

JS 5

If we have an event that close to the deadline, we want that event to have special attention. We can link HTML, CSS, and Javascript all together to create a special feature where an approaching event becomes bigger and has a border.

On the other hand, if an event is far away, then we don't need to give it special attention.

For this session, we will focus on decision making and reacting to deadlines.

NOTE: If we open something, we **MUST** close it. The slash (/) is used to close a tag.

```
<p id = "p2" > Hi </p>
<h2 id = "subT"> Sub Item </h2>
```

=====

1. Write JS Code in between the **<script>** **</script>**

```
var count = 0;

function upByFive()
{
    count += 2;
    document.getElementById("demo").style.color = "#" + count;
    document.getElementById("demo").style.fontSize = count + "px";
}
```

Explanation

We have a function definition. Remember that a function definition is giving code a name. In this case, the name of the code is **upByFive()**. Function definition is important because it allows us to reuse code. By giving code a name, we can call the name again to use it as many times as we like.

Continue to the next page.

The variable `count` is important because it controls the `fontSize` and `color`. Every time the function `upByFive()` is called, we are increasing the `fontSize` and changing its `color`.

Later on, we will see that this is important because it is a basic way to do dynamic CSS, which means that we are changing the website's style in real time. If `upByFive()` is the action, **what is the event?**

2. HTML Code. Type this in between `<body>` `</body>`

```
<h2>JavaScript Functions and Return Value </h2>
```

```
<p onclick="upByFive()"> Color Effect </p>
```

```
<p id="demo"> Changing Colors </p>
```

Explanation

We are creating 3 different HTML elements. The `<h2>` `</h2>` means header of type 2. Next, we created 2 paragraph tags.

The first paragraph tag **DOES NOT** have an `id` but does have the event `onclick` linked to it. When we click on the word "Color Effect", the JS function `upByFive()` is called.

The second paragraph tag **DOES** have an `id` and it is `"demo"`. This paragraph tag is used to test our decision making and deadline calculation.

Run the code. You will see that the font-size gets bigger everytime we click on the word "Color Effect".

You Got A Coupon!!

Remember in JS 1 curriculum where we click on a button called **"Press Me"** and the JS code changes the data of the `<p>` tag dynamically?

By default, CSS is **ALSO STATIC** and this means that it can't be changed. However, just like HTML, we can also use JS to change CSS in real time. There are situations where we want CSS to change on the fly.

When you play a game and acquire a certain number of points from achievements or when you are a member of a retail store and acquire reward points, we want the style to change

when we acquire enough points. **When a threshold of points acquired is crossed, the JS code is activated and we change the CSS dynamically to alert the user that a new coupon has been activated.**

The JS Challenge below will only activate if the count is greater than 25 and then we change CSS in real time.

JS Challenge. Inside `<script> </script>`

Inside the function `upByFive()`, write code to detect if the count is greater than 25, then

1. change the style of the border to **"5px solid #ff0000"**;
2. change the background color to **"#606060"**

CSS Challenge. Inside the `<style> </style>`

1. add the code below

```
body
{
}
}
```

2. change the background-color of body to **"#FFA500"**

JS Challenge 2. Inside `<script> </script>`

Inside the function `upByFive()`, write code to detect if the count is greater than 30, then

1. change the background color to **"#f0f0f0"**
2. change the font size back 10px
3. reset the count variable back to 0

HTML Challenge. Type this in between `<body> </body>`

1. create another paragraph tag and give it an id of **"rev"**
2. between the open and closing paragraph tag, put the word **"reverse"**

CSS Challenge. Inside the `<style>` `</style>`

```
p#rev
{
    font-size: 65px;
}
```

JS Challenge 3. Inside `<script>` `</script>`

1. **Inside the function `upByFive()`**, write code to **ALSO** link up with the paragraph tag with id `"rev"`.
2. Remember that when we click on the word **"Color Effect"**, the word **"Change Color"** grows bigger and changes color.
 - 2.1. add code to the function definition so that when we click on the word **"Color Effect"**, the word **"Reverse"** gets smaller in font size.
3. basically, we have opposite effects where the word **"Change Color"** grows in font size while the word **"Reverse"** gets smaller in font size.