions work together to enable efficient and transparent internship management.

V. Expected Deliverables

This chapter outlines the major outputs expected from the development of the Internship Portal project which will serve as the foundation for implementing an effective enterprise architecture framework that supports the institution's digital transformation goals.

1. Enterprise Architecture Blueprint (Current and Target State)

This blueprint will describe both the existing paper-based internship documentation process and the envisioned digital workflow. It will illustrate how the Internship Portal integrates with current operations to streamline document review, feedback, and progress tracking. The blueprint will serve as a roadmap that aligns the project's objectives with institutional needs.

2. Repository of Architecture Diagrams and Documentation (Zachman-structured)

A centralized repository will be created to store all architecture-related diagrams, models, and supporting documentation. Using the Zachman Framework as a guide, the repository will organize components such as data structures, process

flows, and user roles to ensure consistency, traceability, and easy reference throughout the project lifecycle.

3. TOGAF ADM-based Architecture Roadmap

The Architecture Roadmap will outline the step-by-step development of the Internship Portal based on the TOGAF Architecture Development Method (ADM). It will define key milestones, deliverables per phase, and implementation timelines, ensuring a structured and methodical approach from planning to deployment.

4. Governance and Change Management Plan

This plan will define the policies, procedures, and responsibilities for managing updates, revisions, and maintenance of the system. It will establish clear decision-making structures, change approval workflows, and version control mechanisms to maintain the system's integrity and sustainability over time.

5. Stakeholder Training and EA Adoption Guide

A training and adoption guide will be developed to assist all users—including students, coordinators, and administrators—in understanding the system's functions and processes. It will include orientation materials, user manuals, and best practices to promote smooth adoption and long-term system utilization.

VI. Benefits and Impact

The Internship Portal offers a practical solution to improve the current paper-based documentation process. By allowing students to submit their internship documents online for review and feedback, it minimizes repeated office visits and enhances communication between students and coordinators. Instructors and coordinators benefit from a more organized system for tracking, labeling, and

evaluating submissions, reducing manual workload and improving record accuracy. For the institution, the portal promotes efficiency, transparency, and better data management, supporting its goal of digital transformation while maintaining existing paper requirements. Overall, the system enhances convenience, accountability, and collaboration in managing internship records.

VII. Project Timeline

Figure 2 illustrates the projected timeline for the project. It includes elements from TOGAF including preliminary and vision, business architecture, information and technology architecture, solutions and planning, as well as governance and change.

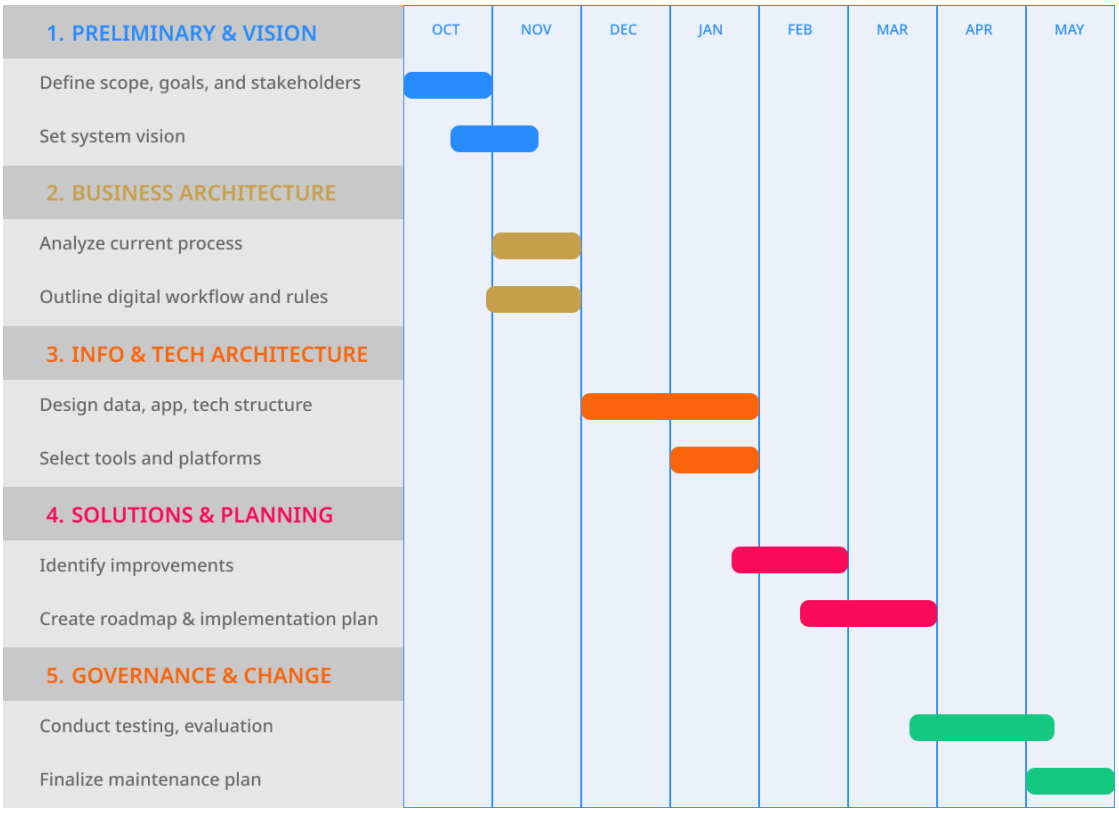

Figure 2. *Gantt chart for Internship Portal project*

VIII. Budget Estimate

Table 1. *Budget Estimate for the Project*

	Description	Estimated Cost (PHP)
Training Sessions for EA Modeling	Conducting hands-on training sessions for the project team to understand and apply Enterprise Architecture (EA) concepts such as Zachman and TOGAF. This includes creating modeling exercises, providing instructional materials, and facilitating discussions.	₱80,000.00
Consultant / Analyst Fees	Engaging an external consultant or IT systems analyst to review the architecture, framework application, and design structure. This ensures that the Internship Portal follows best practices in system integration and documentation.	₱30,000.00
Documentation and Governance Setup	Preparation of all supporting documents, diagrams, and reports required for the project. This includes setting up the architecture repository, establishing governance roles, and producing printed/digital materials for submission and presentation.	₱6,000.00
Miscellaneous Expenses	Covers minor and unforeseen expenses such as internet costs, data storage, online tools, or printing materials needed during system development and presentation.	₱10,000.00
Total Estimated Budget		₱126,000.00

IX. Risk Management

Several potential risks were identified during the planning of the Internship Portal. These include possible technical issues during deployment, user resistance to the new system,

data security concerns, incomplete submissions, and limited internet access for some users. Each of these risks could affect the system's functionality, user adoption, and overall effectiveness.

To address these concerns, the project team will conduct thorough system testing and regular maintenance to prevent and resolve technical problems. User orientations and help materials will be provided to ensure ease of use and promote acceptance of the platform. Security measures such as password encryption and access control will safeguard user information. Validation checks will minimize submission errors. These actions will help ensure a stable, secure, and accessible system that effectively supports the internship documentation process.