ABSTRACT

The development of technology is developing rapidly in the current era. As a result of these developments there are impacts that will be caused. Indonesia is a developing country with a population of 2019 reaching 267 million. Along with the increasing population of Indonesian people from year to year and changes in people's lifestyles, it will increase the demand for electricity consumption. The awareness of the Indonesian people is still minimal in consuming electricity, therefore researchers made a Smart Home control system design that functions as a controller of lights, doors and garages in households based on the Internet of Things that can be accessed by the website and can be controlled remotely. The microcontroller used in this research is Raspberry Pi. Raspberry Pi functions as a server used to store data captured by sensors and controlled by a website-based system. The system at Smart Home uses a prototyping method. Thus it can provide solutions in controlling the lights, as well as minimizing wasteful consumption of electricity when the user forgets to turn off the lights, close the door or garage, when the user is outside the house or wherever the user is useful to ease the user's work.

Keywords: Smart Home, Internet of Things, Raspberry Pi, Website, Prototyping.