

**ADAIR: SISTEM AUTOMATIC SMART WATER TANK CONTROL
MENGUNAKAN MIKROKONTROLER BERBASIS IOT DENGAN
MONITORING DASHBOARD**

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui hasil pengembangan aDAIR: Sistem Automatic Smart Water Tank Control menggunakan mikrokontroler berbasis IoT dengan monitoring dashboard. Penelitian ini menggunakan metode penyebaran angket, studi literatur, analisis, desain, pengembangan dan pengujian, serta kesimpulan. Tahap pengembangan dan pengujian dibagi lagi menjadi pengumpulan kebutuhan, membangun prototipe, evaluasi, pengkodean prototipe, pengujian prototipe dan evaluasi. Jenis pengujian yang dilakukan adalah pengujian blackbox, whitebox, efektivitas dan validitas. Hasil dari pengujian tersebut didapatkan hasil dari pengujian blackbox dan whitebox sudah berhasil, pengujian efektivitas sebesar 100% selain pengujian efektivitas juga dilakukan pengujian validitas didapat margin of error sebesar 4,38% semua pengujian validitas yang dilakukan berhasil mendapatkan nilai dibawah 4,38% dan bisa dikatakan bahwa hasil pengujian valid.

Keywords: internet of things, smart water tank control, smart home, dashboard, monitoring

***ADAIR: AUTOMATIC SMART WATER TANK CONTROL SYSTEM USING
MICROCONTROLLER BASED ON IOT WITH MONITORING DASHBOARD***

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ABSTRACT

This research aims to determine the result of the development of aDAIR: Automatic Smart Water Tank Control System Using Microcontroller Based On IoT With Monitoring Dashboard. Research method using in this research is using questionnaire distribution, literature studies, analysis, design, development and testing, and conclusion. The development and testing stages are divided into requirements gathering, prototype building, evaluation, prototype coding, prototype testing and evaluation. This research tested using blackbox, whitebox, effectiveness and validity testing. The results of these tests show that the results of the blackbox and whitebox testing have been successful, the effectiveness test result is 100%, validity testing result is a margin of error of 4.38%, all validity tests carried out managed to get a value below 4.38% and it can be said that the test results are valid.

Keywords: internet of things, smart water tank control, smart home, dashboard, monitoring