**Stopwatch - PROJECT**

**Due**: Thursday, November 20

**Description**

You will partner with another group. I will assign the teams. Together, you should create a stopwatch that displays the minutes and seconds that have passed since the stopwatch was started. One team should display the minutes, the other team should display the seconds (you pick).

**Requirements**

Your stopwatch must meet the following requirements:

1. Displays the minutes and seconds using 7-segment LEDs and a shift register
2. Use two Arduinos and circuit boards running different codes (one for minutes, one for seconds)
3. Both Arduinos are activated by a push button (When this button is pressed the stopwatch starts, if it is pressed again the time should remain on the digits for 5 seconds before clearing.)
4. Before the stopwatch is activated, all 7-segment LEDs should display 0
5. After 59 seconds, the seconds counter should reset to 00 and the minutes counter should increase by 1 (the minutes counter can go above 59)
6. You will have a “Lap” button. When the button is pressed, if the stopwatch is running it will stop, if the stopwatch is stopped and the button is pressed, the stopwatch will start again. (Note: this does not clear the display, the stopwatch starts running from where it left off.) If the button is held down the display should blink off and on in .5 second intervals.