



DAFTAR PUSTAKA

- [1] Yu, J., Kim, M., Bang, H., Bae, S., & Kim, S. (2015). IoT as a applications: Cloud-based building management systems for the internet of things. *Multimedia Tools and Applications*, 75(22), 14583-14596. doi:10.1007/s11042-015-2785-0
- [2] Jagschies, G., Lindskog, E., Łacki, K., Galliher, P., & Armando, J. W. (2018). *Biopharmaceutical processing: Development, design, and implementation of manufacturing processes*. Amsterdam: Elsevier.
- [3] Hannan, M. A., Faisal, M., Ker, P. J., Mun, L. H., Parvin, K., Mahlia, T. M., & Blaabjerg, F. (2018). A review of internet of energy based building energy management systems: Issues and recommendations. *IEEE Access*, 6, 38997-39014. doi:10.1109/access.2018.2852811
- [4] Ilham Hanif, M. (2020), *Rancang Bangun Skema Komunikasi Data Multipoint to Point pada Building Management System di Sekolah Menengah Kejuruan Negeri 3 Yogyakarta*, Yogyakarta, Universitas Gadjah Mada.
- [5] Profil: Asri Medical Center. (n.d.). Retrieved February 24, 2021, from <https://asrimedicalcenter.com/web/profil/>
- [6] Hassan, Q. F. (2018). *Internet of things A to Z: Technologies and applications*. Hoboken, NJ: John Wiley & Sons.
- [7] L. mainetti, L. Manco, L. Patrono, I. Sergi and R. Vergallo, "Web of Topics: An IoT aware Model-driven Designing approach", 2015 IEEE 2nd World Forum on, Dec 2015
- [8] Manoj, R. T. (2018) NodeMCU ESP8266 *Communication Methods and Protocols : Programming with Arduino IDE*.
- [9] Kodali, R. K., & Sarjerao, B. S. (2017). MQTT based air quality monitoring. *2017 IEEE Region 10 Humanitarian Technology Conference (R10-HTC)*. doi:10.1109/r10-htc.2017.8289064.
- [10] Giménez, M. C., Geerdinck, L. M., Versteylen, M., Leffers, P., Meekes, G. J., Herremans, H., Schlangen, L. J. (2016). Patient room lighting influences on sleep, appraisal and mood in hospitalized people. *Journal of Sleep Research*, 26(2), 236-246. doi:10.1111/jsr.12470



- [11] Khodakarami, J., & Nasrollahi, N. (2012). Thermal comfort in hospitals – a literature review. *Renewable and Sustainable Energy Reviews*, 16(6), 4071-4077. doi:10.1016/j.rser.2012.03.054
- [12] American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). (2015). *2015 ASHRAE Handbook -- HVAC Applications Heating, Ventilating, and Air-Conditioning Applications (I-P) - (includes CD in I-P and SI editions) (Ashrae Applications Handbook Inch/Pound)*. ASHRAE.
- [13] Kashyap, M., Sharma, V., & Gupta, N. (2018). Taking MQTT and NODEMCU TO IOT: Communication in Internet of things. *Procedia Computer Science*, 132, 1611-1618. doi:10.1016/j.procs.2018.05.126
- [14] K. Grgić, I. Špeh and I. Hedi (2016), "A web-based IoT solution for monitoring data using MQTT protocol," 2016 International Conference on Smart Systems and Technologies (SST), pp. 249-253, doi: 10.1109/SST.2016.7765668.
- [15] Atmoko, R. A., Riantini, R., & Hasin, M. K. (2017). IoT real time data acquisition using MQTT protocol. *Journal of Physics: Conference Series*, 853, 012003. <https://doi.org/10.1088/1742-6596/853/1/012003>
- [16] Ding Yi, Fan Binwen, Kong Xiaoming and Ma Qianqian, (2016) "Design and implementation of mobile health monitoring system based on MQTT protocol," IEEE Advanced Information Management, Communicates, Electronic and Automation Control Conference (IMCEC), 2016, pp. 1679 - 1682, doi: 10.1109/IMCEC.2016.7867503.
- [17] Luthfi, F., Juanda, E. A., & Kustiawan, I. (2018). Optimization of Data Communication on Air Control Device Based on Internet of Things with Application of HTTP and MQTT Protocols. *IOP Conference Series: Materials Science and Engineering*, 384, 012009. <https://doi.org/10.1088/1757-899x/384/1/012009>
- [18] S. S. Prayogo, Y. Mukhlis and B. K. Yakti, (2019) "The Use and Performance of MQTT and CoAP as Internet of Things Application Protocol using NodeMCU ESP8266," Fourth International Conference on Informatics and Computing (ICIC), 2019, pp. 1-5, doi: 10.1109/ICIC47613.2019.8985850.
- [19] D. Eridani, K. T. Martono and A. A. Hanifah, (2019) "MQTT Performance as a Message Protocol in an IoTbased Chili Crops Greenhouse Prototyping," 4th International Conference on Information Technology, Information Systems and Electrical Engineering (ICITISEE), 2019, pp. 184-189, doi: 10.1109/ICITISEE48480.2019.9003975.
- [20] Mishra, Biswajeeban. (2018). *Performance Evaluation of MQTT Broker Servers*. 10.1007/978-3-319-95171-3_47.



- [21] D. L. de Oliveira, A. F. da S. Veloso, J. V. V. Sobral, R. A. L. Rabêlo, J. J. P. C. Rodrigues and P. Solic, (2019) "Performance Evaluation of MQTT Brokers in the Internet of Things for Smart Cities," 4th International Conference on Smart and Sustainable Technologies (SpliTech), 2019, pp. 1-6, doi: 10.23919/SpliTech.2019.8783166.
- [22] Borgohain, Tuhin & Kumar, Uday & Sanyal, Sugata. (2015). Survey of Security and Privacy Issues of Internet of Things. International Journal of Advanced Networking Applications. 6. 2372-2378.
- [23] Le, D. N., le Tuan, L., & Dang Tuan, M. N. (2019). Smart-building management system: An Internet-of-Things (IoT) application business model in Vietnam. Technological Forecasting and Social Change, 141, 22–35. <https://doi.org/10.1016/j.techfore.2019.01.002>
- [24] Dita Anggraini, Nazrul Effendy, MI Al Hafiz, DO Luviano, 2018, Research and Development of a Power Monitoring System for the Sustainable Energy Management System Implementation at Green School, Bali, Indonesia, E3S Web of Conferences 43
- [25] Coates, A., Hammoudeh, M., & Holmes, K. G. (2017). Internet of Things for Buildings Monitoring. Proceedings of the International Conference on Future Networks and Distributed Systems. Published. <https://doi.org/10.1145/3102304.3102342>
- [26] Muhammad Abdul Mujeebu, Indoor Environmental Quality. IntechOpen, 2019.
- [27] E. C. F. S. STANDARDIZATION, “Indoor environmental input parameters for design and assessment of energy performance of buildings addressing indoor air quality, thermal environment, lighting and acoustics.,” 2006
- [28] A. H. Oti, E. Kurul, F. Cheung, and J. H. M. Tah, “A framework for the utilization of building management system data in building information models for building design and operation,” Autom. Construct., vol. 72, pp. 195–210, Dec. 2016, doi: 10.1016/j.autcon.2016.08.043.
- [29] E. Z. Tragos et al., “An IoT based intelligent building management system for ambient assisted living,” in Proc. IEEE Int. Conf. Commun. Workshop (ICCW), London, U.K., Jun. 2015, pp. 246–252, doi: 10.1109/ICCW.2015.7247186.
- [30] A. Corna, L. Fontana, A. A. Nacci, and D. Sciuto, “Occupancy detection via ibeacon on android devices for smart building management,” in Proc. Design Autom. Test Europe Conf. Exhibit. (DATE), Grenoble, France, Mar. 2015, pp. 629–632
- [31] IoT Considerations, Requirements, and Architectures for Smart Buildings—Energy Optimization and Next-Generation Building Management Systems



- [32] Heri Adrianto. Pemrograman Mikrokontroler AVR ATmega 16 Menggunakan Bahasa C (CodeVisionAVR). Bandung : Penerbit INFORMATIKA, 2013.
- [33] Behrouz A. Forouzan, Data Communications and Networking, Fourth Edition. McGraw-Hill, 2007
- [34] Sunita S. Shinde, (2019), *Computer Network*. New Delhi: New Age International Publisher.
- [35] Shea, S. (2019, August 2). *machine-to-machine (M2M)*. IoT Agenda. <https://internetofthingsagenda.techtarget.com/definition/machine-to-machine-M2M>.
- [36] Suznjevic, Mirko & Saldana, Jose. (2016). Delay Limits for Real-Time Services. IETF draft.
- [37] Karagiannis, Vasileios & Chatzimisios, Periklis & Vázquez-Gallego, Francisco & Alonso-Zarate, J.. (2015). *A survey on application layer protocols for the Internet of Things*. Trans. IoT Cloud Comput.. 3. 11-17.
- [38] V. Gazis et al., (2015) “*A survey of technologies for the internet of things*,” in International Wireless Communications and Mobile Computing Conference, pp. 1090-1095
- [39] D. Thangavel, X. Ma, A. Valera, H. Tan, and C.K. Tan, “Performance evaluation of MQTT and CoAP via a common middleware,” Intelligent Sensors, Sensor Networks and Information Processing, April 2014
- [40] V.Lampkin et al., (2012), *Building Smarter Planet Solutions with MQTT and IBM WebSphere MQ Telemetry*, First Edition.
- [41] Messaging Queues in the IoT under pressure Stress Testing the Mosquitto MQTT Broker
- [42] “TR 101 329; Telecommunications and Internet Protocol Harmonization Over Networks (TIPHON); General aspects of Quality of Service (QoS).” The European Telecommunications Standards Institute, Jun. 1999
- [43] M. Yasir, G. Carmelita, M. Maciej, T. Andreas, (2015) “*Mobile M2M communication architectures, upcoming challenges, applications, and future directions*”, Mehmood et al. EURASIP Journal on Wireless Communications and Networking, doi : 10.1186/s13638-015-0479-y
- [44] R. Liu, W. Wu, H. Zhu and D. Yang, (2011) “*M2M-Oriented QoS Categorization in Cellular Network*,” 7th International Conference on Wireless Communications, Networking and Mobile Computing, 2011, pp. 1-5, doi: 10.1109/wicom.2011.6040143.
- [45] *Paho MQTT C Client Library: Quality of service*. (2021, June 16). <http://www.eclipse.org/paho/files/mqtt/doc/MQTTClient/html/qos.html>



UNIVERSITAS
GADJAH MADA

Rancang Bangun Skema Komunikasi Data Dengan Protokol Message Queuing Telemetry Transport (MQTT) Pada

Sistem Pemantauan Kualitas Lingkungan Ruang Klinik Berbasis Internet of Things (IoT)

FITRA FADHILLA, Dr. Faridah, S.T., M.Sc, Ir. Memory M. Waruwu. , S.T., M.Eng., IPM

Universitas Gadjah Mada, 2021 | Diunduh dari <http://etd.repository.ugm.ac.id/>