

## Lab 7 - Math Object, Date Object & JS Timers (3%)

### Part 1: THE FINAL COUNTDOWN (1%)

REQUIREMENTS: Using `lab7-1-countdown.html/css/js...`

**Create the JavaScript to display today's date, the Final Project due date and the number of days until the due date.**

**Section A due: Dec 16, 11:59pm / Section B due: Dec 15, 11:59pm**

1. Create variables for now, and for the due date.
2. Convert to milliseconds and subtract to get the time difference.
3. Convert this to days (no decimals).
4. Send output to the appropriate html page elements.
5. If the deadline has passed, the user will see that the last paragraph has changed to say, "The Deadline for the Final Assignment has passed!"

### Part 2: STOP TIME (1%)

REQUIREMENTS: Using `lab7-2-clock.html/css/js...`

**Create the JavaScript to display the current time when START is clicked and updates every second so that it looks like a digital clock.**

1. Create variables for hours, minutes & seconds.
2. Create an interval variable that is activated when start is clicked.
3. When START is clicked, the user will see the current time display, then update every second.
4. The STOP button should stop the timer but not clear the display.
5. If start is re-clicked, the user will see the current time updated every second.

**HINT:** Not counting the *onload* function, you will need to create 3 functions for this: `displayTime`, `startClock`, & `stopClock`.

### EXTRA CHALLENGE FOR PART 2: User-friendly Display (1%)

The user will always see two digits displayed for the values - so that '8:4' gets displayed as '08:04'. Make a function for this.