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## (54) Title of the invention: QUICK ACCIDENT DETECTION AND RESPONSE SYSTEM(GO SAFE)

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## (57) Abstract:

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One of the primary reasons for annual fatality is accounted for by traffic accidents, the count matching a whelming 1.25 million. Additive to multiple other primitive factors, Emergency Care shares the largest onus in post-crash response. Post-crash response largely depends upon a few important time-sensitive actions. Quick Accident Response System (Go Safe) forms the basis of measures initiated to address the time-sensitive post-crash response system, being proposed in this patent filing. The pre-requisites form anemergency traffic assist model which sustains immediate Emergency Services at the very urgent hours of the accident. A four-point Emergency Response Unit (ERU) gets activated using Go Safe, namely, a. the multi-functional accelerometer seconded by the Ultrasonic sensors immediately generates a notification, b. Location of the accident site using GPS is transmitted along with the notification, c. Video footage of the accident, and d. Driver details fetched from the master database, get appended with the main notification. The four-point ERU forms part of the master application, which is pre-loaded with the driver database. Points 'a' and 'c' are designed using Arduino and smart sensors, whereas point 'b' is governed using AT commands aiding the communication using emergency SMS alerts. The applications also has provisions for the pedestrians to send actual image and video feed to the Emergency Services.

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