**DEVELOPMENT LECTURE SCHEDULING APPLICATION**

**BY**

**ALMUSTAPHA ADO FAROUQ**

**BU/22B/IT/6871**

**IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING, FACULTY OF COMPUTING AND APPLIED SCIENCE, BAZE UNIVERSITY, ABUJA.**

**NOVEMBER, 2023**

**DECLARATION**

This is to certify that this Thesis entitled LECTURE SCHEDULING APPLICATION, which is submitted by ALMUSTAPHA ADO FAROUQ in partial fulfilment of the requirement for the award of degree for B.Sc. in Information Technology to the Department of Computer Science, Baze University Abuja, Nigeria, comprises of only my original work and due acknowledgement has been made in the text to all other materials used.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ALMUSTAPHA ADO FAROUQ Date

BU/22B/IT/6871

**APPROVED BY**

………………..

Dept. of Computer Science **H.O.D**

**CERTIFICATION**

This is to certify that this Thesis entitled LECTURE SCHEDULING APPLICATION, which is submitted by ALMUSTAPHA ADO FAROUQ in partial fulfilment of the requirement for the award of degree for B.Sc. in Information Technology to the Department of Computer Science, Baze University Abuja, Nigeria is a record of the candidate’s own work carried out by the candidate under my/our supervision. The matter embodied in this thesis is original and has not been submitted for the award of any other degree.

**APPROVAL PAGE**

The project titled "LECTURE SCHEDLING APPLICATION" submitted by ALMUSTAPHA ADO FAROUQ bearing registration number BU/22B/IT/6871, has been approved by the examination committee for the award of the Bachelor of Science in Software Engineering degree at Baze University, Abuja.

By

Dr. Usman Bello Abubakar

Supervisor Date

Assoc Prof. Chandrashekhar Uppin

Head of Department Date

Prof. Peter Ogedebe

Dean, Faculty of Computing and Applied Science Date

Prof. Choji Davou Nyap

External Examiner Date

**DEDICATION**

[DEDICATION PAGE]

**ACKNOWLEDGEMENT**

I want to sincerely thank everyone who helped to see this initiative through to its successful conclusion.

My supervisor, Dr. Usman Abubakar, has my sincere gratitude for all of his advice, knowledge, and helpful assistance during this research. Their patience, support, and sage advice have been invaluable in determining the course and caliber of this work.

I am appreciative of the professors at Baze University's Department of Computer Science for sharing their expertise and creating a positive learning atmosphere.

I want to express my gratitude to my friends and family for their consistent encouragement, understanding, and support throughout this journey. Their confidence in me has always served as a source of inspiration.

Lastly, I would like to thank the reviewers who remained anonymous.

**ABSTRACT**

A state-of-the-art software program called the Lecture Scheduling Application was created to completely change how educational institutions organize their lecture schedules. Conventional scheduling methods frequently entail laborious manual coordination, which takes time and leads to disagreements in scheduling, waste of resources, and unhappiness among teachers and students. The goal of this program is to improve scheduling overall by offering a streamlined, automated, and user-friendly solution to these problems.

**CHAPTER ONE**

**INTRODUCTION**

**1.1 Overview**

The purpose of the lecture scheduling application is to make the process of organizing and managing lectures in educational institutions more efficient and user-friendly. With the use of this software, scheduling should be more effective and efficient, resulting in less manual labor and an overall better experience for teachers and students.

**1.2 Background and Motivation**

The traditional lecture scheduling process in educational institutions often involves complex manual coordination, leading to potential scheduling conflicts, resource wastage, and inconvenience for students and faculty. The motivation behind this application is to leverage technology to address these challenges and provide a more efficient and user-friendly scheduling solution.

**1.3 Statement of the Problem**

The current scheduling process in educational institutions is time-consuming and error-prone, resulting in scheduling conflicts, suboptimal resource allocation, and dissatisfaction among stakeholders. This application aims to address these issues and provide a solution that ensures smooth lecture scheduling, minimizes conflicts, and maximizes resource utilization.

**1.4 Aim and Objectives**

The primary aim of the lecture scheduling application is to create a user-friendly, automated, and efficient system for scheduling lectures in educational institutions. The specific objectives include:

* Developing a user-friendly interface for administrators, faculty, and students to access and manage the scheduling system.
* Automating the scheduling process to minimize conflicts and optimize resource allocation.
* Providing notifications and reminders for all stakeholders to ensure they are informed about their schedules.
* Integrating features for requesting and approving schedule changes or swaps.
* Generating reports and analytics to help administrators make data-driven decisions about scheduling.

**1.5 Significance of the Project**

The lecture scheduling application is significant as it offers numerous benefits, including:

1. Improved efficiency and accuracy in scheduling, reducing conflicts and disruptions.
2. Enhanced user experience for students, faculty, and administrators.
3. Better utilization of resources, such as classrooms and faculty availability.
4. Time and cost savings due to reduced manual scheduling efforts.
5. Data-driven insights for better decision-making in scheduling.

**1.6 Project Risks Assessment**

While developing and implementing the lecture scheduling application, several risks must be considered, including:

* Technical challenges during development.
* Resistance to change among users.
* Data security and privacy concerns.
* Integration issues with existing systems.
* Potential resource limitations.

**1.7 Scope and Organization**

The project's scope includes the development and implementation of the lecture scheduling application for a specific educational institution. The project will be organized into the following phases:

* Requirement analysis and system design.
* Application development and testing.
* User training and system deployment.
* Ongoing support and maintenance.