

Learn CSS In One Day and Learn It Well

Accompanying Resource (End of Chapter Exercises)

http://www.learncodingfast.com

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Note: If you copy and paste any code in this document, you may have to retype the quotation marks (") yourself. Quotation marks tend to fail when copy-and-pasting.

Exercise 3

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 3 - Basics of CSS* folder.

Exercise 3.1

- 1. Open the file *Chapter 3 Basics of CSS.html* concurrently in your browser and text editor.
- 2. First, look for the following lines in the source code in your text editor:

```
p {
    background-color: yellow;
}
```

This selects all the p elements and sets their background colors to yellow. The line 'This is some text in the div element.' is not selected because it is not within any p...p tags.

3. Now let's try changing the rule from

```
p {
    background-color: yellow;
}

to

P {
    Background-coloR: YELLOW;
}
```

Save the file in your text editor and refresh your browser. Notice that nothing changes? This is because CSS is not case-sensitive in most cases.

4. Now, let us try to select different HTML elements and observe which elements end up with a yellow background. For each item below, simply change the selector on line 6 in the HTML file to the required selector.

First, let's select the element with class = "myClassPara". To do that, change the p selector in the CSS rule to .myClassPara. Save the file in the editor and refresh the page

in the browser. Notice which paragraph is selected now.

- 5. Now change the selector to .myclasspara. Notice that nothing is selected now? That is because CSS is case-sensitive when selecting classes and ids.
- 6. Next, let's select the element with id = "myIDPara". Try doing it yourself.

Got it? You can change .myClassPara to either p#myIDPara or just #myIDPara. Notice which paragraph is selected.

Try changing #myIDPara to #MYIDPARA. Notice that nothing is selected?

7. Next, let's learn how to select more than one elements. Try selecting both the h1 and h2 elements.

The way to do it is simply to change the selector to h1, h2.

8. Next try selecting the div element.

To do it, simply change the selector to div.

- 9. Now, let's select the p element inside the div element. To do this, we write div p as the selector. Notice which elements are selected.
- 10. Next, try selecting all the link (<a>) elements.

What do you notice? The links are now highlighted in yellow right?

11. Next, we'll narrow down our selection based on HTML attributes. Try selecting the link with href="http://www.learncodingfast.com". The correct way to do this is with square brackets as follows:

```
a[href="http://www.learncodingfast.com"]
```

Try it. Only the first link will have a yellow background now.

12. Next, we'll use the pseudo-class selector to change the background color of all link elements when we hover over them. Try changing

```
a[href="http://www.learncodingfast.com"]
```

```
a:hover
```

Save the file and refresh the browser. Notice that nothing is selected? Now hover your mouse over any of the hyperlinks and observe what happens.

13. Next, let's try to select the second child element of the div element. You do that by changing the selector to

```
p:nth-child(2)
```

14. Now, let's try selecting the first letter of all elements. You use the pseudo-element first-letter to do that. Change the selector to

```
p::first-letter
```

15. Next, let's look at what happens when an element has more than one classes. Change the selector back to .myClassPara and add the following CSS code just before the </style> tag.

```
.mySecondClassPara {
    text-decoration: underline;
}
```

Notice which paragraph is both yellow in background AND underlined. This is because that paragraph has two classes: myClassPara and mySecondClassPara. Therefore, both rules apply to it.

16. Finally, let's try adding an exclamation mark to the end of all elements. We'll use the after pseudo-element to do that. Add the following CSS code just before the </style> tag.

```
p::after{
      content: "!";
}
```

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the Chapter 4 - CSS Box Model folder.

Exercise 4.1

- 1. Open the file Chapter 4 CSS Box Model.html concurrently in your browser and text editor.
- 2. Resize your browser window and observe how the gibberish text flows around the bigger box.
- 3. Modify the CSS declaration for box1 by changing width: 100px; and height: 100px; to each of the following:

```
(a) width: 200px; height: 200px;(b) width: 60%;(c) height: auto; width: auto;
```

Save the file in the text editor and refresh the page in the browser. Notice what happens to box1 in each case.

4. Now change the width and height of box1 back to 100px and change the text between the tags <div id="box1">...</div> to:

"Learn CSS in One Day and Learn It Well. This example shows what happens when text overflows the dimension of the box."

Next, add each of the following to the CSS declaration of box1 and notice what happens in each case:

```
(a) overflow: visible;(b) overflow: hidden;(c) overflow: scroll;(d) overflow: auto;
```

5. Modify the CSS declaration for box1 by changing margin: 20px; to each of the following and notice what happens to the space around box1 in each case:

```
(a) margin: 50px;
(b) margin: -50px;
(c) margin: 25px 200px;
(d) margin: 25px 50px 60px 10px;
```

6. Remove the margin rules for box1 and add the 4 lines below:

```
margin-top: 25px;
margin-right: 50px;
margin-bottom: 60px;
margin-left: 10px;
```

Notice any changes to box1? There should be no change as this is the same as 5(d) above.

7. Remove the margin rules for box1 and add the line below:

```
margin: 0 auto;
```

Next, change the width of box1 to 80%. Finally, remove the line float: left; Notice what happens. (We'll explain what float does in the next chapter). box1 is now centeraligned.

8. Now, let's work on box2. Modify the CSS declaration for box2 by changing padding: 50px; to each of the following and notice what happens inside box2.

```
(a) padding: 25px;
(b) padding: -10px; (refer to note below)
(c) padding: 25px 50px;
(d) padding: 25px 50px 60px 10px;
```

- 8(b) will not work as paddings cannot have negative values. You'll just end up with a padding of 0 pixel.
- 9. Remove the padding rules for box2 and add the 4 lines below:

```
padding-top: 25px;
padding-right: 50px;
padding-bottom: 60px;
padding-left: 10px;
```

Notice any changes to box2? There should be no change as this is the same as 8(d) above.

10.Now let's change the border style for box2. Remove the line border: 5px solid black; from the CSS declaration of box2 and add each of the following. Notice what happens to the border in each case:

```
(a) border-style: solid dotted;(b) border-style: none dashed double groove;(c) border-style: inset;(d) border-style: outset;
```

11. Next, remove the border-style rule for box2 and add the following:

```
border-top-style: dotted;
border-left-style: double;
```

12. Now remove the rules from part 11 and change border style to solid (border-style: solid;)

Next add each of the following rules. Notice what happens to box2 in each case.

```
(a) border-width: 25px;(b) border-width: 25px thin;(c) border-top-width: 30px;
```

13. Now we are going to change the border color for box2. Try adding each of the following rules:

```
(a) border-color: rgb(255, 0, 0);
(b) border-color: red green;
(c) border-top-color: #12FF5F;
```

14.Next, we'll try the border shorthand. Remove all the border properties for box2. Add the following:

```
border: 5px solid green;
```

15. Now, let's try the border-radius property. Try each of the following:

```
(a) border-radius: 20px;
(b) border-radius: 10px 20px;
(c) border-radius: 25px 5px 0 50px;
(d) border-top-left-radius: 10px;
```

16. Finally, let's try to create a circle. First, change the width and height of box2 to 100px, padding to 20px and the property

```
border: 5px solid green;
to
border: 50px solid green;.
```

Now, remove all previous rules for border radius and add the following rule:

```
border-radius: 120px;
```

You end up with a circle right? That's because the border radius is half of the total height (and width) of box2.

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 5 - Positioning and Floating* folder.

Exercise 5.1

- 1. Open the file *Chapter 5 Positioning.html* concurrently in your browser and text editor.
- 2. Add the rule position: static; to the CSS declaration for #box1 and #box2 and observe what happens to the positions of the two boxes.

Nothing changes right? That's because all HTML elements are positioned using static positioning by default.

3. Remove the rule position: static; from the CSS declaration for #box1 and #box2. Add the following lines to the CSS declaration of #box2.

```
position: relative;
top: 50px;
left: 70px;
```

Observe what happens to the position of the second box. It is now 50px from the top and 70px from the left of its normal position.

Play around with different values for the top and left properties and see what happens to the position of box2. Try negative values as well. You can also try using the right and bottom properties.

4. Now change the CSS declaration of #box2 back to

```
position: relative;
top: 50px;
left: 70px;
```

Notice that the text is partially hidden by the red box?

If you want the text to appear in front of the red box, add the following lines to the CSS declaration of p.

```
position: relative;
z-index: 2;
```

You can set the position to either relative, absolute or fixed. It does not matter as long as it is not static.

Next, add the line z-index: 1; to the CSS declaration of #box2. Refresh the page. The text should now be in front of the red box since the z-index of the text is greater than the z-index of the red box.

If you want the red box to be in front of the text instead, just change the z-index of #box2 to a value greater than 2.

5. Now, change the height of #box1 to 5000px and the positioning of #box2 to fixed (position: fixed;).

Scroll the page. The red box does not move as it uses fixed positioning now.

6. Change the positioning of #box2 back to relative and the height of #box1 back to 100px. Add the following line just before the tag in the HTML code at the bottom of the file.

```
<div id="box3"></div>
```

Now add the following CSS declaration to style box3.

```
#box3 {
    position: absolute;
    top: 50px;
    left: 150px;
    background-color: yellow;
    width: 50px;
    height: 50px;
    padding: 20px;
    border: 5px dotted black;
    margin: 10px;
}
```

box3 uses absolute positioning and since it is not a child element of any <div> elements, it is positioned relative to the page. That is, it is positioned 50px from the top of the page and 150px from the left.

7. Now change the <div> code for the three boxes to the following:

box3 is now a child element of box2. Therefore it is positioned 50px down from the top and 150px right from the left side of box2 as it is now positioned relative to box2.

Exercise 5.2

1. Open the file *Chapter 5 - Floating.html* concurrently in your browser and text editor.

- 2. Resize your browser-window to see what happens when the <div> elements do not have enough room.
- 3. Modify the CSS declaration for div by changing float: left; to float: right;. Observe what happens to the positions of the boxes.
- 4. Now change the rule back to float: left; and add the code below to the HTML code, just above the </body> tag.

```
This is some text that is not floated.
This is more text that is not floated.
This is yet more text that is not floated.
```

Refresh the page and observe where the text is. Resize the browser window to see what happens when the width of the page is narrow.

5. Next, add the code

```
.clearFloat { clear: both; }
```

to the CSS declaration just above the </style> tag.

Change the first p> tag to p class="clearFloat"> and observe what happens.

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 6 - Display and Visibility* folder.

Exercise 6.1

- 1. Open the file *Chapter 6 Display and Visibility.html* concurrently in your browser and text editor
- 2. Change the height and width in the CSS declaration for #displaydemo. Observe what happens to the yellow box.

Nothing changes right? The yellow box is declared as an inline element. Hence it will only take up as much width and height as it needs. In fact, you can remove the height and width properties and nothing will change.

3. Now change the display property of #displaydemo from display: inline; to display: block; What happens?

The yellow box is now displayed as a block element. It starts and ends with a new line. If you have declared its width and height, the width and height will be the values you specified. If you have not specified its width and height, the yellow box will occupy the full width of the page. It will take up as much height as it needs.

- 4. Try changing the height and width in the CSS declaration for #displaydemo. Observe what happens.
- 5. Now, let's move on to the visibility property. Change the CSS declaration of #magic from display: inline; to visibility: hidden;. Observe what happens to the word 'magic' in the blue sentence.
- 6. Next, change the CSS declaration of #magic from visibility: hidden; to display: none;. Observe what happens.

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 7 - Background* folder.

Exercise 7.1

- 1. Open the file *Chapter 7 Background.html* concurrently in your browser and text editor.
- 2. Scroll the page in your browser window. The *Learn Coding Fast* logo is set as the background for the body element. Notice what happens to the logo as you scroll.

Now in the CSS declaration for body, change background-attachment: fixed; to background-attachment: scroll; Refresh and scroll the page. Notice what happens.

3. Next, change background-repeat: repeat-x; in the body CSS rules to each of the following and notice what happens to the background logo.

```
(a) background-repeat: repeat;(b) background-repeat: no-repeat;(c) background-repeat: repeat-y;
```

Notice what happens in each case.

- 4. Next, change background-color: white; to background-color: #0000FF;. This should change the background color of the page to blue.
- 5. Finally, we are going to look at the background-position property. We'll be modifying the rules for #box1 in the examples that follow. The image used in this example is 'backgroundposition.png' stored in the same folder. Have a look at the image before proceeding.

Notice that when background-position is set to 0 0 (the default), area A is displayed. Changing the background-position property will shift the background image with reference to area A.

In the source code CSS declaration for #box1, change background-position: 0 0; to

```
(a) background-position: -100px 0; This shifts the background image 100px to the left. As the default area shown is Area A, after shifting 100px to the left, you should get Area B.
```

```
(b) background-position: 100px 0;
```

This shifts the background image 100px to the right. As the background-repeat property is set to no-repeat, no image will be displayed. This is because the background image has shifted out of the boundaries of box1.

- (c) background-position: 0 -100px; This shifts the background image 100px up. You should get Area C.
- (d) background-position: 0 100px; This shifts the background image 100px down. No image will be displayed as the background image has shifted out of the boundaries of box1.
- (e) background-position: -100px -100px; Try to figure out which area you'll get.

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 8 - Font and Text* folder.

Exercise 8.1

- 1. Open the file *Chapter 8 Font and Text.html* concurrently in your browser and text editor.
- 2. Modify the CSS property font-family and observe what happens to the sample text. The current font family is Sans Serif. Try each of the following:

```
(a) font-family: Verdana, Arial, Helvetica, sans-serif;(b) font-family: Courier, "Lucida Console", monospace;
```

3. Modify the CSS property font-size and observe what happens to the sample text in each of the following cases. Try

```
(a) font-size: 40px;
(b) font-size: 1.5em;
(c) font-size: x-small;
(d) font-size: 120%;
```

4. Modify the CSS property font-style and observe what happens to the sample text. Try

```
(a) font-style: italic;
```

5. Modify the CSS property font-weight and observe what happens to the sample text. Try

```
(a) font-weight: bold;(b) font-weight: 300;
```

6. Modify the CSS property color and observe what happens to the sample text. Try

```
(a) color: blue;
(b) color: #00ff00;
(c) color: rgb(255,0,0);
```

7. Modify the CSS property text-align and observe what happens to the sample text. By default, the text in this paragraph is left aligned. Now try each of the following:

```
(a) text-align: justify;(b) text-align: right;(c) text-align: center;
```

- 8. Modify the CSS property text-decoration and observe what happens to the sample text. Try
 - (a) text-decoration: underline;(b) text-decoration: overline;(c) text-decoration: line-through;
- 9. Modify the CSS property letter-spacing and observe what happens to the sample text. Try

```
(a) letter-spacing: 5px;(b) letter-spacing: -5px;
```

10.Change letter-spacing back to Opx. Modify the CSS property word-spacing and observe what happens to the sample text. Try

```
(a) word-spacing: 10px;(b) word-spacing: -20px;
```

- 11. Change word-spacing back to Opx. Modify the CSS property line-height and observe what happens to the sample text. Try
 - (a) line-height: 2;
 (b) line-height: 25px;
 (c) line-height: 30%;

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the Chapter 9 - Lists, Links and Navigation Bars folder.

Exercise 9.1

- 1. Open the file *Chapter 9 List and Links.html* concurrently in your browser and text editor.
- 2. Modify the CSS declaration for ol and observe what happens to the 'Cars Ordered List'. Try each of the following:

```
(a) list-style-type: decimal-leading-zero;
(b) list-style-type: lower-roman;
(c) list-style-type: upper-roman;
(d) list-style-type: upper-alpha;
(e) list-style-type: lower-alpha;
(f) list-style-type: lower-greek;
(g) list-style-type: none;
```

3. Modify the CSS declaration for ul and observe what happens to the 'Cars Unordered List'. Try each of the following:

```
(a) list-style-type: circle;(b) list-style-type: square;(c) list-style-type: none;(d) list-style-type: disc;
```

4. Add the following rule to the CSS declaration for ul:

```
list-style-position: outside;
```

Refresh the browser. Nothing changes right? That is because list-style-position: outside; is the default. Now change list-style-position: outside; to list-style-position: inside;. You'll notice that the unordered list is shifted slightly to the right (i.e. there's more indentation).

5. Remove the list-style-type property for ul and add the following instead:

```
(a) list-style-image: url("myMarker.gif");
```

Observe what happens to the 'Cars Unordered List'.

6. Now let's look at how to style hyperlinks. Try adding the following rules to the stated selector:

```
(a) Add color: green; to a:link{} and observe what happens to the 'Click Me' link.(b) Add font-size: 2em; to a:active{} and click on the link.(c) Add background-color: red; to a:hover{} and hover your mouse over the link.
```

Exercise 9.2

- 1. Open the file *Chapter 9 Navigation Bar.html* concurrently in your browser and text editor.
- 2. This page shows an example of how a horizontal navigation bar can be created using CSS rules for lists and links. The steps are explained in the book. Study the code and try modifying the CSS declaration to improve the design of this navigation bar.

Download the source code for this exercise from http://learncodingfast.com/css and unzip the file. The source code for this exercise can be found in the *Chapter 10 - Tables* folder.

Exercise 10.1

- 1. Open the file *Chapter 10 Tables.html* concurrently in your browser and text editor.
- 2. Modify the CSS declaration for table and observe what happens to the table. Try adding the following and observe what happens in each case:

```
(a) padding: 50px;(b) margin: 30px;(c) border-collapse: collapse;(d) Change border: dashed 1px black; to border: solid 2px green;
```

3. Modify the CSS declaration for th and observe what happens to the table. Try adding:

```
(a) padding: 50px;(b) margin: 30px; (Margin rules will be ignored. Try it)
```

Repeat the same for td.

4. Remove the padding and margin properties from Part 3 for both td and th. Modify the CSS declaration for table and observe what happens to the table. Try adding each of the following:

```
(a) width: 300px;(b) width: 50%;Notice that the width of the table is now 50% of the red box.
```

```
(c) height: 500px;
(d) height: 80%;
```

Notice that the height of the table is now 80% of the red box.

5. Remove the height and width properties for table from Part 4. Modify the CSS declaration for <u>th</u> and observe what happens to the table. Try changing the height property to:

```
(a) height: 100px;
```

Remove the height property from th and add it to td. Notice what happens. Repeat the

same for t.r.

6. Modify the CSS declaration for th and observe what happens to the table. Try changing the width property to:

```
(a) width: 100px;
```

Remove the width property from th and add it to td. Notice what happens. There should be no difference as whether you set the width of a table cell at the th or td level, that width will affect both elements

7. Add the attributes id="firstColumn", id="secondColumn" and id="thirdColumn" to the first, second and third > start tags respectively. Next, add the following CSS rules to adjust the width of the three columns separately:

```
#firstColumn {
     width: 100px;
}

#secondColumn {
     width: 200px;
}

#thirdColumn {
     width: 50px;
}
```

Refresh the page and observe what happens. Try adjusting the width with different values.

8. Modify the CSS declaration for tr and observe what happens to the table. Try adding:

```
(a) text-align: center;(b) vertical-align: top;
```

Remove the above properties from tr and add them to th. Notice what happens. Repeat the same for td. If you do not see any difference, try increasing the width of the table and/or the height of the rows.

9. Modify the CSS declaration for tr and observe what happens to the table. Try adding:

```
(a) background-color: green;
(b) color: white;
```

Remove the above properties from tr and add them to th. Notice what happens.

Now, remove the properties from th and add them to td.

10. Finally, let's try coloring alternating rows. Remove the background-color and color rules from td first. Next, add the following code and observe what happens.

```
tr:nth-child(even) {
    background-color: lightgreen;
}

tr:nth-child(odd) {
    background-color: lightgray;
}
```

Thank You

Before ending this tutorial, I would like to thank you once again for buying <u>my book</u>. I sincerely hope the book has been useful to you and has helped you understand CSS better. If you enjoyed reading the book, I would appreciate it if you would take a few seconds to leave a review on Amazon. This will help with my ranking and help other readers find the book. Even a one sentence review would help. You can click here to leave your review.

Thank you and as usual, if you have any problems or feedback, you can email me at jamie@learncodingfast.com.