Abstract
Based on the Association of Certified Fraud Examiners (ACFE) report, Indonesia faces a high level of fraud. As a solution, a web-based application called Fraud Deterrence Propeller was developed to detect and prevent fraud. Currently, the application is in the development stage and requires testing to ensure the application conforms to the needs and expectations of users. The testing includes white box testing methods, namely unit testing and integration testing. Unit testing aims to ensure that each unit of code meets functional requirements. Integration testing aims to ensure integration between the fraud assessment module and the fraud assessment assessment runs according to the business processes that have been defined. Of the 77 unit testing test cases executed, the percentage of branch coverage is 84% to 99% with the percentage of successful test cases (passed) reaching 100%. Meanwhile, of the 55 integration testing test cases executed, the percentage of successful test cases (passed) also reached 100%. The results of this test show that unit testing can ensure that the unit or function of the FDP application is in accordance with functional requirements and integration testing can ensure integration between modules runs according to predetermined business processes. With this testing, it is expected to detect errors early and improve the quality of the application so as to provide a sense of comfort and trust to users.

Keywords: fraud, software testing, unit testing, integration testing, whitebox testing.