Faculty of Engineering & Applied Science

SOFE 4610U Design & Analysis of IoT

Project Proposal - Smart Lighting

Project Group 8:

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Project description

After completing some market research around IoT applications our group noticed that there was a gap in the market for a simple mobile application that has one main function, turn on and off smart lights. Current applications are complicated and not user friendly. For example Apple's home app, Philips Hue, Samsung's SmartThings, etc., all of these applications are excessively complicated. This is why we decided to come up with LightSmart lighting.

For this project we will create a simple web/mobile application that allows users to turn on and off their lights. We will use the Osoyoo kit as our hub and a set of 3 globe smart lights as our lights. We will connect the smart lights to the Osoyoo kit which will in turn be connected to our web/mobile app, that will enable users the ability to control their lights. This will will be the basis of LightSmart lighting

Functional Requirements:

- Users will be able to control their connected lights through a mobile/web application.
- Each connected light will have an option to either be turned on or off
- The mobile application will also display other information about the lights such as what brand and model they are.
- All the information in the web/mobile application will be stored in a database

Non Functional Requirements:

- Reliability:
    1. An uninterrupted connection between the smart lights and web/mobile application with a seamless transition
    2. An uninterrupted connection between the Osoyoo kit and the smart lights as well as the web/mobile application and the smart light bulbs

- Availability:
    1. The information about the lights will be stored in a database and be refreshed through the application