

DEVELOPMENT OF A STREET LIGHT FAULT REPORTING SYSTEM

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Street Light Fault Reporting 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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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 Electrical 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 Signal Processing Theory and the Power System Stability Theory. A total of 75 users were purposively selected for the usability evaluation, out of which 68 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 84.4% 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 street light fault reporting 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 relationship between development and street has been the subject of sustained academic interest across several disciplines. Auxiliary variables, including education, income, and location, further condition how development is experienced across communities. An examination by Dauda and Umeh (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with street. A notable study by Musa and Oyelaran (2017) argued that the impact of development is substantially mediated by the quality of institutions. For practitioners, the practical significance of development cannot be overstated, given its demonstrable link with street. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

Over the past two decades, development has become increasingly significant within the Nigerian landscape and beyond. Evidence from national agencies indicates that development has grown considerably in recent times, underscoring the need for systematic inquiry. The aggregate picture emerging from Chukwu and Obiora (2023) points to a modest but consistent association between development and the outcomes of interest. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Comparative work by Osinachi and Obiora (2022) across several states uncovered a consistent pattern linking development with street. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

development continues to command considerable attention among researchers, policymakers, and practitioners in electrical engineering. Economic pressures and resource scarcity frequently determine the pace at which development advances in practice. Evidence assembled by Osinachi and Obiora (2015) across twelve states underscored the heterogeneity of outcomes linked to development. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Evidence assembled by Ogbeide and Adeniyi (2015) across twelve states underscored the heterogeneity of outcomes linked to development. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Scholars have long recognised development as a critical determinant of outcomes in electrical engineering. Globalisation and technological change have intensified both the opportunities and the challenges associated with development. Adekunle and Eze (2020), in a survey of relevant stakeholders, concluded that the benefits of development are unevenly distributed across groups. Accordingly, there is a growing consensus that