SIMOD: SISTEM MONITORING DASHBOARD KONSUMSI DAYA PERALATAN LISTRIK RUMAH BERBASIS *INTERNET OF THINGS*

Oleh

Fashan Saraya, NIM 1815051070

Program Studi Pendidikan Teknik Informatika

Jurusan Teknik Informatika

Fakultas Teknik dan Kejuruan

Universitas Pendidikan Ganesha

Singaraja

Email : fashan@undiksha.ac.id

ABSTRAK

Penelitian ini bertujuan untuk mengetahui bagaimana hasil pengembangan dari Sistem Monitoring Dengan Internet Of Things Untuk Monitoring Konsumsi Daya Peralatan Listrik Di Rumah. Penelitian ini menggunakan metode studi literatur, analisis, desain, pengembangan , pengujian, dan kesimpulan. Tahap pengembangan dan pengujian dibagi lagi menjadi beberapa proses yaitu pengumpulan kebutuhan, membangun prototipe, evaluasi, pengkodean prototipe, pengujian prototipe dan proses evaluasi. Jenis pengujian yang dilakukan dalam penelitian ini adalah pengujian blackbox, whitebox, efektivitas serta validitas data. Hasil dari pengujian tersebut didapatkan hasil dari pengujian blackbox dan whitebox sudah berhasil, pengujian efektivitas sebesar 100% dan juga dilakukan pengujian validitas dengan peroleh margin of error sebesar 4,38% semua pengujian validitas yang dilakukan berhasil mendapatkan nilai dibawah 4,38% dan bisa dikatakan bahwa hasil pengujian valid.

Kata kunci: internet of things, smart home, dashboard, monitoring, energi listrik

SIMOD: DASHBOARD MONITORING SISTEM POWER CONSUMPTION HOME ELECTRICITY EQUIPMENT BASED ON INTERNET OF THINGS

By

Fashan Saraya. NIM 1815051070

Program Study of Informatic Education

Informatic Engineering Departement

Faculty of Engineering and Vocational

Ganesha University of Education

Singaraja

Email : *fashan@undiksha.ac.id*

ABSTRACT

This study aims to find out how the results of the development of a Monitoring System with the Internet of Things for Monitoring the Power Consumption of Electrical Equipment at Home are. This study uses the method of literature study, analysis, design, development, testing, and conclusions. The development and testing stages are further divided into several processes, namely gathering requirements, building prototypes, evaluating, coding prototypes, testing prototypes and evaluating processes. The types of tests carried out in this study are blackbox, whitebox, effectiveness and data validity testing. The results of these tests showed that the results of the blackbox and whitebox testing were successful, the effectiveness testing was 100% and validity testing was also carried out with a margin of error of 4.38%. All validity tests carried out managed to get a value below 4.38% and can be said that the test results are valid.

Keywords*: internet of things, smart home, dashboard, monitoring, electrical energy*