

7– Date & Math Objects, and Timers

For this supplemental, there are additional files included to work with.

PART 1

1. TIMESTAMP

- Create a new JavaScript file and attach it to the included 7-mathDateTimers.html file.
- Setup a listener for the window load event, and create a function that will hold all of the Part 1 code.
- Capture the output `` element from the paragraph marked `<!-- # 1 -->` and hold it in a variable.
- Change the content inside this `` to a full current time display. e.g. Thu Nov 03 2016 09:36:44 GMT-0400 (Eastern Daylight Time)

2. SAVE THE DATE!

- Capture the output `` element from the paragraph marked `<!-- # 2 -->` and hold it in a variable.
- Using a method of the Date object, change the content inside this `` to display the current date. e.g. Thu Nov 03 2016.

3. HAVE YOU GOT THE TIME?

- Capture the output `` element from the paragraph marked `<!-- # 3 -->` and hold it in a variable.
- Using a method of the Date object, change the content inside this `` to display the current time. e.g. 09:46:29 GMT-0400 (Eastern Daylight Time).

4. WEEKDAYS...WHAT?

4-A

- Capture the output `` element from the paragraph marked `<!-- # 4 -->` and hold it in a variable.
- Using a method of the Date object, change the content inside this `` to display the current day of the week.

4-B

A number for the day of the week isn't going to be useful for most users, so let's help them out.

- Create a `weekDays` array holding the days of the week (as strings).
- Use the value gained in part A as the index for the `weekDays` array, and output the day of the week as a string.

5. HAPPY BIRTHDAY TO ME

- Capture the output `` element from the paragraph marked `<!-- # 5 -->` and hold it in a variable.
- Create a new Date that is the date of your next birthday.
- Using a method of the Date object, change the content inside this `` to display your next birthday. e.g. Wed Jan 01 2017.

6. COUNTDOWN

- Capture the output `` element from the paragraph marked `<!-- # 6 -->` and hold it in a variable.
- Create a function that, when called, will change the text of the span to "Time's up!!".
- Create a timer that will call the above function 5 seconds after the page loads.

7. CLICK TO COUNTDOWN

- Capture the <button> element from the html page and hold it in a variable.
- Create a function that will be called when the button is clicked.
- Move your timer from #6 inside this function so that is not called until the button is clicked.
- Create a listener for when the button is clicked.
- Now, the timer will not start until the button is clicked.

My answers are in the included JavaScript file (7-mathDateTimers.js).

PART 2: LOTTO 649 LUCKY NUMBER PICKER

REQUIREMENTS: ***Using the provided code create a Lotto 649 quick picker.***

1. Initialize variables to hold the button element and results paragraph from the html page.
2. Create an onclick event and function for the button.
3. In this function:
 - a. Create a new array to hold the results of the selected numbers.
 - b. Set up a loop to create 6 random numbers between 1 and 49 and put them in the results array.
4. The User will see the results array as a string in the paragraph element.
5. The User will see the numbers refreshed each time the button is clicked.

EXTRA CHALLENGE: Find out how to make the sort() method work for numbers in JavaScript and output the numbers in numerical sequence.

EXTRA SUPERSTAR CHALLENGE: You will notice that, occasionally, a number will appear more than once in the array. For Lotto 649 this should not happen. Modify the Lotto Picker so that numbers are not repeated.

HINT: It may take you a *while*.

My answers are in the included JavaScript file (7-part2.js).