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| LAW BREACH BOX |
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LAW BREACH BOX

Prof. Neamat .A. Kader

**Abstract:**

The project idea depends on putting a well-secured box in the car for storing all fines or irresponsible actions done by driver depending on the different reports set by standard organizations that are interested in that topic hoping for low enforcement. Therefore, reducing car accidents rate.

In addition, we will use different types of sensors to get the data considered describing

the state of the car at moment, in addition to GBS module for reading location and time.

We are interested in storing six kinds of fines that can lead to an accident: Extra speed, lights non-usage in dark places, Break oil shortage, unlocked doors, Radiator water shortage and improper motor oil pressure.

Fines are stored with value, location and time in a memory in the box, this information can be accessed only by Traffic Management to check out the law-break list for each car when renewing car license.

The first step is checking the car movement before reading data from the sensors. Then

the microcontroller starts to read different data from all sensors continuously as car is moving. After data is read, the microcontroller compares the data with standard limits and records fines in

the memory according to the algorithms set , if an illegal action occurred then microcontroller store the time and location read from the GPS module and records the corresponding fine that are

computed according to the algorithm of computing all types of fines.

**CONCLUSION:**

We consider our project as a step for reaching road safety but not enough. We think that this should be a national policy for road safety due to the direct effects on the people involved in an accident and the side effects on the people surrounding them. We hope that there will be a large technical improvement in that direction allowing a semi totals controllability to decrease the rate of accidents as possible and impose more control on people who are used to violate the law.

**Suggestions for Project development**

We have a lot of suggestions for improvement of our project for not only law violation recording but also to prevent accidents from occurring.

**We will put a spotlight on two main points:**

Smart, audible seat-belt reminders that detect whether or not belts are in use in each occupied seat and emit increasingly aggressive warning signals until belts are fastened. In Sweden, for example, 35% of all new cars sold are equipped with these. Although Sweden already has high rates of seat-belt use, these reminders could boost the rate to an Intelligent speed adaptation is a system by which the vehicle determines the speed limit for a road.

Current versions use a digital road map onto which speed limits have been coded. Intervention levels can be set to advisory (informing the driver of limits and violations), voluntary (the system is linked to the controls but the driver can enable or disable the link) or mandatory (the driver cannot override the system’s control).

According to some studies, this system could reduce fatal crashes by an estimated 18–25% at the advisory level, 19–32% at the voluntary level and 37–59% at the mandatory level.