

Abstract

The use of technology in helping human task is absolutely necessary in helping to achieve the level of effectiveness and high efficiency. This applies in all sector including industry and household, which is in control and the use of the lights on a house. Average lamp uses 2 kWh of electricity per month if used 10 hours per day.

Therefore, to achieve efficient use of light in a house, then the lighting must be used when its required or reduce the power of the lamp. This issue became a basic idea to support the saving of electricity that used from a lamp through an application titled "**BrightSide : Application for Home Lighting Automation Based on IoT**". This application will be assisted by Android Studio as a software and using Philips Hue as a hardware, because this hardware and software can help to connected the application with the lamp.

The end result of this application is able to turn on and off the lights, adjust the light intensity of the lights, set the time when the light is on and off automatically, and also have 3 modes of eco mode, sleep mode, and none mode. Eco mode is a economic mode where the light will automatically turn off at 6 am and will automatically turn on at 6 pm with intensity of 75%, then sleep mode is the night mode where the intensity of the light is lowered to 5%, and the last mode is none mode where user does not use any mode and control the lamp manually. With these applications, users can make efficient use of electricity on the lamp.

Keywords : Lights, Android, IoT, Efficiency, Bridge