

## **Extended Finite State Machine-Model Based Testing pada Aplikasi Mobile**

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### **Abstract**

**Testing is an important process of software development. Testing the software can perform as expected by the application user and not do something the user does not expect. Over time, the need for mobile phones is increasing. In early 2020, the Indonesian government required Indonesian citizens to download the PeduliLindungi application on their respective mobile phones. In this research, MBT (Model-Based Testing) with the Extended Finite State Machine (EFSM) approach is proposed as a research method because EFSM can perform testing on applications that have CRUD systems. CRUD is where the system can do data management. As a result, it is found that EFSM can be tested with a CRUD system, and testing will be faster if using a weighted random strategy algorithm. However, several stages must be done manually from the time of the testing process because of some elements of the application change under certain conditions.**

**Keywords: Testing, Extended Finite State Machine (EFSM), Model Based Testing (MBT), CRUD**

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