Coding HTML with NVDA -Part 12(Adding Colour with CSS)

# Introduction

Hey guys what’s up it’s your girl Thee Quinn here and I’m back with another video in the html series. In today’s video, I will be showing you how to use colours on your webpages. But before we get into it, please be sure to like the video if you love the content, subscribe if you are new and turn on my notification bell to be alerted whenever I post the next video. Also note that the instrumentals for this video have been provided by Inner Sanctum Entertainment Ltd. But without further ado, let’s get right into it.

# Start of Tutorial

So, in the last video I taught you guys the basic syntax of CSS rules and how you can use them. In today’s video, we will be learning how to add colours to the elements on our html webpage. Colours can make your webpage look more attractive, and it can also be used to draw attention to important elements. In CSS there are many ways in which you can specify colours. These are:

* Predefined colour names
* RGB or RGBA
* HEX
* HSL or HSLA

Let’s start with the colour names.

# Colour names

There are currently 140 pre-defined colour names that are supported by CSS and HTML. If you want to use one of these built in colours, all you have to do is write the name of the colour as the value for that colour property. Here is an example of using blue:

element {

color: Blue;

}

So that’s the basics of it. You can find a list of all these 140 predefined colours via a link at the end of this document. Now let’s move on to RGB and RGBA values.

# RGB and RGBA colours

An RGB color value represents RED, GREEN, and BLUE light sources. Each of these 3 parameters defines the intensity of the colour between 0 and 255. To represent a colour in RGB, you would type RGB, then in parenthesis, you would put the intensity for red, green and blue in that order, separated by commas. So, the basic syntax is:

rgb(red, green, blue)

Here is an example:

rgb(0, 255, 0)

In this example, the intensity of the red is 0, the intensity of the green is 255, and the intensity of the blue is 0. Therefore, the colour will be displayed as green because green is set to its highest value and the others are set to 0 which is the lowest value. To represent white, you would set all the parameters to 255. For example:

rgb(255, 255, 255).

To represent black, you would set all the parameters to 0. For example:

rgb(0, 0, 0).

Of course, experimenting with these colours would require some sighted help. But don’t worry, I have some tips that blind or visually impaired persons can use for choosing colours to the end of the video.

So, what are RGBA values? RGBA values are an extension of RGB values with an alpha channel. This alpha channel specifies the opacity for a colour. To represent RGBA values, the basic syntax is:

rgba(red, green, blue, alpha)

for the alpha parameter, you would use a number between 0.0 which means fully transparent and 1.0 which means not transparent. Now that is it for RGB and RGBA. Now let’s move on to hex colours.

# Hex colours

The word hex stands for hexadecimal and is represented by hexadecimal integers. The syntax is:

#rrggbb,

RR, GG, and BB represent the red, green and blue hexadecimal integers respectively. These are represented by a hexadecimal value between 00 and ff, which is equivalent to 0 to 255 in decimal number representation. For example:

#ff0000

This is displayed as red, because red is set to its highest value which is ff, and the others are set to the lowest value which is 00. To display the colour black, set all the values to 00, like this:

#000000.

To display white, set all the values to ff, like this:

#ffffff.

There are also times where you might see a 3-digit hex code in CSS. This is a short hand hex code which represents:

#rgb

r, g, and b represent the red, green, and blue components with values between 0 and f. The short hand hex code can only be used when both the values (RR, GG, and BB) are the same for each component. For example, if we have:

#ffcc99,

It can be written as:

#fc9

Now let’s move on to HSL colours.

# HSL colours

HSL stands for hue, saturation, and lightness. This can be represented by this basic syntax:

hsl(hue, saturation, lightness)

Hue is a degree on the color wheel from 0 to 360. 0 is red, 120 is green, and 240 is blue. Saturation is a percentage value. 0% means a shade of gray, and 100% is the full color. Lightness is also a percentage.

0% is black, 50% is neither light or dark, and 100% is white. Here is an example of how it will be represented:

hsl(120, 100%, 50%)

HSLA color values are an extension of HSL color values with an alpha channel. Just like RGB, this alpha channel specifies the opacity for a colour. The syntax is:

hsla(hue, saturation, lightness, alpha)

just like RGB, the alpha parameter is a number between 0.0 which is fully transparent and 1.0 which is not transparent.

ok so that’s it for the methods that you can use to represent colour in CSS. Now I am going to share some tips that I use to choose colours for my websites.

# Method 1: Extracting colour themes from a logo

This is personally my favourite method. If the person that you are creating a website for has a logo, and they want the colours of the logo to be the theme of the website, there is a tool that you can use to extract the colours from the logo. This online tool is Adobe colour. Not only can you extract themes from logos or images, but there is another trick that I use it for. Sometimes the client may not have a logo but they have an idea of the colours that they want to use. I would send them to search on google images for an image with that color and send it to me. I would then run it through the colour extractor on Adobe color to get the colour code for it. The link for Adobe color can be found at the end of this document.

Here are the steps to extract colours with Adobe colour:

1. Go to the Adobe colour website
2. Navigate to the top of the page.
3. If it asks you to sign in, just down arrow to close and press enter.
4. Navigate to the extract themes tab by either down arrowing to it, or using your NVDA find dialog (NVDA + Ctrl + F) to search for “extract”.
5. Press enter on the extract themes tab to activate it.
6. Press your heading key (H) to jump to the next heading.
7. Down arrow to “select files” and use your arrow keys to go on the word “select”, and click on it to add an image.
8. Choose an image from your computer in the open dialog.
9. After you upload the image, if you down arrow you should start seeing the codes of all the colours that were found in your photo.

Now you must be wondering, I have extracted these themes, what am I going to do with these colour codes now? How am I going to know which colour code is for what colour? Don’t worry, I have you covered. There is also another website that we can use to get the name of the colour based on the colour code. That website is color-name.com.

here are the steps to find the name of a colour:

1. First, copy the colour code, excluding the number sign.
2. Go to color-name.com and navigate to the top of the page.
3. Navigate to the first edit box by pressing the letter E.
4. Press enter to open it and paste in the colour code.
5. Escape out of the edit box and down arrow to “link space”
6. Press enter on it and the name of the colour should be announced to you.
7. If you do not know what colour that name refers to, you can always look it up in Google search. It will more than likely describe it for you.

Now let’s move on to the next method.

# Method 2: letting the client or a sighted person choose the colours

This is another method that you can use for clients to choose the colours that they want. They can do this by using the same adobe colour tool. Instead of extracting colours, they would go on the colour wheel tab which is above the extract theme tab, and once they go on Adobe color it will be on there by default. Then they can select the colour that they want, and send the hex codes to you, labelling them of course. Now before we end this video, let me demonstrate some basic applications of colour.

# Background colour

There is a way to set the background colour for html elements. You would do this by creating a rule referring to that element, then assign the colour name or code to the background-color property. Note that in html/CSS code, the colour is spelt color. For example, setting the background colour of some text:

p {

background-color: Blue;

}

Now let’s open our index.html file to demonstrate this. Remember that we were working with forms the last time we were in this file. So, I went ahead and deleted out that code for the form. So, right now the only thing that we have on the webpage is a heading level one tag, with a heading in it. Now we want to change the background colour behind this heading level one text. Therefore, we have to put some CSS styling in. so let’s use internal CSS for this example. Remember that if you are doing internal CSS, you would put some code within the style tags which should be located within the head tag of your document. So, let’s go back up to the top of our document, and go down to the starting head tag. Go in to a new line under it, then type the code below:

<style>

h1 {

background-color: Blue;

}

</style>

If you should save the document and open it in your browser, and use your NVDA key + F to read the formatting on the heading, it would say “Black on bright blue”. So, that is it for the demonstration of background colours. Of course, in that example where I put the word blue, you could have also just put the hex, hsl, or rgb code for that colour there. Now let’s move on to text colour.

# Text color

There is also a way to set the colour of text. You would do this by creating a rule referring to that text

Then assign the color name or code to the color property. For example, the text within the heading level ones in this document will be blue:

h1 {

color: Blue;

}

Now let’s go ahead and try this out in our index.html file. This time we are going to use a hex code instead. So, we are going to go back up to where we have the properties for the rule, and go into a blank line under it. Then we will add the color property, using #ffffff this time, which represents white. Your complete code in the style tag should be:

<style>

h1 {

background-color: Blue;

color: #ffffff;

}

</style>

If you should save this, open it in your browser, and use your NVDA key + F on the heading, it should say “white on bright blue”. And that is it for CSS colours.

Predefined colours link:

https://www.w3schools.com/css/css\_colors.asp

adobe color:

<http://color.adobe.com/>

color name:

https://www.color-name.com/hex/05aff2