

ABSTRACT

The rapid development of the internet has significantly enhanced the role of the logistics industry in the distribution of goods and services. Challenges faced by logistics service providers, such as unexpected damages, suboptimal maintenance schedules, and complex coordination, have prompted TransTrack.ID to develop the Vehicle Maintenance System (VMS). VMS is a Software as a Service (SaaS) solution designed to efficiently manage vehicle fleets. An Agile Scrum-based development and testing methodology, known for its flexibility and collaborative nature, is utilized to ensure the optimal functionality of VMS. This methodology allows for quick adjustments to changes, ensures open communication among the development team, and accelerates the development and testing process. This report discusses manual testing, automated testing, and the role of Quality Assurance in testing. VMS testing was conducted using Black Box Testing methods, both manually and automatically, with the Katalon framework utilizing the Record and Playback feature. The author avoided testing methods such as White Box Testing and Test Driven Development. The results of automated testing with the Katalon framework have proven to increase the efficiency and accuracy of testing compared to manual testing. The implementation of automated testing is expected to support TransTrack.ID's efforts in improving product quality and system development efficiency, helping the company meet the demands of an increasingly competitive logistics market.

Keywords: Quality Assurance, Black Box Method, Manual Testing, Automation Testing, Katalon