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# "IOT BASED IV BAG MONITORING & ALERT SYSTEM"

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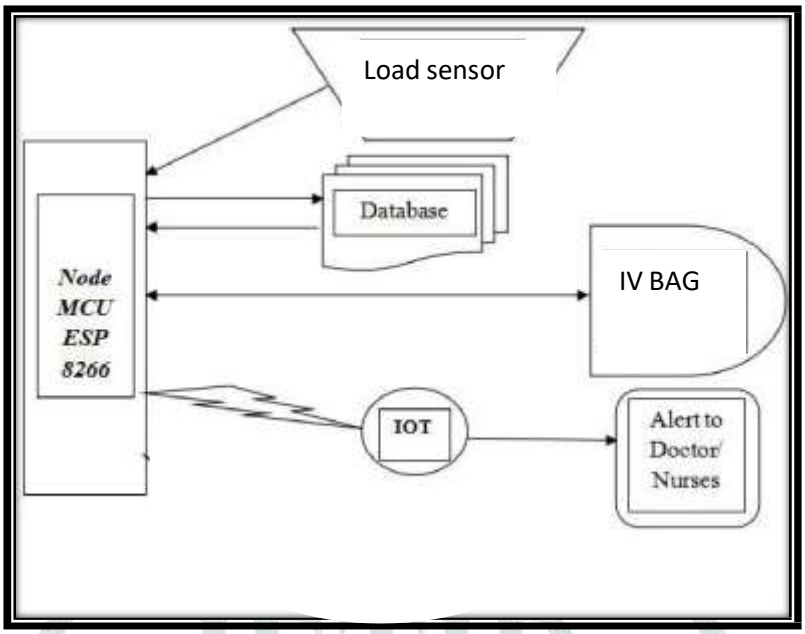
**ABSTRACT**

The Internet of Things (IoT) is a network of actual physical objects made up of all the gadgets, cars, buildings, and other things with electronics, software, and sensors that allow them to collect and share data with one another. Real-time analytics, machine learning, commodity sensors, and embedded systems have all helped to advance the Internet of things. Any time saline is administered to a patient, the patient must be closely watched by a nurse or any other family members. Most frequently because of carelessness, lack of attention, a hectic schedule, and an increased number of patients, the nurse may forget to replace the saline bottle as soon as it has been completely eaten. Blood rushes back to the saline container shortly after the saline has finished because of a difference in **Keywords**: Home Automation, Node MCU, Esp8266 Wi-Fi Module, Google Assistant.

**INTRODUCTION**

Thanks to a new technology known as IOT, or the internet of things, we can control devices over the internet. When intravenous fluid levels fall below a predetermined threshold, the weight sensor's output voltage level changes. The comparator continuously compares the WEIGHT output with a threshold that has been set. The ESP8266 controller determines that the fluid level is too low when the transceiver output is negative and informs the observer by buzzing. An alarm is created to notify the nurse that the patient has received all of the saline that was being administered. The weight difference is utilised to determine how much saline is in the bottle and, as a result, to trigger an auditory warning on the indication board at

**SYSTEM ARCHITEC**

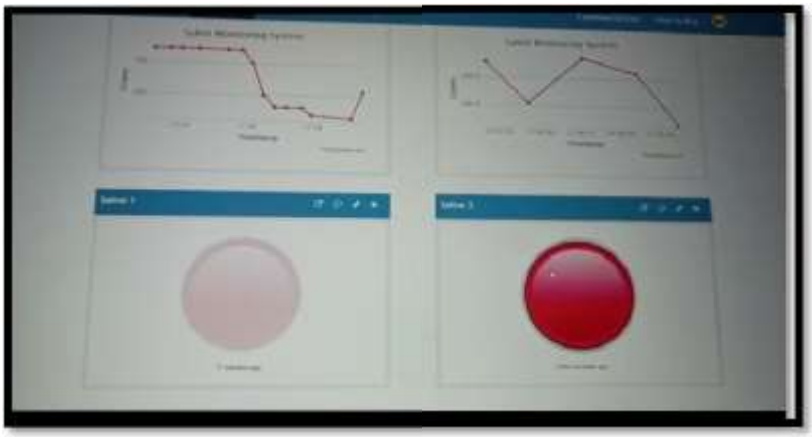



**WORKING OF THE PROJECT**

A drips chamber and an IV set are connected by the current system. Each drop of the IV set is detected using the flow sensor. Each time a drop occurs, a light beam is disrupted, and the weight sensor transmits and receives this information. As a result, the sensor output changes, and the comparator outputs a pulse for each drop. The LCD displays the drip rate so that the observer may see how much fluid is in the IV set.The device will sound an alarm if it is not sensed for 45
seconds. Another suggests "Design and development of versatile saline flowsystem and GSM based remote monitoring device" as a way.

**RESULT**

The outcomes as favourable and the system performed effectively. The suggested system's full prototype implementation as depicted in.



## CONCLUSION

To ensure therapeutic effectiveness of IV fluids, a constant, even flow is necessary to prevent complications from too much or too little fluid. A physici n must order a rate of infusion for IV fluids or for medications. The system has the added benefit of having two channels for monitoring the data coming from the sensor components. One is the location where the cloud data is stored.The drip's top, middle, and bottom levels could be observed, and another option is the GSM, which could be used to get notifications on the fluid levels in the drip.

# References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