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"Remotely Patient Health Monitoring System"

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Abstract : *In India, close to regarding 2 hundredth of the whole population loses their lives because of Interrupted health observance system i.e., in most of the hospitals, doctor visits patients Either in morning shift or in evening shift or in each shift. What happens if patient's health Becomes important in between that interval or once a doctor isn't on the market with a Patient. The solution is a patient could lose her\his life. Thus, to avoid this important Situation; we tend to area unit proposing a sensible embedded system device that monitors Patients' health ceaselessly. There are several scopes for IoT to make a difference in lives Of patients.*

Keywords – *Health observance, health ceaselessly, IoT, sensor, MCU*

I. INTRODUCTION

As technology has advanced and sensors have become smaller, efforts have been made to apply the new technology in a variety of fields to enhance human existence. The healthcare industry is one major research field where the technology has been adopted [1]. It is exceedingly costly for those who require healthcare services; this is especially true in poorer nations. Therefore, this initiative is an effort to address a healthcare issue that society is now dealing with. Designing a remote healthcare system was the project's primary goal. There are three primary components to it [2, 4]. First, sensors were used to identify the patient's vitals; next, data was sent to cloud storage; and last, the detected data was provided. For remote viewing

The Internet of Things (IoT) concepts have been widely used to interconnect the available Medical resources and offer smart, reliable, and effective healthcare service to the patients. Health monitoring for active and assisted living is one of the paradigms that can use the IoT Advantages to improve the patient's lifestyle[2]. In this project, I have presented an IoT Architecture customized for healthcare applications. The aim of the project was to come up With a Remote Health Monitoring System that can be made with locally available sensors With a view to making it affordable if it were to be mass produced[3]. Hence the proposed Architecture collects the sensor data through microcontroller and relays it to the cloud where It is processed and analysed for remote viewing.

II. METHODOLOGY

The concepts of the Internet of Things (IoT) have been widely employed to connect the available medical resources and provide patients with intelligent, dependable, and efficient healthcare services. One paradigm that can leverage the benefits of the Internet of Things to enhance patients' lifestyles is health monitoring for assisted and active living [2]. I have proposed an IoT architecture in this project that is tailored for use in healthcare settings. The project's goal was to develop a remote health monitoring system that could be manufactured using locally accessible sensors in order to make it reasonably priced if it were to be mass-produced [3]. Therefore, using a microcontroller, the suggested architecture gathers sensor data and sends it to the cloud for processing and analysis in preparation for remote viewing. Programming a Node MCU with the Arduino IDE will only take five to ten minutes. The Node MCU board itself, the Arduino IDE, and a USB cord are all you need. To get your Arduino IDE ready for Node MCU, you can look at this Getting Started Tutorial. Using the Arduino IDE to program a Node MCU will only take five to ten minutes. All you need is a USB wire, the Arduino IDE, and the Node MCU board itself. You can use this Getting Started Tutorial to prepare your Arduino IDE for Node MCU.

FIGURES AND TABLES

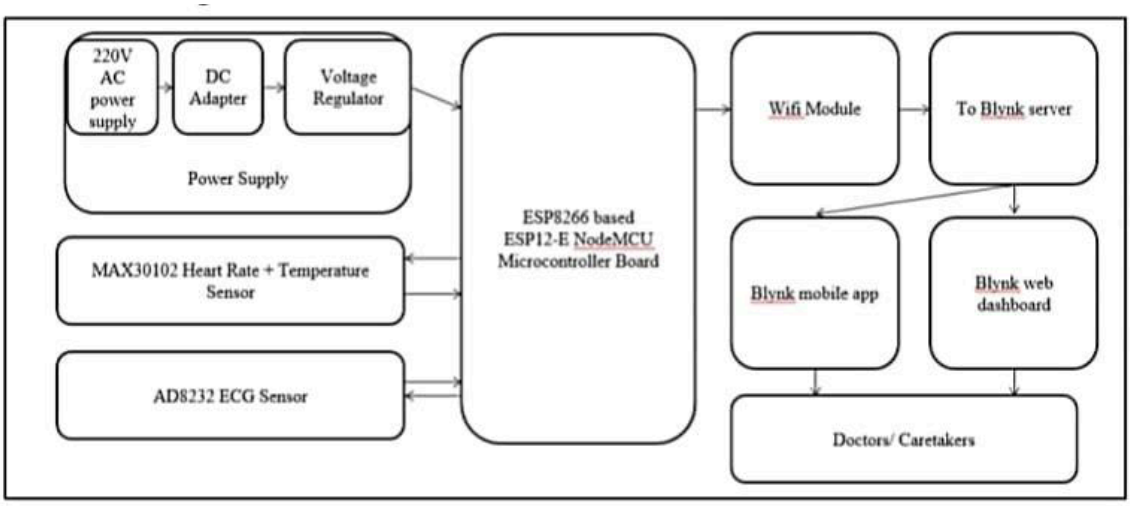

Fig 1 : Block Diagram of the System

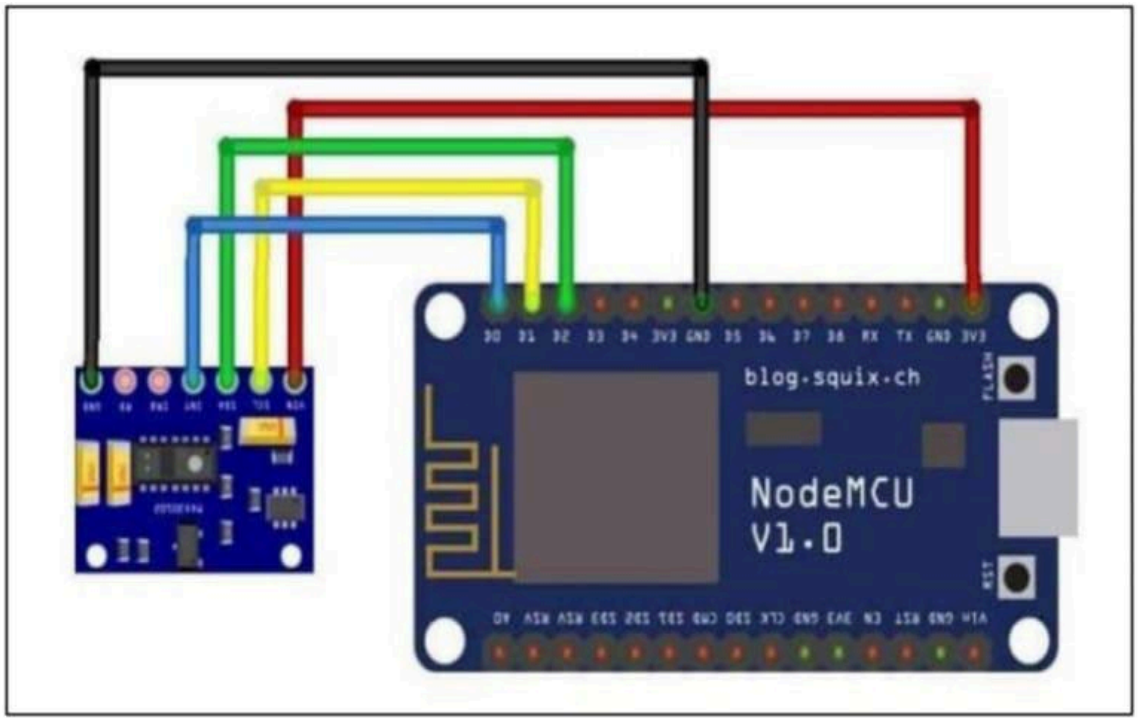

Fig 2: Circuit Diagram of the System

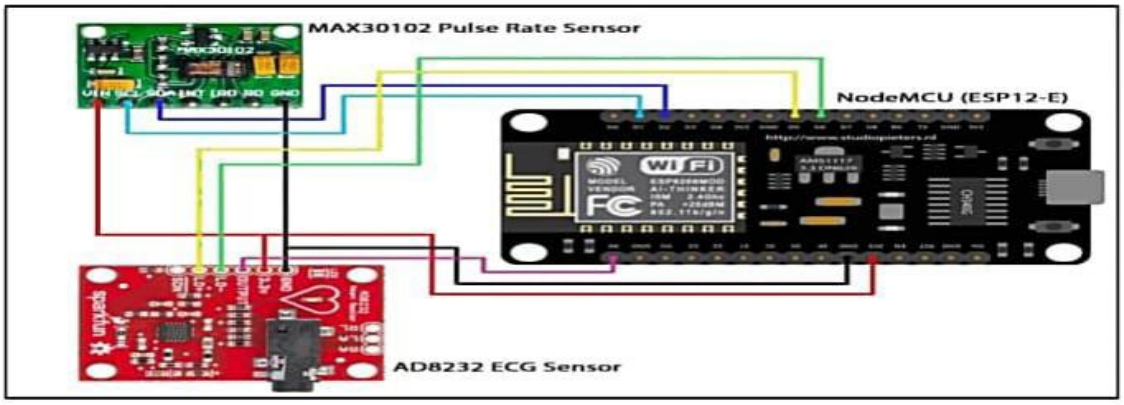

Fig 3 Circuit Diagram of the System

III. CONCLUSION

This project has focused on developing a Remote Patient Health Monitoring System with an emphasis on accessibility and affordability. Utilizing available technologies and open-source platforms where possible, the proposed system is expected to close the gap in healthcare access, especially for disadvantaged people. The potential cost saving via fewer hospital readmissions and proactive care management further underscores the value that such systems can bring toward equable and sustainable healthcare solutions.

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