Internet of Things Based Patient Health Monitoring System

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Abstract : The emergence of the Internet of Things (IoT) has facilitated better device control and monitoring in the modern world. The constant monitoring of a patient would be drastically altered by the usage of IoT in healthcare. As we've seen in the case of the COVID-19 pandemic, it's important to keep oneself untouched while continuously checking on the patient's heart rate and temperature. Additionally, patients with paralysis should be closely watched, especially if they are elderly and in need of special care. Our "IoT BASED PATIENT HEALTH MONITORING SYSTEM" project uses IoT to track patient health conditions in an effort to address these issues. In this project, the main board is an 8051 microcontroller that connects a number of sensors, including a heart rate sensor, a temperature sensor (LM-35), and a saline water measuring circuit. These sensors are connected via an ESP832 (WiFi) module, which enables the sending of recorded data directly to the cloud so that the patient's health status can be regularly monitored. An LCD is used to monitor the data in offline mode, and a buzzer will sound if any variation from the regular readings occurs. The data in the cloud may be viewed as a graph, making it simple for a user to spot any unusual conditions.

Keywords : IoT, ESP8266, 8051 microcontrollers, sensors
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