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EIOT Mini Project

Topic: Automatic Street Light using Sensors

Objective of the project:

- Streetlights are quite an important part of a city. These street lights are switched ON in the evening and are switched OFF in the morning.
- In order to reduce this wastage of electricity, we need an automated Street Light Monitoring System Using IoT.
- With the help of IoT, street lights can switch ON and OFF automatically.
- Power Consumption is quite low in these street lights using IoT which also leads to energy conservation.
- There are 3 sensors in our project. If you want we can increase the number of parking slots by adding a few more IR sensors and modify the code accordingly.

Requirements:

- **Proteus:** Proteus is used to simulate, design and drawing of electronic circuits. By using proteus you can make two-dimensional circuits designs as well. With the use of this engineering software, you can construct and simulate different electrical and electronic circuits on your personal computers or laptops.

- **Keil:** Arm Keil MDK is the most comprehensive software development solution for Arm-based microcontrollers and includes all components that you need to create, build, and debug embedded applications. MDK includes the µVision IDE and debugger, Arm C/C++ compiler, and essential middleware components.

Components Used:

1. Micro Controller (AT89C51)   5. Transistor (BC547)

2. Button   6. Ground

3. Relay (5V)   7. Power

4. AC Voltage Source (ALTERNATOR)   8. Lamp