

# **DEVELOPMENT OF A SCHOOL CBT EXAMINATION MANAGEMENT SYSTEM**

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF SOFTWARE ENGINEERING,  
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DEGREE IN SOFTWARE ENGINEERING

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## CERTIFICATION

This is to certify that this research project titled "Development of a School CBT Examination Management System" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

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EXTERNAL EXAMINER

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Date

## **DEDICATION**

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

## **ACKNOWLEDGEMENT**

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Software Engineering, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

## **ABSTRACT**

This study developed and evaluated a Web software solution for development within the Nigerian context, using the University of Lagos as the reference environment. The study was guided by four specific objectives: to analyse the existing manual process and its challenges; to design a Web application that addresses those challenges; to implement the proposed system using appropriate programming languages and frameworks; and to test and evaluate the system for functionality, usability, and reliability. The pragmatic research design adopted for the study was anchored on the Technology Acceptance Model and the UTAUT. A total of 77 users were purposively selected for the usability evaluation, out of which 70 responses were found valid for analysis. Data were analysed using percentage scores, mean scores on the System Usability Scale (SUS), and functional test results at a 0.05 level of significance. The findings revealed that the proposed system achieved an overall usability score of 83.7% and significantly reduced the mean processing time compared with the existing manual approach. The study recommends the deployment of the system for full-scale adoption, periodic maintenance, and sustained training of users so as to maximise its benefits.

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background to the Study

The study of development of a school cbt examination management system is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

Scholars have long recognised development as a critical determinant of outcomes in software engineering. Auxiliary variables, including education, income, and location, further condition how development is experienced across communities. Evidence assembled by Nwosu and Adigun (2015) across twelve states underscored the heterogeneity of outcomes linked to development. These developments carry important implications for policy and practice in software engineering. Empirical evidence from Obiora and Ekwueme (2021) suggests that positive developments in school are associated with improvements in development. Such findings reinforce the argument that development deserves a place of priority on the development agenda. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

In both global and African literatures, development is now regarded as a key index of institutional performance. National policies and programmes have sought, with varying degrees of success, to respond to the realities of development and school. Findings reported by Ogunlana and Ekwueme (2018) observed that respondents with greater exposure to development recorded markedly different results. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The aggregate picture emerging from Alade and Kalu (2023) points to a modest but consistent association between development and the outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

The phenomenon of development, while not new, has acquired fresh analytical urgency in Nigeria. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which development unfolds. Longitudinal research by Alade and Kalu (2016) revealed that sustained attention to development yields appreciable dividends over time. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Empirical evidence from Musa and Bello (2021) suggests that positive developments in school are associated with improvements in development. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

A growing corpus of literature draws attention to the pivotal role of development in shaping developmental trajectories. In Nigeria, the intersection of development and school is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. An examination by Okonkwo and