ABSTRACT

Vehicle thefts have been an area of concern in the recent years. And this project is mainly focused on the safety of two-wheeler vehicles. So, this proposed project deals with this issue in a more preferable way by ensuring security system for the vehicle. This system aims to create a simple biometric security system and passcode authentication for ignition that protects the vehicle from unauthorized users.

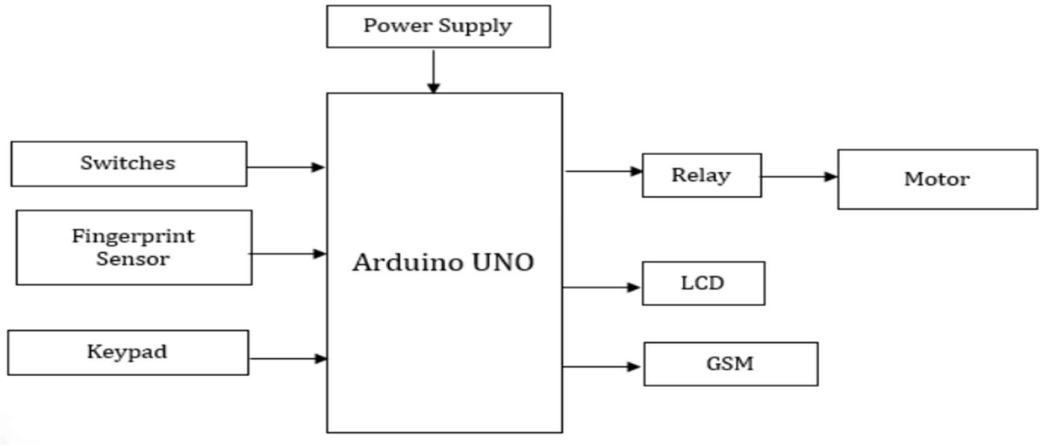
This system comprises of Arduino uno and an R307 fingerprint sensor along with a passcode authentication. This passcode is used as the second stage security to start the ignition of the vehicle after the verification of the fingerprint. Passcode checks the validity of the password entered and then permits to proceed for ignition takes place.

The system also incorporates a data management feature allowing authorized users to enroll, add or delete data from fingerprint sensor, thus enhancing user control. This proposed project paves way for stopping unauthorized users for operating the vehicle without the consent of the respective owner of the vehicle. In addition to these three repeated attempts to start the vehicle will result in rising of an alarm to alert the owner.

Keywords:

1. Fingerprint sensor
2. Arduino uno
3. GSM module
4. LCD module
5. Keypad
6. Relay module
7. Buzzer

Block diagram:



Circuit diagram: