ENGINE OIL AND COOLANT LEVEL MONITORING SYSTEM

Engine oil quality measurement in real time is one of the major issues find in automobile industry mostly in developing countries. The main reason is the lack of automatic monitoring system from the continuous use of engine. The architecture of EOM system consist of three different phases named as Data Sensing, IoT based Transmission and Monitoring . The phases of EOM system is described in below section one by one.

- **Data Sensing**: This is used to sense the oil condition during the working of the engine in real time. Light Dependent Resistor (LDR) sensor used to check the visibility of lubricant, ultra-sonic sensor to measure the depth of lubricant in the vehicle tank and temperature sensors are used to sense the oil condition with respect to time. These electronic sensors having better sensing capacity and helps to improve the interactive with the physical environment of developed IoT-based EOM system. The data collected by the sensors has to be stored and processed intelligently in order to derive useful inferences from it.
- **IoT based Transmission:** In second phase, we develop an IoT network for communication purpose to transmit the oil condition for monitor via computational devices like mobile, computer, laptop etc. Bluetooth, RFID, Wi-Fi and ZigBee are used as a medium for the data transmission from transmitter to receiver.
- **Monitoring:** It is a observing and checking steps of lubricant condition during the progress to ensure the quality of lubricant over a period of time.