RANCANG BANGUN SISTEM KEAMANAN SEPEDA MOTOR MENGGUNAKAN RFID DAN GPS MENGGUNAKAN *MICROCONTROLLER* ARDUINO UNO

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ABSTRACT

The aim of this research is to provide an alternative solution to improve motorbike safety using RFID and the arduino uno microcontroller. And produces a tool that can be controlled remotely and can monitor motorbikes. The research method used is the research and development method. RFID can replace the function of the ignition key and starter button. Where RFID is used to turn on and off and is used to start motorbikes. By attaching the tag/card to the RFID reader with a maximum distance of 3 cm. The motorbike can be turned off via the telegram application so that the motorbike can be controlled remotely, this can be done if the system is connected to the internet. The "*EngineOff*" character is for the shutdown command, "*Mylocation*" is to find the location of the vehicle then there will be a reply from the system in the form of a gmaps link and clicking on the link after that will automatically be transferred to the gmaps application and you will see where the motorbike is located. An alarm will sound if the vehicle is off and still and then moved to another location and will automatically send a notification to the owner via telegram in the form of *Warning characters, Please Check Your Motocycle*.

Keywords: RFID, Motorcycle Security System, Arduino uno