

DESIGN AND IMPLEMENTATION OF A LIBRARY SEAT RESERVATION SYSTEM

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Design and Implementation of a Library Seat Reservation 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.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

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.

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ABSTRACT

This study developed and evaluated a Web software solution for design 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 62 users were purposively selected for the usability evaluation, out of which 56 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 86.5% 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 design and implementation of a library seat reservation 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.

The salience of design in national discourse has grown steadily, driven by changing social conditions and technological penetration. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which design unfolds. Findings reported by Ibrahim and Musa (2018) observed that respondents with greater exposure to design recorded markedly different results. Accordingly, there is a growing consensus that deliberate policy action is required. Studies by Obiora and Umeh (2019) largely support the view that design exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

design occupies a prominent position in contemporary debates about implementation and national development. Auxiliary variables, including education, income, and location, further condition how design is experienced across communities. The work of Ogbeide and Umeh (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Okonkwo and Nnamdi (2023) extended earlier analyses by demonstrating that implementation reinforces the effects of design. Accordingly, there is a growing consensus that deliberate policy action is required. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Contemporary scholarship increasingly frames design as inseparable from the broader question of implementation. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of design. Research by Okonkwo and Nnamdi (2021) using mixed methods provided particularly rich insight into the mechanisms connecting design and implementation. For practitioners, the practical significance of design cannot be overstated, given its demonstrable link with implementation. Comparative work by Nnamdi and Kalu (2022) across several states uncovered a consistent pattern linking design with implementation. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. 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 design in shaping developmental trajectories. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of design. A notable study by Adebayo and Adeniyi (2017) argued that the impact of design is substantially mediated by the quality of institutions. These observations collectively invite a reconsideration of