

Course Name: **O Level (1<sup>st</sup>Sem)**Subject **Web Designing & Publishing (WDP)**Topic: **CSS – Positioning Properties (Part 15)**Date: **18-May-2020**

## CSS – Positioning

 CSS **positioning** properties are used how to position the HTML elements on the web page. The **position** property is used for this and it can have following value:

- static**
- relative**
- absolute**
- sticky**
- fixed**

Now **left**, **right**, **top**, **bottom** properties are used to set the position of element on the web page after setting the value of **position** (except for **static**).

### **position: static**

The element will be positioned according to the normal flow of the webpage. This is default value of position; it means that if the position value for any element is not set, then it will be static. The left, right, top, bottom properties have no effect in this position.

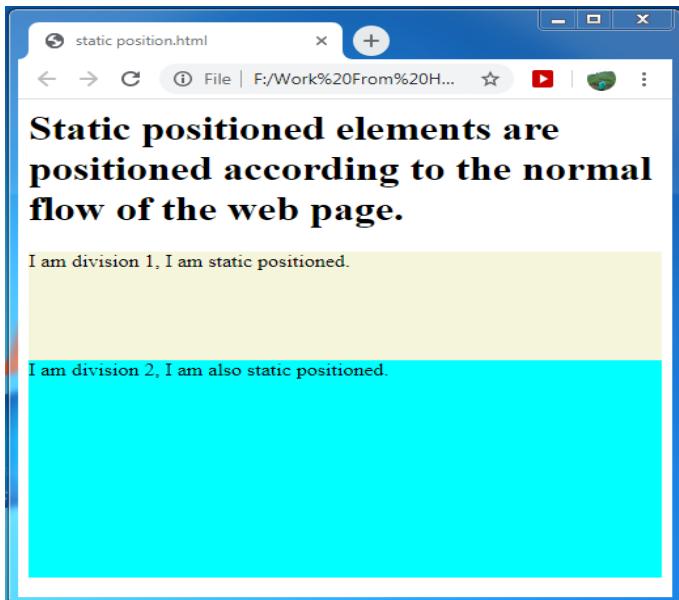
```
div{
  position: static;
  height:100px;
  width:200px;
}
```

```
div{
  height:100px;
  width:200px;
}
```

**Note:** Above both declarations of CSS properties for div tag are same. Position is set to static by default.

**Example - Static**

```
<html>
<head>
  <style>
    #box1{
      background-color: beige;
      height:100px;
    }
    #box2{
      background-color: cyan;
      height:200px;
      position: static;
    }
  </style>
</head>
<body>
<h1> Static positioned elements are positioned according to the normal flow of the web page.</h1>
<div id="box1"> I am division 1, I am static positioned.</div>
<div id="box2">I am division 2, I am also static positioned.</div></body>
</html>
```

**Output - Static**
+ **position: relative**

The element will be positioned relative to its normal position in the webpage. The left, right, top, bottom properties are used then to set its location on the webpage. The gap (space) created due to this adjustment (setting value of left, right, top, bottom) will not be fit or fill by any other element.

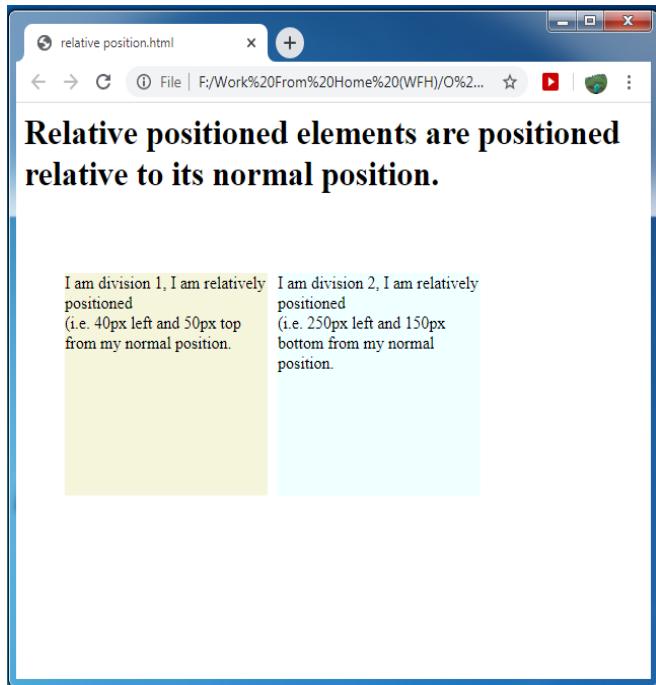
```
div{
  position: relative;
  height:100px;
  width:200px;
  top:30px;
  left:50px;
}
```

## Example - Relative

```

<html>
<head>
  <style>
    #box1{
      background-color:beige;
      position: relative;
      left:40px;
      top:50px;
      width:200px;
      height:200px
    }
    #box2{
      background-color:azure;
      position: relative;
      left:250px;
      bottom:150px;
      width:200px;
      height:200px;
    }
  </style>
</head>
<body>
  <h1> Relative positioned elements are positioned relative to its normal position. </h1>
  <div id="box1"> I am division 1, I am relatively positioned <br>(i.e. 40px left and 50px top from my normal position.</div>
  <div id="box2"> I am division 2, I am relatively positioned <br>(i.e. 250px left and 150px bottom from my normal position.</div>
</body>
</html>
  
```

## Output - Relative



## position: absolute

The element will be positioned relative to its closest positioned ancestor (parent). The left, right, top, bottom properties are used to set the location of the element relative to the closest positioned ancestor. No space (gap) is created due to this adjustment (setting value of left, right, top, and bottom).

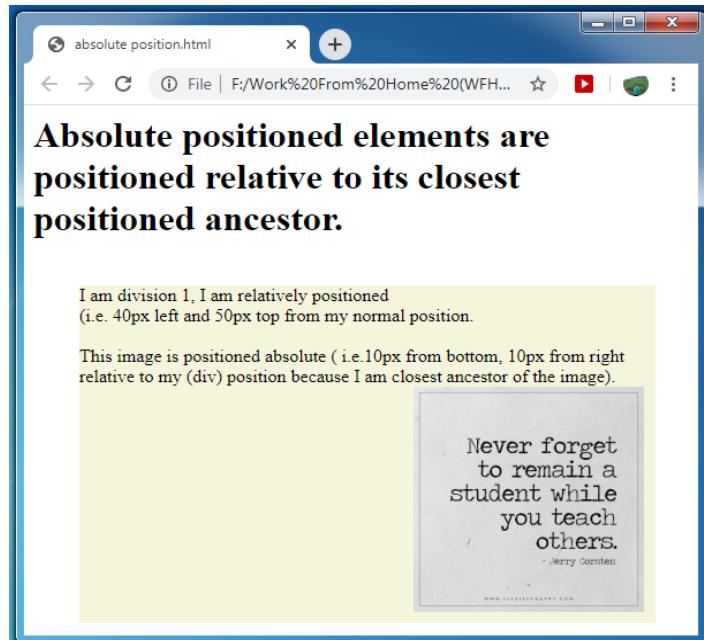
```
div{
position: absolute;
height:100px;
width:200px;
right:10px;
bottom:10px;
}
```

## Example - Absolute

```
<html>
<head>
<style>
#box1 {
background-color:beige;
position: relative;
left:40px;
top:20px;
width:500px;
height:300px
}
img{
position: absolute;
height:200px;
width:200px;
right:10px;
bottom:10px;
}
</style></head>
<body>
<h1> Absolute positioned elements are positioned relative to its closest positioned ancestor.</h1>
<div id="box1"> I am division 1, I am relatively positioned <br>(i.e. 40px left and 50px top from my normal position.
<br><br> This image is positioned absolute ( i.e.10px from bottom, 10px from right relative to my (div) position because I am closest ancestor of the image).

</div></body></html>
```

## Output - Absolute



## position: fixed

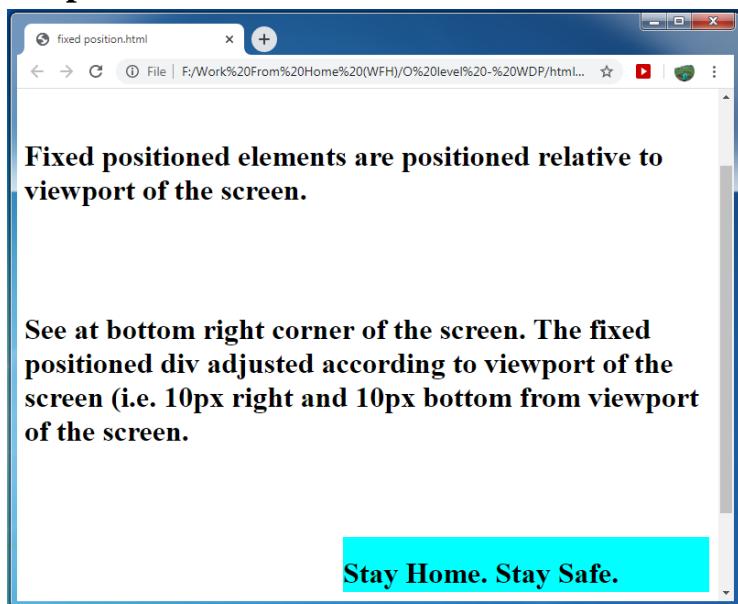
The element will be positioned relative to viewport of the screen. The left, right, top, bottom properties are used to set the location of the element according to viewport of the screen. No space (gap) is created due to this adjustment (setting value of left, right, top, and bottom). Even if the page scrolls, fixed element always stays at same place.

```
div{
  position: fixed;
  height:50px;
  width:200px;
  right:10px;
  bottom:10px;
}
```

### Example - Fixed

```
<html>
<head>
<style>
div{
background-color: aqua;
position: fixed;
height:60px;
width:400px;
right:10px;
bottom:10px;
}
</style></head>
<body>
<br><br><br><br><br><br>
<h1> Fixed positioned elements are
positioned relative to viewport of the
screen.</h1>
<br> <br> <br> <br><h1>See at bottom
right corner of the screen. The fixed
positioned div adjusted according to
viewport of the screen (i.e. 10px right and
10px bottom from viewport of the
screen.</h1>
```

### Output - Fixed



```
<br><br><br><br><br><br>
<br><br><br><br><br><br><br>
<div><h1>Stay Home. Stay Safe.</h1>
</div> </body> </html>
```

## position: sticky

This position value works like as a mixture of **relative** and **fixed**. The element will be positioned relative to viewport of the screen. It behaves like relative position before the page scrolls and then sticks on the page based on the value of top, left, right and bottom.

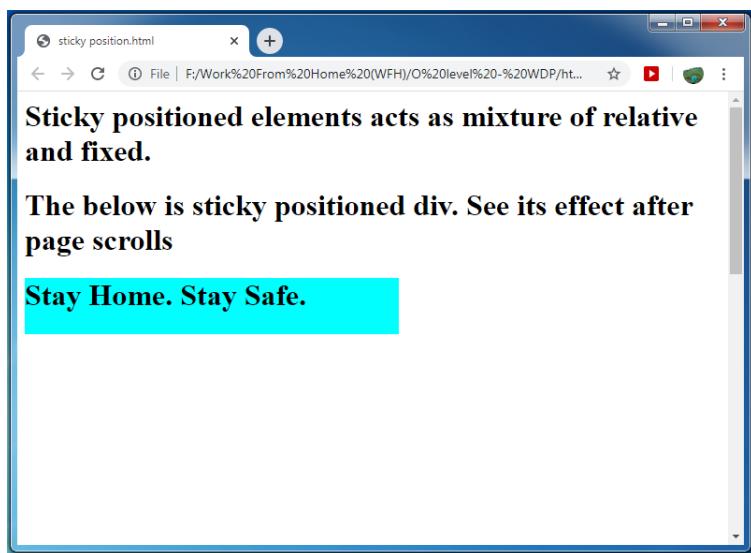
```
div{
  position: sticky;
  height:60px;
  width:400px;
  left: 0;
  top: 0;
}
```

### Example - Sticky

```
<html>
<head>
<style>
div{
background-color:aqua;
position:sticky;
height:60px;
width:400px;
left:0px;
top:0px;
}
</style></head>
<body>
<h1> Sticky positioned elements acts as mixture of relative and fixed.</h1>
<h1>The below is sticky positioned div. See its effect after page scrolls</h1>
<div><h1>Stay Home. Stay Safe.</h1>
</div>
```

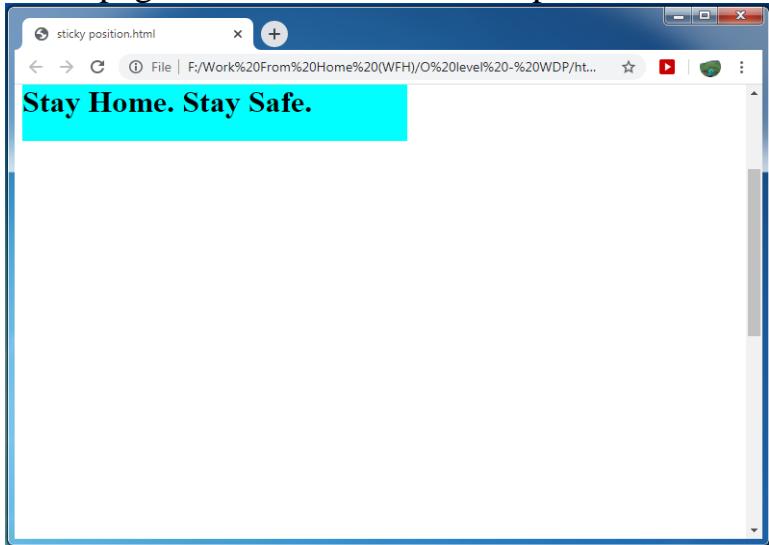
### Output - Sticky

Firstly, it behaves like relative position,



```
<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br><br></body>
</html>
```

When page scrolls it behaves fixed position:



### Exercise:

1. What are CSS positioning properties?
2. Explain about sticky position with an example.

