

# JS 4

It's great that we have text on our website. A good calendar app also has images so that the user can associate images with text. Text and images help each other explain the event. Also, images associated with text makes it easier to remember the event.

1. images
2. event and event handler
3. positioning using "top" and "left"

**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 HTML code in between `<body>` `</body>`.

---

```

```

## Explanation

In HTML, we have the image tag that is used as a placeholder of images. We used the image tag and give it an id of "imgF". The "src" is the location of the image on the internet.

Next, we can specify the dimensions of our image. The width and height both use the assignment operator ( a single equal sign ) and double quotation around the number.

## 2. Write CSS code in between `<style>` `</style>`

---

```
img#imgF
{
    position    : relative;
    top         : 250px;
    left        : 150px;
}
```

### Explanation

In CSS, we can also change the style of our image.

1. remember that the id is important because it is used to link up CSS and JS with HTML.
2. also remember that in CSS, replace "id" with the hash tag ( # ).

The code above **links** CSS with HTML by using `img#imgF`. Next, we use "top" to position the image in the y position and "left" to position the image in the x position.

Run the code and see what happens.

### CSS Challenge

1. give the image a border and experiment

- 1.1. inside the curly braces of `img#imgF`, add the following code

```
border    : 5px double #a7f7a7;
```

### 3. Write the JS Code in between `<script>` `</script>`.

---

```
var
yPos = 0;

function goDown()
{
    yPos += 10;
    //alert( "topPos: " + topPos );
    document.getElementById("imgF").style.top = yPos + "px";
}
```

#### Explanation

Inside our `<script>` `</script>` tag, we have a function definition called `goDown()`. Remember that function definition is giving code a name. In this case, the name of the code is `goDown()`.

The function makes the image go in the vertical direction. This is the y position and that is why the var `yPos` is a counter that keeps tracks of how far we go down. The function `goDown()` is an action.

How do we activate the action? We use an event and link up with HTML.

#### 4. Write HTML Code in between `<body>` `</body>`.

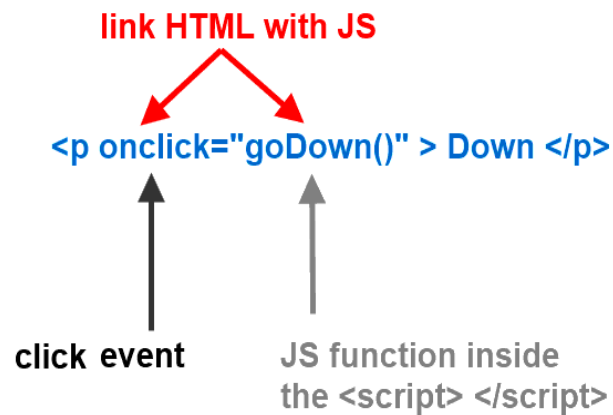
---

```
<p onclick="goDown()" > Down </p>
```

#### Explanation

We have a new paragraph tag that **DOES NOT** have an id. We connect an event to the HTML by using the keyword "on". In the above, we have "onclick". This means that when we click on the paragraph tag, it will activate the event.

Notice that we **ALREADY** defined the Javascript code of "goDown()", we wrote the code in Chapter 3 above. Look inside the `<script>` `</script>` and you will see that the action is already there.



When we "click" on the word "Down",  
the JS function goDown() is called

### JS Challenge - Inside `<script> </script>`

1. write another Javascript function called `goRight()`. Since we are going in the left and right position, do we make another variable called `xPos`?

### HTML Challenge - Inside `<body> </body>`

1. create another paragraph tag and have it say Right
2. next, link together HTML and JS by having the event as `onclick`.
  - 2.1. when we click on the word "`Right`", the action `goRight()` is called.

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

1. style the image tag with id "`imgF`"
2. style the paragraph tag

### JS Super Challenge - Inside `<script> </script>`

1. write another Javascript function called `expBy()`. Inside the function, use `getElementById("imgF")` and change the width to "`300px`" and height to "`300px`"

### HTML Super Challenge - Inside `<body> </body>`

1. create another paragraph tag and have it say Expand
2. next, link together HTML and JS by having the event as `onclick`.
  - 2.1. when we click on the word "`Expand`", the action `expBy()` is called.