TEMPERATURE SENSING SYSTEM USING RFID FOR VACCINE DELIVERY

ABSTRACT:

The efficacy of vaccines is often compromised due to changes in temperature during transportation and storage. To address this issue, this project proposes the use of radio frequency identification (RFID) tags to monitor the temperature of vaccine boxes

The objective of the project is to detect temperature changes by attaching RFID tags to the vaccine boxes and alert the user when the temperature of the vaccine box is not within the optimum temperature range. The RFID tags will be equipped with non-contact infrared thermometer MLX90614 that can detect any changes in temperature. The data from the RFID tags will be transmitted wirelessly to a central monitoring database system, which will process the data and generate alerts when the temperature is outside the desired range. We will be using ESP8266, MLX90614, EM18 RFID Reader, and Ultrasonic Sensor to build this project. It is something like an RFID based temperature monitoring system.

One of the most important parameters of quality control is the temperature and this system will help to ensure that vaccines are stored at the proper temperature, thus improving the efficacy of the vaccines.

- By
A. Hima Varsha (124006068)
N. Kaavia (124004125)
B. Shriram (124004290)

GUIDE:
Dr.AMRITHARAJAN.R
PROFESSOR