

Changing HTML elements from JavaScript

In this ninth video, Steve demonstrates how to change HTML elements (remember an element is something in a web page, such as an image or a sound) using JavaScript. In this, Steve changes the image element firstly to get bigger each time it is clicked, and then, when it gets to a certain size, for the picture to change. At the end of this you will be able to produce an image of a balloon in a web page that, when clicked, gets bigger each time until it bursts.



So you can replicate the same effect as Steve achieves with his code, we have provided you with the image of the balloon (as a png – same as the one that Steve uses) and the 'bang' (as a jpeg, the same as Steve uses). Download these first and put them into the same folder as all of your Notepad++ HTML examples. They need to be in the same folder as the code for this to work. When you have done that, start to watch the video.

Step 1: Preparing the code (Video start - 2.00)

Watch the video for two minutes to see Steve create the code from scratch. Pause the video and write the code to match his, and the screenshot on the right. You should find this quite straightforward now, after all of this practice! Note that you should make sure the image you have downloaded has the same name as the image in the code – balloon.png – and should be in the folder where the code is saved.

```

1 <html>
2 <head>
3 </head>
4 <body>
5 
7 </body>
8 </html>

```

Step 2: Creating the function (video 2.00 – 02.40)

Watch the next section of the video, up to 2.40 to add the script tags and the function to the code. Steve is calling the function 'blow' and then he defines the variable as the picture, with the syntax that allows the browser to find the picture. When your code matches his, and the screenshot above, go on to the next step.

```

1 <html>
2 <head>
3 <script>
4 function blow()
5 {
6     var picture = document.getElementById("picture");
7
8
9 </head>
10 <body>
11 
13 </body>
14 </html>

```



Step 3: Building the function to increase the image size (video 02.40 – 3.07)

In this next section of video, Steve adds more information to the function that, on click, will increase the height and width of the image by 100 pixels each time. Add this code to your Notepad++ and check it is the same as Steve's and the screenshot to the right.

```
1 <html>
2 <head>
3 <script>
4 function blow()
5 {
6     var picture = document.getElementById("picture");
7     picture.height = picture.height + 100;
8     picture.width = picture.width + 100;
9 }
10
11 </script>
12 </head>
13 <body>
14 
16 </body>
17 </html>
```

Step 4: Adding an 'if' conditional to change the picture (Video 03.08 – 04.00)

Steve adds an 'if' conditional to the code which tells the browser that if the picture height is more than 400 pixels, then the picture should change to another – this time, to the 'bang' picture. Again, make sure you have saved this image into the same folder as the code, with the correct name (bang.jpg). Make sure, too, your code matches Steve's, and the screenshot on the right before moving on to publishing the page and trying it out.

```
1 <html>
2 <head>
3 <script>
4 function blow()
5 {
6     var picture = document.getElementById("picture");
7     picture.height = picture.height + 100;
8     picture.width = picture.width + 100;
9     if (picture.height > 400)
10        picture.src = "bang.jpg";
11 }
12 </script>
13 </head>
14 <body>
15 
17 </body>
18 </html>
```

Step 5: Publishing the page and bursting the balloon (Video 04.01 – end)

Steve publishes the page in Chrome and runs it. The balloon image appears, and when this is clicked, it grows in size. Click more times and eventually the balloon image is replaced by the 'Bang'. Make sure this works when you publish your page – if it doesn't, debug your code. Take a screenshot of the code, and the published page displaying the 'Bang' and insert it into your Student Log.

Well done, you have just coded your own bursting balloon! Now impress your friends by demonstrating your skills...

