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**CBE 1**

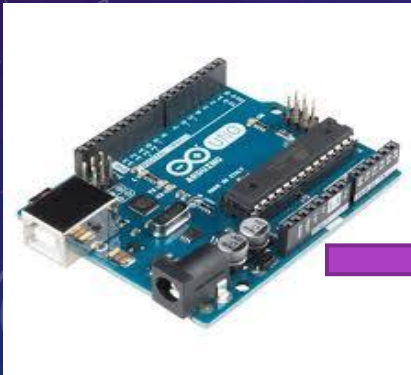
**TITLE OF MY PROJECT IS**

# **SMART HELMET**



## PROJECT MATERIAL

- I AM USING ARDUINO UNO R3,  
LED LIGHT,  
PULSE SENSOR.



## PROGRAM

```
INT PULSESENSORPURPLEPIN = 0;
  INT LED13 = 13;
  INT SIGNAL;
  INT THRESHOLD = 550;

  VOID SETUP()
  { PINMODE(LED13,OUTPUT);
    SERIAL.BEGIN(9600);
  }

  VOID LOOP() {
    SIGNAL =
    ANALOGREAD(PULSESENSORPURPLEPIN);
    SERIAL.PRINTLN(SIGNAL);
    IF(SIGNAL > THRESHOLD){
      DIGITALWRITE(LED13,HIGH);
    }
    ELSE {
      DIGITALWRITE(LED13,LOW);
    }
    DELAY(10);}
}
```

The background features a dark blue gradient with faint, light blue technical diagrams. On the left, a large circular scale is visible with numerical markings from 160 to 260 in increments of 10. Several circular diagrams with arrows indicate clockwise or counter-clockwise rotation. The overall aesthetic is technical and futuristic.

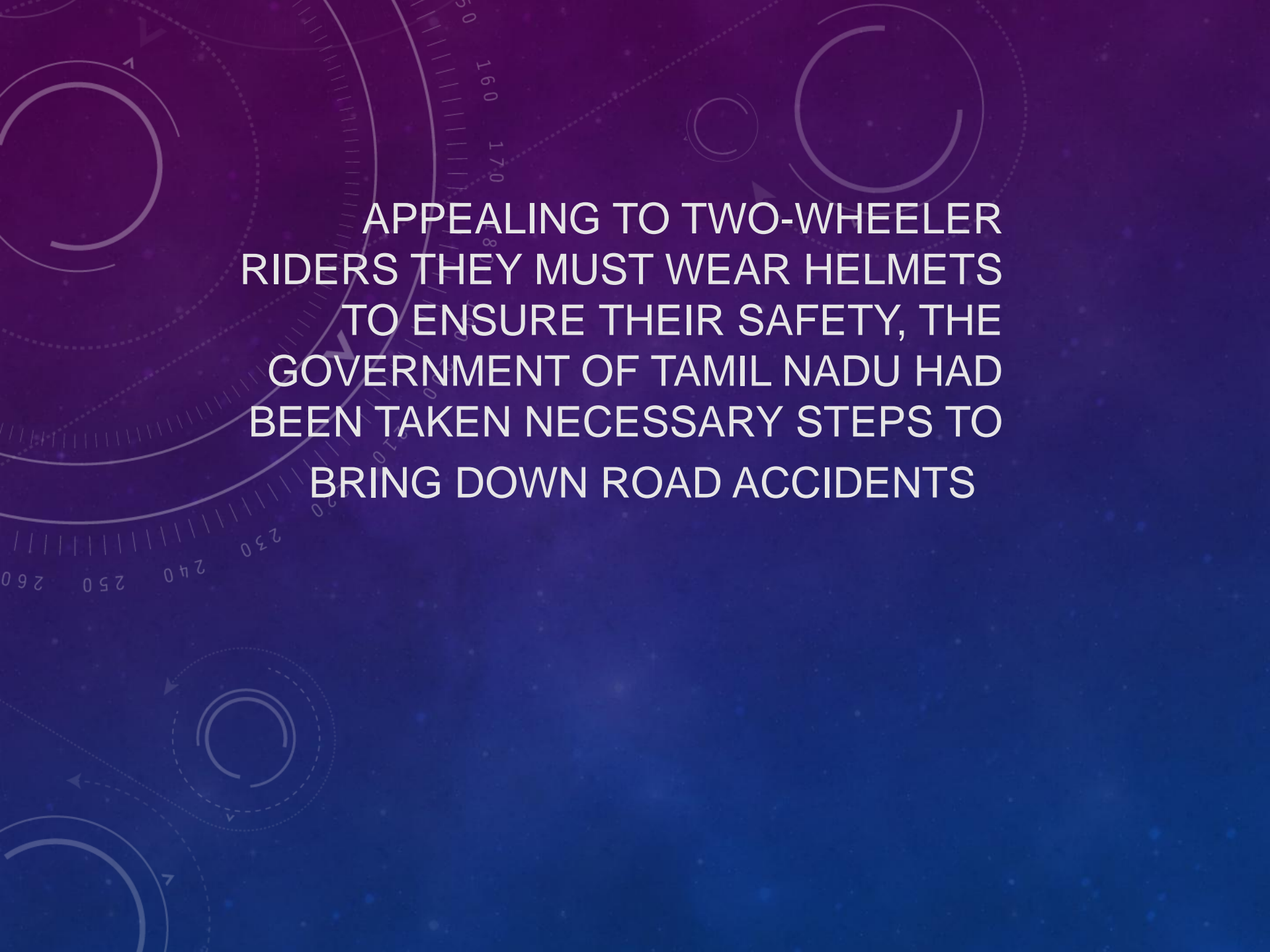
## HOW IT WORKS

WHEN THE PULSE SENSOR  
RECEIVE THE SIGNALS  
IT PROCESS THE SIGNAL AND  
TURNS ON THE LED



## PRACTICAL APPLICATION

CURRENT AMPLIFIER CAN BE  
AMPLIFY THE CURRENT.  
STEP UP TRANSFORMER USES TO  
INCREASE VOLTAGE  
BIKE MOTOR

The background features a dark blue gradient with faint, light-colored technical diagrams. These include circular gauges with tick marks and numerical values (e.g., 160, 170, 230, 240, 250, 260), dashed lines, and arrows, suggesting a mechanical or engineering theme. The text is centered in a bold, white, sans-serif font.

**APPEALING TO TWO-WHEELER  
RIDERS THEY MUST WEAR HELMETS  
TO ENSURE THEIR SAFETY, THE  
GOVERNMENT OF TAMIL NADU HAD  
BEEN TAKEN NECESSARY STEPS TO  
BRING DOWN ROAD ACCIDENTS**

TWO-WHEELERS WERE INVOLVED IN 15,000 ACCIDENTS. IT ACCOUNTS FOR 40.53% OF THE TOTAL ACCIDENTS. OUT OF THEM, 1,800 PEOPLE, RIDING TWO-WHEELERS WITHOUT WEARING HELMETS HAVE DIED AFTER HEAD INJURIES.





**THE CONCEPT OF MY PROJECT  
IS  
COMPULSORILY SHOULD WEAR  
HELMET  
OTHERWISE  
THE BIKE ENGINE WILL NOT  
START.**



**According to section 129 motor  
vehicle act 1988, riders must wear  
helmet compulsorily.**

**THIS PROJECT IS MAINLY USED IN  
ACCIDENT**

**USES OF THIS PROJECT**

**IT HAS MANY USES IN ACCIDENT  
PREVENTION AND IN COLLISION  
PREVENTION**

**WE CAN BRING DOWN THE ROAD  
ACCIDENTS.**

**WE CAN REDUCE THE DEATH IN ROAD  
ACCIDENTS  
AND WE CAN SAVE MANY PEOPLES LIFE.**



**HAVE A SAFE JOURNEY**

**THANK YOU**

Thank you for your attention!  
I hope you enjoyed the  
presentation!

