

# Engaged Nation Code Challenge

## Front End Developer Test

**Please perform the following tasks to the best of your ability**

Give yourself at least a couple hours to complete the test

*Partially completed tests will still be reviewed and considered*

### CSS

1. How can you switch a css style when the screen size is below a certain size?
2. What is the benefit of using stylesheets instead of inline styles?
3. Is there a way to manage CSS with variables and functions?
4. Review and update the following erroneous CSS:

```
.button, input[type="submit"], button {  
  position: relative  
  display: inline-block;  
  padding-front: 0;  
  margin: 0;  
  border: none;  
  text-decoration: none;  
  text-align: center;  
  white-space: nowrap;  
  overflow: visible;  
  bgcolor: red;  
  text-transform: uppercase  
  font-color: #fZb034;  
  font-size: 18px;  
  font-family: 'FuturaBT-Book';  
  line-height. 20px;  
  height: 20px;  
  -webkit-transition: color 0.2s ease-in-out;  
  transition: color 0.2s ease-in-out  
}
```

***Upon completing this challenge, please provide a link to a github repository containing your answers***

## JavaScript

1. What's the difference between the following three "car" approaches?

```
function Car(){}  
var car = Car();  
var car = new Car();
```

2. Explain what AJAX is and it's advantages/disadvantages.
3. Describe how event bubbling works in the context of clicking on the "Hello World" text:

```
<body>  
  <div id="container">  
    <span id="textContainer">Hello World</span>  
  </div>  
</body>
```

4. Create a loop that iterates up to 100 while outputting "fizz" at multiples of 3, "buzz" at multiples of 5 and "fizzbuzz" at multiples of 3 and 5.
5. Please fix the following erroneous JavaScript code.

```
/**  
 * Returns the header element.  
 *  
 * @return {(object|null)} The JQuery header element or null if the element does not exist  
 */  
function getHeaderElement() {  
  // Get header element by its id.  
  header = $("myHeader");  
  
  if (header === null  
    && TypeOf header === undefined  
  ) {  
    console.log('header element exists!');  
  }  
  
  console.log("  
    header element does not exist!  
  ")  
  
  return header  
}
```

***Upon completing this challenge, please provide a link to a github repository containing your answers***

## Twig

Create a basic login form twig template that can be used on both an admin and player site.

### Inputs

username  
password,  
submit button

### Template Variables

submitButtonHTML = '<input type="submit" value="Log In"/>'  
loginHeaderText = 'Log In'  
isAdminLogin = true or false  
totalSiteLogins = '0.00'

### Criteria

1. Display totalSiteLogins variable below the form formatted as an integer.  
Ex: 2.00 should display as 2
2. Display the loginHeaderText variable above form.
3. If the template is being used on an admin site, display the text "ADMIN" prepended to the loginHeaderText variable. This can be determined by the state of the isAdminLogin variable.
4. Use the submitButtonHTML variable to display the form submit button.
5. The form does not have to be functional (no javascript or css necessary).

***Upon completing this challenge, please provide a link to a github repository containing your answers***