INTERNET OF THINGS-BASED CHILDREN'S SMART ROOM DESIGN

Meiwidia Seftiana[1], Damayati[2], Jefri Andri Rifai[3]

[123]*Universitas Teknokrat Indonesia, Jl. Z.A. Pagar Alam No. 9-11 Labuhan Ratu. Kota/Kab Bandar Lampung, Kec. Labuhan Ratu., Lampung, Indonesia.*

Article Information

Abstract

Home is one of the primary needs of human life. Used as a shelter from all the weather and a gathering place for a family. In a modern era where technology is evolving, the automation of the control of electronic devices in the home has become one of the solutions to make it easier for humans to create comfortable and safe room conditions and can train the discipline of family members, especially children. Sometimes the negligence that can make the expenditure, in a month becomes boros even causes fires, negligences which are simple in nature like forgetting to turn off electronic devices when travelling especially in children's bedrooms. Based on the above description of the problem and developing previous research, the author proposed a study entitled "Design Building Children's Smart Room based on the Internet of Things" in which the author wanted to apply his research to the sleep patterns of children to be more regular and qualitative. One of them is to turn off the lights at ten o'clock at night, turn on the light at dawn at the same time as the alarm sounds, control the room temperature, switch on the fan, turn the fan off and monitor cigarette smoke and smoke due to electrical failure, and turn off electricity lines when the child is leaving school via the telegram application. The innovation will be connected to the telegram to provide intelligent bedroom notifications.

1. Introduction

Home is one of the primary needs for human life. Used as a shelter from various weather and a family gathering place. Comfort and safety when doing activities in the house is one of the things that every owner wants. In modern times where technology is increasingly developing, automation of controlling electronic devices at home is one solution to make it easier for humans to create comfortable and safe room conditions while being able to train the discipline of family members, especially children(Tirtana &; Hidayat, 2018).

Security is something that is an important consideration in life. Every human being needs a guarantee of security for the activities carried out. Like health, safety is an important aspect of life. Various kinds of

developments in the field of technology are directed to provide or increase security in human life. For this reason, a room monitoring system is needed that can keep the condition of the room safe when there are family members who are playing in the house, when parents forget to supervise their children (Pridiatam & Agustin, 2021).

In addition, the author wants to apply his research to children's sleep patterns to be more regular and quality. One of them is to turn on and off the automatic room lights which will be controlled in realtime according to the desired schedule. Quoting from halodoc.com, based on the results of research from the National Sleep Foundation, light exposure stimulates nerve pathways from the eyes to parts of the brain that control hormones, body temperature, and other functions that play a role in making humans feel sleepy or awake. As a result, sleeping with the lights on can be the cause of sleep deprivation (Endra et al., 2019).

In addition, sleeping with the lights on can bring various health problems such as depression, obesity, anemia and an increased risk of chronic diseases. Many problems often occur in society, especially in urban areas, so it is undeniable that the era of technological development in the current era, must cause some problems in the wider community, especially in controlling electrical equipment. Sometimes negligence that makes expenses, in one month becomes wasteful and even causes fire, simple negligence such as forgetting to turn off electronic equipment when traveling, especially in the child's bedroom (dahlan, 2023).

Based on the author's experience as a caretaker at an Islamic boarding school, he had difficulty carrying out some of his duties when waking up students and turning on the lights from the electricity center manually every morning and night before going to bed. Then proceed to wake up the students by knocking on the door of the room one by one.

Research on smart rooms has been done before where research focuses more on bathrooms. In this study, there were automatic features on lights, water faucets, and soap dispensers based on Raspberry pi 3 model b +. In this design, there are input devices in the form of PIR sensors and ultrasonic sensors then output devices in the form of lights, servo motors for soap dispenser suppression, and solenoid valves for automatic water faucets and sensor readings will be sent to the realtime firebase database and Telegram bot notifications. Based on the results of functional testing, the design of the Smart Bathroom prototype tool based on Raspberry pi can work according to its function so that it can make it easier for bathroom users. The time it takes to send sensor readings to Firebase's realtime database for all four features is 2.8ms – 4.6 seconds.

Based on the description of the problem above and developing previous research, the author proposes a study entitled "Design and Build Children's Smart Room based on the Internet of Things" where in this study the author wants to apply his research to children's sleep patterns to be more regular and quality. One of them is to turn off the lights at ten o'clock in the evening, turn on the lights when shubuh time arrives along with the alarm sound, control the room temperature, turn on the fan, turn off the fan and monitor cigarette smoke and smoke due to electrical damage, and turn off the electric cable when the child has left for school through the telegram telegram application.

1.1   Literature Review
1.1.1   literatur 1

In a study conducted by {Formatting Citation} entitled "Design of LPG Gas Leak Detection Device using Arduino-Based MQ2 Sensor". In this study, the Arduino-based MQ-2 sensor was used as an LPG gas leak detection tool. This sensor will detect leaking gas and will automatically provide information through the display on the LCD screen, sound the Buzzer as an alarm, and send an SMS to the mobile number entered in the program. This tool is not only an effort to reduce fires due to LPG gas cylinder leaks, but also as a solution to prevent losses due to LPG gas cylinder fires. In future research, the author hopes that this system can be developed by making an Android Smartphone application for remote control of LPG gas sensors(Inggi & Pangala, 2021).

1.1.2   literatur 2

In a study conducted by Roby Yuli Endra, Ahmad Cucus and M. Bintang Syahputra with the title "Smart Space Model Using Arduino Microcontroller for Resource Efficiency". This study aims to apply the concept of

Internet of Things-based automation using Arduino microcontrollers Motivated by the increasing number of electronic devices used in everyday life, in places such as office spaces, study rooms, even bedrooms equipped with electronic equipment, because of the usefulness of every electronic device that is able to support activities carried out by the community or teaching and learning activities Learning activities Teaching that takes place in the room sometimes requires electronic equipment to support teaching and learning activities such as LCD projectors as a medium for delivering material, fans, and lamps. After teaching and learning activities are over, sometimes there are still electronic equipment that is still on, this can happen because you forgot to disable the equipment or do not understand how to disable the device. As a result, there is a waste of electricity sources, especially many electronic equipment that is still on when there are no lecture activities, this causes high electricity bills to be paid. This prototype design uses the Arduino Mega 2560 as a control center and as a processor output from object detection and temperature and humidity sensors (DHT11). The output produced from the Arduino Mega 2560 is in the form of LED (Light Emitting Diode) lights that light up, representing every electronic device in the room such as lights, and air conditioners.(Endra et al., 2019)

1.1.3 Literatur 3

In research conducted by (Putra, 2019) this research applies the concepts of pervasive computing and Internet of Things (IoT) to toddler-friendly room monitoring systems through social media applications making it easier for users to monitor toddler safety and room conditions. The MQ-7 sensor is used to detect smoke in the room which will then activate the exhaust fan to remove smoke from the room. To keep toddlers safe from electricity, webcams are used as trigger electrical breakers if someone is detected covering a colored object in an electrical outlet. To detect a toddler leaving a room, cameras inside the room will send notifications and images when the door opens to users via social media apps. The social media application twitter is used for room monitoring by users. Design validation is carried out by testing the system through a prototype that has been built using prepared test parameters. The toddler-friendly room monitoring system through this social media application has been able to run well according to the specifications of the system that has been designed.(Endra et al., 2019).

1.1.4 Literatur 4

In research conducted by (Eryawan et al., 2019) Smart Home Prototype with the Internet of Things (IoT) Concept uses Web-Based Raspberry Pi, which is a system that can control home electronic equipment remotely using Raspberry Pi as a base system, which is connected to Web Applications through the internet network. The electronic equipment used in this study was 5 lights, 1 stepper motor to control the garage, 1 servo motor to control the door lock, and 1 brushless motor that functions as a fan. Block and overall test results on Bedroom Lights, Living Room Lights, Kitchen Lights, Bathroom Lights, Terrace Lights, Garage, Door Locks, and Fans, all work well. Testing the control distance between cities on the Smart Home Prototype was successfully carried out, where the Smart Home Prototype in Demak City was successfully controlled by Users who at the time of testing were in the cities of Semarang, Kudus, Jepara, Surabaya, and Jakarta.(Eryawan et al., 2019)

1.1.5 Literatur 5

In research conducted by (Riyadi et al., 2020) IoT-based smart boarding room design is an innovative solution by utilizing internet technology, android devices, telegram BOT applications, Wemos and the use of microcontrollers. The easy-to-use design is an advantage in designing this smart boarding room. Users only need to give a command to turn off / on text-based via telegram and it will automatically execute the command. This design can run optimally in an effort to minimize waste of costs, especially in paying electricity bills.(Riyadi et al., 2020)

1.2 Children

According to Law of the Republic of Indonesia No. 23 of 2002 concerning Child Protection, a child is someone who is not yet 18 (eighteen) years old, including children who are still in the womb. Meanwhile, according to Sugiri Gultom (2010), states that as long as a person's body is still running the process of growth

and development, then he is still said to be a child and will only become an adult when the process of growth and development is complete. The age limit for children is the same as the beginning of adulthood, which is 18 years for women and 21 years for men.

1.3 Smart Room

Smart room is an otamatization concept that exists in a room using the Internet of Things. The development of technology today cannot be denied, with the emergence of the concept of the industrial revolution 4.0. This is the basis for this research to automate a room. If a space is controlled and controlled automatically, it will have an impact on reduced operational costs (Tirtana &; Hidayat, 2018). In addition to saving more operational costs, smart rooms will also make every activity that uses electronic devices more efficient and energy-efficient.

1.4 Internet of Things (IoT)

The Internet of Things (IoT) is a concept in an object that can transmit data over a network without requiring interaction between humans and computers. The Internet of Things utilizes a programming language algorithm that has been compiled. Each algorithm that is formed will produce interactions that help a hardware in performing its functions. The Internet of Things has been applied in several areas of life such as health, energy, transportation, the general environment and many others. The benefits of implementing the Internet of Things are to facilitate the connectivity process, achieve efficiency and increase the effectiveness of activity monitoring. . (Ridho, 2018).

1.5 Monitoring

According to (Ismai, 2020), monitoring is a process of collecting and analyzing information (based on established indicators) systematically and continuously about program activities so that corrective actions can be taken for the next 12 program improvements. According to government regulation number 39 of 2006, it is stated that monitoring is an activity to carefully observe a situation or condition, including certain behaviors or activities with the aim that all input data or information obtained from these observations can be the basis for making decisions on further actions needed. This action is necessary if the results of observations show things or conditions that are not in accordance with what has been planned.

1.6 Microcontroller

A microcontroller is a functional computer system on a chip. It contains a processor core, memory (a small amount of RAM, program memory, or both), and input-output equipment (Yasin et al., 2019). Like most computers, a microcontroller is a device that works out the instructions given to it. In other words, a microcontroller is a digital electronic device that has input and output and control with programs that can be written and deleted in a special way, the way the microcontroller works actually reads and writes data According to Edi Rakhman, Faisal Candrasyah, Fajar D. Sutera, 2014, Microcontroller is a General Purpose (and) Output that allows Rasberry Pi to interact with the outside world. The chip-shaped header is worthy of the header we know in the hardware world.

1.7 NodeMCU

The NodeMCU below is the microcontroller that the author will use in research because NodeMCU has an open source IoT platform, which is usually analogous to an Arduino ESP8266 board. In the tutorial series ESP8266 have discussed how to program ESP8266 in programming this is a little troublesome because, it takes some wiring techniques and additional USB to serial modules to download the program. But NodeMCU has packaged ESP8266 into the same board and is equipped with various features such as microcontroller + Wifi access capabilities as well as USB to serial communication chips. So to program it, only an extension of the exact USB data cable is needed which is used as a data cable and charging cable for Android smartphones (Setyawan et al., 2018).

1.8 Frizing

Fritzing is one of the good enough software to learn electronics. Fritzing software is software that can be used by electronics hobbyists. Fritzing software can be operated on Windows and Linux systems. In this study, fritzing was used to design tool schematics (Ahmad et al., 2019).

1.9 Schematic Tools

Schematic is an electronic circuit that describes a circuit using electrical symbols. In schematic diagrams the electrical symbols are connected with lines that describe the connections and relationships of electrical components in the circuit.(Yanwar et al., 2017) By using schematic diagrams, the workings of an electrical system can be observed from input to output. Schematic designs are made through basic sketches, graphics, and design schemes that become the basis for the next stage of design.

1.10 Arduino IDE

According to (Junaidi &; Prabowo, 2018) arduino IDE (Integrated Development Enviroenment) is a program used to create a program on NodeMCU ESP8266. The Arduino IDE application serves to open, create and edit programs that will be inserted into the Arduino Noard besides that the Arduino IDE application is designed to facilitate its use in making various applications. Arduino IDE has a simple programming language structure and complete functions so that it can make it easier to learn it, especially beginners, Arduino IDE sketch uses C ++ programming language. The Arduino IDE software has a kind of black message box that can display the status of error messages, compile, and upload programs. Programs written using Arduino IDE software are called sketches.

1.10   Blender

It is a 3D graphics software used to create animated films, visual effects, 3D printed models, interactive 3D applications, and video games. Generally Blender is widely known by the public as a free 3D creation package with open source. Blender is perfect for individuals or small studios who want to benefit from a unified pipeline and responsive development process. This software can also be used on several operating systems, such as Windows, macOS, and Linux. Indeed, in fact, there are many 3D animation software that can be used (Ismai, 2020).

1.11   Telegram

Telegram is a communication application that focuses on performance and more security levels with a simple and free appearance in its use (Prabowo et al., 2020). On its official website in telegram.org, Telegram claims that its application allows accessing chats from devices in 18 single accounts (sync), besides that Telegram also has bots that can be used in IoT development in this research

2 Research Methods

In this study, the author uses an experimental method where the research is divided into several stages or parts, the first is literature study, design and manufacture of software and hardware, testing, data collection and analysis of results. Literature studies are carried out by collecting information from articles and journals. In this study, a research framework is made that will be a framework of relationships between the concepts to be studied as follows.

(1) Research framework

1. Identifikasi Masalah

Studi Literatur	Pengumpulan Data
▪ Jurnal	▪ Observasi
▪ Artikel	▪ Tinjusn Pustaka

2. Perancangan

Model Perancangan Sistem	Perangkat Lunak
▪ Skematik	▪ Android IDE
▪ Flowchart	▪ Telegram
▪ User Interface	

3. Pengujian

Pengujian menggunakan *Prototype*

4. Penutup

Hasil, Kesimpulan dan Saran

Fig 1. Research Framework

(2) Stages of Research

Tahap 1 : Komunikasi

Pada tahap ini penulis melakukan indentifikasi masalah seperti membaca jurnal dan membaca buku.

Tahap 2 : Perencanaan Secara Cepat

Pada tahap ini penulis mengumpulkan bahan dan alat yang akan dibutuhkan saat penelitian.

Tahap 3 : Pemodelan Perancangan Secara cepat

Pada tahap ini penulis membuat flowchart, membuat program untuk penelitian.

Tahap 4 : Rancangan Sistem

Pada tahap ini desain alat, desain sistem, dan pembuatan alat

Tahap 5 : Evaluasi Alat Dan Sistem

Pada tahap ini penulis melakukan evaluasi pada sistem dan alat.

Tahap 6 : Pengujian secara langsung

Pada tahap ini sistem atau alat diuji secara langsung.

Fig 2. Research Phase

(3) Data Collection Methods

In completing this thesis proposal, relatively complete data and information are needed as material that supports the correctness of the description and discussion material. Therefore, before writing this thesis proposal is carried out, the author conducts research or research first to obtain related data and information. The data collection methods carried out by the author are as follows:

a. Observation

The method of data collection is carried out by observation to direct partners, carried out with the intention of obtaining data and documents directly that actually occur in the implementation or project.

b. Literature Review

The data collection method is carried out by studying various journals and scientific documents or reading sources as well as books related or related to the topic of the research proposal.

(4) Blok Diagram

Block diagrams are the most important thing in tool design, in this chapter will be discussed an overview of how the system works from the tools to be created and used. The block diagram in this study is
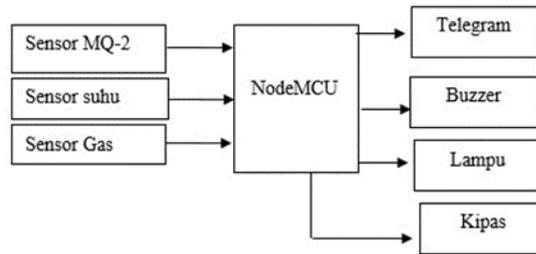
Fig 3. Block Diagram

(5) Schematic Network Tool

The schematic suite of tools is designed using Fritzing software in the form of an overview for further implementation in real form. Below figure 5 is an example of a schematic circuit of all the tools to be used. As for the series, it is shown in the following figure.
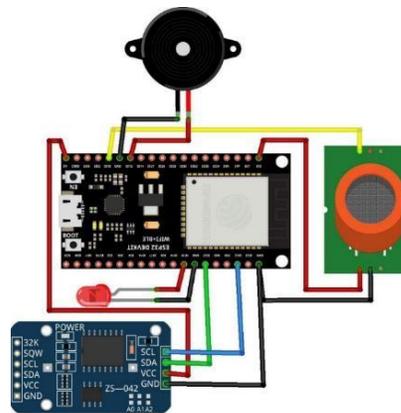

Fig 5. Tool scheme

In figure 5 is a schematic image of the Internet Of Things Based Children's Smart Room tool used by the authors during the study. The above scheme has been connected with each pin and can work according to the tool or system created by the author.

(6) Tool design

The design of the tool is made to get a 3D picture of the tool to be designed with the aim of being a guide in making the tool. The design of this tool is made with SketchUp software in the form of 3D modeling with such a design to get a real picture. Below is an example of a tool design that the author will use in the study.
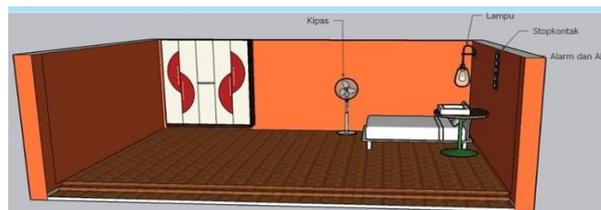

Fig 6. Tool Design

3 Results and Discussion

In this chapter, the author will explain the results of testing tools that have been designed along with discussions to find out the results of the tool design and implementation carried out whether it is in accordance with its function, so that the first step taken is to test several components, so that if something goes wrong it will be easier to find out. Below is a picture of the physical form of the tool that has been created.

a) Program in Telegram In figure 7 below is the program display from telegram. Which is used for notifications from the tool to telegram.

Fig 7. Telegram Code

b) Program sensor MQ-2

In figure 8 below is a display of the MQ-2 sensor program. Which is used to detect gas smoke, cigarette smoke or smoke due to electrical damage in the child's bedroom whose notifications are connected directly to telegram.

Fig 8 MQ-2 Code Sensor

c) MQ-2 Sensor Testing

MQ-2 sensor testing is done by trying to bring gas or smoke closer in front of the sensor to find out whether the sensor is working or not. By paying attention to the notification displayed by the telegram whether it is in accordance with the existing situation or not.
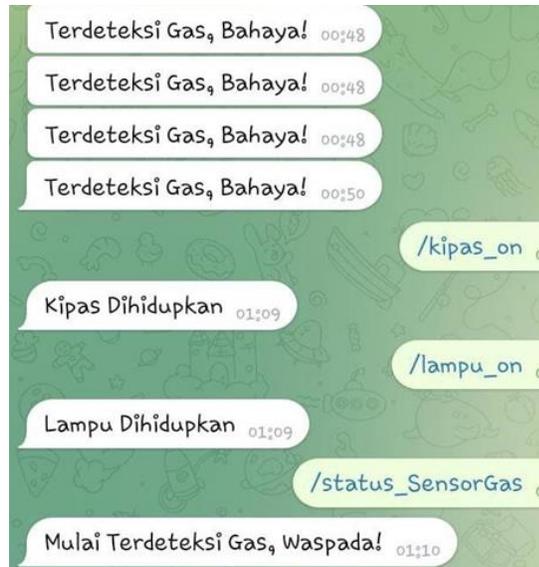
Fig 9. Telegram Notifications

Table 4.1 MQ-2 Sensor Testing

Not	Sensor MQ-2	Telegram Notifications
1	0 cm	Gas detected, Danger!!
2	5 cm	Gas detected, Danger!!
3	10 cm	Gas detected, Danger!!
4	Smoke or gas is turned off	Ready
5	Smoke or gas is turned off	Ready

From the above test table, it can be concluded that the closer the smoke distance to the sensor, the telegram notification detects gas which means danger and if the smoke or gas is kept about 30 cm and above or eliminated, the telegram notification is alert.

d) Discussion

Tool testing is done on smart space tools by comparing the technology created with the manual one. The system or tool made has successfully run well starting from the MQ-2 sensor which successfully detects gas or cigarette smoke around the sensor, the lights successfully turn on from 17.20 – 22.00, 4.00-7.00 and turn off at 22.00-4.00, 07.00-17.20, the fan is successfully turned off and turned on via telegram, the alarm successfully sounds automatically at 4.20-4.23 In addition to this time the alarm turns off and Telegram successfully displays telegram notifications and other control systems that can also be checked from Telegram.

4 Conclusion

The conclusions that the authors can give for this study after testing and analysis on smart space tools are:

1. The tool or system has successfully turned the alarm on and off, turning on automatically according to the respective time.
2. The tool or system has successfully controlled the fan, temperature, via telegram and this tool has successfully displayed a notification if gas or cigarette smoke is detected in the child's room to the homeowner's telegram application.
3. Based on the test results, all tools or systems successfully run properly.

5 Reference

Ahmad fatoni,Dhany Dwi Nugroho, A. I. (2015). Rancang Bangun Alat Pembelajaran Microcontroller Berbasis ATmega 328 di Universitas Serang Raya. *JurnalJurnal PROSISKO Vol. 2 No. 1 Maret 2015*, *2*(1), 10–18.

Endra, R. Y., Cucus, A., Afandi, F. N., & Syahputra, M. B. (2019). Model Smart Room Dengan Menggunakan Mikrokontroler Arduino Untuk Efisiensi Sumber Daya. *Explore: Jurnal Sistem Informasi Dan Telematika*, *10*(1). https://doi.org/10.36448/jsit.v10i1.1212

Eryawan, B., Jayati, A. E., & Heranurweni, S. (2019). Rancang Bangun Prototype Smart Home Dengan Konsep Internet of Things (Iot) Menggunakan Raspberry Pi Berbasis Web. *Elektrika*, *11*(2), 1. https://doi.org/10.26623/elektrika.v11i2.1691

Inggi, R., & Pangala, J. (2021). Perancangan Alat Pendeteksi Kebocoran Gas LPG Menggunakan Sensor MQ-2 Berbasis Arduino. *Simkom*, *6*(1), 12–22. https://doi.org/10.51717/simkom.v6i1.51

Ismai. (2020). Aplikasi Monitoring dan Pengaduan Inventaris Barang Pada Jurusan Manajemen Informatika Berbasis Website. *JASISFO (Jurnal Sistem Informasi)*, *1*(2), 79–89.

Name, C., Name, T., Revd, R. T., Lungile, L., World Economic Forum, Fitzpatrick, T., Modeling, L. M., Measurement, F., Snowrift, O. N., Environmental, A. R., Regional, S. S., Power, E., Limited, G. C., Influence, T. H. E., Snow, O. F., On, F., Around, S., Embankment, T. H. E., Wind, I. N., … End, F. Y. (2021). No 主観的健康感を中心とした在宅高齢者における 健康関連指標に関する共分散構造分析Title. *Paper Knowledge . Toward a Media History of Documents*, *3*(2), 6.

Ridho, A. (2018). Masa depan perpustakaan seiring perkembangan revolusi industri 4.0 : mengevaluasi peranan pustakawan. 151(2), 10–17.

Prabowo, R. R., Kusnadi, K., & Subagio, R. T. (2020). SISTEM MONITORING DAN PEMBERIAN PAKAN OTOMATIS PADA BUDIDAYA IKAN MENGGUNAKAN WEMOS DENGAN KONSEP INTERNET OF THINGS (IoT). *Jurnal Digit*, *10*(2), 185. https://doi.org/10.51920/jd.v10i2.169

Pridiatama, F., & Agustin, M. (2021). Rancang Bangun Smart Bathroom Berbasis Raspberry Pi. *Jurnal SIMADA (Sistem Informasi Dan Manajemen Basis Data)*, *4*(2), 128–138. https://doi.org/10.30873/simada.v4i2.3008

Putra, D. I., & Eka Putra, D. (2017). Sistem Monitoring Ruangan Ramah Balita pada Smartroom Menggunakan Aplikasi Berbasis Teknologi Internet of Things (IoT). *Semnastek*, *November*, 1–5. https://jurnal.umj.ac.id/index.php/semnastek/article/download/2004/1647

Riyadi, R. N., Wijayanti, E., & Murti, A. C. (2020). PERANCANGAN SISTEM KAMAR KOS PINTAR BERBASIS IoT. *Indonesian Journal of Technology, Informatics and Science (IJTIS)*, *2*(1), 17–21. https://doi.org/10.24176/ijtis.v2i1.5642

Setiawan, W., & Ardana, I. M. S. (2023). Implementasi Internet of Things Pada Sistem Kendali Lampu Rumah Menggunakan Telegram Messenger Bot Dan Board ESP. *OKTAL: Jurnal Ilmu Komputer Dan Sains*, *2*(03), 910–917.

Setyawan, A. B., Hannats, M., & Setyawan, G. E. (2018). Sistem Monitoring Kelembaban Tanah, Kelembaban

Udara, Dan Suhu Pada Lahan Pertanian Menggunakan Protokol MQTT. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer (J-PTIIK) Universitas Brawijaya*, *2*(12), 7502–7508.

Suryadi. (2017). Sistem Kendali dan Monitoring Listrik Rumahan Menggunakan Ethernet Sheeld dan RTC (Real Time Clock) Arduino. *Jurnal Teknologi Dan Rekayasa*, *2*(1), 14.

Tirtana, S. A., & Hidayat, H. T. (2018). Rancang Bangun Prototype Smart Room Berbasis a-14 a-15. *Proceeding Seminar Nasional Politeknik Negeri Lhokseumawe*, *2*(1), 14–18. http://eprints.uty.ac.id/1587/%0Ahttp://eprints.uty.ac.id/1587/1/Naskah Publikasi perpus.pdf

Yanwar, I. M., Adrianto, D., & P, N. H. (2017). Upgrade Prototype Alat Ukur Arus Sensor Reed Switch Dengan Perangkat Telemetri Menggunakan Modem GSM. *Jurnal Hidropilar*, *3*(2), 69–75. https://doi.org/10.37875/hidropilar.v3i2.59

Yasin, V., Zarlis, M., Tulus, Nababan, E. B., & Sihombing, P. (2019). Rancangan Miniatur Otomatisasi Bel Listrik Pada Gerbang Pintu Menggunakan Microcontroller ATMEGA8535. *Journal of Information System, Infomatics and Computing*, *3*(1), 13–20. http://journal.stmikjayakarta.ac.id/index.php/jisicom/article/view/68

Indonesia, R. (2002). *Undang-Undang Republik Indonesia Nomor 23 Tahun 2002 Tentang Perlindungan Anak*. Kementerian Pemberdayaan Perempuan, Republik Indonesia.