**A Project Report on**

**SMART STREET LIGHTING**

**By**

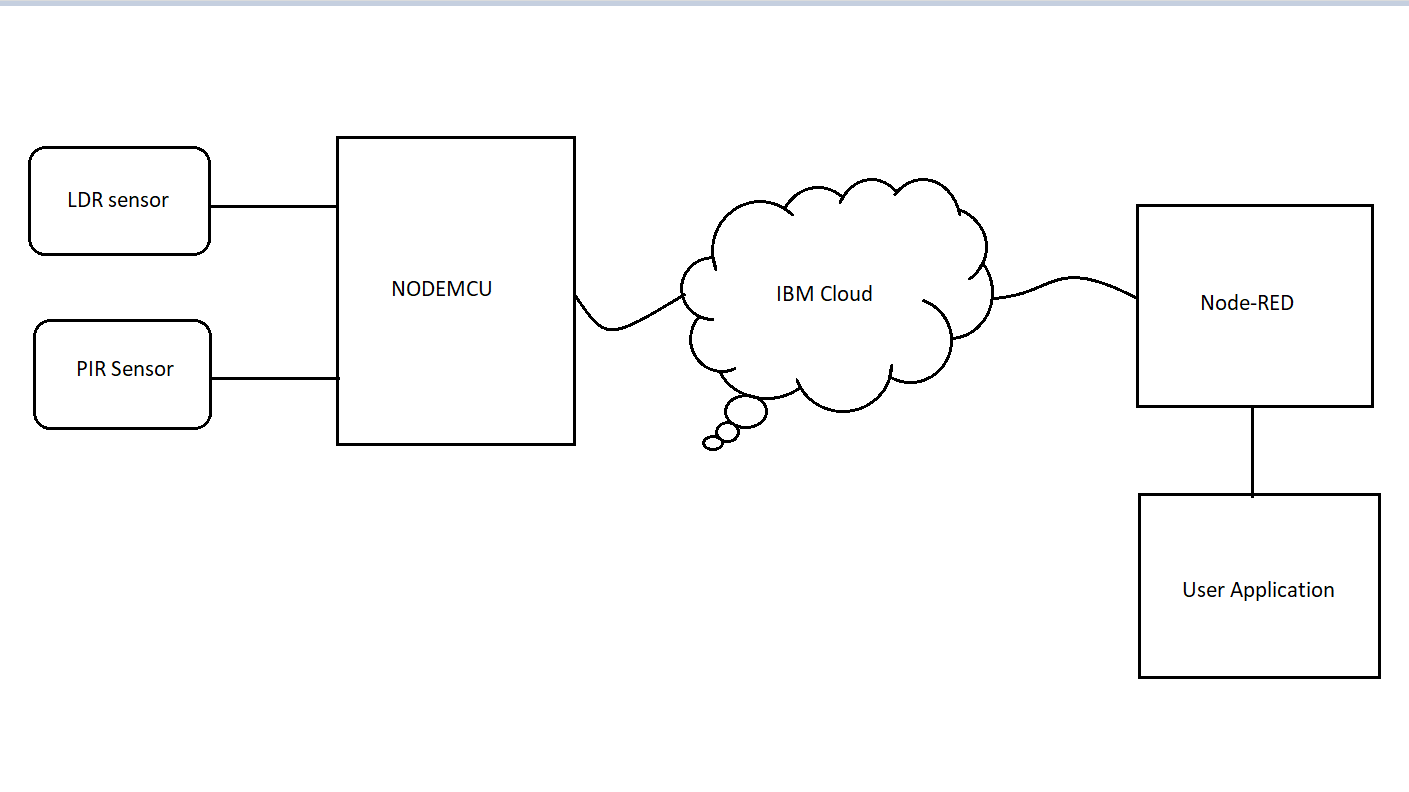
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**ABSTRACT**

The aim of the project is to provide the people with the automatic street lighting in a smart format by using the IOT concept. As we know these project is mostly depending on the sensors by which we can easily detect the intensity of the light and by detecting the presence of the vehicle, as by depending on these two things the light will be controlled . this project consists of hardware and software requirements in these we mainly have NODEMCU (esp8266) which provides connection between the sensors and the code which will be given to control the light .And the reaming part is of two sensors LDR sensor and PIR sensor (HC-SR501), this LDR sensor is used to detect the intensity of sunlight and PIR sensor is the motion sensor which is used to detect the vehicle is present near its surroundings .And we will be storing the data in cloud(IBM cloud) ,we also use the application called Node-RED which is a flow-based development tool developed originally by IBM for wiring together hardware devices ,APIs and online services as part of the Internet of Things.And by the help of Node-RED the smart light can also be controlled from a electric sub sections.

**WORKING**

First we will be connecting the two sensors to the NODEMCU with the use of jumper wires (electrical wire) by the data given in the code ,And these nodemcu has to be supply with the power of 5v(voalts) and now after the proper working of the sensors now we will be sending the data to the cloud which is detected by the sensors and we can also control these lights by any smart device which will be present at the sub sections by the help of Node-RED (Flow-based development tool).Now by the any smart application we can also be controlling the led bulb in a case of sensor failure.

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