## **ABSTRACK**

The house is the main thing that must be owned by a family where the house is a shelter for a small family. Home security at this time has become something that every homeowner wants who wants good security for his home because of the existing home security system. still not perfect. The problem that often occurs is theft and crime in every home, the purpose of this final project is to design a home security system based on Arduino Nano and Android applications. usually crimes take place at night when the occupants of the house are asleep, so a technology is needed to send information on criminal acts via alarm, the method used is literature review, obtaining information from the final project or previous thesis, consulting method for obtaining information by exchanging opinions with supervisors or fellow students, the design is carried out to design an alarm system, trials are carried out on the tool whether it runs or not, and the last analysis and conclusion is an analysis and conclusions are drawn from the design results. in the study it was explained that the home security system uses a pushbutton instead of a sensor by controlling it through an android smartphone application called the Arduino Bluetooth controller. For the sensitivity of the pushbutton to 2mm and the distance between the smartphone and the device when operating is 8.1 meters.

Keywords: Arduino nano, Microcontroller, Alarm System