**East West University**

**Project Title:** Wrong way road blocker

**Course Title:** Microprocessor and Microcontroller

**Course Code:** CSE 442 **Sec:** 02

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**Tools for Wrong Way Road Blocker:**

1. Arduino Unor3
2. Light Sensor(L2D93D)
3. Buzzer
4. DC Motor driver

**Description of Project:**

It helps to control the traffic jam by blocking the vehicle which have the tendency to go in the wrong way. This has been done by raising spikes in the road which will puncture the tire. If any car goes in the wrong way due to jam or any other reason, then at first alarm will give alert to the driver and warn that if he continue to go in the wrong way any further then the tire could be punctured. This warning is to reduce sudden damage or accident which can be occurred due to hard break or puncturing of tire. There will also some banner to inform public that the road has spike so they have to maintain traffic rules otherwise their tire will be punctured. At the beginning it would create chaos among public but sooner after when everyone knows about it and it is used strictly then it can control our traffic.

**Description of Code:**

When car goes along the wrong way the light sensor will sense that movement by measuring the darkness. There will be two light sensor. When the first sensor sense the movement it will alarm the driver about the spike by buzzing the buzzer. But when the second light sensor is also passed by the car the motor will start to drive which will raise the spike and puncture the car. In this way the program works.

**Program Code of Wrong Way Road Blocker:**

sij#include <Keyboard.h>

#include <pins\_arduino.h>

#include <SPI.h>

double sensor\_read\_left = 0.00;

double sensor\_read\_right = 0.00;

int rb=0;

void setup()

{

// put your setup code here, to run once:

Serial.begin(9600);

//pinMode(A0,INPUT);

pinMode(8, OUTPUT);

pinMode(9,OUTPUT);

pinMode(7, OUTPUT);

}

void loop()

{

// put your main code here, to run repeatedly:

sensor\_read\_left = analogRead(A0);

sensor\_read\_right = analogRead(A1);

Serial.println("Left: ");

Serial.println(sensor\_read\_left);

Serial.println("Right: ");

Serial.println(sensor\_read\_right);

delay(10);

if(sensor\_read\_right <300 )

{

if(sensor\_read\_left <300 && rb==1)

{

//uP

digitalWrite(8,HIGH);

digitalWrite(7,HIGH);

digitalWrite(9,LOW);

}

else

{

//Down

digitalWrite(8,LOW);

digitalWrite(9,HIGH);

noTone(7);

}

if(sensor\_read\_left>=300)

{

rb=1;

}

}

else

{

rb=0;

//Down

digitalWrite(8,LOW);

digitalWrite(9,HIGH);

noTone(7);

}

}

**Simulation of Wrong Way Road Blocker using Proteus:**