PENGEMBANGAN MEDIA PEMBELAJARAN SISTEM KONTROL AC SPLIT JARAK JAUH BERBASIS IoT PADA MATA KULIAH SISTEM KONTROL OTOMATIS DI PROGRAM STUDI PENDIDIKAN TEKNIK ELEKTRO UNDIKSHA

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ABSTRAK

Penelitian ini bertujuan untuk membuat Media Pembelajaran yang diimplementasikan pada Sistem Kontrol AC Split Jarak Jauh Berbasis IoT yang digunakan untuk membantu proses pembelajaran pada Mata Kuliah Sistem Kontrol Otomatis di Program Studi Pendidikan Teknik Elektro Undiksha. Penelitian ini tercakup dalam kegiatan R&D (*Reasearch and Development).* Penelitian ini menggunakan teknik analisa statistik persentase untuk mengolah data ahli isi, ahli media, dan uji coba lapangan. Penelitian ini menggunakan angket sebagai instrumen pengambilan data ahli isi, ahli media, dan peserta didik. Hasil penelitian diperoleh: Hasil uji ahli isi diperoleh persentase sebesar 92.30% dengan kualifikasi layak, hasil uji ahli media diperoleh persentase sebesar 94.44% dengan kualifikasi layak. Hasil uji responden kelompok kecil terdapat nilai terendah yaitu pada responden 4 (R4) dengan skor 69 sudah termasuk klasifikasi sangat baik, dan hasil uji kelompok besar hasil nilai responden terendah yaitu pada responden 8 (A8) dengan skor 44 sudah termasuk klasifikasi sangat baik. Berdasarkan hasil penelitian, Media Pembelajaran Sistem Kontrol AC Split Jarak Jauh Berbasis IoT layak digunakan dalam proses pembelajaran di Mata Kuliah Sistem Kontrol Otomatis Program Studi Pendidikan Teknik Elektro Undiksha.

Kata Kunci : Media Pembelajaran, Kontrol AC, IoT, Sistem Kontrol Otomatis

Abstract

The research aims to create Learning Media that is implemented on the IoT-based Remote Split AC Control System that is used to assist the learning process on High School Tomato Control System in the Undiksha Electrical Engineering Education Study Program. This research is covered in R&D activities. (Research and Development). The research uses percentage statistical analysis techniques to process data from content experts, media experts, and field experiments. The research uses the lift as a tool for collecting data from content experts, media experts, and learners. The results of the study were: 92.30% of the content expert test results were achieved with qualifying qualifications, 94.44% of the media expert test results were achievable with qualifying qualifications. The test results of small group respondents had the lowest score, i.e., respondents 4 (R4) with a score of 69 already included excellent classification, and the results of the test of large group respondents 8 (A8) with a rating of 44 already included very good classification. Based on the results of the research, the Learning Media AC Control System Split Distance Remote Based IoT is suitable for use in the learning process in the High School Automatic Control System Undiksha Electrical Engineering Education Program.

Keywords : *Learning Media, AC Control, IoT, Automated Control System.*