PROJECT SOURCE CODE

```
#include <LiquidCrystal.h>

const int rs = 13, en = 12, d4 = 11, d5 = 10, d6 = 9, d7 = 8;

LiquidCrystal lcd(rs, en, d4, d5, d6, d7);

int sound=7;

int belt=6;

int buzzer=A0;

int motor=5;

int x=0;

int y=0;

String number="9398962139";

String message="WELCOME MESSAGE FROM SMART SEAT BELRT ALERTING SYSTEM PROJECT";

void setup()

{

pinMode(sound,INPUT);pinMode(belt,INPUT);

pinMode(buzzer,OUTPUT);digitalWrite(buzzer,LOW);

pinMode(motor,OUTPUT);digitalWrite(motor,LOW);

lcd.begin(16, 2);

Serial.begin(9600);delay(100);

lcd.clear();lcd.print("SMART SEAT BELT");delay(1000);

lcd.clear();lcd.print("AT");Serial.print("AT\r\n");delay(1000);

lcd.clear();lcd.print("ATE0");Serial.print("ATE0\r\n");delay(1000);

lcd.clear();lcd.print("AT+CMGF=1");Serial.print("AT+CMGF=1\r\n");delay(1000);

lcd.clear();lcd.print("AT+CNMI=1,2,0,0");Serial.print("AT+CNMI=1,2,0,0\r\n");delay(1000);

lcd.clear();lcd.print(number);delay(100);
```

```
lcd.setCursor(0,1);lcd.print("Sending sms....");
Serial.print("AT+CMGS=");
Serial.print("");
Serial.print(number);
Serial.print("");
Serial.print("\r\n");delay(1000);
Serial.print(message);delay(100);
Serial.write(0x1A);delay(10000);

}
void beep()
{
digitalWrite(motor,LOW);delay(10);
digitalWrite(buzzer,HIGH);delay(1000);digitalWrite(buzzer,LOW);delay(1000);
lcd.clear();lcd.print("AT");Serial.print("AT\r\n");delay(1000);
lcd.clear();lcd.print("ATE0");Serial.print("ATE0\r\n");delay(1000);
lcd.clear();lcd.print("AT+CMGF=1");Serial.print("AT+CMGF=1\r\n");delay(1000);
lcd.clear();lcd.print("AT+CNMI=1,2,0,0");Serial.print("AT+CNMI=1,2,0,0\r\n");delay(1000)
;
lcd.clear();lcd.print(number);delay(100);
lcd.setCursor(0,1);lcd.print("Sending sms....");
Serial.print("AT+CMGS=");
Serial.print("");
Serial.print(number);
Serial.print("");
Serial.print("\r\n");delay(1000);
Serial.print(message);delay(100);
```

```
Serial.write(0x1A);delay(10000);
}
void loop()
{
back:
x=analogRead(A4);delay(10);y=analogRead(A5);delay(10);
lcd.clear();lcd.print("x:");lcd.print(x);lcd.print(" y:");lcd.print(y);delay(1000);
if((x>400)||(x<300)||(y>400)||(y<300))
{
lcd.setCursor(0,1);lcd.print("TILT OCCURED");delay(1000);
message="TILT OCCURED";delay(1000);
beep(); goto back;
}
int soundval=digitalRead(sound);delay(10);
if(soundval==HIGH)
{
lcd.clear();lcd.print("SOUND DETECTED");delay(1000);
message="SOUND DETECTED...ALERT....";delay(1000);
beep();goto back;
}
int beltval=digitalRead(belt);delay(10);
if(beltval==HIGH)
{
lcd.clear();lcd.print("SEAT-BELT ALERT");delay(1000);
message="SEAT BELT REMOVED...ALERT....";delay(1000);
beep();goto back;
}
```

```
digitalWrite(motor,HIGH);delay(10);
}
```