**IT114/IT114L**

***OBJECT ORIENTED-PROGRAMMING***

Project Proposal

**1. LNU Room Management System**

**2. Introduction**

A room management system that enables teachers to book a room per semester while effectively handling different classes and sections. This includes gathering the students into a room to view announcements and managed activity dates, deadlines, and course topics. Students are able to access class calendar for definitive overview. There will be termination of room validity as semester ends. LMRS’ primary goals are simplicity, user-friendly, lightweight and efficiency while keeping the UI/UX intuitive and visually appealing. The system will prioritize a clean and organized interface that minimizes unnecessary complexity, ensuring ease of navigation for both teachers and students.

**2.1 Background**

In educational institutions like Leyte Normal University, room scheduling is often done manually, which may lead to conflicts and inefficient utilization of spaces. The need for a Room Management System arises to automate the process of room allocation for subject class sectioning, thus enhancing organization, efficiency, and accessibility. This system will help instructors, and students track room schedules for the rest of the semester while ensuring a calendar for effective monitoring of dates and course works.

**2.2 Purpose**

The primary purpose of this project is to develop an automated Room Management System for LNU. The system will facilitate efficient room bookings, date and data tracking, and management, ensuring that room schedules are conflict-free and well-coordinated. It will also streamline the process for instructors to book rooms, view schedules, and make necessary announcements for students.

**2.3 Objective**

To design and implement an Object-Oriented Program system for managing room bookings that enables instructors to administer room schedule and to develop a fully scalable and functional application that meets the needs of LNU's room management system.

**3. Scope of the Project**

**3.1 Case Study Review**

The case study for this project will involve reviewing existing room management systems to understand their features, functionalities, and limitations. Key concepts such as user role (instructors), room allocations, scheduling algorithms, and database management will be analyzed.

**3.2 Group Project Work**

**Requirements Analysis and Documentation**

**Purpose**

The LNU Room Management System (LMRS) aims to streamline room booking processes for instructors, allowing efficient management of room allocations for semesters.

**Scope**

The system will allow instructors to book rooms for specific times throughout a semester or 5-6 months’ time interval.

**Functional Requirements:**

User Registration and Login

Room Search and Booking

Viewing Rooms and Buildings

Dashboard and User Profile to manage and edit information

3.3 Expected Outcome