

## ABSTRACT

Home is a place for people to take a rest and take shelter. Definitely, everybody wants to have a convenient and safe home that make them live peacefully. However, there is still complaint about home security, especially when people leave the house for a long time. Fear of somebody who might break into their house, or fear of their equipment safety, for example when they forget to switch of the electricity power it could start a fire. All these things make them inconvenient.

Science and technology development has been encouraging people to overcome the trouble that emerge around them, in addition to lighten up their work. One of the developing technology is microcontroller. By using microcontroller, a device as smart as computer with minimum budget can be created. Along with the development of microcontroller, this device has been implemented on many kind of instruments in people's daily life, including home security system.

In this final project, the author makes a smart home system to provide homeowner comfort. This system consist of devices to switch on and switch off the lamps automatically also provides home security to avoid thief based on microcontroller. This tool can function properly. With these tools, electrical devices at home can set the time when on and off. For safety, the system can send sms to residents of the house if there is an intruder, with the response speed of SMS by the system, valued at the average - the fastest rate is 6.9561 seconds and the longest is 16.5077. Hoping that by created this system can reduce level of roobing and effectively in using listric energy .

Key word : SMS, Microcontroler, GSM