

**Abstract**

The Fraud Deterrence Propeller (FDP) application is an application that aims to detect and prevent fraud. This application is still in the development stage so it needs to be tested to ensure that the FDP application meets the needs and expectations of users. The tests carried out in this research are system testing and performance testing using the black box testing method. System testing is done to ensure the suitability of application functionality with the requirements, while performance testing is done to ensure the application has the ability to complete tasks given by users quickly. Black box testing is a software testing method that focuses on the external behavior of the application based on input data and without looking at the source code. Of the 277 test cases created, 85.19% were successfully executed, totaling 236 test cases, 20 failed test cases were found, so the percentage of successful test cases was 91.52% and the percentage of failed test cases was 8.47%. In terms of system testing, all related test cases have no failures. Failure was found in the type of performance testing, due to test cases that did not meet the expected response time of no more than 3 seconds. From the results of the test metrics, it can be concluded that there is a mismatch between the FDP application and the needs listed in the SKPL document.

**Keywords:** *system testing, performance testing, black box testing, fraud*