# IDEATION PHASE

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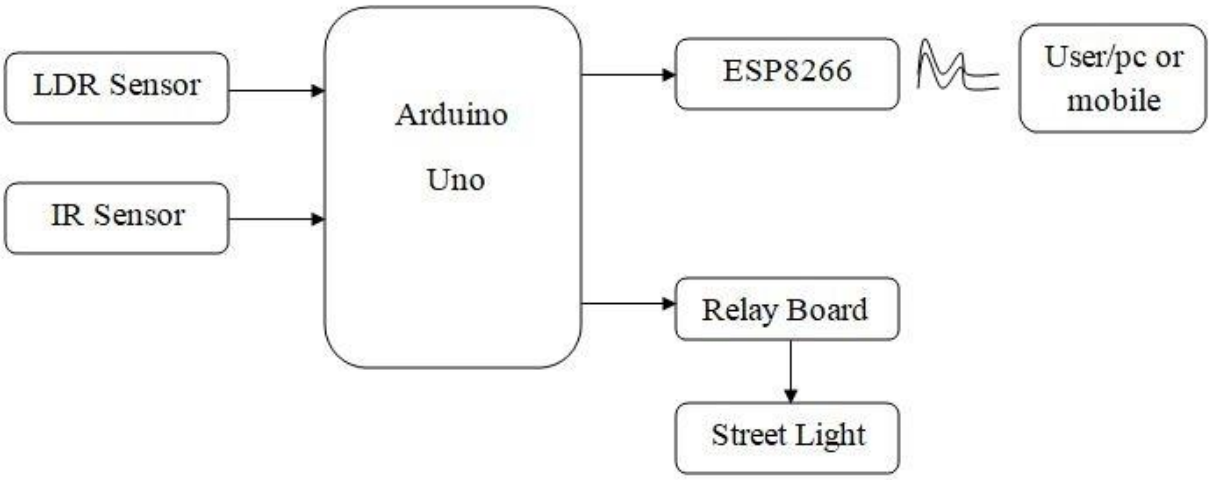
| DATE | 04.05.2023 |
| TEAM ID | NM2023TMID14120 |
| PROJECT TITLE | IoT based Weather Adaptive Street lighting system |
| MAXIMUM MARKS | 4 MARKS |

## OVERVIEW:

This project “IoT based smart lighting intelligent and weather adaptive lighting in street lights” could be a price effective, eco-friendly and therefore the safest technique to save energy and through this method the light status data is accessed from anytime and anyplace. It clearly tackles the matter the planet is facing these days that’s, saving energy.

The project has scope in variedalternative applications like for providing lighting in industries, campuses and parking lots oflargespaces like malls. The project presents much morebenefitswhich might over shadow the current limitations. Keeping in sight the long runadvantagesand therefore the initial price would never be an issuebecause the investment recurrence time is extremely less.




**WORKING**

We send the command for switching ON or OFF of the lights through our phone or the laptop. This command is received by the arduino through the Wi-Fi module, which then controls the light according to the command. In case an OFF command has been given the light will be glow lightly and In case of an ON command has been given the light will be glow brightly

COMPONENTS:

LDR SENSOR:

Photoresistors, also known as light dependent resistors (LDR), are light sensitive devices most often used to indicate the presence or absence of light, or to measure the light intensity.

IR SENSOR:

IR sensors are now widely used in motion detectors, which are used in building services to switch on lamps or in alarm systems to detect unwelcome guests. In a defined angle range, the sensor

elements detect the heat radiation (infrared radiation) that changes over time and space due to the movement of people.

## ESP8266:

The ESP8266 WiFi Module is a self contained SOC with integrated TCP/IP protocol stack that can give any microcontroller access to your WiFi network. The ESP8266 is capable of either hosting an application or offloading all Wi-Fi networking functions from another application processor.