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IOT-BASED HEALTH MONITORING DEVICE

R. Thilakshan^{*}, M.A.M. Ashfak, A.M.H. Sampath, T. Sajarupan, G.A. Canistus

Department of Engineering Technology, University of Jaffna, Sri Lanka.

**Correspondence E-mail: raveendranthilakshan88@gmail.com, TP: +94770764452*

Abstract: In today's modern healthcare environment, significant advancements in science and knowledge have been achieved through the implementation of Internet of Things (IoT) technology. However, many patients in rural areas face numerous challenges in managing their health conditions due to the lack of adequate medical facilities. These challenges are not limited to rural areas; urban dwellers also struggle to allocate time for their health needs, potentially leading to significant health issues in the future. The Internet of Things refers to objects embedded with sensors, software, and various technologies to interact and exchange data with other devices and systems over the internet. This research presents an electronic device capable of measuring essential human body parameters such as temperature (using LM35), heart rate, and oxygen level through Arduino technology. The primary technique employed in this process is the Blynk IoT web-based application. Ketone levels are identified through breath measurements. Initially, the patient's personal information, including name, gender, age, and mobile number, is collected, followed by the sensor-based checkup process. Upon completion, the patient receives a summarized report on their mobile device. If any result from the report exceeds the threshold value, the system alerts the patient to consult a doctor. The main features of this device include user-friendliness and portability, enabling individuals to operate it conveniently anytime and anywhere.

Keywords: Device; Healthcare; Human; Monitoring