Week 12 codify academy

**Week 12**

**Group Discussion Questions**

1. How would you display a random whole number between 1 & 20?
2. Why would you want to select a random name from an array and display it?
3. What is the built in JavaScript method to find out the date and time?
4. How would you display the current year in the console?
5. How would you display the current hour in the console, after 2 seconds?
6. How would you display the current hour with a DOM event listener?
7. What are 3 ways we can add events in JavaScript?
8. What is the event listener we should use for modern browsers?

**Exercises**

***Important: Make sure to add comments to your code to help your future self.***

1. Create a copy of your template folder and rename it to week12exercise.
2. Drag this new folder into your 'week12' folder inside your 'codify' folder.
3. When working through these exercises, there are bits and pieces of the instructions that are deliberately left out. You should start thinking about what you THINK you will need in order to accomplish the request.
4. In JS: Create an array of 5 numbers each with 2 decimal places.
5. In JS: Loop through the array and round all numbers to the nearest whole integer. Add each rounded number to a new array.
6. In JS: Create a function that produces 10 random numbers between 1 and 100. Add each number to an array of numbers.
7. In JS: Write out a function that creates a few variables that stores the following information: the whole date, the current hour, the current minute, and the current second.
8. In JS: Inside the function, create a variable that will display the current time in the hh:mm:ss format.
9. In JS: Inside the function, create a few more variables to store the current month, day, and year.
10. In JS: Inside the function, create a variable that will display the current date in the dd/mm/yy format.
11. In JS: Write some code that will run this time/date function every second.
12. In JS: Write a function that will display the current data in an alert when a button is clicked. Do not use the inline 'onclick' attribute in HTML to achieve this.

***Once you have completed these exercises add them to Github.***

[Download Completed Week 12 Exercises](http://codifyacademy.com/wk12/week12exercises.zip)

**Project**

Today we will build a clock using the Date Method, you will notice when minutes or seconds are below 10 they will not display as double digits, make sure to address this issue when you get to displaying minutes and seconds.

**Steps For Making this JavaScript Project - Remember to break this project into manageable steps:**

1. Paper Prototype the layout of the project.
2. Create the HTML needed to display the results.
3. Write pseudocode for the JavaScript Logic.
4. Write JavaScript from your pseudo code.
5. Style the finished product with some CSS.

**Working Project Examples**

[Clock Example](http://codifyacademy.com/litmos/wk12/clock" \t "_blank) [Countdown Example](http://codifyacademy.com/litmos/wk12/countdown" \t "_blank)