

ABSTRACT

In an era that continues to develop like nowadays, the level of electricity consumption continues to increase over time. This is due to a large number of large customers for electricity needs in Indonesia. In addition, the number of community activities that must be carried out at home lately due to the restrictions on activities due to the Covid-19 pandemic has quite affected the realization of electricity consumption and production in Indonesia. One of the largest electricity needs is in the household sector, throughout the past year which resulted in wasting electricity and had an impact on global warming, reducing electricity reserves for electricity generation.

In this final project, the focus is on reducing the excessive use of electrical energy by making a product, namely S-LUCY. S-LUCY stands for Smart Light Ultimate Control by a website. This product is made by utilizing Internet of Things technology so that it can be controlled automatically using a website to make it easier for the public.

The S-LUCY smart plug is equipped with several features, namely being able to control on and off, set a timer, and set a schedule according to what the user wants through a website that can be accessed via a smartphone, computer, or other devices with internet access. The manufacturer of this product uses the NodeMCU as a place for programming to be installed. Users will get information related to the current value generated by the electrical energy load from the electronic device used by using the acs712 current sensor.

Keywords: *Electricity Consumption, S-LUCY, NodeMCU 8266, Internet of Things, Smart plug, ACS712 Current Sensor*