AMRITA VISHWA VIDYAPEETHAM

19CSE446 - Internet Of Things

STREET LIGHT CONTROLLING SYSTEM

PRESENTED BY

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PROBLEM STATEMENT

Urban areas face challenges related to energy consumption, safety, and environmental impact due to inefficient street lighting systems.

Conventional street light systems often operate on fixed schedules or resulting in wasted energy and inadequate illumination in certain areas.

Additionally, these systems lack adaptability to varying environmental conditions, leading to further inefficiencies.

OBJECTIVE

The objective of this project is to develop a smart street light control system that intelligently manages lighting based on real-time occupancy and environmental conditions.

The system aims to reduce energy consumption, enhance safety, and minimize environmental impact by leveraging the power of IOT protocols and cloud technologies while ensuring optimal lighting levels for pedestrians and vehicles.

COMPONENTS

HARDWARES

- ***Ultrasonic Sensor***
- ***Photoresistor***
- ***Humidity Sensor***
- ***PIR Sensor***
- ***Arduino***
- ***Bread Board***
- ***Bulbs and Relay***

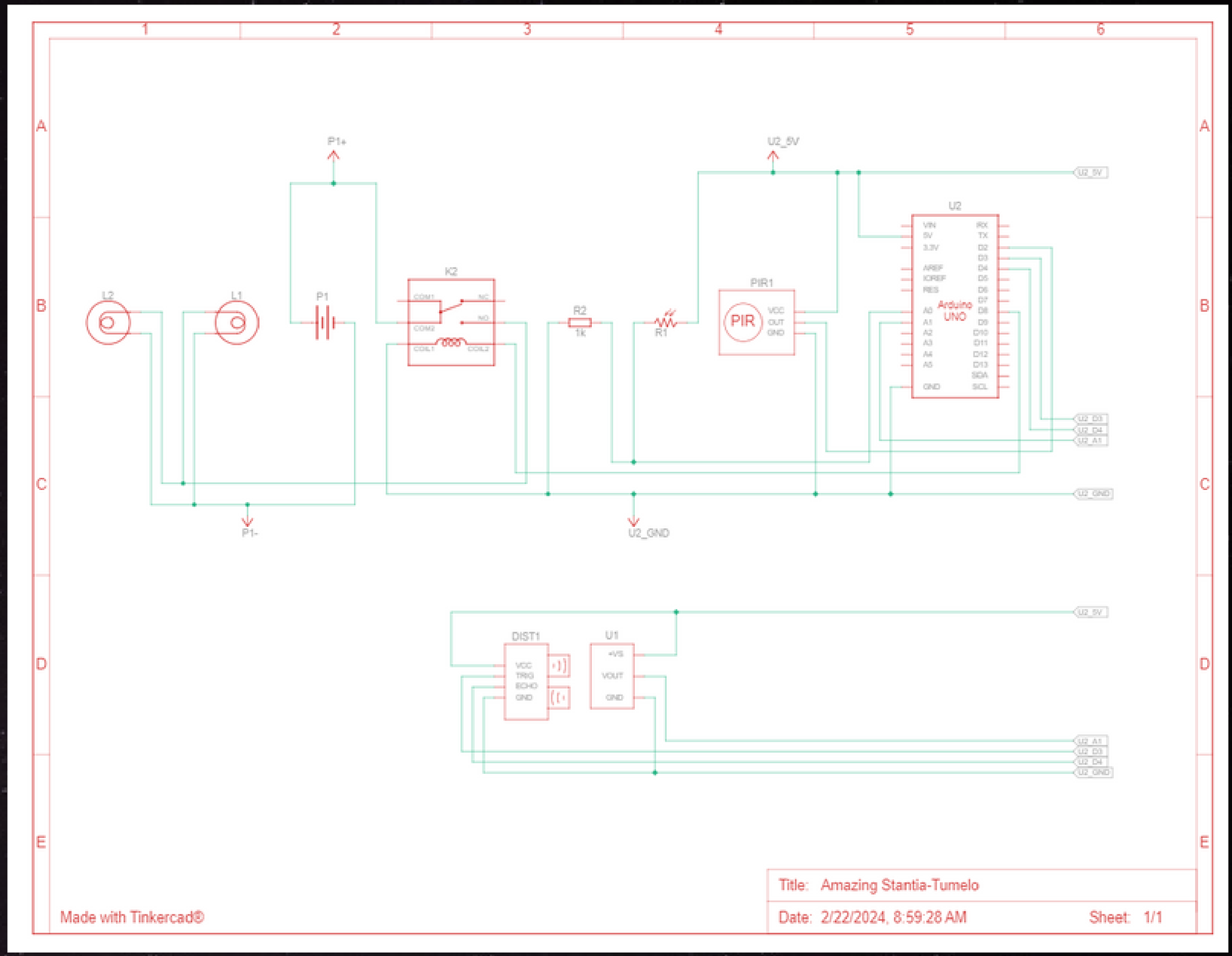
SOFTWARE

- ***Arduino IDE***

PROPOSED IDEAS

1. To use *Photoresistor* to measure Sunlight
2. To use *PIR Sensor* to identify pedestrians or cars.
3. To use *Ultrasonic Sensor* to identify pedestrians and cars still in range
4. To use *Humidity/Temprature Sensor* to collect data on environment conditions
5. To use *Arduino* to connect and co-ordinate the sensors.

CIRCUIT DIAGRAM



THANK YOU