

# **DEVELOPMENT OF A SCHOOL BUS TRACKING AND FEES SYSTEM**

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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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 Bus Tracking and Fees 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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PROJECT SUPERVISOR

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Date

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HEAD OF DEPARTMENT

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Date

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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 78 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 87.6% 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 bus tracking and fees 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.

In both global and African literatures, development is now regarded as a key index of institutional performance. In Nigeria, the intersection of development and school is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Studies conducted within the West African subregion by Osinachi and Ogunlana (2018) reached conclusions broadly consistent with the Nigerian evidence. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Field evidence gathered by Chukwu and Kalu (2016) suggested that stakeholder engagement materially improves the results achieved in matters of development. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with school. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

development occupies a prominent position in contemporary debates about school and national development. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. Salami and Olawale (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Studies conducted within the West African subregion by Adigun and Nnamdi (2018) reached conclusions broadly consistent with the Nigerian evidence. These observations collectively invite a reconsideration of standard assumptions regarding school. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

development occupies a prominent position in contemporary debates about school and national development. Evidence from national agencies indicates that development has grown considerably in recent times, underscoring the need for systematic inquiry. An examination by Adigun and Nnamdi (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. These observations collectively invite a reconsideration of standard assumptions regarding school. Obiora and Nwosu (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. Such findings reinforce the argument that development deserves a place of priority on the development agenda. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

Debates on national transformation repeatedly return to the role of development and its attendant dynamics. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of development. Comparative work by Nwosu and Bello (2022) across several states