## **ABSTRACT**

Home security is a mandatory requirement of each homeowner. Home alarm for example, is one of a traditional security system still widely used until now. Along with the development of technology, more kind of alarm was developed too. This feature is a requirement for all home owner who seek a safe house, free from robbery, and many other disturbing matter about home security.

In different case, development of mobile phone in Indonesia has shown remarkably growth rate. On the average, Indonesian people is certain to have a cellphone, no matter what they social status because is a mandatory requirement today. There is one feature in cellphone when many people still using, that is a SMS ( Short Message Service ). Besides the development of many chatting application today people start to forget SMS, but this feature still can be useful for another matter.

In this final task, author made one of home security system and combine with the cellphone feature, SMS. If the user want to control the door lock, they only need to send text to the system and the door lock will open or close depend on the text they send. This system also have a feature to address the access door forced by strangers. This system is also implemented features to provide notification via phone and can lock the door from a distance just by sending a text via SMS. This will help the owner when they leave the home but forgot to lock the door, because that becoming one of the reason why home robbery happen. This system is also have centralized system that was inside the house so the owner don't need to use SMS if they was in the house but still wanted to lock the door.

With the test performed by the design of the door lock system and pre – defined test scenarios, the authors came to the conclusion that the design of this system, the central system can work well in a lock or unlock the doors. In the SMS feature for lock or unlocking the door, user will get a notification when the door forcibly opened, between 5-8 seconds. When the user wants to open the door or lock the doors using the SMS, the text will be delivered to the modem between 1-3 seconds.

Key Word: Home Security, SMS, Back Up Power