ABSTRACT

With the progress of time, humans have succeeded in developing existing technology to make their work easier. Internet of Things (IoT) is a technology that is developing rapidly, especially in terms of monitoring and controlling IoT-based electrical devices. This research plays a role in developing IoT technology and its use in energy savings.

his research aims to design and develop an innovative IoT-based website frontend, with a focus on monitoring and controlling electrical devices for energy savings at PT. Telkom Indonesia TBK. The development method used is iterative incremental to ensure that this website can develop according to needs and changes that may occur. Testing is carried out using the black-box testing method to ensure website performance and reliability.

The result of this research is a website frontend that allows users to effectively monitor and control electrical devices. With the features provided by this website, it is hoped that users can optimize the use of electrical energy and contribute to energy saving efforts.

Keywords: *Frontend, Website, Internet of Things, Iterative Incremental, Black-Box Testing, IoT-based.*