IOT BASED SMART CAR PARKING SYSTEM

PROJECT CODE

```
#define BLYNK_TEMPLATE_ID "TMPL37d1-Xx33"

#define BLYNK_TEMPLATE_NAME "parking2"

#define BLYNK_AUTH_TOKEN "JYMB5gYoWSaP8w6lgwXBqrgZK2LmPBEq"


#include<Wire.h>

#include<WiFiClient.h>

#include<BlynkSimpleEsp32.h>

#include<LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd(0*27, 16, 2);

#define SENSOR1 32

#define SENSOR2 33

#define SENSOR3 25

#define SENSOR4 26


// Blynk Timer

BlynkTimer timer;


// WiFi Credentials

char auth[] = "JYMB5gYoWSaP8w6lgwXBqrgZK2LmPBEq";

char ssid[] = "ragul";     // Your WiFi name
```

```arduino
char pass[] = "62226222";    // Your WiFi password


void setup() {
  Serial.begin(115200);
  lcd.backlight();
  lcd.setCursor(0, 0);
  lcd.print( "Welcome To");
  lcd.setCursor(0, 1);
  lcd.print("JustDoElectronic");
  Blynk.begin(auth, ssid, pass, "blynk.cloud", 80);
  pinMode(SENSOR1, INPUT_PULLUP);
  pinMode(SENSOR2, INPUT_PULLUP);
  pinMode(SENSOR3, INPUT_PULLUP);
  pinMode(SENSOR4, INPUT_PULLUP);
}
void sensor() {

  int L1 = digitalRead(SENSOR1);
  int L2 = digitalRead(SENSOR2);
  int L3 = digitalRead(SENSOR3);
  int L4 = digitalRead(SENSOR4);

  if (L1 == 1){
    Serial.println(" IR Sensor 1 detected");
    lcd.setCursor(0, 0);
```

```cpp
    lcd.print("1:Full.");

    WidgetLED LED1(V0);

    LED1.on();



  } else {

    Serial.println(" 1 === ALL clear");

    lcd.setCursor(0, 0);

    lcd.print("1:Empty");

    WidgetLED LED1(V0);

    LED1.off();

  }

  if (L2 == 1) {

    Serial.println(" IR Sensor 2 detected");

    lcd.setCursor(9, 0);

    lcd.print("2:Full.");

    WidgetLED LED2(V1);

    LED2.on();

  }else {

    Serial.println(" 2 === ALL clear");

    lcd.setCursor(9, 0);

    lcd.print("2:Empty");

    WidgetLED LED2(V1);

    LED2.off();

  }
```

```
if (L3 == 1) {

  Serial.println(" IR Sensor 3 detected");

  lcd.setCursor(0, 1);

  lcd.print("3:Full.");

  WidgetLED LED3(V2);

  LED3.on();

}else {

  Serial.println(" 3 === ALL clear");

  lcd.setCursor(0, 1);

  lcd.print("3:Empty");

  WidgetLED LED3(V2);

  LED3.off();

  }

  {

   if (L4 == 1) {

  Serial.println(" IR Sensor 4 detected");

  lcd.setCursor(9, 1);

  lcd.print("4:Full.");

  WidgetLED LED4(V3);

  LED4.on();

}else {

  Serial.println(" 4 === ALL clear");

  lcd.setCursor(9, 1);

  lcd.print("4:Empty");

  WidgetLED LED4(V3);
```

```
      LED4.off();

    }

  }

}


  void loop() {

    sensor();

    Blynk.run();

    delay(200);

  }
```