

ABSTRACT

Motorcycles are one of the transportation tools that many people choose to move places. This is due to more minimal costs and can avoid prolonged traffic jams. But, the level of crime against motorcycles every year continues to increase. This encourages motorcycle manufacturers to design a security system that can improve the safety and comfort of consumers using motorbikes. Therefore, a system is designed that can monitor the position of the motorcycle that can be seen through the Android application. In short, a motorcycle will be installed in a motorcycle, a GPS module, SIM800L module and relay. The GPS module functions to determine the coordinates of the position of the motorcycle in real time and displayed on an android-based application via GPRS serial communication using a GSM module. Relay serves as a security system that is designed to cut off electricity from CDI motorcycles and sound an alarm (horn) that is controlled through an Android-based application to prevent criminal acts. The result of this Final Project is that the android application can monitor the position of the motorcycle and turn on / off the security system designed to prevent criminal acts against motorcycle theft.

Keywords : *Monitoring system, GPS, Android, Security system.*