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/*****
*Linh Do
*Wearable Technology Final Project
*
* Example for Sparkfun MP3 Shield Library
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*****/

#include <SPI.h>

//Add the SdFat Libraries
#include <SdFat.h>
#include <SdFatUtil.h>
//and the MP3 Shield Library
#include <SFEMP3Shield.h>

//create and name the library object
SFEMP3Shield MP3player;
byte result;

void setup() {

  Serial.begin(115200);
  //boot up the MP3 Player Shield
  result = MP3player.begin();
  //check result, see readme for error codes.
  if(result != 0) {
    Serial.print("Error code: ");
    Serial.print(result);
    Serial.println(" when trying to start MP3 player");
  }
  MP3player.SetVolume(10, 10);
}

void loop() {
  //light sensor
  int sensorValue2 = analogRead(A2);
  //force sensor
  int sensorValue3 = analogRead(A3);
  //temperature sensor
  int sensorValue4 = analogRead(A4);

  int mappedSensorValue2 = map (sensorValue2, 0, 1023, 0, 10);

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int mappedSensorValue3 = map (sensorValue3, 0, 1023, 0, 10);

if (mappedSensorValue2<6) {
  //sound when light sensor triggered - happy "yay"
  MP3player.playMP3("track001.mp3");
} else if (mappedSensorValue3>3) {
  //sound when force sensor triggered - hurt "ouch"
  MP3player.playMP3("track002.mp3");
} else if (mappedSensorValue4>360) {
  //sound when temperature sensor value>360 - too hot
  MP3player.playMP3("track004.mp3");
} else if (mappedSensorValue3<3) {
  //sound when temperature sensor value<320 - too cold
  MP3player.playMP3("track005.mp3");
} else {
  //sound when no sensor trigged - silence
  MP3player.playMP3("track003.mp3");
}
}
```