## Lab 8 - Math Object, Date Object & JS Timers (4%)

Part 1: THE FINAL COUNTDOWN (1.5%)

REQUIREMENTS: Using lab8-1-countdown.html/css/js...

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

Pet Project Due Date: August 15th, 6:00pm

- 1. Create variables for now, and for the due date.
- 2. Output today's date string and the due date string to the web page.
- 3. Create new variables that convert your timestamps to milliseconds and subtract to get the time difference.
- 4. Convert this to days (no decimals).
- 5. Send due date message to the appropriate HTML page element.
- 6. 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!" (0.5%)

## **Part 2: STOP TIME (1.5%)**

REQUIREMENTS: Using lab8-2-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.

## STRETCH GOAL FOR PART 2: User-friendly Display (1%)

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