Parameter measurement of vehicle

Abstract

Safety and comfort of road users is becoming a matter of grave concern. It is essential to build a safer and much more reliable system for traffic control and management, since the number of on road accidents has shoot up greatly with the increase in vehicle traffic. The objective of this project is to introduce a system which detects all kind of violations thereby we can trace each and every individual vehicle who breaks the rule. Lcd is used for detecting violations. To monitor the violations of the traffic, we will be keeping the few Sensors in the besides the road and signals from the sensors are given to microcontroller unit.

In this project, we introduce a system that detects all kinds of violations. This system is connected various sensors such as North Sensor, South sensor, East Sensor, and West Sensor which monitors the violations. The system takes pictures of vehicles and tracks the vehicles which crosses the road when red light is there i.e. that individual violates the traffic rule. As soon as he crosses the road in the presence of red light, the sensors which are connected in and beside the road senses instantly and activates the web camera which is connected through microcontroller unit. The camera records the video of individual who has violated the traffic rule. This information of traffic rule breaker gets collected to RTO Office. Thus this Traffic violation monitoring system works.

Block Diagram:

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                  ┌─────────┐      ┌─────────┐
                  │   GSM   │      │   GPS   │
                  └────┬────┘      └────┬────┘
                       │                │
        ┌─────────┐    ▼                ▼    ┌─────────┐
        │  Flow   │ ┌──────────────────────┐ │  Relay  │
        │ Sensor  │◄┤       Arduino        ├►│ Driver  │
        └─────────┘ └──┬────────────────┬──┘ └────┬────┘
                       │                │         │
                       ▼                ▼         ▼
                  ┌─────────┐      ┌─────────┐ ┌──────────┐
                  │   LCD   │      │  Level  │ │ Ignition │
                  └─────────┘      │Indicator│ │Of vehicle│
                                   └─────────┘ └──────────┘
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