IOT Heart Attack Detection & Heart Rate Monitor

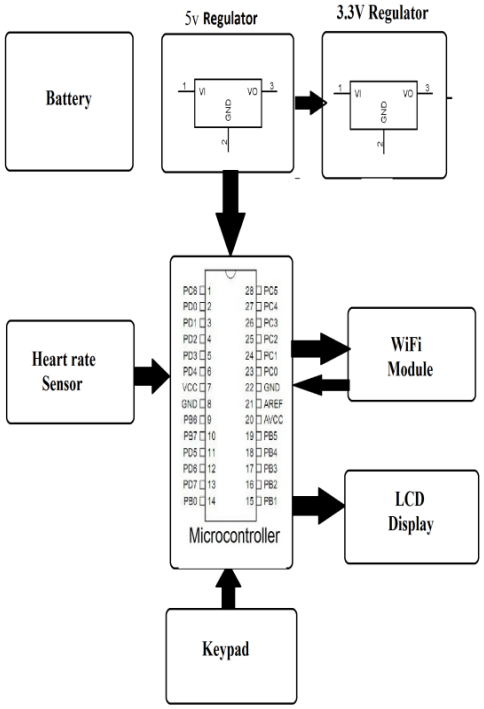
Abstract:-

These days we have an increased number of heart diseases including increased risk of heart attacks. Our proposed system users sensors that allow to detect heart rate of a person using heartbeat sensing even if the person is at home. The sensor is then interfaced to a microcontroller that allows checking heart rate readings and transmitting them over internet.

The user may set the high as well as low levels of heart beat limit. After setting these limits, the system starts monitoring and as soon as patient heart beat goes above a certain limit, the system sends an alert to the controller which then transmits this over the internet and alerts the doctors as well as concerned users. Also the system alerts for lower heartbeats.

Whenever the user logs on for monitoring, the system also displays the live heart rate of the patient. Thus concerned ones may monitor heart rate as well get an alert of heart attack to the patient immediately from anywhere and the person can be saved on time.

Block Diagram:



Hardware Specifications

1.ATmega328P AVR MC- Buy ATmega328P Online
2.Heartbeat Sensor – Buy Heartbeat Sensor Online
3.ESP8266 Wifi Module – Buy Wifi Module Online
4.LCD's – Buy LCD Online
5.Crystal Oscillator – Buy Crystal Oscillators Online
6.Resistors – Buy Resistors Online
7.Capacitors – Buy Capacitors Online
8.Transistors – Buy Transistors Online
9.Cables & Connectors – Buy Cables & Connectors Online
10. Diodes – Buy Diodes Online
11. PCB – Buy PCB & Breadboards Online
12. LED's – Buy LED Online
13. Transformer/Adapter – Buy Transformers & Adapters Online
14. Push Button – Buy Buttons & Switches Online

Software Specifications:

- Arduino Compiler
- MC Programming Language: C
- IOTGecko