

ACCIDENT DETECTION AND ALERTNESS

MAIN COMPONENTS USED

ULTRASONIC SENSOR

Ultrasonic sensor is an electronic device that measures the distance of a target object by emitting ultrasonic sound waves. Here in this case of accident detection and alertness ultrasonic sensor is fitted in front and back of the vehicle to detect the vehicles and lorries which are coming with too much speed .Within a range of 300meters it detects the vehicles and lorries which are coming with too much speed.

RASPBERRY PI CONTROLLER

Raspberry pi is a low cost ,credit card sized computer that plugs into a computer monitor on TV ,and uses a standard keyboard and mouse. Here in this case accident detection and alertness Raspberry pi acts as a controller and controls the entire system to function. It also detects the speed of the vehicle or lorries which is coming in the opposite.

ARDUINO

Arduino is an single board micro controller .It is the place where the program is written. In this of accident detection and alertness Arduino will act as an operating system and will detect the vehicles by using ultrasonic sensor and also when the vehicle is fallen it creates and alertness. And also when the vehicle is fallen it sends messages to the persons family.

GSM MODULE

A GSM Module is a hardware device that uses GSM mobile telephone to provide a data link to a remote network. Here in this case of accident detection and alertness when the accident happen this GSM Module will send the message to the persons family

FUNCTION OF ACCIDENT DETECTION AND ALERTNESS

When a vehicle is coming with too much of speed in the opposite the Ultrasonic sensor detects and send it to the Raspberry Pi .And the Raspberry stop the engine from running .suppose after the engine is stopped when the vehicle is hidden by another vehicle or lorries and it is fallen down . Automatically the buzzer will on and create some noise to create an alertness to the people around the accident zone. And the Arduino will send the message to the persons friends and family members about the accident .It also shares the location of the accident where it is taken place.