

DEVELOPMENT OF A WEB-BASED AUTOMATED TEST RESULT AGGREGATION AND REPORTING PLATFORM

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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DEGREE IN SOFTWARE ENGINEERING

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Development of a Web-Based Automated Test Result Aggregation and Reporting 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.

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 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 76 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 82.4% 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 web-based automated test result aggregation and reporting 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 salience of development in national discourse has grown steadily, driven by changing social conditions and technological penetration. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of development. Research by Dauda and Adigun (2021) using mixed methods provided particularly rich insight into the mechanisms connecting development and web. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Umeh and Ibrahim (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. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

development occupies a prominent position in contemporary debates about web and national development. Within Lagos State, the country's most populous commercial hub, the dynamics of development are observed in their starkest form. Evidence assembled by Nwosu and Bello (2015) across twelve states underscored the heterogeneity of outcomes linked to development. These developments carry important implications for policy and practice in software engineering. The aggregate picture emerging from Bello and Dauda (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. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Contemporary scholarship increasingly frames development as inseparable from the broader question of web. Within Lagos State, the country's most populous commercial hub, the dynamics of development are observed in their starkest form. Studies conducted within the West African subregion by Bello and Dauda (2018) reached conclusions broadly consistent with the Nigerian evidence. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Field evidence gathered by Bello 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. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

development occupies a prominent position in contemporary debates about web and national development. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which development unfolds. Studies by Obiora and Bamgbose (2019) largely support the view that development exerts a measurable influence on outcomes of interest. Accordingly,