

ABSTRACT

The current security system which still has many limitations in controlling the valuable items such as favorite vehicle. A variety of limitations that exist raises many concerns of each owner of the vehicle, such as a distance that does not allow to hear the warnings issued by the alarm that exists today, no tracking system in the security alarm system at this time so it does not allow for tracking of vehicles that have been stolen and simply paralyze the alarm security system that exists today as a source of alarm is only a flow of electricity directly from the battery of the vehicle. In the previous study [12] [13] [14] [20] still has shortcomings such as inefficient utilization of the application for android, so to close it then made a new device that is made in the final project writer. Currently there is an alarm that can not meet the desired security requirements of the owner of the vehicle and easily paralyze the alarm security system at the moment.

The final task was created with the aim to facilitate vehicle owners to maintain and oversee the favorite vehicle from theft are rife with devices designed which has a monitoring system smart that can be accessed by phone with Android Operating System, because the device is made is the development of technology microcontroller Arduino uno which allows the reading of the GSM module is equipped with GPS, GPRS and Bluetooth. Devices made with these, is expected to further maximize existing security system at this time, because the device can perform tracking with GPS systems installed and perform the SMS gateway.

The desired outcome is how a security system can perform optimally control despite being in the attempted theft of the vehicle and facilitate the control of distances. Target system performance to be achieved is a system having at least 80% accuracy rate.

Keywords: Android, microcontroller, Arduino, Security, Tracking.