

ABSTRACT

This final project aims to automate the testing process of a Transportation Management System (TMS) website to improve efficiency and accuracy in software testing. Manual testing, which is performed repeatedly, requires significant time and effort and is prone to human error. Therefore, an automated testing solution was developed using Cypress, an open-source JavaScript-based framework designed specifically for end-to-end testing of web applications. The development process began with the identification of the main features tested, such as the order data input process, the voucher application process, and the order verification process. Automated test scripts were then created to cover essential scenarios based on operational needs. Testing was conducted through multiple iterations, and the results were analyzed to evaluate the effectiveness of automation compared to manual methods. The final results show that Cypress significantly reduces testing time and improves the consistency of test results. Thus, automated testing using Cypress is a suitable solution to support the quality assurance process in TMS, especially for regression testing that needs to be performed regularly.

Keywords: Test Automation, Cypress, Website, Transportation Management System, Quality Assurance