### **Learning Management System- Moodle**

A THESIS

PRESENTED TO

THE FACULTY OF

BESTLINK COLLEGE OF THE PHILPPINES

A PARTIAL

FULLFILMENT OF THE REQUIREMENTS

FOR THE BACHELOR OF

SCIENCE IN INFORMATION TECHNOLOGY

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#### **DECLARATION**

I certify that this project study does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, It does not contain any material previously published or written by another person or myself except were due reference is made in the text. I also hereby give consent for our Project Study, if accepted to be made available for photocopying and for inter-library. and for the title and summary to be available to outside organizations.

| Signature of Groupl Individual           | Date: |
|--|-------|
| Name of Groupl Individual Members        |       |
| Countersigned by Signature of adviser(s) | Date: |

### **CERTIFICATION**

This Project Study entitled *LMS MOODLE SYSTEM* prepared and submitted by Neil Vincent Benzal, Joshua Domingo, John Glenn D. Laynesa, Kenneth Dave Quilingen, and John Michael Realizan in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY** has been examined and recommended for **Oral Examination**.

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#### **APPROVAL**

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**CERTIFICATE OF ORIGINALITY** 

This is to certify that the research work presented in this Project Study entitled *LMS MOODLE SYSTEM* for the degree Bachelor of Science in Information Technology at the Bestlink College of the Philippines embodies the result of original and scholarly work carried out by the undersigned. This Project Study does not contain words or ideas for the published sources nor written works that have been accepted as basis for the award of a degree from any higher education institution, except where proper referencing and acknowledgement were made.

Benzal, Neil Vincent Domingo, Joshua Laynesa, John Glenn Realian, John Michael Quilingen, Kenneth Dave

January 2022

#### **ABSTRACT**

#### INTRODUCTION

Lms Moodle is a learning platform that allows educators, administrators, and students to construct customized learning environments using a single, resilient, secure, and integrated system. Moodle is used in schools, universities, companies, and other sectors for blended learning, remote education, flipped classroom, and other e-learning projects. It is used to develop private websites with online courses for educators and trainers to meet learning goals, and it has customized management tools. Plugins from the community can be used to customize and extend Moodle's learning environments. Moodle's LMS discovered a problem with Subjects, Security, Forgot Password, and Test/Quiz Results. Security Easy to hack accounts using default student id and password, Forgot Password Provided email or phone number did not receive recovery code, Test/Quiz Results Inaccurate test or quiz results on activities or exams, and last but not least, Lost File Activities files are not recorded or nowhere to be found.

The Development Team works to improve Moodle, the Learning Management System, by repairing issues and adding new features. Other services that will assist students, professors, and parents in monitoring the actions and performances of each individual and reducing error while using the Moodle Learning Management System are also being considered by the team.

#### **METHODOLOGY**

The Development team ran a data analysis and a mini survey and discovered that the majority of users are experiencing connection issues when there are a large number of students visiting the homepage at the same time. As a result, the team is working to resolve this problem as quickly as possible.

#### **RESULT**

The team discovered the inaccuracies of the majority of people using the homepage as a result of the conducted data analysis and mini survey, and as previously said, the Development team strives to fix such problems.

#### **DISCUSSIONA**

The results that the team discovered provide the team with a great opportunity to encounter bugs and errors on the webpage, so that the team can fix the problems stated and apply it to the webpage, and then run a data analysis and mini survey to determine whether the solution applied to the problems has a positive effect on the webpage and users.

### **ACKNOWLEDGEMENT**

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Dr. Thelma Villaluna, OIC for Research, Bestlink College of the Philippines, .....

Dr. Rosicar Escober, Dean of College of Computer Studies Bestlink College of the Philippines, ...

<Teacher of Project Study>

<Adviser of the Group>

<others.. i.e. clients, company, that makes this study possible>

Almighty God .....

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# **Chapter 1**

### 1.0 Project Background

Moodle is a learning platform designed to provide educators, administrators and learners with a single robust, secure and integrated system to create personalised learning environments. You can download the software onto your own web server or ask one of our knowledgeable Moodle Partners to assist you. Moodle system is a free and open-source learning management system (LMS) written in PHP and distributed under the GNU General Public License. Developed on pedagogical principles, Moodle is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplaces and other sectors. With customizable management features, it is used to create private websites with online courses for educators and trainers to achieve learning goals. Moodle allows for extending and tailoring learning environments using community-sourced plugins.

### Front Page

The front page is the initial page seen by someone reaching a Moodle site after or before a login. Typically, a student will see courses, some blocks of information, displayed in a theme. In the Navigation bar and Navigation block it is called "Home". A combination of site policies, user authentication and front-page settings determine who can get to the front page. And once they get there what they can see and what they can do. In many ways, a Front Page has similar features and functions to those in a Course.

### Log in As

The capability Moodle/user: loginas allows a user to log in as any other user, apart from administrators. This capability may be applied in the course or system context. If applied in the course context, it allows a user to login as admin, professor or as a student.

#### Dashboard

is a customizable page for providing users with details of their progress and upcoming deadlines. In the center is the Course overview block which allows students and teachers to easily track required activities and filter courses.

#### User Menu

The user menu can be accessed by clicking next to your user's name at the top right of the Dashboard, the home page, or most other pages in your Moodle site. When you click on the small triangle next to your user's name, a dropdown menu will show links to your dashboard, profile, grades, messages and your preferences. There will also be a link to log out of the site, and (if you are a teacher or admin) there may be a link that allows you to Switch your role

#### User Profiles

Every user has a profile page which may be reached from the user menu top right and then clicking Profile. This page contains links to further pages allowing the user to edit their profile information and preferences, view their forum/blog posts, and check any reports they have access to.

#### Course List

Every student, professor, admin or new enrollees can access this part of Moodle. You can view available courses and how many slots left to enrolled on your choice course1.1

### 1.1.1Business Case

## 1.1.1.1 Executive summary

Learning Management System (LMS) is used to promote quality education and training through an on-line and partially automated system creating a virtual

environment for the instructors and students to communicate among them at a single platform with all available resources and learning material.

#### 1.1.1.1.1 Issue

The LMS Moodle found an issue on Subjects, Security, Forgot Password, Test/Quiz Results. On Subjects appear even you didn't enroll on those curriculum, Security Easy to hack accounts using default student id and password, Forgot Password Provided email or number didn't receive recovery code, Test/Quiz Results Inaccurate test or quiz results on activities or exams, and the last is Lost File Activities files are not recorded or nowhere to be found.

### 1.1.1.1.2 Anticipated Outcome

The Development Team seeks and provide improvements on Learning Management System Moodle by fixing bugs and improving its features. The team also wants to add other functions that will help students, professor and parents to monitor the activities and performances of each individuals and to lessen error while using this Learning Management System Moodle

#### 1.1.1.1.3 Recommendation.

Various options and alternatives were analyzed to determine the best way to leverage technology to improve the Connection of the Students and Staffs and reduce time and effort within LMS Moodle. The approach described herein allows us to meet our corporate objectives of continuously improving efficiency, reduce the time and efforts, and capitalizing on technology. The recommended to this Project will methodically migrate the data and functions of our current mainframe system to our new web-based platform in order to preserve data integrity and allow adequate time to all staff and managers on their responsibilities and respective administrative functions. The web-based platform is compatible with all other current IT systems and will improve the efficiency and accuracy throughout the company.

# 1.1.1.2 Business case Analysis Team

Table 1 Business Analysis

| Role              | Description                           | Name                   |  |
|-------------------|---------------------------------------|------------------------|--|
| Project Manager   | The one who manage the Neil Vincent B |                        |  |
|                   | development team                      |                        |  |
| Business Analyst  | The person who analyzes an            | Michael John Realizan  |  |
|                   | organization and documents            |                        |  |
|                   | its business, process, and            |                        |  |
|                   | system.                               |                        |  |
| Programmer        | Advises the team for a better         | Joshua Domingo         |  |
|                   | approach on the process also          |                        |  |
|                   | helps the team to improve             |                        |  |
|                   | their individual techniques.          |                        |  |
| Technical Support | Provides all technical support        | John Glenn Laynesa     |  |
|                   | for the project                       |                        |  |
| Software Support  | Provides all software support         | Kenneth Dave Quilingen |  |
|                   | for the project                       |                        |  |

### 1.1.1.3Problem Definition

### 1.1.1.3.1 Problem Statement

This research is about innovative system and the researchers design the system as friendly user so that, the user will not be having a hard time to study the function of the system.

# 1.1.1.3.2 Organizational Impact

The Learning Management System Moodle will impact in some many ways, the following provides an explanation of how the organization, tools, process, hardware, software and roles and responsibilities will be affected in implementing the project.

- Process The traditional style of attending a class will be lessen and you can access all the lessons using your gadgets at home.
- Tools The existing method which is face to face classes is still accessible.
   But the impact of it is most of the classes will happen online. Registered user can access a new useful informations and system to make their study at ease.
- Roles and Responsibilities The native procedure will be reduced the effort and consuming time for travel to attend a class.
- Hardware and software

The following are the hardware and software requirements needed to run the system:

- -Intel(R) Pentium® CPU N4200 @ 1.10GHz
- -4 gb ram
- -250 hard disk drive -VS Code
- -Google Chrome -Xampp

### 1.1.1.3.3 Technology Migration

This section gives a high-level summary of how the new technology will be implemented, as well as how data from the old system will be moved. This section should also cover any unresolved technical requirements or roadblocks that must be overcome.

Phase I: Domain and software will be purchased, moodle system will be built in a web-based environment and thoroughly evaluated by the IT development team.

Phase II: In the technology lab, the IT group will set up a temporary legacy platform for day-to-day operations. This will be utilized as a backup system as well as a repository for all educational mainframe data.

Phase III: The web-based platform will be populated with all current transactions. This must be done in conjunction with the end of a transaction cycle.

Phase IV: The new web-based platform will be taught to all workers.

Phase V: The web-based platform goes live, and the legacy mainframe system is archived and decommissioned.

The Researcher wanted to make sure we were using the best tools possible to enable the evolution that was required to meet rising client demand. The Researcher wanted to take use of the container-based cloud benefits of immutable architecture to provide better support to their clients, even though we'd always been a cloud-based corporation, developing and running a transaction site cloud with our own data centers.

### 1.1.1.4 Project Overview

Moodle is frequently used as a online classroom and much better than other software. The researchers are creating prototypes to encounter bugs and errors that they can fix and avoid it so the final version will run smoothly.

The Goal of LMS Moodle is to be a top online classroom platform with a less request timeout error no matter how many students using the website on the same time and in the way that can everyone will can easily create an account with a real time monitoring on their courses and grades.

# 1.1.1.4.1 Project Description

Learning Management System Moodle is created to help students take their subject activities view grades and see the process of the enrolled subject with ease and to help students attend class without going anywhere, also this is a software platform that runs in any computer server

## 1.1.1.4.2 Goals and Objectives

The Learning Management System MOODLE Project directly supports several goals and objectives established by the educational department. The following table lists the business goals and objectives that the Learning Management System MOODLE Project supports and how it supports them:

Table 1.1 Goals and Objective

| Business Goals/Objective                     | Description  |
|--|--|
| Time Travel Less travel time consumption     | Instead of going on school far away from your home, you can have your class at your phone, laptop or any gadgets you have.                       |
| Enrollment  No more queue on registrars      | You can enroll on offered courses using your Gadgets and no need to queue on registrars. You can easily go to Enrollment Page of the System.     |
| Grades Less requirements upon viewing grades | Instead of collecting your subject grades on school one by one, you can easily view your grades by entering the student number and subject code. |

### 1.1.1.4.3 Project Overview

Moodle is frequently used as a online classroom and much better than other software. The researchers are creating prototypes to encounter bugs and errors that they can fix and avoid it so the final version will run smoothly.

The Goal of LMS Moodle is to be a top online classroom platform with a less request timeout error no matter how many students using the website on the same time and in the way that can everyone will can easily create an account with a real time monitoring on their courses and grades.

### 1.1.1.4.4 Project Assumption

The following assumption apply to the LMS Moodle system project. As a project planning begins and more assumption are identified, they will be added accordingly:

- The project team will identify which methodology will be used on the project.
- The project team will complete the project charter, project management, and project planning.
- The researchers will complete a list of software and tools to be used in developing the project.
- Project team will create design pattern, define the system architecture including the system process architecture, application architecture, data architecture and technology architecture.
- Project team will ensure to create a LMS Moodle system with functionalities.

# 1.1.1.4.5 Project Constraints

# 1.1.1.4.6 Major Project Milestone

The following are the major project milestones identified at this time. As the project planning moves forward and the schedule is developed, the milestones and their target completion dates will be modified, adjusted, and finalized as necessary to establish

#### the baseline schedule.

table 1.2 Major Project Milestone

| MILESTONES/DELIVERABLES            | Target Date |
|------------------------------------|-------------|
| Project Charter                    | On Going    |
| Project Plan Review and Completion | On Going    |
| Project Kickoff                    | On Going    |
| Sprint 1 Complete                  | On Going    |
| Sprint 2 Complete                  | On Going    |
| Sprint 3 Complete                  | On Going    |
| Sprint 4 Complete                  | On Going    |
| Sprint 5 Complete                  | On Going    |
| Sprint 6 Complete                  | On Going    |
| Sprint 7 Complete                  | On Going    |
| Sprint 8 Complete                  | On Going    |
| Closeout/Project Completion        | On Going    |

# 1.1.1.5 Strategic Alignment

The LMS Moodle project will strengthen our System and help us progress to the next level of maturity by directly supporting these strategic plans.

| PLAN                   | Goals/Objectives     | Relationship to Project        |
|------------------------|----------------------|--------------------------------|
|                        | To increase the      | The goal of this project is to |
| 2022 Plan for Learning | server capacity that | increase the number of         |
| Management System      | can hold multiple    | students that can use the      |
|                        | accounts using the   | webpage at the same time       |

|                        | website at the same  | without having a server error     |
|------------------------|----------------------|-----------------------------------|
|                        | time.                | or full server capacity           |
|                        |                      |                                   |
|                        | to add a system that | this project is targeting to have |
| 2022 Plan for Learning | can have a buying    | a buying transaction where        |
| Management System      | option               | you can buy books uniforms        |
|                        |                      | etc. on the website               |
|                        |                      |                                   |

Table 1.3 Strategic alignment

#### 1.1.1.6 Cost Benefits

The following table captures the cost and savings actions of the Project, descriptions of these actions, and the costs or savings associated with them through the year. At the bottom of the chart is the net savings for the year of the project.

| Action            | Action Type | Description        | First year Cost |
|-------------------|-------------|--------------------|-----------------|
| Purchase web-     | Cost        | Initial investment | 10,000          |
| based product and |             | internship project |                 |
| licenses          |             |                    |                 |

Table 1.4 Cost benefits

# 1.1.1.7 Approvals

The signatures of the people below indicate an understanding in the purpose and content of

this Business Case by those signing it. By signing this document, you indicate that you approve of the proposed project outlined in this business case and that the next steps may be taken to create a formal project in accordance with the details outlined herein.

| Approver name  | Title   | Signature | Date |
|----------------|---------|-----------|------|
| Pineda, Enrico | Adviser |           |      |

| Villalon, Jhun | Adviser |  |
|----------------|---------|--|
|                |         |  |

Table 1.5 Approvals

# 1.1.2 Project Charter (with Gantt Chart)

The project plan will be submitted and approved in accordance with the milestone schedule. Upon approval of the project plan resources will be assigned to the project and work will commence within 5 business days. The Project Sponsor must approve any schedule changes which may impact milestones. A detailed schedule will be included in the project plan. The high-level milestone schedule is:

The budget for the Internship project is 10,000. It is to be funded through the BCP

| WBS    | TASK TITLE                                       | DATE      | PCT OF TASK |
|--------|--|-----------|-------------|
| NUMBER |  | COMPLETED | COMPLETE    |
|        |  |           |             |
| 1.1    | Project Plan                                     | On Going  |             |
| 1.1.1  | Design   | On Going  |             |
| 1.2    | Coding Completed                                 | On Going  |             |
| 1.3    | Testing Completed                                | On Going  |             |
| 1.4    | Implementation Completed                         | On Going  |             |
| 1.5    | One Transaction Completed and Project Completion | On Going  |             |

Table 1.6 Project Charter

### 1.1.3 Stakeholder Strategy

### 1.1.3.1 Introduction

The LMS Moodle Project Stakeholder Management Strategy for Internship Project will identify and classify the stakeholders of the project. By this, it will help to know the influence and interest of the stakeholders. It will also know the use and methodology in approaching or communicating the stakeholders. In doing this, the project will be freely to gain input for the progress of the project. Identifying and communicating with stakeholders gives help to ensure the success of the internship Project by gaining support and input for the project. The project will benefit by having clear objectives and maximizing the resources required to complete the project

.

### 1.1.3.2 Identify Stakeholders

The internship Project Team will have a meeting session in order to identify stakeholders for the project. This session will include the primary project team and project sponsor. These stakeholders may include student, personnel, and development team, and any other employee who will be affected by the internship project.

The following criteria will be used to determine if an individual will be included as stakeholder:

- 1. Will the person or their organization be directly affected by this project?
- 2. Will the person or their organization hold a position from which they can influence the project?
- 3. Will the person have an impact on the project's resources (material, personnel, funding)?
- 4. Will the person potentially benefit from the project?

Any individual who meets one or more of the above criteria will be identified as a stakeholder.

### 1.1.3.3 Key Stakeholders

The project team will identify the key stakeholders who has more impact and will be affected in this project. Key stakeholders are the people who are more needed in the project's progress. Once the key stakeholder has been identified the project manager will make a plan to gather their ideas, concerns or any form of participation in this project.

By analyzing, the project team will involve the key stakeholders on every project meeting, sessions or any deliverables works. Through communication with the key stakeholders, it will ensure the needs to address all the concerns. Once the project team choose who the stakeholders is, the team will conduct a discussion.

### 1.1.3.4 Stakeholder Analyst

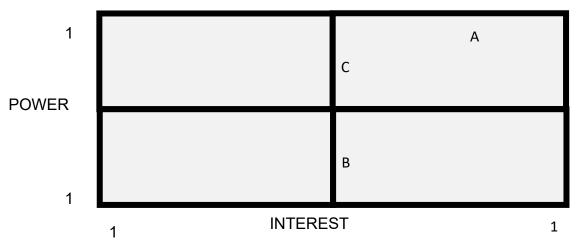
The purpose of this analysis is to determine the stakeholders' level of role ori influence. It is to know how the level or appropriate approach in every key stakeholder for their participation.

The project team will categorize stakeholders based on their organization or department. Once all stakeholders have been categorized, the project team will utilize a power/interest matrix to illustrate the potential impact each stakeholder may have on the project. Based on this analysis the project team will also complete a stakeholder analysis matrix which illustrates the concerns, level of involvement, and management strategy for each stakeholder

| KEY | ORGANIZATION  | POWER (1-5) | INTEREST (1-5) |
|-----|---------------|-------------|----------------|
| А   | DEPARTMENT    | 5           | 4              |
| В   | STUDENT       | 2           | 3              |
| С   | ADMINISTARTOR | 4           | 3              |

Table 1.7 Stakeholder analyst

Below is the power/interest chart for the Learning Management System Moodle Project stakeholders. Each letter represents a stakeholder in accordance with the key in the chart above.



Based on the power and interest analysis and chart above, the stakeholders A and C must be kept informed and have a large participation as they reside on the upper right quadrant of the matrix. Stakeholder B will require minimum involvement effort for they reside in the lower right quadrant.

# 1.2 Project Planning

# 1.2.4 Project Management Plan

Moodle is a software for E-learning and it helps the various educators considerably in conceptualizing the various courses, course structures and curriculum thus facilitating interaction with online students. The individual user's Courses or Subject will take care to their account.

#### 1.2.1.5 Introduction

Moodle is a learning management system providing a platform for e-learning and it helps the various educators considerably in conceptualizing the various courses, course structures and curriculum thus facilitating interaction with online students

# 1.2.1.6 Project Management Approach

The Project Manager, Neil Vincent Benzal is hereby authorized to communicate with all contractors and management as needed, to interface with management as needed, to negotiate for resources, to delegate responsibilities within the project framework, and to communicate with all contractors and management as needed to ensure the project's successful and timely completion. The Project Manager is in charge of creating the project plan, keeping track of the project's schedule, cost, and scope during implementation, and maintaining project control by measuring performance and taking remedial action. The product owner will examine and approve all project and subsidiary management plans.

# 1.2.1.7 Project Scope

Ranging from e-courses creation, user registration, assignment submission, learning materials(even SCORM), exam/quiz, grading moodle offers the provision for associating virtual classroom as well. These are just the basic features of moodle and much more advanced features are there as well like conditional progress in courses, certificates, competency based learning plans and much more. Any organization/institution willing to use e-learning portal for academic courses in schools/colleges/universities, internal training programmes for companies, corporate competency based learning provisions and even SAAS based portal.

#### 1.2.1.8 Milestone List

The important milestones for the LMS Moodle Project are listed in the chart below.

| Milestone             | Description                          | Date |
|-----------------------|--------------------------------------|------|
| Complete requirements | All requirements for LMS Moodle      |      |
| gathering             | site must be determined to base      |      |
|                       | design upon.                         |      |
| Complete Lms Moodle   | This section is for design of LMS    |      |
| website design        | Moodle site for the software and its |      |
|                       | functionality.                       |      |
|                       |                                      |      |

| Complete Lms Moodle | All coding completed in a software |  |
|---------------------|------------------------------------|--|
| website coding      | prototype                          |  |
|                     |                                    |  |
| Complete LMS Moodle | All functionality tested and all   |  |
| website testing and | identified errors are corrected.   |  |
| debugging           |                                    |  |
|                     |                                    |  |

Table 1.8 Milestone List

### 1.2.1.9 Schedule Baseline and WBS

The LMS Moodle Project timetable was created using the WBS and Project Charter, with input from all project team members. The timetable was reviewed and approved by the project sponsor. The timetable will be kept by the Project Manager. Any planned schedule changes will need the project sponsor's approval. The Project Manager and team will analyze the impact of the change on the schedule, cost, resources, scope, and hazards.

# 1.2.1.10 Change Management Plan

It is important that management effect real change throughout the organization and this can only be done by changing the current organizational culture. The Shared values are the pinnacle of any organization, they form the underpinning culture, strategy, effectiveness and performance. Managers are not only fighting with their peers but also their direct reports in an attempt to undermine them and take their position within the organization. This culture is self-defeating and dangerous to the ongoing wellbeing of the organization. This can clearly be shown by the contempt the ousted CEO had for one of the independent contractors when an issue was raised at the end of a trip whilst transporting the CEO.

- Scheduling changes: changes will impact the approved project schedule. These changes may require fast tracking, crashing, or re-baselining the schedule depending on the significance of the impact.
- Budget changes: changes which will impact the approved project budget.

  These changes may require requesting additional funding, releasing funding which

would no longer be required, or adding to project or management reserves. May require changes to the cost baseline.

• Scope changes: changes which are necessary and impact the project's scope which may be the result of unforeseen requirements which were not initially planned for. These changes may also impact budget and schedule. These changes may require revision to WBS, project scope statement and other project documentation as necessary.

The project manager must ensure that any approved changes are communicated to the project stakeholders. Additionally, as changes are approved, the project manager must ensure that the changes are captured in the project documentation where necessary.

# 1.2.1.11 Communication Management Plan

| Communicatio   | Descriptio | Frequenc | Format   | Participants | Deliverable | Owner   |
|----------------|------------|----------|----------|--------------|-------------|---------|
| n types        | n          | у        |          | 1            | s           |         |
|                |            |          |          | Distribution |             |         |
|                |            |          |          | s            |             |         |
| Weekly Status  | Meeting to | Weekly   | Email    | Project      | Status      | Project |
| Report         | create and |          | Messenge | Sponsor,     | Report      | Manage  |
|                | update the |          | r        | Team and     |             | r       |
|                | documents  |          | ·        | Stakeholder  |             |         |
|                | and the    |          |          | s            |             |         |
|                | system.    |          |          |              |             |         |
| Weekly Project | The        | Weekly   | Email    | Project team | Review the  | Project |
| Team Meeting   | document   |          | Messenge |              | status of   | Manage  |
|                | sends in   |          | r        |              | documents   | r       |
|                | google     |          | '        |              |             |         |
|                | drive and  |          |          |              |             |         |
|                | email in   |          |          |              |             |         |

|                                | order, for<br>all<br>members<br>of the team<br>will review<br>the<br>documents |              |                                 |   |   |                        |
|--------------------------------|--|--------------|---------------------------------|---|---|------------------------|
| Project Monthly<br>Review (PMR | Present status to team and sponsor   | Monthly      | Email<br>Messenge<br>r          | Project<br>Sponsor,<br>Team and<br>Stakeholder<br>s | Status and<br>Presentatio<br>n                        | Project<br>Manage<br>r |
| Project Gate<br>Reviews        | Present closeout of project phases and kickoff next phase                      | As<br>Needed | Email<br>Messenge<br>r<br>Gmeet | Project<br>Sponsor,<br>Team and<br>Stakeholder<br>s | Phase<br>completion<br>report and<br>phase<br>kickoff | Project<br>Manage<br>r |
| Technical Design Review        | Review of any technical designs or work associated with the project            | As<br>Needed | Email<br>Messenge<br>r<br>Gmeet | Project team  | Technical<br>Design<br>Package                        | Project<br>Manage<br>r |

Table 1.9 Communication Management Plan

# Project team directory for all communications is:

| Name                | Title           | Email | Cellphone |
|---------------------|-----------------|-------|-----------|
| Neil Vincent Benzal | Project         |       |           |
|                     | Manager         |       |           |
| John Michael        | Business        |       |           |
| Realizan            | Analyst         |       |           |
| Joshua Domingo      | Project Sponsor |       |           |
|                     | Technical       |       |           |
|                     | Support         |       |           |
|                     | Software        |       |           |
|                     | Support         |       |           |

Table 2 Project Team Directory

#### **Communications Conduct:**

### Meetings:

A meeting agenda will be distributed by the Project Manager at least one week prior to any scheduled meeting, and all participants must comply and study the agenda before the meeting. Every information and agenda will be taken notes at all project meetings, and this will serve as a record for the team's concerns.

#### Email:

All emails related to the MOODLE should be professional, active, and concise. According to the communication matrix above, emails should be sent to the appropriate project participants based on their content. All attachments should be saved in one of the company's official software suite products and follow the company's normal formatting guidelines

#### Informal Communications:

Any issues, concerns, or status that occur as a result of informal team communication must be reported to the Project Manager so that appropriate action can be taken.

# 1.2.1.12 Cost Management Plan

The project manager must be kept up to speed on cost performance and offer status or updates on its calculations throughout the project's life cycle.

Because the Project Sponsor is in control of all budget authorization, choices, and modifications, the project manager must deliver it to him.

| Budget Item       | Description                   | Budgeted Cost |  |
|-------------------|-------------------------------|---------------|--|
| Project Study Fee | Individual fee share costs,   | 5,000php      |  |
|                   | which must be paid by all     |               |  |
|                   | members of the group in       |               |  |
|                   | order to qualify for defense. |               |  |
| Total Fixed Cost  |                               | 5,000php      |  |
| Budget Item       | Description                   | Budgeted Cost |  |
| Miscellaneous     | It includes food,             | 15,000php     |  |
|                   | transportation, electricity,  |               |  |
|                   | and WiFi, which are the       |               |  |
|                   | project team's essential      |               |  |
|                   |                               |               |  |

Table 2.1 Cost Management Plan

### 1.2.1.13 Procurement Management Plan

All procurement activities under this project will be managed by the Project Manager. All procurement actions up to P15, 000 must be approved by the Project Manager. The Project Sponsor must approve any procurement actions that exceed this amount

# .1.2.1.14 Project Scope Management Plan

The scope of the project is defined by the Scope Statement and the Work Breakdown Structure. The Project Manager, Sponsor, and Stakeholders must all approve and provide paperwork in order to determine the project's scope. All deliverables and job performance measurements are included in the scope management plan.

The Scope of **Registration** is to register or enroll a individual onLMS Moodle The organization already has a Web site where students and staff's can view the services and subjects, so this project does not involve the web development, but will include online form, database, and Web portal. The Scope of **Courses** is to view, select and enroll on chosen course. Lastly the **Scope of Dashboard** is you can access the subjects, activities, exams and lesson on your selected course.

## 1.2.1.15 Schedule Management Plan

MS Excel will be used to develop project schedules for the LMS Moodle
Project. Work Breakdown Structure indicated these timetable deliverables
(WBS). All activities have been outlined in order to identify particular work that
will be done in order to complete all deliverables

## 1.2.1.16 Quality Management Plan

The Researcher Team will play a role in quality management. The following are the quality roles and responsibilities for the LMS Moodle.

The quality roles and duties for the LMS Moodle Project are as follows: All quality criteria for the LMS Moodle Project must be approved by the Project Sponsor. All project tasks and deliverables will be reviewed by the Project Sponsor to verify that they meet the specified and agreed quality standards. In addition, the Project Sponsor will sign off on the project deliverable's final acceptance.

### 1.2.1.17 Risk Management Plan

The project team will put effort in identifying risks associated with this project, as gathering all of its resources and recognizing risks early on allows the project team to design a strategy for addressing the risks.

During the data collection process, we run into roadblocks in the development of the project, which highlights the project's risk. To address and find a solution, the project manager will assess and communicate it to the project team and stakeholders.

### 1.2.1.18 Risk Register

The project team identified and categorized each risk. Additionally, the team assigned each risk a score based on the probability of it occurring and the impact it could potentially have. The Risk register also contains the mitigation strategy for each risk as well as when the risk is likely to occur. Based on the identified risks and timeframes the risk register, each risk has been added to the project plan.

| Risk Factor    | Probability | Impact  | Risk Management   |
|----------------|-------------|---------|---|
|                | (H-M-L)     | (H-M-L) | Action  |
| Technical Risk | Medium      | Medium  | In advance, the team will provide multiple laptops if possible, to have a backup. |
|                |             |         | ·   |

| Operational Risk | Medium   | Medium | One of the team must       |
|------------------|----------|--------|----------------------------|
|                  |          |        | provide at least a data to |
|                  |          |        | access the resources       |
|                  |          |        | needed in documentation    |
|                  |          |        | as well as the system.     |
| File Risk        | Low      | Medium | The files will keep        |
|                  |          |        | secured from unknown       |
|                  |          |        | intruders.                 |
|                  |          |        |                            |
| Consider Diale   | I li ada | 1 limb | Consider for the book and  |
| Security Risk    | High     | High   | Security for the back end  |
|                  |          |        | and front end of the       |
|                  |          |        | system.                    |
|                  |          |        |                            |

Table 2.2 Table Register

# 1.2.1.19 Staffing Management

| Role               | Name & Contact<br>Information | Responsibilities   |
|--------------------|-------------------------------|--|
| Project Manager    | Neil Vincent Benzal           | <ul><li>Managing risk</li><li>Manage and lead the team</li><li>Making the final decisions</li></ul>  |
| Software Technical |                               | <ul> <li>Responsible for design and develop system</li> <li>Responsible for design and develop system</li> <li>Analyzing requirements</li> </ul> |
| Business Analyst   |                               | <ul> <li>Analyze the business process and problem.</li> <li>Responsible to know the current business process.</li> </ul>                         |
| Technical Writer   |                               | <ul> <li>Responsible for the documentation</li> <li>Revise and re-write the documents</li> </ul>   |

| Lead Programmer | Maintaining the system                      |
|-----------------|---|
|                 | <ul> <li>Responsible programming</li> </ul> |
|                 | language                                    |
|                 | <ul> <li>Developed program</li> </ul>       |
|                 |   |

Table 2.2 Staffing Management

#### 1.2.1.20 Cost Baseline

The following table captures the cost and savings actions associated with the LMS Moodle, descriptions of these actions, and the costs or savings associated with them through the first year. At the bottom of the chart is the net savings for the first year of the project.

Table 2.3 Cost Baseline

| Action  | Action Type | Description   | First year costs<br>(- indicates<br>anticipated<br>savings) |
|---|-------------|---|---|
| Initial License Fee   | Cost        | Initial investment for LMS Moodle   | P10,000   |
| Software installation and training                            | Cost        | Cost for IT group to install new software and for the training group to train all employees   | P512,400  |
| System maintenance required every 6 months instead of monthly | Savings     | It will provide for the creation and ongoing maintenance of the project plan component defined for the configuration management plan. | P100,000  |
| Configuration/Customization                                   | Cost        | Custom software development is the process of designing, creating, deploying and maintaining software for a specific set of users.    | P50,000   |
| Net First Year Savings  |             |   | 1 year  |

## 1.2.1.21 Quality Baseline

| Item                            | Acceptable Level  | Comments |
|---------------------------------|---|----------|
| Collection and Generate reports | At least 95% working with 5% or less errors                             |          |
| Compatibility                   | No errors associated with running software with compatible applications |          |
| Supporting Documentation        | All documentation will be in completion                                 |          |

Table 2.4 Quality Baseline

## 1.2.5 Risk Management Plan

#### 1.2.2.22 Introduction

Risk is inevitable as organizations begin to initiate a new project and such uncertainty often occurs when developing new and unique products or services. Been an issue bound to happen, these organizations take chances which results in risk playing a significant part in any project. The central motive of the risk management plan is to develop the framework in which the project team will visualize risks and develop strategies to eradicate or mitigate those risks. However, before risks can be identified and managed, there are preliminary project elements which must be completed. These elements are outlined in the risk management approach.

It will be practically impossible to initiate risk management without ascertaining where, how and what may trigger the risk as the project progresses, in our case we have established structures prior to developing this Risk Management Plan.

## 1.2.2.23 Top Three Risk

Connection Risk, sometimes when having a exam or activities connection problem will occur due to students is using the web site at the same time. The loss of data

Technological Risk the potential for any technology failure to disrupt a business. Companies face many types of technology risks, such as information security incidents, cyberattacks, password theft, service outages, and more.

Financial Risk is any of various types of risk associated with financing, including financial transactions that include company loans in risk of default. Often it is understood to include only downside risk, meaning the potential for financial loss and uncertainty about its extent.

#### 1.2.2.24 Risk Management Approach

The Researcher team manages risk by identifying, scoring and ranking the various risks. The risk management approach and plan should be tailored to the scope and complexity of individual projects. The risk focus typically centers on development. Risk exists in operations, requirements, design, development, integration, testing, training and fielding.

#### 1.2.2.25 Risk Identification

A creative collaborative workshop that encourages everyone to participate and that generates a large number of ideas in a short period of time. By sharing ideas without speaking, it enables each participant to make better ideas on all parts of the subject. Originally the participants need to have a sticky note to write about the possible risk but since it is a virtual meeting, the project manager writes it down and talks about it one by one.

#### 1.2.2.26 Risk Qualification and Prioritization

The Researcher Team budget and other resources entitle to this project are limited, the team have been urged identified the severity of the risk, a probability and impact factor was assigned to each risk. This process allowed the project manager to prioritize risks based upon the effect they may have on the project. The project manager utilized a probability-impact matrix to facilitate the team in moving each risk to the appropriate place on the chart.

Once the risks were assigned a probability and impact and placed in the appropriate position on the chart, the recorder captured the finished product and the project manager moved the process on to the next step: risk mitigation/avoidance planning.

## 1.2.2.27 Risk Monitoring

Each assigned project managers are responsible of reporting risks related assessment in weekly bases in order to identify where necessary to modify as the project execution progress; however, only risks which fall in the current time period will be discussed. Risk monitoring will be a continuous process throughout the life sperm of this project. One of the beauties of this project is weekly report that project manager will depend on that when reporting to our appropriate stake holders and such important information's includes the risk status, identification of trigger conditions, and the documentation of the results of the risk response.

## 1.2.2.28 Risk Mitigation and Avoidance

The project manager is responsible in leading the project team in developing lucrative strategies to tackle identified risk. As more risks are identified, they will be specified and the team will develop avoidance and mitigation strategies if possible total eradication of such risk as the project progress. These risks will also be added to the Risk prime list and the project plan to ensure they are monitored at due period of times and are responded to accordingly.

## 1.2.2.29 Risk Register

The project team identified and categorized each risk. Additionally, the team assigned each risk a score based on the probability of it occurring and the impact it could potentially have. The Risk register also contains the mitigation strategy for each risk as well as when the risk is likely to occur. Based on the identified risks and timeframes the risk register, each risk has been added to the project plan.

| RISK FACTOR         | PROBABILITY | IMPACT  | RISK MANAGEMENT          |
|---------------------|-------------|---------|--------------------------|
|                     | (H,M,L)     | (H,M,L) | ACTION                   |
|                     | M           | M       | Brown out might happen   |
| Power Interruption  |             |         | while preparing the      |
| 1 owor interruption |             |         | system. Provide UPS      |
|                     |             |         | (Universal Power Supply) |
|                     |             |         | in case of brown out the |
|                     |             |         | power continue to        |
|                     |             |         | support.                 |
|                     | Н           | M       | Provide money to         |
| Financial Risk      |             |         | support the system.      |
|                     |             |         |                          |

| Technological Risk | M | M | Hard to relate the usage of the software in order to understand the system and need the proper training.  |
|--------------------|---|---|---|
|                    | M | M | The process whereby decisions are made to accept a known or assessed risk and/or the implementation of actions to reduce the consequences or probability of occurrence. |
| Calamity Risk      |   | M | Provide back-up details of user   |
| Hacker             | Н | М | Provide strong security in every account.   |

Table 2.5 Risk Register

## 1.2.6 Scope Management Plan

#### 1.2.3.30 Introduction

A scope management plan outlines the processes involved in executing your project and serves as a guideline to keep the project within specific limits. In this article, we'll explain what a scope management plan is and how it can assist you in the planning phase. With effective scope management, you can set you and your team up for success.

## 1.2.3.31 Scope Management Approach

This Project, Scope management unit planning is the only real responsibility of project manager. The Scope Statement, Work Breakdown Structure (WBS), and

WBS Dictionary outline the project's scope. The person in charge of the project. The Sponsor and Stakeholders will create and approve documentation for determining project scope, such as deliverable quality checklists and work performance metrics. The Project Manager, Stakeholders, or any member of the project team can propose scope revisions. All requests for changes will be sent to the Project Manager, who will assess the requested scope change.

#### 1.2.3.3 Role and Responsibility

| Name | Role               | Responsibilities  |
|------|--------------------|---|
|      | Sponsor            | <ul> <li>Approve or deny scope<br/>amendment requests as<br/>acceptable</li> <li>Evaluate want for scope<br/>amendment requests</li> <li>Accept project deliverables</li> </ul>   |
|      | Project<br>Manager | <ul> <li>Measure and verify project scope</li> <li>Facilitate scope modification requests</li> <li>Facilitate impact assessments of scope modification requests</li> <li>Organize and facilitate scheduled modification management conferences</li> <li>Communicate outcomes of scope modification requests</li> <li>Update project documents upon approval of all scope changes</li> </ul> |

| Team<br>Lead   | <ul> <li>Measure and verify project scope</li> <li>Validate scope amendment requests</li> <li>Participate in impact assessments of scope amendment requests</li> <li>Communicate outcomes of scope amendment requests to team</li> <li>Facilitate team level amendment review method</li> </ul> |
|----------------|---|
| Team<br>Member | <ul> <li>Participate in shaping modification resolutions</li> <li>Evaluate the necessity for scope changes and communicate them to the project manager as necessary</li> </ul>  |
| Team<br>Member | <ul> <li>Participate in process<br/>amendment resolutions</li> <li>Evaluate the necessity for scope<br/>changes and communicate<br/>them to the project manager as<br/>necessary</li> </ul>   |

Table 2.6 Scope Management Approach

## 1.2.3.33 Scope Definition

## 1.2.3.34 Project Scope Statement

The new web site has a user-friendly graphical interface, which shall allow user to do queries, and do tasks.

#### 1.2.3.35 WBS

# 1.2.3.36 Scope Verification

#### 1.2.3.37 Scope Control

## 1.3 Project Execution Plan

## 1.3.7 Implementation and Migration Plan

#### 1.3.1.38 Purpose

Implementation and Migration Plan has been developed the LMS Moodle on how the system ensure its security, reliability and functionality. This project will be implemented, installed and migrated to its operational environment. The purpose of this plan is to ensure all stakeholders are aware of the details, requirements, and responsibilities involved in successfully completing this project and migrating the product to the operational group. Any requested changes to this plan should be submitted through the project's change control process for review and approval prior to implementation.

## 1.3.1.39 Description of Implementation

The LMS Moodle will be implemented at Bestlink College of the Philippines as part of the requirements. This project has different sub-modules: For the system implementation, they need samples for testing and evaluation thus, they need to ensure that the databases will work properly. This description of implementation provides all stakeholders with a detailed understanding of how implementation will take place. Once LMS Moodle database design is complete, a beta version of the database will be uploaded to the institute. The team collects all existing data from the existing database and loads that data into the LMS Moodle database to test data integrity and compatibility between the way maintenance data is collected and the new database. Once the test has been completed and the functionality of the LMS Moodle has been verified, operator training will be carried out with maintenance personnel for the new tool. Upon completion of the training, the LMS Moodle database will be uploaded to the institute's maintenance servers and partitioned to prevent user access. The institute department then verifies the functionality of the database on the actual servers.

#### 1.3.1.40 Points of Contact

Database project spans several different LMS Moodle system and is an extremely fluid and technical project. As such, it is crucial to acknowledge the points of contact for the several characteristics of this project. The chart below gives all stakeholders with the points of contact should any urgent questions or

concerns arise. All stakeholders should ensure their communications are compliant with the LMS Moodle Database Project Communications Plan.

| NAME         | ROLE         | CONTACT INFORMATION |
|--------------|--------------|---------------------|
| Vince Benzal | Scrum Master |                     |
|              | Programmer   |                     |
|              |              |                     |
|              |              |                     |

Table 2.7 Points of Contact

## **1.3.1.41 Major Task**

The LMS Moodle project team has developed a list of major tasks required to successfully Implement and migrate this project. All of these tasks have been vetted by the project team to ensure they are within the scope of this project. Additionally, all major tasks have been assigned to the responsible individuals and/or groups and communicated to all stakeholders.

## 1.3.1.42 Implementation Schedule

The Implementation Schedule of LMS Moodle System are provided below:

| Task Milestone                               | Schedule completion date |
|--|--------------------------|
|  |                          |
| Complete LMS Moodle design                   |                          |
| Complete testing                             |                          |
| Complete Functionality or maintenance server |                          |
| Complete data capture                        |                          |
| Operational Acceptance                       |                          |

Table 2.8 Implementaion Schedule

## 1.3.1.43 Security

#### 1.3.1.44 Implementation Support

The LMS Moodle project system will require a moderate level of support from the institution of Bestlink College of the Philippines. The groups directly involved in providing support for this project are the College of Computer Studies (CCS), the Maintenance Operations Group, and the IT Group. The Project Manager will facilitate all meetings and discussions in completing the tasks for this project. The Project Manager will work directly with both the IT Group and the Maintenance Operations Group to complete these tasks. With feedback and requirements from the Operations Maintenance Group, the IT Group will design, test, and implement the System on both the virtual testing servers and the maintenance servers. The IT Group will also develop and provide training to maintenance operators on the system. These tasks will be done by the lead and assistant IT engineers. If additional support is needed, it will be coordinated through the Project Manager and IT Group Lead. The Maintenance Operations Group will provide all operational requirements to the IT Group for inclusion in the design and implementation of the software. The Maintenance Operations Group will also be required to provide feedback on testing. Additionally, all maintenance operators will participate in system training. If additional support is needed, it will be coordinated with the Project Manager and the Maintenance Division Lead.

## 1.3.1.45 Listing of Hardware, Software and Facilities

The LMS Moodle System requires a database design on where existing database resides. while this allows improved functionality and capability, it does not require any additional hardware or upgrades to existing hardware. Likewise, no additional facilities are required to complete the implementation and migration of this project. This project will be completed within the existing capabilities of current facility.

#### 1.3.1.46 Performance Monitor

# 1.3.1.47 Implementation Requirements (Hardware/Software/Personnel/ Facilities/ other capital investment)

| Project Sponsor    |  |
|--------------------|--|
| Project Manager    |  |
| Programmer         |  |
| Technical Writer   |  |
| Testing Specialist |  |

Table 2.9 Implementation Requirements

#### Facilitie

None – utilize existing facilities.

#### 1.3.1.48 Back Out Plan

## 1.3.1.49 Post Implementation Verification

## 1.4 Project Closure

When a project is finished, one of the most important steps is to get official permission or closure from all major stakeholders to announce the project's completion. The closure is more than a formality; it establishes accountability and restricts certain obligations. When project owners, scrum teams, and other stakeholders sign off on a project, it means the work fulfilled their and the organization's expectations. Individuals who are concerned about closure should write down their concerns and make sure that all stakeholders are aware of them.

#### 1.4.8 Transition-out Plan

## 1.4.1.50 Executive Summary

The Bestlink of the Philippines Quezon City Branch has seeking to develop a system as a requirement for the IT students to their subjects. The system that we develop is LMS Moodle system where it will ensure the features that the developers provided in terms of Security, Reliability and Functionality. The system will be implemented and governed by the IT Department Of the premise will give by the

Development Team. The contract is currently negotiated, Handled and it will take some to decide the operations of the system.

#### 1.4.1.51 Transition Approach

For this case, the Development Team will provide the LMS Moodle system and hand over to the Bestlink College of the Philippines. The Staff will test the system and Development Team will maintain the integrity, efficiency and the troubleshooting of it. The transition will take place in 60 days to finish. Now prior to the transition, the BCP will take a stand to the Development Team will handled all matters necessary for the accomplishment of the transition. As said earlier, the BCP will have its staff assigned at the start of the 60-day transition and it will coordinate with the development team.

## 1.4.1.52 Transition Team Organization

The following chart illustrates the transition team members from Development Team from the IT department of BCP, as well as the roles and responsibilities of each team member.

| Organization | Title                            | Roles/Responsibility  |
|--------------|----------------------------------|---|
|              | Transition<br>Project<br>Sponsor | Approve or Deny Transition as acceptable Evaluate want for transition request   |
|              | Transition<br>Project<br>Manager | Collaborate activities between contractors throughout transition; giving workspace for all transition staff; handling transition meetings as required |
|              | IT Transition<br>Lead            | Secure all IT activities are accomplished during transition; document all IT processes, tasks, and activities for transition.                         |
|              | Team<br>member                   | Secure continuity of all IT activities throughout transition; secure receipt of sufficient IT documentation of all processes, tasks, and activities   |
|              | Team<br>member                   | Secure all training documentation obtain addresses all planned training items; secure standardization of all transitioned documentation               |

Table 3 Transition Team Organization

#### 1.4.1.4 Work Transition

For the duration of this contract change, all employees will remain with their present employer. Until the transition is completed and acknowledged by all parties,

the logistic personnel will remain on standby to carry out their transition activities. Until the transition is complete, the development team will offer workspace for all parties involved.

#### 1.4.1.5 Work Execution during Transition

During the transition period of this arrangement, work will be proceeding to be executed by BCP In line with the accepted project schedule and work breakdown structure (WBS) in place. Along with the other parties involved, the Dev Team will ensure the BCP staff's work. Nonetheless, BCP will continue to handle all tasks and deliverables. Upon transition acceptance will take its position at the end of the 60-day transition period.

#### 1.4.1.6 Subcontracts

This section documents all the existing contracts and if/how they will be transitioned. It should contain this information in a table format (subcontract agreements, software/hardware maintenance contracts, etc.).

The following chart illustrates the subcontracts in place which are in assistance of BCP Transaction's activity. These subcontracts appeal to third party tasks to secure all required transactions and facilitates functionality is in place to support the system.

#### 1.4.1.7 Property Transition

## 1.4.1.7.1 Government Furnished Equipment (GFE)

As a segment of this transition, all GFE provided to BCP will be under a certain contract that will be become into the government over completion and acceptance of the transition phase. GFE comprise of laptop computer, flash and external hard drives. All electronic devices will be assigned by the government IT officer and it will be issued appropriately.

## 1.4.1.7.2 Incumbent Owned Equipment

Upon completion and approval of the transfer, the incumbent will retain all essential owned equipment. If it is determined that any incumbent owned equipment must remain with the client in order to ensure the successful completion of the contract, the client and incumbent contracting staff representatives will interrelate the acquisition of the equipment.

## 1.4.1.7.3 Intellectual Property

#### 1.4.1.7.4 User Accounts and Passwords

Table 3.1 User accounts and psswords

| User Accounts | LMS Moodle |  |  |
|---------------|------------|--|--|
|               |            |  |  |
|               |            |  |  |

## 1.4.1.8 Knowledge Transfer

#### 1.4.1.9 Schedule

Table 3.2 Schedule

| WBS<br>NUMBER | TASK TITLE  | DATE<br>COMPLETE | PCT OF TASK<br>COMPLETE |
|---------------|---|------------------|-------------------------|
| 1             | Project charter                                     |                  |                         |
| 2             | Project Plan complete and approved                  |                  |                         |
| 3             | Design completed                                    | Ongoing          |                         |
| 4             | Coding completed                                    | Ongoing          |                         |
| 5             | Testing completed                                   | Ongoing          |                         |
| 6             | Implementation completed                            | Ongoing          |                         |
| 7             | One transaction completed and<br>Project completion | Ongoing          |                         |

## 1.4.1.10 Handover and Acceptance

The customer will decide when the transfer is complete and will sign a written acceptance reflecting this. To do so, the client's transition PM will utilize the agreed transition checklist to determine if all transition-related tasks have been completed. The client's transition PM will meet with the transition PMs from each contractor to make sure that all concerns and issues have been handled. The checklist and associated documents will be signed and authorized by the client's project sponsor and the company's human resources director once the client's transition PM has formally approved the transfer. The final stage is the customer's contracting officer representative's formal acceptance and signing. The transfer will

not be deemed complete until all of these approvals and signatures have been obtained.

#### 1.4.2 Project acceptance

The work items and deliverables for the LMS Moodle Project are formally accepted in this document. All acceptance criteria and requirements in the project documentation and scope statement were satisfied successfully by the Project. All essential deliverables have been tested to ensure that they fulfill the project's requirements. The quality and functioning of the product were also assessed and quantified.

The project was turned over to LMS Moodle workers, who were trained on how to utilize it as their new method system. All of the knowledge on how to use the project has been transferred.

The Project Manager has been given permission to complete the project's formal closeout. A post-project evaluation, documentation of lessons learned, release of the Project Team, closing out all and archiving all pertinent project records are all part of the closeout process. The Project Sponsor will be contacted once the closing procedure is complete, and the Project Manager will be dismissed from the project.

## 1.4.3 Post Project Review

## 1.4.3.1 Project Summary

## 1.4.3.1.1 Project Team and Staffing

Table 3.3 Project Team and Staffing

| Role | Name | Responsibilities |
|------|------|------------------|
|      |      |                  |
|      |      |                  |
|      |      |                  |
|      |      |                  |
|      |      |                  |

## 1.4.3.1.2 Project Deliverable (Planned vs. Actual)

The LMS Moodle System Project has been completed with success. This section highlights the planned deliverables and compares them to actual deliverables as they occurred.

#### LMS Moodle System Design

| Planned Deliverable | Actual Deliverable  | Summary |  |
|---------------------|---|---------|--|
|                     | Complete the process and generating of collection of reports. |         |  |

Table 3.4 Project Deliverable

#### LMS Moodle System Production (Prototype)

Table 3.5 Moodle System Production

| Planned Deliverable | Actual Deliverable  | Summary |  |
|---------------------|---|---------|--|
|                     | Complete the process and generating of collection of reports. |         |  |

#### LMS Moodle System Testing

Table 3.6 Moodle System Testing

| Planned Deliverable                     |    | Actual Deliverable |  | Summary |    |            |                                |     |
|---|----|--------------------|--|---------|----|------------|--------------------------------|-----|
| Testing the system recognize the errors | to | Testing recogniz   |  | ,       | to | This compl | deliverable<br>eted as planned | was |

#### LMS Moodle System Project Deliverables

Table 3.7 Moodle System Project Deliverables

| Legal Management       |                       |   |  |  |  |  |
|------------------------|-----------------------|---|--|--|--|--|
| Planned<br>Deliverable | Actual<br>Deliverable | Summary                                   |  |  |  |  |
|                        |                       | This deliverable was completed as planned |  |  |  |  |

| This deliverable was completed planned | as |
|--|----|
| This deliverable was completed planned | as |

In outline all documented project deliverables are met by the LMS Moodle project team. All stakeholders have submitted their feedback and acknowledge that there are not any deliverables that were incomprehensible or omitted for this project.

## 1.4.3.1.3 Transition to Operations

The LMS Moodle System Project is a difficult task that needs to spend time and effort to meet the deliverables and objectives of the system. The project team, the stakeholders are communicating to update the changes of the system.

## 1.4.3.2 Project Costs

The budgeted price for the LMS Moodle System Project.

Table 3.8 Project Costs

| Project Phase | Budgeted Cost | Actual Cost | Comments |
|---------------|---------------|-------------|----------|
|               |               |             |          |
| System design |               |             |          |
|               |               |             |          |
| Testing       |               |             |          |
|               |               |             |          |

## 1.4.3.3 Project Schedule

This section describes the project's set upend schedule or timeline and the way the project measured against this plan. The project schedule is important and useful because it serves as guide to the proponents to complete the task as early or on time. This data serves as proof that the project team is doing the task effectively.

The LMS Moodle project schedule caught up a 3 months project with initiation starting on the October 2021 and project sale ending in December 2021. There have been initial issues by the project team would probably shortage of time. The chart below shows the project phase, the planned schedule dates, and also the actual completion dates of every part of the project.

Table 3.9 Project Schedule

| Project Phase   | Scheduled<br>Completion | Actual<br>Completion | Comments |
|---|-------------------------|----------------------|----------|
| Project Plan<br>Complete and<br>Approved              |                         |                      |          |
| Design Completed                                      |                         |                      |          |
| Coding Completed                                      |                         |                      |          |
| Testing Completed                                     |                         |                      |          |
| Implementation<br>Completed                           |                         |                      |          |
| One Transaction<br>Complete and Project<br>Completion |                         |                      |          |
| Project Closure                                       |                         |                      |          |

#### 1.4.3.4 Recommendations

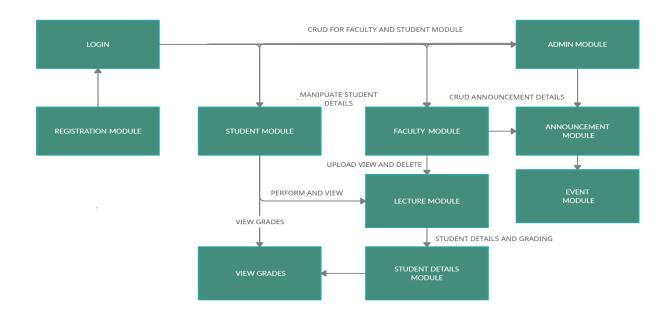
- Apply more security measures on the system
- Improve the design and graphics of the system
- Spend more time to research about the system for the positive outcome

## 1.5 Technical Solution Design

# 1.6 System architecture (Top level1 -> EIS, Top level 2 -> Group)

## 1.6.1 Business Process Architecture





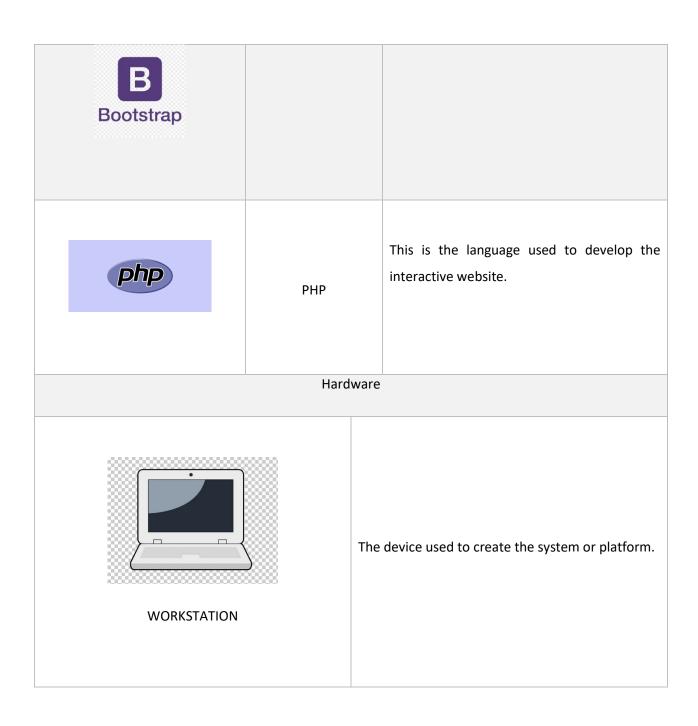
# 1.6.2 Application Architecture

## 1.6.3 Data Architecture

# 1.6.4 Technology Architecture

Table 4 Technology Architecture

| Software |                          |  |  |
|----------|--------------------------|--|--|
| Logo     | Description              |  |  |
| 83       | XAMMP<br>DATABASE, MySQL | It is used to create database, sorting data and integrating data to another database                       |  |
| HTML     | HTML                     | It is use to create the webpage and its content.   |  |
| EZZ      | CSS                      | This language is used for describing the presentation of the webpages including colors, layouts and fonts. |  |
|          | BOOTSTRAP                | This is a potent front-end framework used to create modern websites and web apps.                          |  |



## 2.0 Product Backlog

This chapter prioritized features list, containing short descriptions of all functionality desired to be included in the system project by the client. a Scrum team and its product owner writing down everything they can think of for agile backlog prioritization.

# 2.1 Product backlog (user stories)

Table 4.1 Product Backlog

| User   |   |            | Requirements | Revised    |          |
|--------|---|------------|--------------|------------|----------|
| Story  | User Stories  | Priorities | Reference    | Priorities | Status   |
| Number |   |            |              |            |          |
| 1      | As a user I want  | 1          |              |            | On-going |
|        | to create an  |            |              |            |          |
|        | account that is   |            |              |            |          |
|        | easy to access  |            |              |            |          |
|        |   |            |              |            |          |
|        |   |            |              |            |          |
|        |   |            |              |            |          |
| 2      | As a user I want<br>to secure my<br>account every<br>time I open the<br>account | 1          |              |            | On-going |
| 3      | As a user I want  | 2          |              |            | On-going |
|        | to make sure  |            |              |            |          |
|        | that I input the  |            |              |            |          |
|        | right password  |            |              |            |          |
|        | for my account  |            |              |            |          |

| 4 | As an admin, I    | 1 |  | On-going  |
|---|-------------------|---|--|-----------|
|   | want to have      |   |  |           |
|   | the capability to |   |  |           |
|   | create a          |   |  |           |
|   | document to       |   |  |           |
|   | track.            |   |  |           |
|   |                   |   |  |           |
| _ | As an admin I     | 4 |  | On main m |
| 5 | As an admin, I    | 1 |  | On-going  |
|   | would like to     |   |  |           |
|   | have              |   |  |           |
|   | information on    |   |  |           |
|   | every document    |   |  |           |
|   | that is being     |   |  |           |
|   | managed by the    |   |  |           |
|   | system to         |   |  |           |
|   | monitor the       |   |  |           |
|   | current           |   |  |           |
|   | progress of all   |   |  |           |
|   | the documents     |   |  |           |
|   |                   |   |  |           |
| 6 | And a staff       | 1 |  | On-going  |
|   | (admin,           |   |  |           |
|   | approver,         |   |  |           |
|   | secretary,        |   |  |           |
|   | faculty) I would  |   |  |           |
|   | like to have a    |   |  |           |
|   | function that let |   |  |           |
|   | me monitor the    |   |  |           |
|   | current status of |   |  |           |
|   | the documents     |   |  |           |
|   |                   |   |  |           |
|   |                   |   |  |           |

| 7 | As an admin, I    | 3 |  | On-going |
|---|-------------------|---|--|----------|
|   | must be fully     |   |  |          |
|   | aware of the      |   |  |          |
|   | current status of |   |  |          |
|   | users and         |   |  |          |
|   | access to the     |   |  |          |
|   | full list of the  |   |  |          |
|   | users' account    |   |  |          |
|   |                   |   |  |          |
| 8 | As a              | 2 |  | On-going |
|   | Department        |   |  |          |
|   | admin in the      |   |  |          |
|   | dashboard, I      |   |  |          |
|   | want to see the   |   |  |          |
|   | numbers of        |   |  |          |
|   | Approver,         |   |  |          |
|   | Secretary, and    |   |  |          |
|   | Faculty           |   |  |          |
|   | accounts          |   |  |          |
|   |                   |   |  |          |
| 9 | As a              | 3 |  |          |
|   | department        |   |  |          |
|   | admin I want to   |   |  |          |
|   | have a function   |   |  |          |
|   | to be used to     |   |  |          |
|   | create type of    |   |  |          |
|   | document          |   |  |          |
|   |                   |   |  |          |

| 10 | As a user I want | 3 |  | On-Going |
|----|------------------|---|--|----------|
|    | to make it easy  |   |  |          |
|    | to add and       |   |  |          |
|    | delete           |   |  |          |
|    | documents.       |   |  |          |
|    |                  |   |  |          |

# 2.2 Product Backlog for EIS Information Security

Table 4.2 Product Backlog

| IS Number | User Stories  | Priorities | Requirements<br>Reference | Revised<br>Priorities | Revised<br>Priorities |
|-----------|---|------------|---------------------------|-----------------------|-----------------------|
| 1         | As a admin<br>secretary<br>approver<br>faculty) I want<br>to make sure<br>that password<br>is secured | 1          |                           |                       | On-going              |
| 2         | As a admin secretary approver faculty) I want to make sure that no one is using my account            | 2          |                           |                       | On-going              |
| 3         | As a admin<br>secretary<br>approver<br>faculty) want to<br>make sure that<br>I am capable             | 2          |                           |                       | On-going              |

|   | of knowing my<br>logs record   |   |  |          |
|---|--|---|--|----------|
| 4 | As a admin secretary approver faculty) I want to have a terms and authentication | 1 |  | On-going |

# 2.3 product backlog for EIS Standards

# 2.3.1 UI/UX(icon,color,etc)

Table 4.3 UI/UX

| Number<br>Standard | User Stories   | Priorities | Requirements<br>Reference | Revised<br>Priorities | Status   |
|--------------------|--|------------|---------------------------|-----------------------|----------|
| 1                  | As a admin secretary approver I want to have a user-friendly interface this can be achieved by using light colors and very minimal design of course with a visible size of icons and readable type of font | 1          |                           |                       | On-going |
| 2                  | As a staff I would like to use a respondsive navigation bar to make it   | 2          |                           |                       | On-going |

| files                         | 5   |   |  |          |
|-------------------------------|---|---|--|----------|
| would be rether updaying my o | a staff, I  uld like to  notified if  re is any late with  current  ument  us | 1 |  | On-going |

# 2.4 Product Backlog for Integration

Table 4.3 Product Backlog for Integration

| Integration<br>Number | User Stories   | Priorities | Requirements<br>Reference | Revised<br>Priorities | Status   |
|-----------------------|--|------------|---------------------------|-----------------------|----------|
| 1                     | As an admin I want to have an integrated database where I can easily read and collect data | 1          |                           |                       | On-going |
| 2                     | As an admin I want to access the other databases in the subsystems.                        | 1          |                           |                       | On-going |

# 2.5 Product Backlog for Analytics

# 2.5.1 Application System Analytics

Table 4.4 Application System Analytics

| Analytics<br>Number | User Stories   | Priorities | Requiremen ts Reference | Revised<br>Priorities | Status   |
|---------------------|--|------------|-------------------------|-----------------------|----------|
| 1                   | As a user I want to easily abort my process and log out on my account. | 1          |                         |                       | On-Going |

# 2.5.2 EIS Analytics

Table 4.5 Analytics

| Analytics<br>Number | User Stories  | Priorities | Requiremen ts Reference | Revised<br>Priorities | Status   |
|---------------------|---|------------|-------------------------|-----------------------|----------|
| 1                   | As an admin I want to see all the data I want to manage in one place. | 1          |                         |                       | On-Going |
| 2                   | As an admin I want to know the number of users in the dashboard.      | 1          |                         |                       | On-Going |

# 3.0 Sprint Backlog

# 3.1 Sprint Backlog Table

## 3.1.1 User Stories

Table 4.6 User Stories

| User<br>Story<br>Numbe<br>r | User Stories   | Task | User Story<br>Points<br>(Hours) | Responsible<br>Team<br>Member |  |  |  |  |  |  |
|-----------------------------|--|------|---------------------------------|-------------------------------|--|--|--|--|--|--|
|                             | Sprint 1   |      |                                 |                               |  |  |  |  |  |  |
| 1                           | As a web developer I need to create a registration and sign-up form. |      |                                 |                               |  |  |  |  |  |  |
|                             | Sprint 2   |      |                                 |                               |  |  |  |  |  |  |
| 2                           | As a web developer I need to make sure the website is secure.        |      |                                 |                               |  |  |  |  |  |  |
| 3                           | As a web developer I need to make the password characters visible.   |      |                                 |                               |  |  |  |  |  |  |
| Sprint 3                    |  |      |                                 |                               |  |  |  |  |  |  |

| 4 | As a web developer I     |          |   |  |
|---|--------------------------|----------|---|--|
|   | need to organize the     |          |   |  |
|   | document for the         |          |   |  |
|   | admin to track.          |          |   |  |
|   |                          |          |   |  |
| 5 | As a web developer I     |          |   |  |
|   | need to make the         |          |   |  |
|   | documents in the         |          |   |  |
|   | modules easy to check.   |          |   |  |
|   |                          | Sprint 4 |   |  |
| 6 | As a web developer I     |          |   |  |
|   | need to make the         |          |   |  |
|   | documents in the         |          |   |  |
|   | module available for     |          |   |  |
|   | monitoring.              |          |   |  |
|   |                          |          |   |  |
| 7 | As a web developer I     |          |   |  |
|   | need to make the         |          |   |  |
|   | accounts in the website  |          |   |  |
|   | available for            |          |   |  |
|   | monitoring.              |          |   |  |
|   |                          | Sprint 5 | 1 |  |
| 8 | As a web developer I     |          |   |  |
|   | need to create a list of |          |   |  |
|   | user accounts.           |          |   |  |
| 9 | As a web developer I     |          |   |  |
|   | need to create a         |          |   |  |
|   | function for easy to     |          |   |  |
|   | create documents.        |          |   |  |
|   |                          |          |   |  |
|   |                          | Sprint 6 |   |  |
|   |                          |          |   |  |

| 10 | As a web developer I    |  |  |
|----|-------------------------|--|--|
|    | need to make a          |  |  |
|    | function for adding and |  |  |
|    | deleting documents.     |  |  |
|    |                         |  |  |

# 3.1.2 Information security

Table 4.7 Information Security

| IS<br>Number | IS Description   | Task     | Informatio<br>n Security<br>Points<br>(Hours) | Responsible<br>team<br>member |
|--------------|--|----------|---|-------------------------------|
|              |  | Sprint 1 |   |                               |
| 1            | As a web developer I need to make the password secured and                             |          |   |                               |
|              | safe.  |          |   |                               |
| 2            | As a web developer I need to make the accounts not vulnerable to hacking.              |          |   |                               |
|              | <u> </u>   | Sprint 2 |   |                               |
| 3            | As a web developer I need to create a history list of times logged.                    |          |   |                               |
| 4            | As a web developer I need to create the proper terms and make a secure authentication. |          |   |                               |

## 3.1.3 EIS standard

Table 4.8 EIS Standard

| EIS<br>Standard<br>Number | EIS Standard<br>Description  | Task     | EIS<br>Standard<br>Points<br>(Hours) | Responsible<br>team<br>member |
|---------------------------|--|----------|--------------------------------------|-------------------------------|
|                           |  | Sprint 1 |                                      |                               |
| 1                         | As a web developer I need to comply the requested interface design.                          |          |                                      |                               |
|                           |  | Sprint 2 |                                      |                               |
| 2                         | As a web developer I need to organize the documents based on their type for easy navigation. |          |                                      |                               |
| 3                         | As a web developer I need to create a notification form.                                     |          |                                      |                               |

# 3.1.4 EIS integration

Table 4.9 EIS Integration

| EIS<br>Integratio<br>n Number | EIS Integration<br>Description | Task | EIS<br>Integration<br>Points<br>(Hours) | Responsibl<br>e team<br>member |
|-------------------------------|--------------------------------|------|---|--------------------------------|
| Sprint 1                      |                                |      |   |                                |

| 1        | As a web developer I |   |  |  |
|----------|----------------------|---|--|--|
|          | need to make sure    |   |  |  |
|          | the databases are    |   |  |  |
|          | integrated.          |   |  |  |
|          |                      |   |  |  |
| Sprint 2 |                      |   |  |  |
|          |                      | • |  |  |
| 2        | As a web developer I |   |  |  |
|          | need to make the     |   |  |  |
|          | other database       |   |  |  |
|          | accessible.          |   |  |  |
|          |                      |   |  |  |

# 3.1.5 Analytics

Table 5 Analytics

| Analytics<br>Number | Analytics<br>Description   | Task     | Analytics<br>Points<br>(Hours) | Responsible<br>team<br>member |
|---------------------|--|----------|--------------------------------|-------------------------------|
|                     |  | Sprint 1 |                                |                               |
| 1                   | As a web developer I need to create a cancel and log-out                       |          |                                |                               |
|                     | form.  | Sprint 2 |                                |                               |
| 1                   | As a web developer I need to create a dashboard to store documents in modules. |          |                                |                               |
| Sprint 3            |  |          |                                |                               |

| 2 | As a web developer I |  |
|---|----------------------|--|
|   | need to create a     |  |
|   | graph for the number |  |
|   | of users in the      |  |
|   | dashboard.           |  |
|   |                      |  |