

Project 196

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DP
EDUCATION

**Coding
School**

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta http-equiv="X-UA-Compatible" content="IE=edge">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <link rel="stylesheet"
8     href="imageOpacity.css">
9   <title>Document</title>
10 </head>
11 <body>
12   <div class="demo-wrap">
13     
18     <div class="text">
19       <h1>Hello World!</h1>
20     </div>
```

html



Glitch



See the webpage

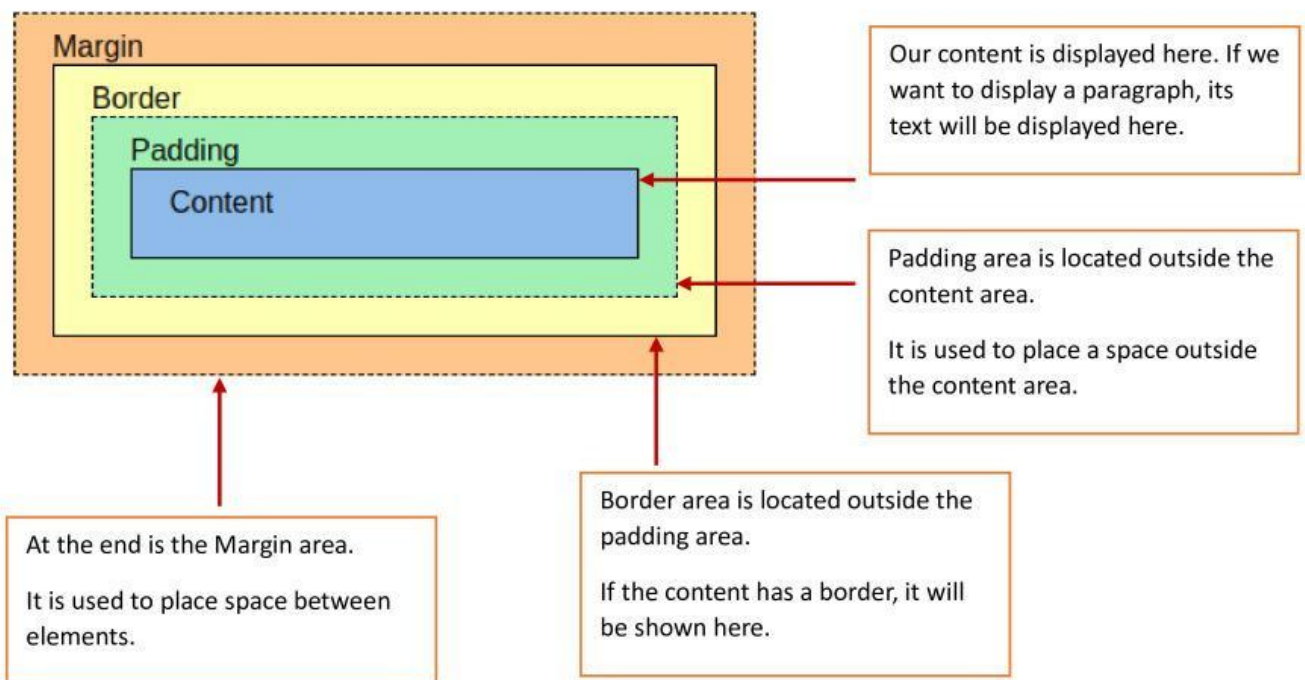


Glitch

Start here

The Box Models

- ❖ The box model is one of the most important concepts in CSS. Whenever the browser renders an element, the element is inserted into an invisible box.
- ❖ The box is as follows.



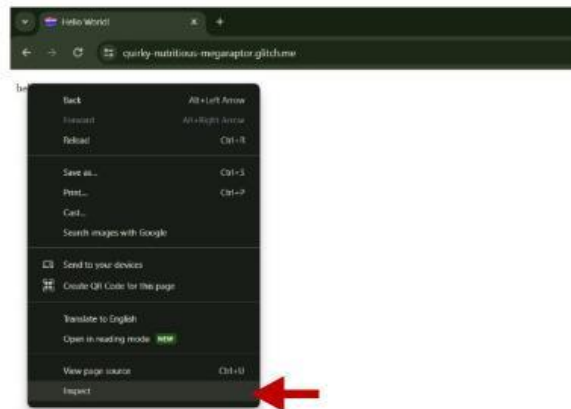
- ❖ Now add a paragraph to the index.html page.

```
<body>
  <p>
    hello world
  </p>
</body>
```

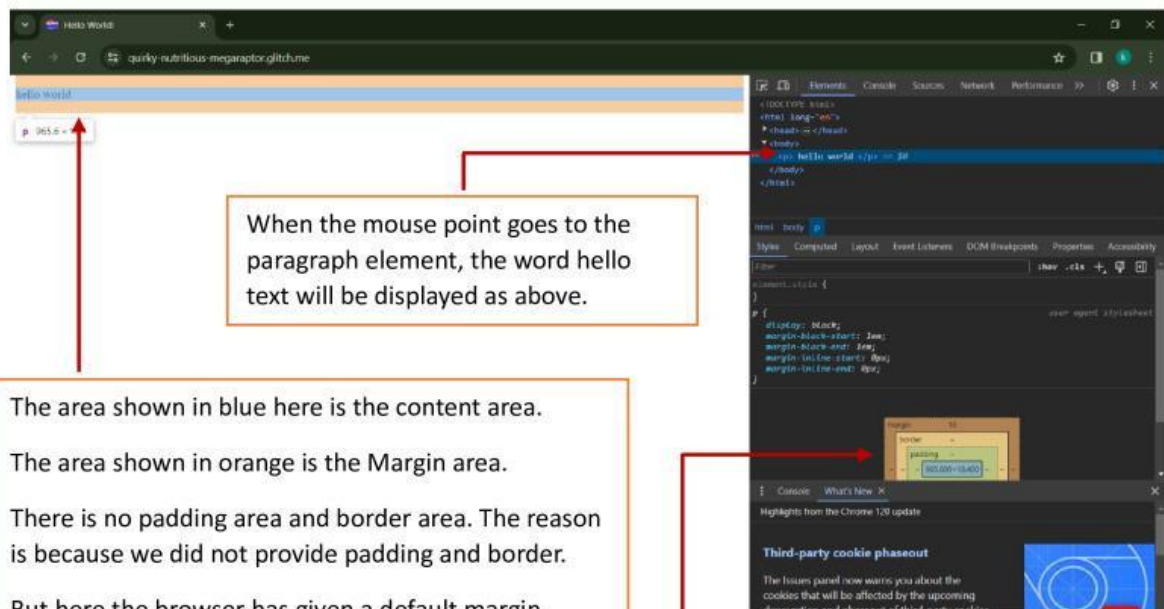
- ❖ Now click on Preview and click on Preview in a new window.



- ❖ Right click on the Hello world text and click on inspect.

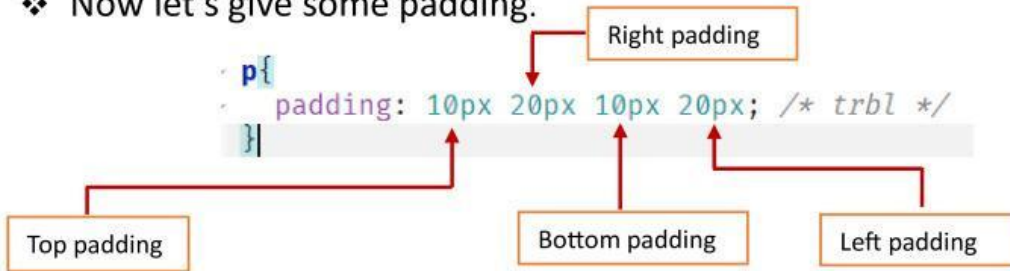


❖ Then it will be displayed as below.



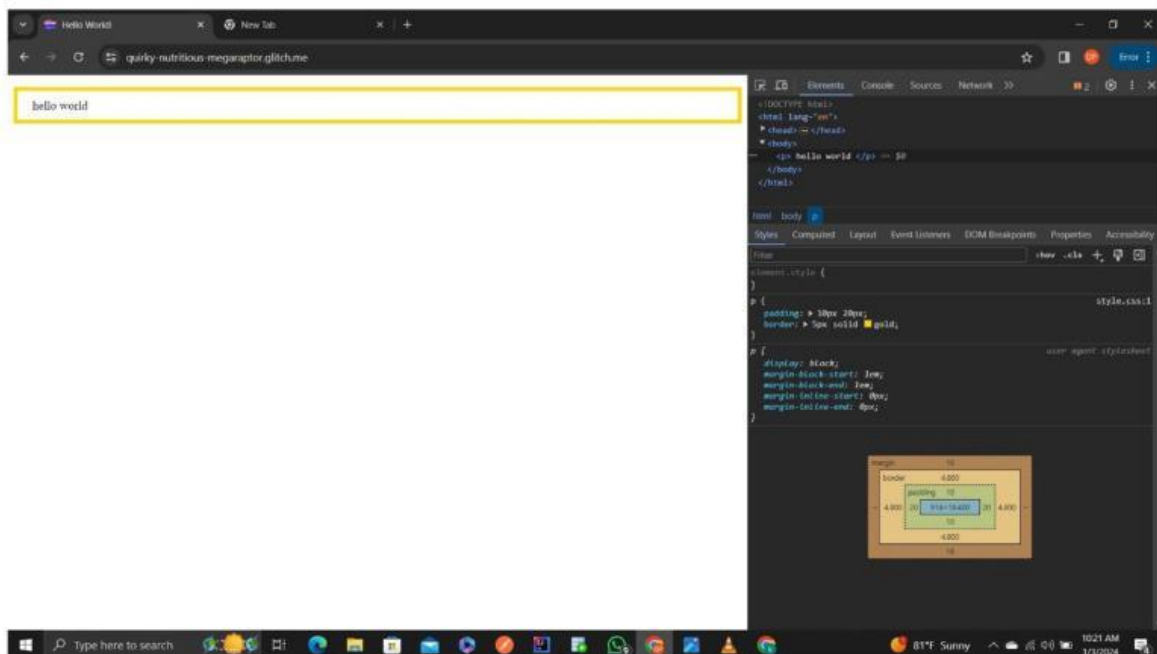
What is shown is the box model of our element. Here the size of our content area is given. The default margin provided by the browser is 16 pixels.

- ❖ Now let's give some padding.



- ❖ If we do not provide the bottom padding, the browser assigns the value given for the top padding to the bottom padding as well. Likewise, if we do not provide the left padding, the browser assigns the value given for the right padding to the left padding as well.
- ❖ So the above css can be given as below. And let's give a border for the paragraph.

```
1 p{  
2 padding: 10px 20px; /* vertical horizontal */  
3 border: 5px solid gold;  
4 }
```

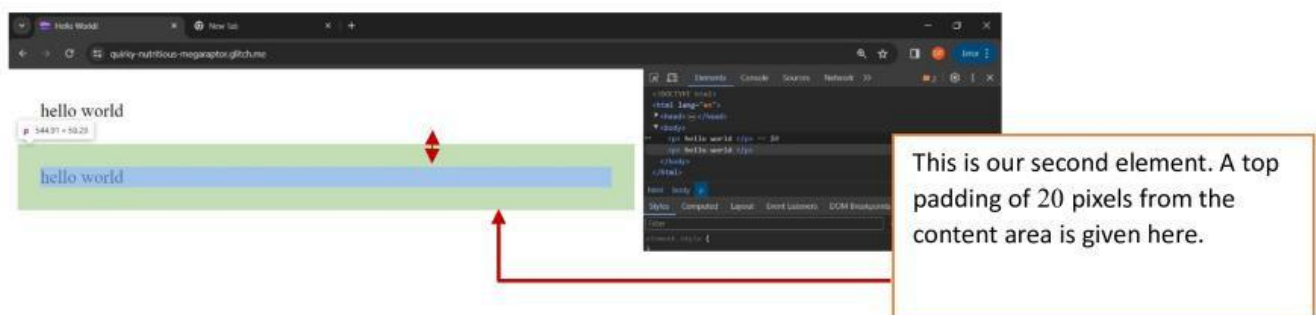
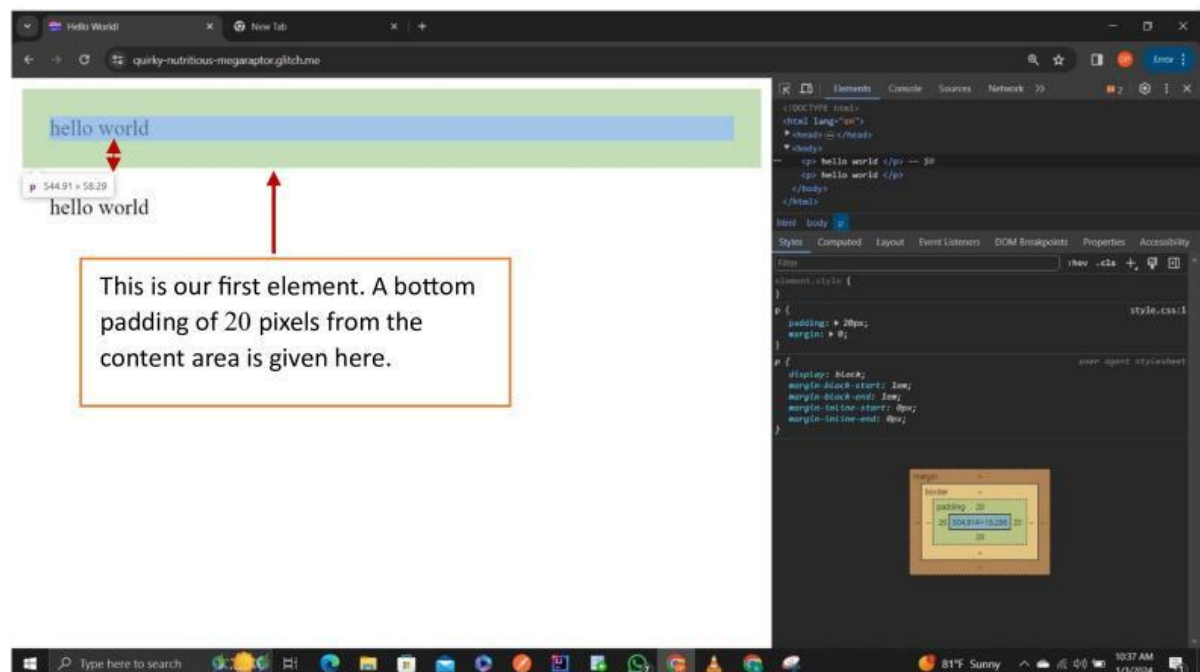


❖ Often, many people confuse padding and margin when using it.

❖ Now let's try using two paragraph elements.

```
18 <body>
19   <p>
20     hello world
21   </p>
22   <p>
23     hello world
24   </p>
25 </body>
```

```
p{
  padding: 20px;
  margin: 0;
}
```



- ❖ Accordingly, there is a space of 40 pixels between the two elements.
- ❖ Now let's change the given CSS as below.

```
p{
  margin: 20px;
  padding: 0;
}
```



You can see that the space between the two elements has decreased. This is known as margin collapsing. When two elements are next to each other, the margins of the two elements become a single margin.

The Margin property should be used to separate elements.

The Padding property should be used to place a space between the content area and the border in an element.

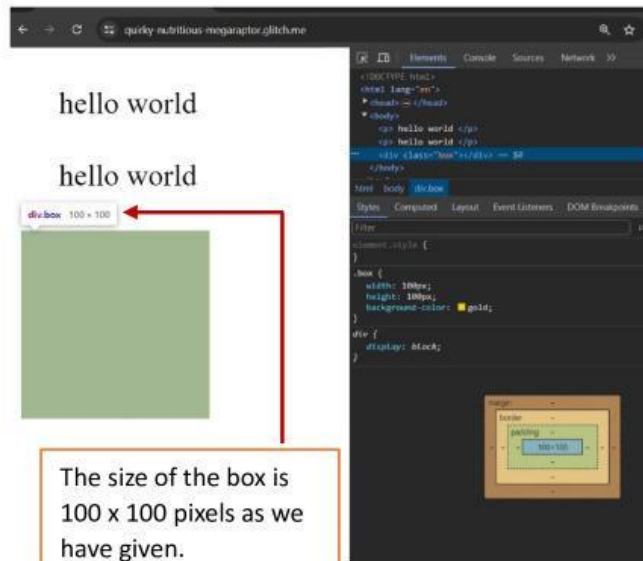
As above is the correct way to have space between elements.

Sizing Elements

- ❖ Let's code as below and create a box.

```
<body>
  <p>
    hello world
  </p>
  <p>
    hello world|
  </p>
  <div class="box"></div>
</body>
```

```
6~ .box{
7   width: 100px;
8   height: 100px;
9   background-color: gold;
10 }
```

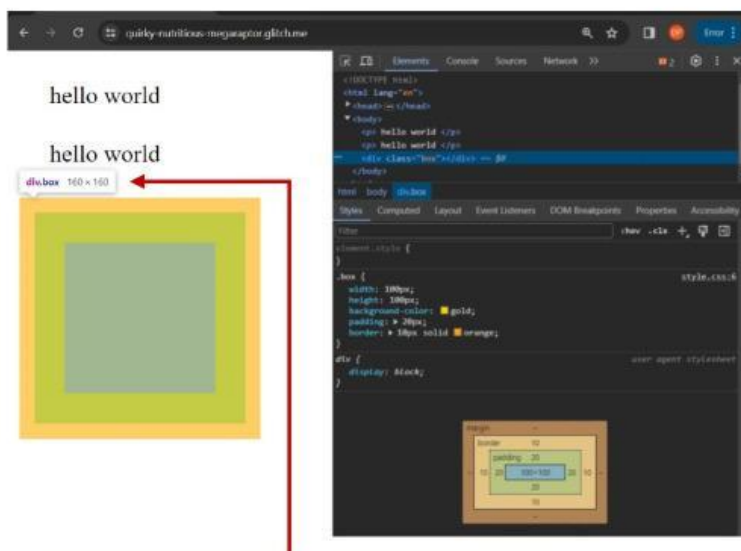


You can see the size of the box by placing the mouse on the div box class.

The size of the box is 100 x 100 pixels as we have given.

❖ Now let's give a border and padding for that box.

```
6 ~ .box{
7   width: 100px;
8   height: 100px;
9   background-color: gold;
10  padding: 20px;
11  border: 10px solid orange;
12 }
```



When the border and padding are added, the size of the box has increased.

By default, the width and height are added for the content box.

Padding has increased by 20 pixels and border by 10 pixels. Then the size of the box has increased.

The Margin element does not affect the size of the box. Margin is used to create space between two elements.

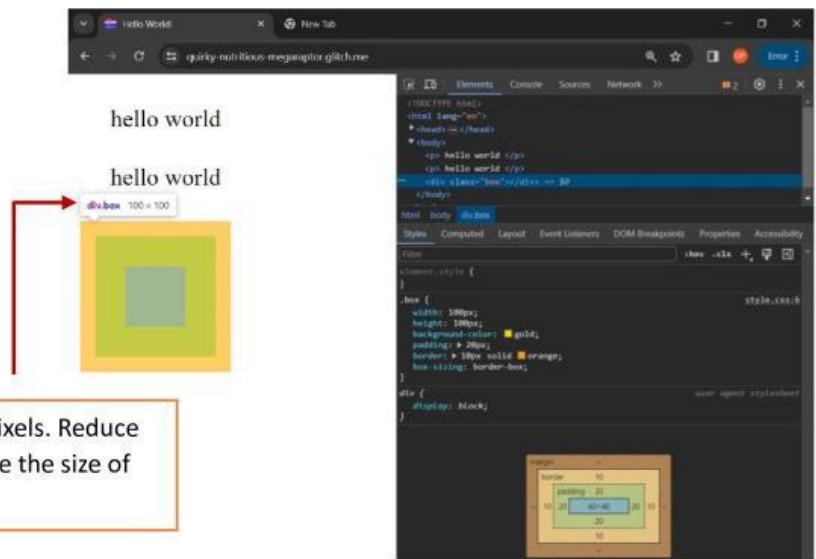
Now the size of the box is 160 x 160 pixels.

- ❖ To prevent the size of the box from changing as above, use the following css.

```

6  .box{
7    width: 100px;
8    height: 100px;
9    background-color: gold;
10   padding: 20px;
11   border: 10px solid orange;
12   box-sizing: border-box;
13 }

```



Then the size of the box is 100 x 100 pixels. Reduce the size of the content area and change the size of the box to the size we have given.

- ❖ We can provide this box-sizing css as a universal selector. Then there is no need to use this css repeatedly.

```

1  *{
2    box-sizing: border-box;
3  }
4

```

- ❖ But this css does not apply to pseudo element. Prepare the code as follows to apply for pseudo element.

```

1  *,
2  *::before,
3  *::after{
4    box-sizing: border-box;
5  }
6

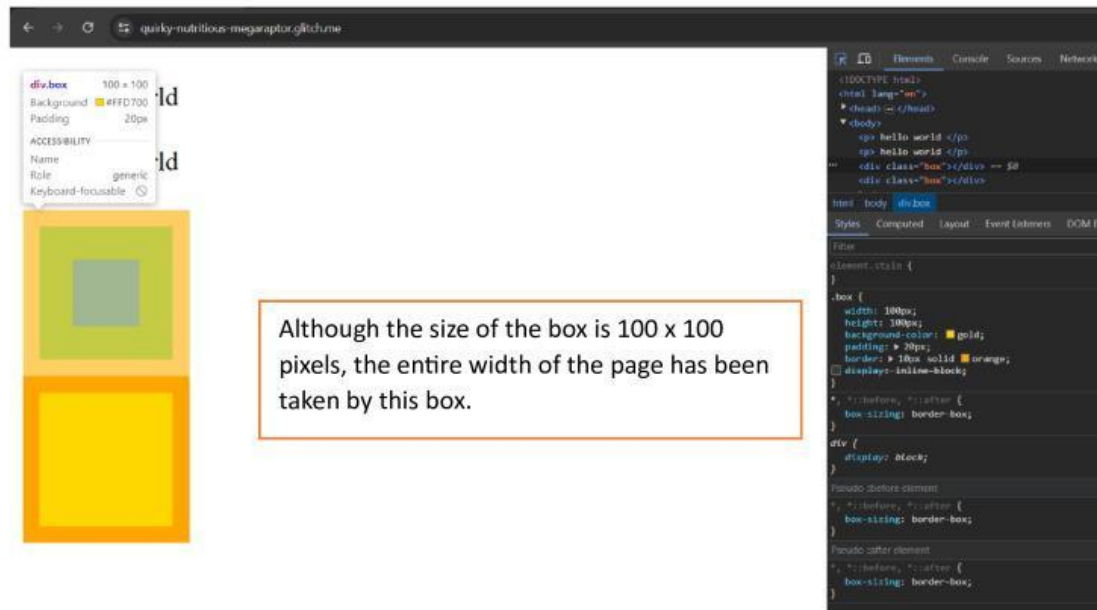
```

- ❖ Add another box to the page.

```

25  <div class="box"></div>
26  <div class="box"></div>
27

```

❖ To display the two boxes in the same row, code as follows.

