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/* Telepathic Cat Vest - Testing the accelerometer showing increases in speed and changes
of direction with three LEDs
For Kate Hartman's Wearable 1 Fall 2012 class.
Based on code from Adafruit's HT1632 16 x 24 LED Matrix tutorials: http://ladyada.net/products/16x24LEDmatrix/
and the Audience Jacket Tutorial which was developed by the Social Body Lab, at OCAD
University: http://blog.ocad.ca/wordpress/socialbodylab/
*/
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```
int led1 = 7;
int led2 = 6;
int led3 = 5;
void setup() {
  Serial.begin(9600);
  pinMode(led1, OUTPUT);
  pinMode(led2, OUTPUT);
  pinMode(led3, OUTPUT);
}
void loop() {
  int sensorValueX = analogRead(A0); //reads data from the X pin on the accelerometer,
  connected to Analog Pin 0 on the LilyPad Arduino
  int sensorValueY = analogRead(A1); //reads data from the Y pin on the accelerometer,
  connected to Analog Pin 1 on the LilyPad Arduino
  int sensorValueZ = analogRead(A2); //reads data from the Z pin on the accelerometer,
  connected to Analog Pin 2 on the LilyPad Arduino
  Serial.print("X ");
  Serial.println(sensorValueX, DEC); //prints the X values in the Serial Monitor
  delay(200); //Delay for smoothing the data printing in the Serial Monitor
  if (sensorValueX > 350 && sensorValueX < 380 && sensorValueX < 400 && sensorValueX < 420) { //
  showing three LEDs lit for lots of cat movement
  digitalWrite(led1, HIGH);
  digitalWrite(led2, HIGH);
  digitalWrite(led3, HIGH);
  } ;
  //
  // Serial.print("Y ");
  // Serial.println(sensorValueY, DEC); //this prints the Y values in the Serial Monitor
  //
  // delay(100);
  // Serial.print("Sensor Z ");
  // Serial.println(sensorValueZ, DEC); //this prints the Z values in the Serial Monitor
  //
  // delay(500);
}
```

```
/* Telepathic Cat Vest - Testing phrases written with the default ASCII text library
For Kate Hartman's Wearable 1 Fall 2012 class.
Based on code from Adafruit's HT1632 16 x 24 LED Matrix tutorials: http://ladyada.net/products/16x24LEDmatrix/
and the Audience Jacket Tutorial which was developed by the Social Body Lab, at OCAD
University: http://blog.ocad.ca/wordpress/socialbodylab/
*/
#include "HT1632.h"
```

```

#define DATA 2
#define WR 3
#define CS 4
#define CS2 5
// use this line for single matrix
// HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS);
// use this line for two matrices!
HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2);
void setup() {
  Serial.begin(9600);
  matrix.begin(HT1632_COMMON_16NMOS);
  matrix.fillScreen();
  delay(500);
}
void loop() {
  int sensorValueY = analogRead(A0); //reads data from the X pin on the accelerometer,
  connected to Analog Pin 0 on the Lilypad Arduino
  int sensorValueX = analogRead(A1); //reads data from the Y pin on the accelerometer,
  connected to Analog Pin 1 on the Lilypad Arduino
  int sensorValueZ = analogRead(A2); //reads data from the Z pin on the accelerometer,
  connected to Analog Pin 2 on the Lilypad Arduino
  Serial.print("Y ");
  Serial.println(sensorValueY, DEC); //this prints the X values in the Serial Monitor
  delay(200); //Delay for smoothing the data printing in the Serial Monitor
  if (sensorValueY > 470 && sensorValueY < 480 && sensorValueY > 500 && sensorValueY < 560) { //
  hectic cat scrambles, likely due to hating the vest.
  matrix.clearScreen();
  matrix.setTextSize(1); // size 1 == 8 pixels high
  matrix.setTextColor(1); // 'lit' LEDs
  matrix.setCursor(0, 4); // start at top left, with border
  matrix.print("Fool");
  matrix.setCursor(24, 4); // next line, on other screen.
  matrix.print("Hate");
  matrix.writeScreen();
  delay(500);
};
}

```

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/* Telepathic Cat Vest - Final Code with hand-drawn type
For Kate Hartman's Wearable 1 Fall 2012 class.
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and the Audience Jacket Tutorial which was developed by the Social Body Lab, at OCAD
University: http://blog.ocad.ca/wordpress/socialbodylab/
*/

```

```

#include "HT1632.h"
#define DATA 2
#define WR 3
#define CS 4
#define CS2 5
// use this line for single matrix

```

```

// HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS);
// use this line for two matrices!
HT1632LEDMatrix matrix = HT1632LEDMatrix(DATA, WR, CS, CS2);
void setup() {
  Serial.begin(9600);
  matrix.begin(HT1632_COMMON_16NMOS);
  matrix.fillScreen();
  delay(500);
}
void loop() {
  int sensorValueY = analogRead(A0); //reads data from the X pin on the accelerometer,
  connected to Analog Pin 0 on the Lilypad Arduino
  int sensorValueX = analogRead(A1); //reads data from the Y pin on the accelerometer,
  connected to Analog Pin 1 on the Lilypad Arduino
  int sensorValueZ = analogRead(A2); //reads data from the Z pin on the accelerometer,
  connected to Analog Pin 2 on the Lilypad Arduino
  Serial.print("Y ");
  Serial.println(sensorValueY, DEC); //this prints the X values in the Serial Monitor
  delay(200); //Delay for smoothing the data printing in the Serial Monitor
  if (sensorValueY 460 && sensorValueY 510 && sensorValueY 526) { //hectic cat scrambles,
  likely due to hating the vest.
  matrix.clearScreen();
  // Oooo
  matrix.drawLine(3, 6, 3, 11, 1); // UC 0, position 1
  matrix.drawLine(4, 5, 5, 5, 1);
  matrix.drawLine(7, 6, 7, 11, 1);
  matrix.drawLine(4, 12, 5, 12, 1);
  matrix.drawLine(9, 7, 9, 11, 1); // LC o, position 2
  matrix.drawLine(12, 7, 12, 11, 1);
  matrix.drawLine(10, 6, 11, 6, 1);
  matrix.drawLine(10, 12, 11, 12, 1);
  matrix.drawLine(14, 7, 14, 11, 1); // LC o, position 3
  matrix.drawLine(17, 7, 17, 11, 1);
  matrix.drawLine(15, 6, 16, 6, 1);
  matrix.drawLine(15, 12, 16, 12, 1);
  matrix.drawLine(19, 7, 19, 11, 1); // LC o, position 4
  matrix.drawLine(22, 7, 22, 11, 1);
  matrix.drawLine(20, 6, 21, 6, 1);
  matrix.drawLine(20, 12, 21, 12, 1);
  // Mice
  matrix.drawLine(27, 5, 27, 12, 1); // UC M, position 5
  matrix.drawLine(31, 5, 31, 12, 1);
  matrix.drawLine(28, 6, 29, 7, 1);
  matrix.drawPixel(30, 6, 1);
  matrix.drawLine(34, 8, 34, 12, 1); // LC i, position 6
  matrix.drawPixel(33, 8, 1);
  matrix.drawPixel(34, 6, 1);
  matrix.drawPixel(35, 12, 1);
  matrix.drawLine(37, 7, 37, 11, 1); // LC e, position 8
  matrix.drawLine(40, 7, 40, 9, 1);
  matrix.drawPixel(40, 11, 1);
  matrix.drawLine(38, 12, 39, 12, 1);
  matrix.drawLine(38, 6, 39, 6, 1);
  matrix.drawLine(43, 7, 43, 11, 1); // LC e, position 8

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```
matrix.drawLine(46, 7, 46, 9, 1);
matrix.drawPixel(46, 11, 1);
matrix.drawLine(44, 12, 45, 12, 1);
matrix.drawLine(44, 6, 45, 6, 1);
matrix.drawLine(44, 9, 45, 9, 1);
matrix.writeScreen();
delay(500);
};
}
```