

Instructions & Grading Rubric
NP HTML5, CSS3, and JavaScript 6e
Getting Started with JavaScript, Practice: Review Assignment

| Description | Pts | Your Score |
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| 1. Use your editor to open the tny_july_txt.html and tny_timer_txt.js files from the html09 > review folder. Enter your name and the date in the comment section of each file, and save them as tny_july.html and tny_timer.js respectively. | 8 | |
| 2. Go to the tny_july.html file in your editor. Directly above the closing </head> tag, insert a script element that links to the tny_timer.js file. Defer the loading of the script file until the web page loads. | 4 | |
| 3. Take some time to study the content and structure of the file, paying close attention to the id attributes applied to different page elements. Save your changes to the document. | 4 | |
| 4. Go to the tny_timer.js file in your editor. At the top of the file (line 1), insert a statement to tell the browser to apply strict usage of the JavaScript code in the file. <u>Hint:</u> "use strict"; | 8 | |
| 5. Directly above the nextJuly4() function (line 19), insert a function named showClock() that has no parameters. Within the showClock() function, complete Steps a through g. <u>Hint:</u> function showClock() { } a. Declare a variable named thisDay that stores a Date object so that it contains the current date and time rather than a specific date and time. <u>Hint:</u> var thisDay = new Date(); b. Declare a variable named localDate that contains the text of the date from the thisDay variable using local conventions. <u>Hint:</u> var localDate = thisDay.toLocaleDateString(); Declare another variable named localTime that contains the text of the time stored in the thisDay variable using local conventions. <u>Hint:</u> var localTime = thisDay.toLocaleTimeString(); c. Within the inner HTML of the page element with the ID currentTime, write the following code | 48 | |

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| <p>datetime where date and time are the values of the localDate and localTime variables.</p> <p>Hint: <code>document.getElementById("currentTime").innerHTML = "" + localDate + "" + localTime + ""</code>;</p> <p>d. Hector has supplied you with a function named nextJuly4() that returns the date of the next 4th of July. Call the nextJuly4() function using thisDay as the parameter value and store the date returned by the function in the j4Date variable.</p> <p>Hint: <code>var j4Date = nextJuly4(thisDay);</code></p> <p>e. The countdown clock should count down to 9 p.m. on the 4th of July. Apply the setHours() method to the j4Date variable to change the hours value to 9 p.m. (Hint: Express the value for 9 p.m. in 24-hour time.)</p> <p>Hint: <code>j4Date.setHours(21);</code></p> <p>f. Create variables named days, hrs, mins, and secs containing the days, hours, minutes, and seconds until 9 p.m. on the next 4th of July.</p> <p>Hint:</p> <pre>var days = (j4Date - thisDay)/(1000*60*60*24); var hrs = (days - Math.floor(days))*24; var mins = (hrs - Math.floor(hrs))*60; var secs = (mins - Math.floor(mins))*60;</pre> <p>g. Change the text content of the elements with the IDs "dLeft", "hLeft", "mLeft", and "sLeft" to the values of the days, hrs, mins, and secs variables rounded down to the next lowest integer.</p> <p>Hint:</p> <pre>document.getElementById("dLeft").textContent = Math.floor(days); document.getElementById("hLeft").textContent = Math.floor(hrs); document.getElementById("mLeft").textContent = Math.floor(mins); document.getElementById("sLeft").textContent = Math.floor(secs);</pre> | | |
| <p>6. Directly after the opening comment section in the file (line 15), insert a command to call the showClock() function.</p> <p>Hint: <code>showClock();</code></p> | 8 | |
| <p>7. After the command that calls the showClock() function (line 16), insert a command that runs the showClock() function every second.</p> <p>Hint: <code>setInterval("showClock()", 1000);</code></p> | 8 | |
| <p>8. Document your work in this script file with comments.</p> <p>Hint: <code>Step a & b: /* Store the current date and time */</code> <code>Step c: /* Display the current date and time */</code> <code>Step f: /* Calculate the days, hours, minutes, and</code></p> | 8 | |

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| <p>seconds until July 4 at 9 p.m. */ Step g: /* Display the time left until July 4 at 9 p.m. */</p> | | |
| <p>9. Save your changes to the file and then open the tny_july.html file in your browser. Verify that the page shows the current date and time, and that Verify that the countdown clock changes every second as it counts down the time until the start of the fireworks at 9 p.m. on the 4th of July.</p> | 4 | |
| <p>10. a. Zip (compress) your case1 folder and submit to Blackboard.</p> <p>No submission in Blackboard = -5</p> <p>b. Publish your case1 folder into the Student Website.</p> <p>NOTE: Per Course Requirements, assignments not correctly operating on student websites will not receive credit.</p> | | |
| TOTAL | 100 | |