## Pengujian Perangkat Lunak Aplikasi SINTAK Dengan Metode Unit Testing

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## **ABSTRACT**

Software testing is an activity or activity to run a series of dynamic executions on a software program after the software source code is developed. Software testing intends to find or involve any activity that aims to evaluate the attributes or capabilities of a system and determine that it meets the right results. The SINTAK application is an application that is used to monitor the final project of students majoring in information technology at the Jember State Polytechnic. This SINTAK application is used to monitor the readiness of students who are doing their final project or thesis. The problem with this SINTAK application is that unit testing has not been carried out to determine the damage or failure of each unit. The definition of unit testing or unit testing is the level of testing on software where all units or components of the software are to be tested. Unit testing needs to be done because this test can ensure that each unit can run as expected by the developer. This study aims to determine the damage or error in the smallest unit of this SINTAK application. The smallest unit tested is the model of the SINTAK application with the function of getting data from a database that has conditions. In this unit test, it will produce the number of failures during unit testing, time of failure during unit testing, total operating time during unit testing, the final value of Mean Time Between Failure, and the value of availability.

**Keywords**: Software testing, SINTAK, unit testing