

LED Switching Using IOT

Prepared By:

Mr. Kazi Jawwad A R (T-16-0020)

Mr. Kiratkar Gunjan Narayan (T-16-0080)

Ms. Ghogale Sonali Sudhakar (T-16-0212)

Guided By:

Prof.Amar Palwankar

Problem Statement:

To Develop a IOT Based Project on Automatic LED Switching using Intel edison to help our society for their Betterment. We can ON/OFF light manually but sometimes we forgot to OFF/On light, So in that case We can use the automatic Light sensor. a design is proposed using Light sensor for automation of lights using Intel Edison with Internet of Things for smart homes and Smart Cities.

Components

Hardware Requirements:

- 1. Intel Edison Board
- 2. Analog Ambient Light Sensor V2.1
- 3. Digital LED Module V2
- 4. Wires
- 5. Expansion Shield V7.1

Software Requirements:

- 1) Intel Edison
- 2) Putty
- 3) Ubidots

Work Done

- 1) With the help of ubidots we have implemented LED switching
 - a) As soon as button ON LED will Glow...
 - b) As soon as button OFF LED will OFF...
- 2) With the help of Digital LDR Identified the intensity of light.
 - a) As soon as brightness turn below 150 LED will Glow..
 - b) As soon as brightness turn below 150 LED will OFF...

Applications

- 1) Automatic Home Light.
- 2) Solar highway lighting system with auto turn off in daytime.
- 3) Sunset to sunrise lighting switch.
- 4) Power saver for street light control system.
- 5) Operate Using Sensor as well as Internet From Anywhere in the world.

Conclusion

Nowadays we're having automation of every little electrical device in our homes. Internet of Things is the concept of basically connecting any device with an on and off switch to the internet. IOT is more than smart homes and connected appliances; however, it scales up to include smart cities with connected sensors. Using Light sensors, the lights will automatically turn on and off according to the intensity of light.