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ECE 153B

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<p align="center">Smart Lamp</p>

Overview/Goal/Purpose

The goal of this final project is to build an STM32L476 based smart lamp based on ambient sensors. The project will read data from an ambient light sensor and ambient temperature sensor.The project will use this information to change the intensity or color of an LED. The project will also include a manual option to change the LED without using the ambient sensors.

Peripherals

1. Temperature Sensor

2. Ambient Light Sensor
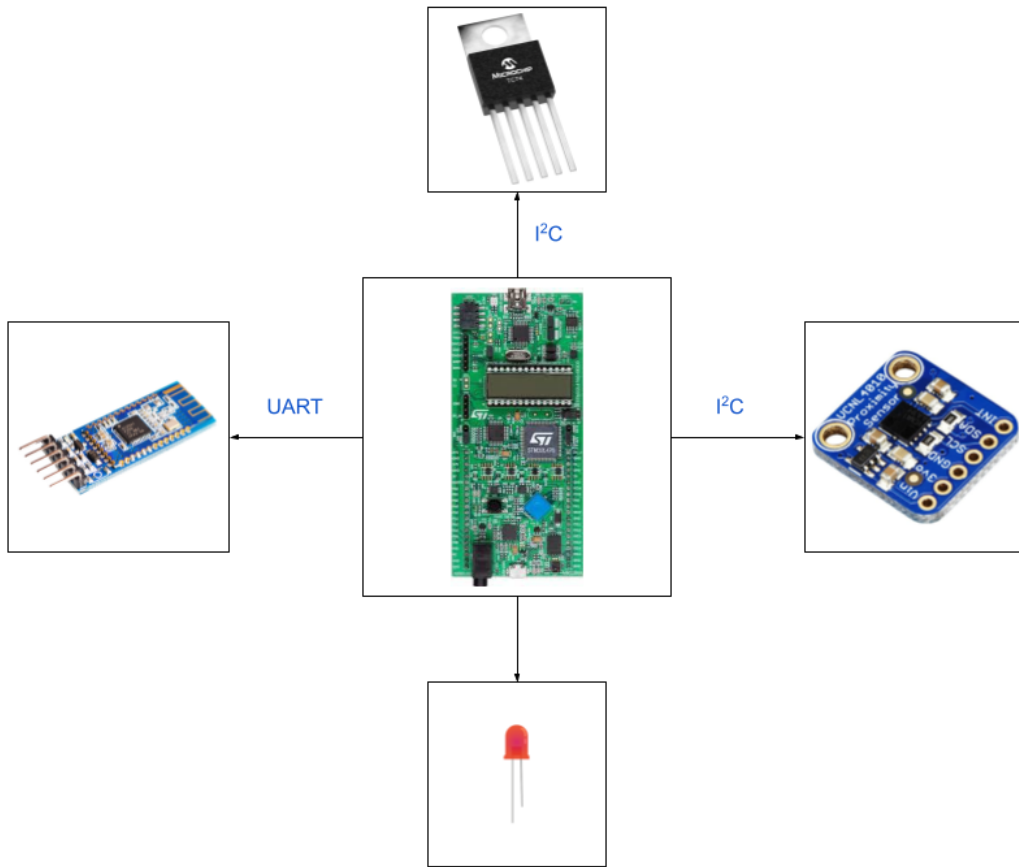
3. LED

4. Bluetooth Module

Serial Interface Protocols

1. UART for the Bluetooth Module

2. I^2C for the Temperature/Light Sensor

Responsibility List

Group Members:

1. Srikar Arani - working privately

Block Diagram

I²C

UART

I²C

Website: https://sites.google.com/view/ece153b-srikararani