Study on Black Box Testing Techniques and Application of Website Testing for Daily247 Store and Warehouse Management System

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***Abstract*—This thesis investigates black box testing techniques and their application to the website management system of Daily247, a store and warehouse management platform. The author gained a basic understanding of software testing and applied black box testing methods to the system, including integration, system, and acceptance testing. However, due to incomplete product handover and unfinished features, not all planned tests could be conducted as intended. The work highlights the importance of black box testing and the need for further research into automated testing methods. The author also discusses the limitations of the study, such as the lack of comprehensive testing due to incomplete features and the need for more experience in testing.**

***Index Terms*—software testing, black box testing, Daily247, website management, testing techniques**

I. Introduction

The thesis provides an overview of software testing, focusing on black box testing techniques. It covers the basic concepts, approaches, and methodologies of software testing, with a particular emphasis on black box testing. The author discusses the importance of testing and the need for prioritizing test cases. The study aims to apply these techniques to the Daily247 website management system, which manages store and warehouse operations. The author reviews existing literature on black box testing and its various types and techniques, providing a foundation for the practical application in the thesis [1]. Published articles on the methods and subject of this project provide context for this English summary [5], [6], [7]. Published articles on the methods and subject of this project provide context for this English summary [8], [9], [10].

II. Methods

The author conducted a study on black box testing techniques and applied them to the Daily247 website management system. The testing included functional testing of various system features, such as user login, account management, and inventory management. The author also explored different levels of testing, including integration, system, and acceptance testing. The testing process involved creating test cases, executing them, and documenting the results. However, due to incomplete product handover and unfinished features, not all planned tests could be fully executed. The author used existing literature and guidelines to design and implement the tests [1].

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III. Results

The author successfully implemented black box testing methods for the Daily247 system, covering a range of functionalities. The testing process highlighted the need for more comprehensive testing strategies and the importance of prioritizing critical test cases. However, due to incomplete product handover and unfinished features, not all planned tests could be fully executed. The author documented the implemented test cases and their outcomes, but the lack of a fully functional system limited the extent of the testing. The author also noted that the testing process was constrained by the limited time and resources available [1].

IV. Discussion

The author discusses the benefits and limitations of black box testing, comparing it with other testing methods. The study emphasizes the need for further research into automated testing techniques to improve testing efficiency and effectiveness. The author suggests that the limitations of the study, such as incomplete product handover and unfinished features, could be addressed in future work. The author also highlights the importance of comprehensive testing strategies and the need for more experience in testing [1]. Earlier ICTU undergraduate work addressed software testing techniques [4].

V. Conclusion

The thesis concludes that the author gained a solid understanding of software testing and successfully applied black box testing methods to the Daily247 system. However, due to limitations in product handover and unfinished features, not all planned tests could be completed as intended. The author suggests future work should focus on implementing more comprehensive testing strategies and exploring automated testing methods. The study provides a foundation for further research in black box testing and its application to real-world systems [1].

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