**DUCoE CSE Department LABORATORY AND ASSESSMENT MANAGEMENT SYSTEM PROJECT PROPOSAL**

**SUBMITTED BY**

**Name……………………….………….id**

1. **Solomon Mekonnen…………………119/10**
2. **Selamawit Melese …………………..117/10**
3. **Eskedar Sisay ………………………105/10**
4. **Birhanesh Zaza ……………………102/10**

***In Partial fulfillment for the award of the degree***

**Of**

**Bachelor of Technology**

**In Computer Science & Engineering**

**At**

**DEFENCE UNIVERSITY, COLLEGE OF ENGINEERING**

**BISHOFTU**

**September 2022**

# Abstract

A "**computer science and Engineering Department laboratory and Assessment** **Management System**" application for the college is to be developed as part of this project. The system can be accessed and used productively throughout the organization with the appropriate access permissions. This system can be used by the faculty of the college as a departmental management tool. The core of the project is the data on the application managed by the head of the department. Our project provides the ability to track managing the laboratories in the department and keeping records of the materials and managing Assessment in the department is our main focus.

It reduces manual effort and uses less paper, which helps to save time. PHP, JSON, CSS and MySQL are used for the development of this project.

The main objective of this project is to engage all users in one collaborative online system systematically as a medium in exchanging information about the CSE Department LA management system. Developing the system involves the knowledge of web design, web setup, database design, database setup and server setup.

Considering four user groups for laboratory and Assessment (LA) Management System, there will be different interface and function for each group. Administrator will be managing the system with the task of handling user registrations and accounts. User verification will secure the system. This web-enabled LA management and its related features are highly valuable, practicable, and relevant in achieving the goals of the involved parties.

# ABBREVIATIONS AND NOMENCLATURES

**FYP** Final Year Project

LAMS laboratory and Assessment Management System

**PHP** Hypertext Preprocessor

**HTML** Hyper Text Markup Language

**CSS** Cascading Style Sheets

**MySQL** structural query language

**JSON JavaScript Object Notation**

- NYC not yet complete

C complete

Table of Contents

[Abstract ii](#_Toc119903153)

[ABBREVIATIONS AND NOMENCLATURES iii](#_Toc119903154)

[CHAPTER 1 2](#_Toc119903155)

[INTRODUCTION 2](#_Toc119903156)

[1.1 STATEMENT OF THE PROBLEM 3](#_Toc119903157)

[1.2 Objective of the project 4](#_Toc119903158)

[1.2.1General Objective 4](#_Toc119903159)

[1.2.2 Specific Objective 4](#_Toc119903160)

[1.3 Scope of the project 4](#_Toc119903161)

[1.4 Methodology 5](#_Toc119903162)

[1.4.1Data collection methodology 5](#_Toc119903163)

[1.5 Development Environment and programming tool 5](#_Toc119903164)

[1.6 SIGNIFICANCE OF THE STUDY 6](#_Toc119903165)

[1.7 ..\main\progerssion timeline.docx 7](#_Toc119903166)

[1.8..\main\budget plan.docx 7](#_Toc119903167)

[Chapter 2 8](#_Toc119903168)

[Literature Survey 8](#_Toc119903169)

[2.1 Existing System 8](#_Toc119903170)

[2.2 Proposed System 8](#_Toc119903171)

# CHAPTER 1

# INTRODUCTION

The CSE Department LA Management Framework is a formal sociotechnical organizational framework for the collection, processing, storage, and distribution of information. In order to make future retrieval of information easy, educational institutions must maintain track of information about all of their members, especially the students. Educational institutions are able to manage student and laboratory data with ease and without fuss thanks to a management information system, commonly known as the **CSE Department LA management system**. You have the ability to manage a variety of student-related data requirements in a department using department systems, including assigning student rooms, posting notices to users, add all courses from year one up to year 5th, delivering assignment mange Assessments and Full information of teachers, their studies, their status and their type.

**Also, managing the laboratories in the department and keeping records of the materials is our project main focus.**

The CSE Department LA Management System is being created to meet all needs and specifications at the departmental level. It is a web-based system that streamlines the management of events or activities, feedback on each event, and showcasing departmental accomplishments. Users are people who engage with the system in some way. The user's web browser is the primary method of user engagement. The user will enter their login ID and password to access the system. Entry will be cancelled if the conditions are incorrect.

There are two user levels administrator level and user level each of which has unique functionalities. CSE Department LA Management System is a online management system which maintains records of **the materials** and mange **Assessments**. It is a complete online project, for a firm to run it successfully. It is compulsory to take feedback from clients. The front-end will be HTML pages. Java code will be used for validation and processing of user input and database it will act as a middle layer. Third layer of database will be interacted with these layers, which would be MYSQL database. The web server would be Apache Tomcat

# 1.1 STATEMENT OF THE PROBLEM

The problems regarding to previous laboratory management system and student assessments system were analysed noted. This project aims to solve some of the problems that faced the department due to manual system. As a CSE department manual system highly damages the department reputation that means reputations with students and instructors something which can so easily be sourced by mistakes delays and shoddy service. Forms can go missing, handwritten notes misread and correspondence unanswered.

Beside this time consuming, slightest work efficiency and storage problems are the major problems in pervious system. The current system will be overcome any biased on class assessments and laboratory management. At the same time it reduce face to face communication between student and teacher outside the class so favouring individual by giving extra recourse will be minimized.

# 1.2 Objective of the project

## 1.2.1General Objective

The general objective of this project is to manage our laboratory effectively and to reduce manual system in the class.

## 1.2.2 Specific Objective

To manage the information of the equipment in CSE department

To improve the proper lab resource management in CSE department

To reduce wastage of time for students to submit their assignment

To add, update, edit and remove records smoothly

To add all courses from year one up to year 5thand and clarify which courses are taken when

# 1.3 Scope of the project

This project designed for computer science engineering department only.

The projecthelps to adapt digital world and it also helps in current all works relative to lab management system.it also reduced the cost of collecting Assignments in the class and laboratory martials information from lab Assistances.

We do to computerize various process of lab management system, Assignment class and materials record methods.

It satisfies user requirement

easy to understand by user

It well expandable

The system generates type of information that can be used for various purpose

It utilize the resource in efficient manner by increasing the productivity through automation.

# 1.4 Methodology

# 1.4.1Data collection methodology

This project use the following methodologies for the following different tasks:

* Interview
* On job observation
* Review of relevant documents
* Review of similar platforms

# Development Environment and programming tool

The following development environments and programming tools are selected based on the following criteria:

* Primarily team members experience with the tools and Software.
* The features that the tools have to make the project more effective.
* Operating system:
* Windows 10
* Data base:
* MYSQL
* Server side language:
* PHP
* Front end language:
* HTML,
* CSS,
* Bootstrap,
* JS
* JQuery
* Server:
* XAMPP
* Text editor:
* Visual studio code
* MS word 2016- for all word processing tasks and documentations.
* Visio 2016 to draw diagrams.

# 1.6 SIGNIFICANCE OF THE STUDY

A computerized CSE Department LA Management System would aid in capturing data, as well as providing accurate and on-timely information on laboratory materials, unlike the current paper-based system which would waste time in sorting and crosschecking papers and files. The following are the significances of this research proposal:

* Timely and quick retrieval of requested information
* add all courses from year one up to year 5thand and clarify which courses are taken when
* providing accurate and on-timely information on laboratory materials.
* Computation of scores assigned by lecturers to tests and assignments over the system. It will allow students to view their respective continues results

# 1.7 [..\main\progerssion timeline.docx](../main/progerssion%20timeline.docx)

# 1.8[..\main\budget plan.docx](../main/budget%20plan.docx)

# Chapter 2

# Literature Survey

## 2.1 Existing System

The whole process of laboratory materials management and evaluating student assessment was done manually till date. Processing the assessment paper i.e. checking and distributing respective scores used to take time when the system was not installed.

**DISADVANTAGES OF CURRENT SYSTEM**

The current system is very time consuming.

It is very difficult to control and check materials manually. especially in the digital world, It is very tedious to assess students manually.

The chances of paper leakage are more in current system as compared to our system.

## 2.2 Proposed System

The online AL management system created for taking assignment and managing computer lab equipment’s has following features

In comparison to the present system our ALM system is less time consuming and is more efficient.

Lab marital controlling and checking and also assessing students very easy in our ALM system as it is automated

online ALM system save the AL information in a database, teachers can add/delete assignments, specify the assignment submission period.