CSS Positioning

Topics Covered:

- Block level elements.
- CSS position property.
- Possible values of Position property.
- Z-index.

Topics in Detail:

Block level elements:

- Block level elements create a full width of their parent elements, and they prevent other elements from appearing in the same horizontal line.
- Block level elements take up their own line of space and do not overlap with each other.
- The default position of the block level elements is to appear on the left side of the browser.

- The default position of an element can be changed by using ***position*** property.

CSS Position Property:

- The CSS ***position*** property is used to set position for an element.
- The CSS ***position*** property is also used to place an element behind another and also useful for scripted animation effects.
- The CSS ***position*** property can take following possible values:
    - static.
    - relative.
    - absolute.
    - fixed.
    - sticky.

Possible values of Position property:

Position: Static;

- The default value of the CSS ***position*** property is ***static***.
- HTML elements are positioned ***static*** by default.
- An element with ***position: static;*** is not positioned in any special way.
- It is not affected by top, right, left, bottom properties.

Position: Relative;

- The relative ***position*** property is used to set the element relative to its normal position.
- Example:

```
.green-box {
  background-color: green;
  position: relative;
}
```

- The code in the above example instructs the browser to place the ***.green-box*** element in relative position.
- But it does not specify where the .green-box element should be positioned. This can be done by accompanying the position declaration with any one of the following offset properties.
    - top - moves the element down from the top.
    - bottom - moves the element up from the bottom.
    - left - moves the element away from the left to right side.
    - right - moves the element away from the right to left side.
- The values of the offset properties can be in pixels, ems, percentages,...
- Example:

```
.green-box {
  background-color: green;
  position: relative;
  top: 50px;
  left: 120px;
}
```

- Before and after applying relative position and offset values:

- Offsetting the relative property will not affect the positioning of other elements.

Position: Absolute;

- When an element's ***position*** is set to absolute, all other elements on the page will ignore the element and act like it is not present on the page.
- The element will be positioned relative to its closest positioned parent element, while offset properties can be used to determine the final position from there.
- Example:

```
header {
  background-color: #466995;
  border-bottom: 1px solid #466995;
  position: absolute;
  width: 100%;
}
```

Position: Fixed;

- When the element ***position*** is set to absolute, the element will scroll when the user scrolls the document.
- We can fix an element to a specific position on the page (regardless of user scrolling) by setting its position to fixed, and accompanying it with the familiar offset properties top, bottom, left, and right.
- Example:

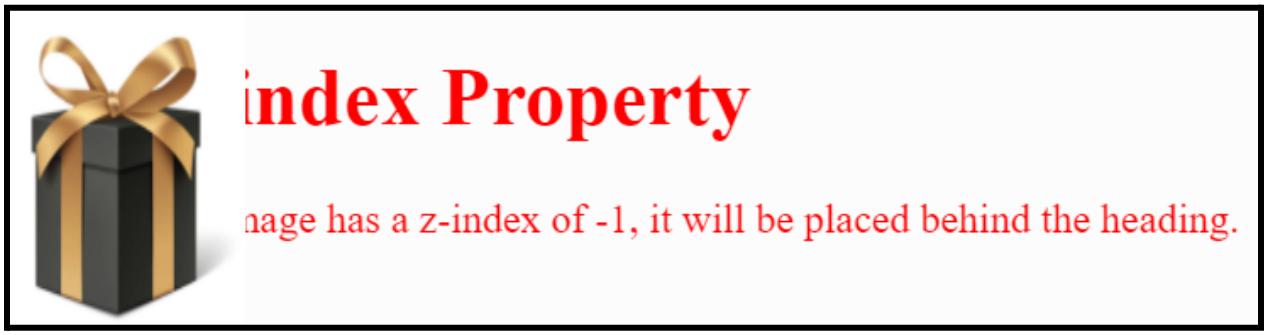
```
header {
  background-color: #466995;
  border-bottom: 1px solid #466995;
  position: fixed;
  width: 100%;
}
```

Position: Sticky;

- The sticky value is another ***position*** value that keeps an element in the document flow as the user scrolls, but ***sticks*** to a specified position as the page is scrolled further.
- This is done by using the sticky value along with the familiar offset properties, as well as one new one.
- A sticky element toggles between relative and fixed, depending on the scroll position. It is positioned relative until a given offset position is met in the viewport - then it "sticks" in place (like position:fixed).

Z-index:

- When elements on a web page have combinations of different positions, their contents can overlap, making the content difficult to read.
- Example:



- The z-index property specifies the stack order of an element. z-index only works on positioned elements.
- The z-index property accepts integer values. Depending on their values, the integers instruct the browser on the order in which elements should be layered on the web page.