

DEVELOPMENT OF A WEB-BASED CODE REVIEW AND TECHNICAL DEBT TRACKING PLATFORM

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF SOFTWARE ENGINEERING,
FACULTY OF SCIENCE, UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
DEGREE IN SOFTWARE ENGINEERING

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Web-Based Code Review and Technical Debt Tracking Platform" 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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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.

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 71 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 80.9% 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 web-based code review and technical debt tracking platform 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 phenomenon of development, while not new, has acquired fresh analytical urgency in Nigeria. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of development. A notable study by Adekunle and Bamgbose (2017) argued that the impact of development is substantially mediated by the quality of institutions. Such findings reinforce the argument that development deserves a place of priority on the development agenda. Findings reported by Adeniyi and Olawale (2018) observed that respondents with greater exposure to development recorded markedly different results. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

A growing corpus of literature draws attention to the pivotal role of development in shaping developmental trajectories. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. The aggregate picture emerging from Okonkwo and Bamgbose (2023) points to a modest but consistent association between development and the outcomes of interest. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Kalu and Kalu (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 deliberate policy action is required. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

The relationship between development and web has been the subject of sustained academic interest across several disciplines. Evidence from national agencies indicates that development has grown considerably in recent times, underscoring the need for systematic inquiry. Comparative work by Kalu and Kalu (2022) across several states uncovered a consistent pattern linking development with web. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Field evidence gathered by Bakare and Kalu (2016) suggested that stakeholder engagement materially improves the results achieved in matters of development. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. 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 web and national development. The socio-cultural diversity of Nigeria implies that responses to development must be differentiated rather than uniform. A notable study by Bello and Ibrahim (2017) argued that the impact of development is