

腳踏車之個人健身教練

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行程規劃 (Road Map)

- 2015/3 →
- 2015/4 →
- 2015/5 →
- 2015/6->
- 2015/7->
- 2015/8 →

本週 (2015/08/31) 進度 (1)

- 購買需要材料
- 研究心率感測器的 source code
- 家裡有事，沒來學校。

本週 (2015/08/31) 進度 (2)



```
void setup(){
  pinMode(blinkPin,OUTPUT);      // pin that will blink to your heartbeat!
  pinMode(fadePin,OUTPUT);      // pin that will fade to your heartbeat!
  Serial.begin(115200);         // we agree to talk fast!
  interruptSetup();             // sets up to read Pulse Sensor signal every 2mS
  // UN-COMMENT THE NEXT LINE IF YOU ARE POWERING The Pulse Sensor AT LOW VOLTAGE,
  // AND APPLY THAT VOLTAGE TO THE A-REF PIN
  //analogReference(EXTERNAL);
}

void loop(){
  sendDataToProcessing('S', Signal); // send Processing the raw Pulse Sensor data
  if (QS == true){                  // Quantified Self flag is true when arduino finds a heartbeat
    fadeRate = 255;                 // Set 'fadeRate' Variable to 255 to fade LED with pulse
    sendDataToProcessing('B',BPM);  // send heart rate with a 'B' prefix
    sendDataToProcessing('Q',IBI);  // send time between beats with a 'Q' prefix
    QS = false;                     // reset the Quantified Self flag for next time
  }

  ledFadeToBeat();

  delay(20);                        // take a break
}

void ledFadeToBeat(){
  fadeRate -= 15;                   // set LED fade value
  fadeRate = constrain(fadeRate,0,255); // keep LED fade value from going into negative numbers!
  analogWrite(fadePin,fadeRate);    // fade LED
}

void sendDataToProcessing(char symbol, int data ){
  Serial.print(symbol);              // symbol prefix tells Processing what type of data is coming
  Serial.println(data);              // the data to send culminating in a carriage return
}
```

本週所遭遇問題及可能解法

下週 (2015/09/07) 預計進度

其它 (備註)

