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Human Health Monitoring System

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Abstract: *Smart sensing devices and the Internet have brought practical solutions to many networking sectors, public and private sector enterprises, and government organisations throughout the world. Health is money. A healthy mind and body are the keys to wealth and pleasure. People nowadays, however, do not have much spare time to monitor their health. As a result, a health monitoring system is required that tracks and alerts individuals about their health state. The health monitoring system may be enhanced thanks to rapid advancements in the internet and technology, such as the Internet of Things. The internet of things enables automated communication between devices and the execution of pre-programmed tasks, making the system more efficient. Patients must see doctors on a regular basis to verify their health condition under the traditional health monitoring system. However, by incorporating the internet of things into the health monitoring system, the procedures of health monitoring may be automated, saving the patient valuable time. Furthermore, the cloud, which revolutionised data storage, contributes in the development of a better and more dependable health monitoring system. This research aims to link Internet of Things (IoT) technology with health monitoring to make it more customised and timely by allowing devices to communicate with one another. This research will look into a variety of wearable health monitoring modules that people may use to track their heart rate, blood pressure, pulse, body temperature, and other physiological data. The wireless sensor is used to collect data in order to develop a health monitoring system. To enable real-time monitoring, the data is integrated utilising the Internet of Things for processing, linking, and computing. The average temperature collected by the monitoring system of three people is 36.5, 36.4, and 36.5 (°C), indicating that the technology displayed relatively accurate and reliable testability. The ECG acquisition system displays the user's ECG in a straightforward and simple manner. The three participants examined by the system have pulse rates of 78, 78, and 79 (times/min), which are similar to medical pulse metre values. The physiological data obtained through semantic recognition, matching, and character matching is relatively accurate. It concludes that a human health monitoring system based on the Internet of Things can provide people with daily health management, which is important for improving the quality and level of health services..*

Keywords: Internet of Things, Ontology, E-Health, Context Awareness , Internet of Things, IoT in Healthcare, Patient Monitoring, Raspberry Pi, Smart Health Monitoring.

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