

Abstract

Software testing is a crucial phase in application development to ensure quality and reliability before release to users. Functional testing is one of the primary testing types used to verify whether an application's functions and features operate according to specifications. The MyIndibiz Assistant application, designed to support agents in performing their tasks, faces challenges in manual testing due to limited resources and tight time constraints. This often reduces the accuracy and effectiveness of testing due to time pressure and high workload.

As a solution, this study proposes an automation testing approach using Katalon Studio to enhance the efficiency and accuracy of functional testing. Katalon Studio is chosen for its advantages in detecting errors, accelerating the testing process, and automating functional behavior validation. However, it is essential to understand when manual testing remains necessary and when automation is more effective. Manual testing still has advantages in certain aspects, so this research not only discusses the effectiveness of automated testing using Katalon but also compares it with manual testing to evaluate the strengths and limitations of each method.

By utilizing the fundamental testing process from ISTQB, this study aims to measure the effectiveness and efficiency of functional testing for the MyIndibiz Assistant application through automated testing using Katalon Studio compared to manual testing in the test implementation and execution process. The expected outcome is a more systematic, efficient, and accurate testing process, supporting faster development cycles and overall software quality improvement.

Keywords: Functional Testing, Automation Testing, Manual Testing, Fundamental Testing Process.