

Abstract

As implied by its name, low code platforms enable software development with minimal or no coding involved. Consequently, ensuring the correctness of the software becomes crucial as developers are unable to directly scrutinize the logic. Furthermore, discussions about the various testing approaches applicable to such applications are relatively scarce. This study aims to conduct integration testing through both white box and black box methods, as well as exploring the types of testing that can be carried out on low code based applications. This research involves several stages, including creating a basic e-shop application and API using OutSystems, test preparation, and test execution. API testing utilizes OutSystems' BDDFramework and Postman automation testing tools, while web page integration is carried out using Katalon Studio. The test results indicate only one of the total 23 test cases was considered failed because the result did not match the expected result. Apart from that, of the four existing levels of testing, component testing can also be carried out on the OutSystems application. However, only with the black box testing method because testing is carried out without accessing the program source code. The comparative execution of API testing (white box) using two distinct testing tools reveals the superior effectiveness of Postman over BDDFramework, offering more comprehensive test outcomes and enhanced test case coverage. In the realm of UI integration testing, Katalon Studio emerges as a fitting tool, benefiting from its record and replay feature that facilitates the definition of test steps.

Keywords: *API, low-code, OutSystems, testing*