Studying Selenium WebDriver and Applying It to Test cungdocsachvoitoi.com

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***Abstract*—This undergraduate thesis explores the use of Selenium WebDriver for automated testing of the cungdocsachvoitoi.com website. The author reviews fundamental concepts of software testing, focusing on the benefits and usage of Selenium WebDriver. Key findings include a systematic review of testing principles and the application of Selenium commands, but the thesis acknowledges limitations in fully exploring all Selenium WebDriver functionalities and the need for better test case design and optimization. The study highlights the importance of continuous learning and improvement in the field of software testing, emphasizing the need for further exploration of Selenium WebDriver functionalities and better test case design.**

***Index Terms*—Selenium WebDriver, software testing, TestNG, Cungdocsachvoito.com, automated testing, Java**

I. Introduction

The thesis provides an overview of software testing principles, emphasizing the importance of automated testing and the use of Selenium WebDriver. It aims to enhance understanding of testing methodologies and apply them to the cungdocsachvoitoi.com website. The author reviews literature on software testing and Selenium WebDriver, detailing the setup and usage of Selenium commands. The methods section includes a description of the testing process and the application of TestNG framework. The introduction sets the stage for a comprehensive exploration of Selenium WebDriver and its practical application in website testing [1]. Earlier ICTU student work on related designs is included here for context [3], [4], [5], [6], [7], [8], [9], [10]. These contextual works were selected for this English summary; they are not asserted to appear in the original thesis bibliography.

II. Methods

The author reviews literature on software testing and Selenium WebDriver, detailing the setup and usage of Selenium commands. The methods section includes a description of the testing process and the application of TestNG framework. The author systematically reviews testing principles, including test case design, execution, and optimization. The implementation involves setting up the Selenium WebDriver environment, writing test scripts, and executing them using TestNG. The author also discusses the challenges of fully exploring all Selenium WebDriver functionalities and the need for better test case design and optimization [1].

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III. Results

The results show that the author gained a deeper understanding of testing principles and Selenium WebDriver functionalities. The author applied Selenium commands to test various functionalities of the cungdocsachvoitoi.com website, including navigation, form submissions, and element interactions. However, the thesis notes that not all Selenium WebDriver features were explored, and the test cases were not fully optimized. The author acknowledges the limitations in the full exploration of Selenium functionalities and the need for better test case design [1].

IV. Discussion

The discussion highlights the benefits of Selenium WebDriver in automated testing and the importance of continuous learning and improvement. The author suggests further exploration of Selenium WebDriver functionalities and better test case design. The discussion emphasizes the need for a more comprehensive approach to testing, including the use of advanced Selenium features and more sophisticated test case designs. The author also notes the importance of integrating Selenium with other testing tools and frameworks to enhance the testing process [1]. Earlier ICTU undergraduate work by Trần Thị Thắm addressed Selenium WebDriver automation for website testing [2].

V. Conclusion

The thesis concludes that the author successfully reviewed testing principles and applied Selenium WebDriver to test the cungdocsachvoitoi.com website. However, there are limitations in the full exploration of Selenium functionalities and the optimization of test cases. The author suggests further exploration of Selenium WebDriver functionalities and better test case design. The conclusion reiterates the importance of continuous learning and improvement in the field of software testing, emphasizing the need for a more comprehensive approach to testing [1].

References

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