# IoT based Smart Health Monitoring System

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# Motivation



- Nowadays Health-care Environment has developed science and knowledge based on Wireless-Sensing node technology-oriented. However, patients face a problematic situation of unforeseen demise due to the specific reason of heart problems and attack, which is because of the nonexistence of good medical maintenance to patients at the needed time.

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- This system is for especially monitoring old age patients and informing doctors and loved ones. So we are proposing an innovative project to dodge such sudden death rates by using Patient Health Monitoring that uses sensor technology and uses the internet to communicate to the loved ones in case of problems.

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- This system uses Temperature and heartbeat sensors for tracking patients' health. Both the sensors are connected to the Arduino-Uno.
- In turn, following the patient health micro-controller is interfaced to an LCD and wi-fi connection to send the data to the web-server(wireless sensing node).

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- If any abrupt changes in patient heart rate or body temperature, alerts are sent about the patient using IoT. This system also shows patients' temperature, and heartbeat tracked live data with timestamps over the Internetwork.

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- Thus Patient health monitoring system based on IoT uses the internet to monitor patient health effectively and helps the user watching their loved ones from work and saves lives.

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- It will also automatically upload all information on the cloud through the wifi module.

# Components



- Processors ...
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  - ESP8266 Wifi Module

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  - Room Temperature Sensor (DHT11)

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  - Room Temperature Sensor (DHT11)
- Wires and others ...
  - Breadboard
  - Battery
  - Capacitor, Resistor, or Inductor
  - GSM Module
  - Burner
  - LCD Display
  - Potentiometer
  - Jumper Wires

# System Design



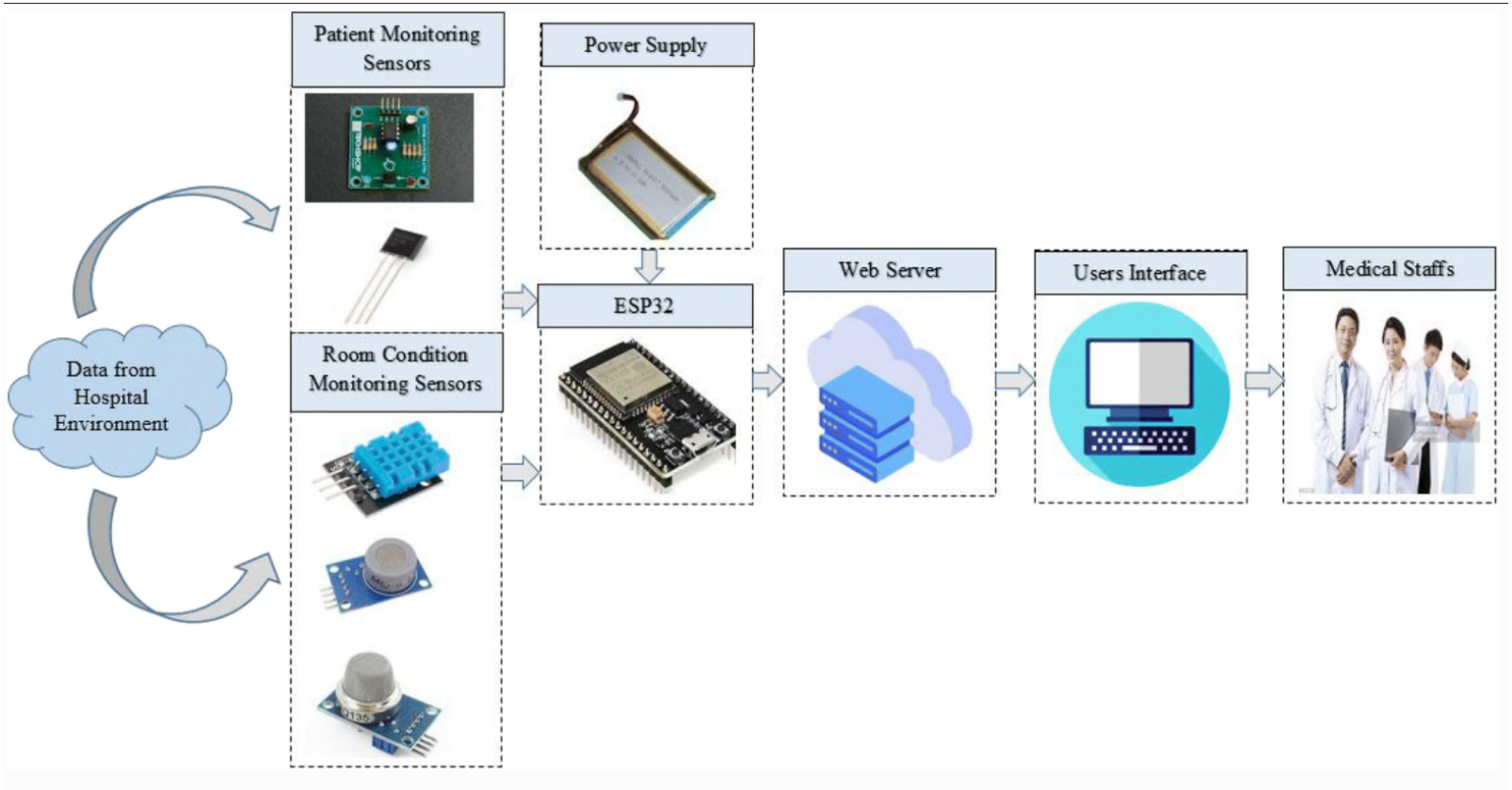


Figure: The overall system architecture of the healthcare monitoring system

# Conclusion



This project can be a really cheap medium to monitor a patient continuously and provide information to doctors, nurses, and patient's relatives efficiently.