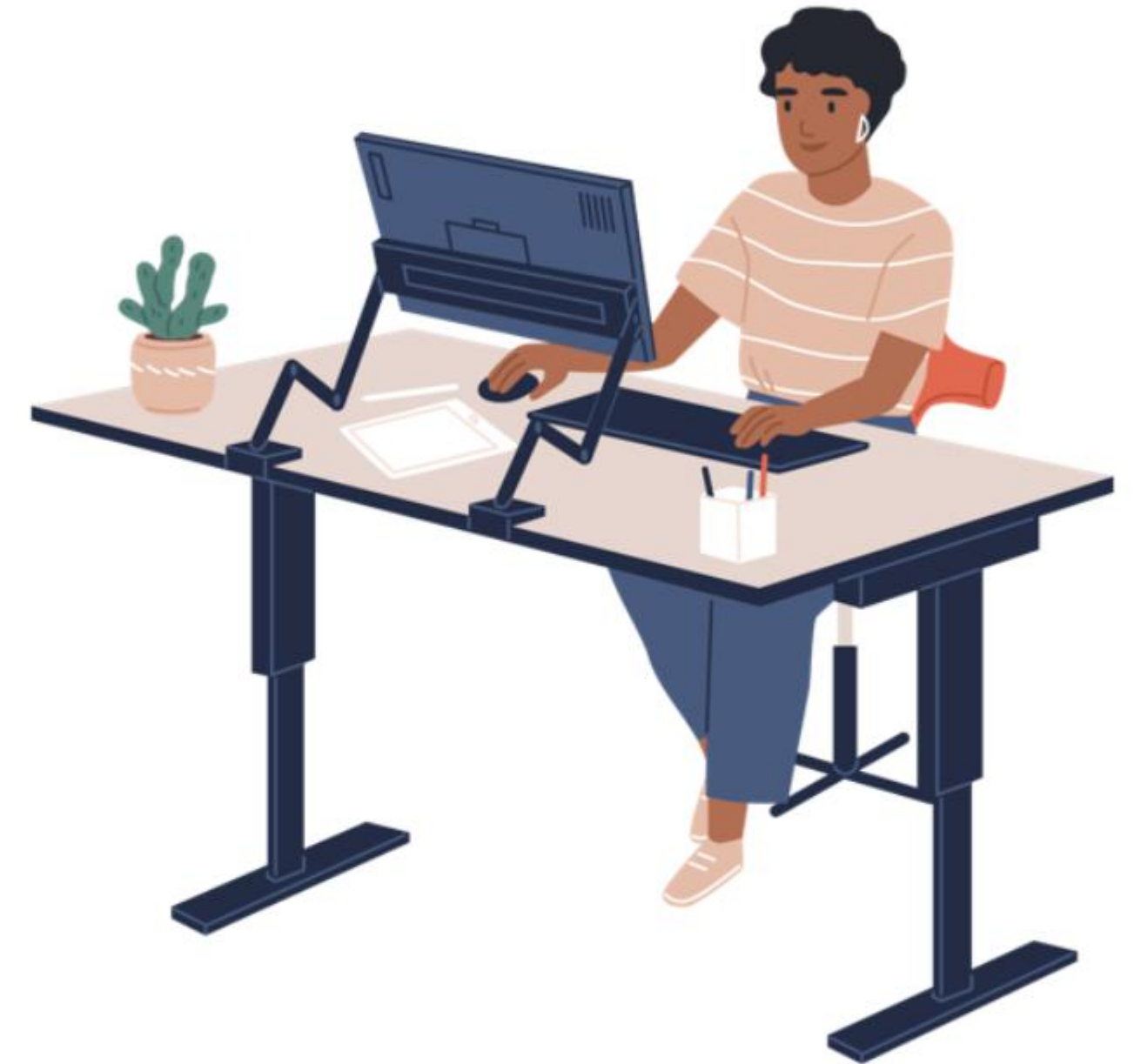


Learning Consolidation Structure a Web Page Using CSS Floats





In this sprint, you learned to:

- Explain normal document flow
- Create multiple column layouts using floats
- Describe the relative and absolute positioning of CSS
- Use z-index and stack order to change the rendering order of HTML elements
- Make use of flexbox to create multiple column layouts

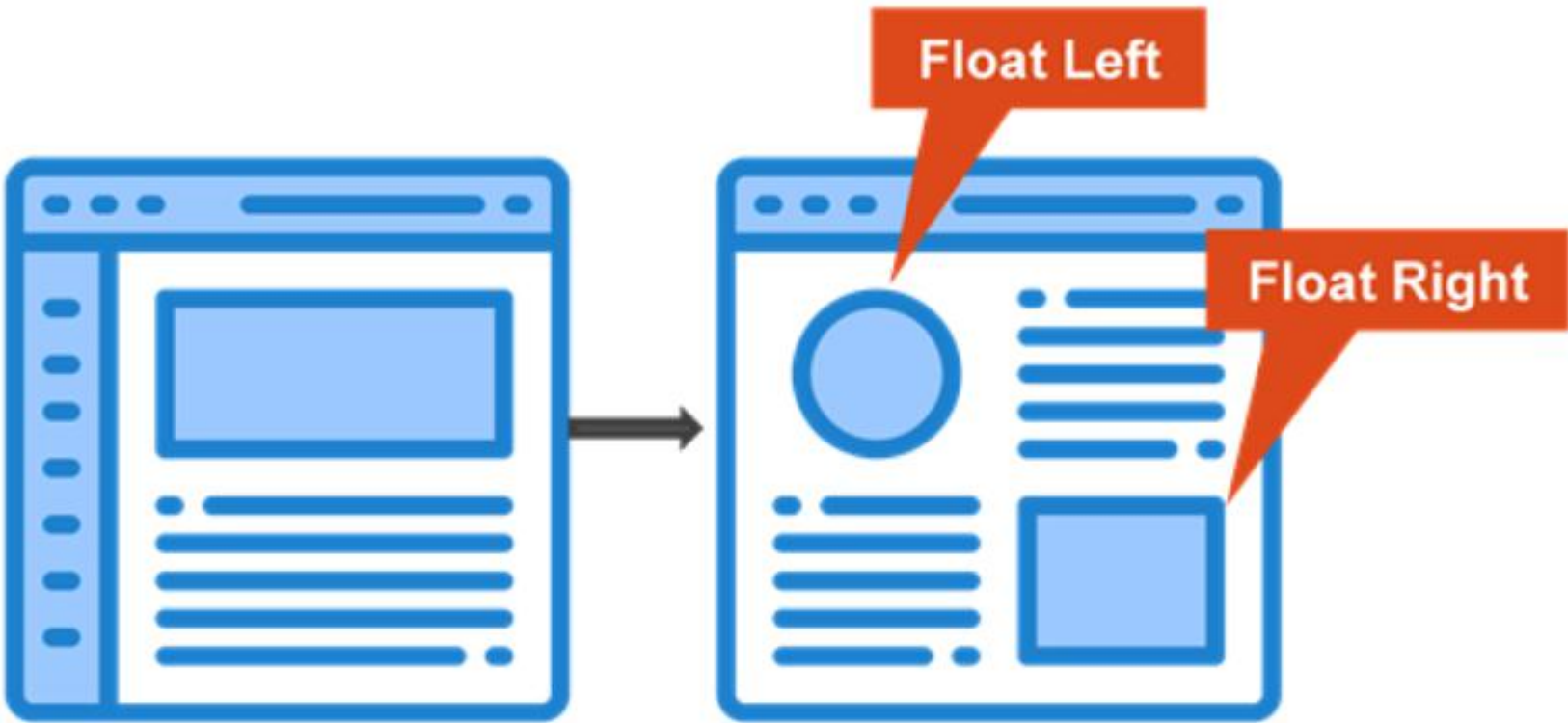
The `float` property was created to let web developers implement simple layouts involving an image floating inside a column of text, with the text wrapping around the left or right of it. This is similar to what you might get in a newspaper layout.

But web developers quickly realized that you could float anything, not just images. So, they use float broadened, for example, to create fun layout effects such as drop-caps.

Why Was CSS Floats Introduced?

CSS `float` property was introduced to implement simple layouts by having an image floating inside the column of a text, along with the text wrapping around the right or left of it.

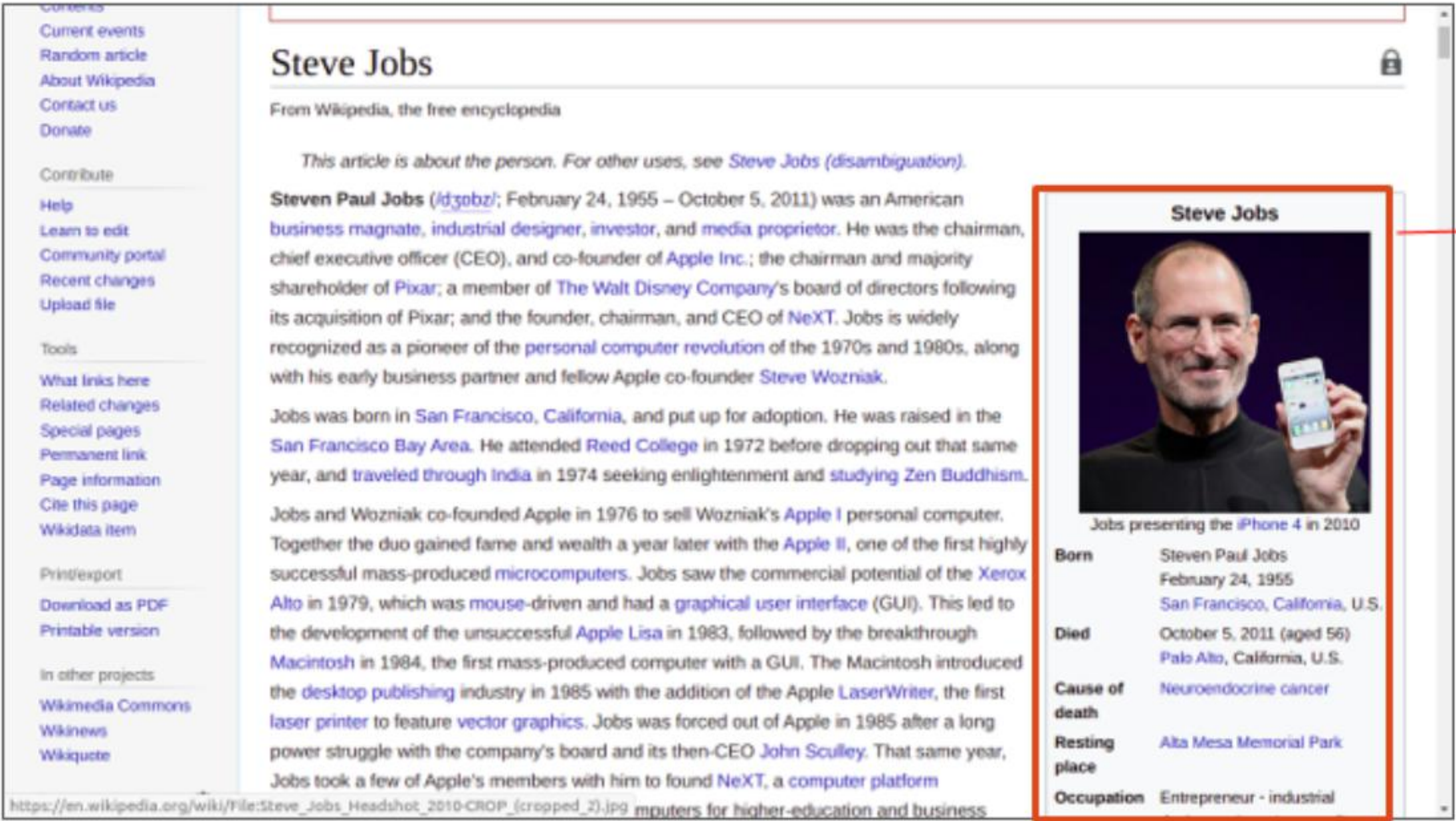
The use of float is extended to create layout effects such as drop-caps.



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CSS Float Used in Wikipedia Page



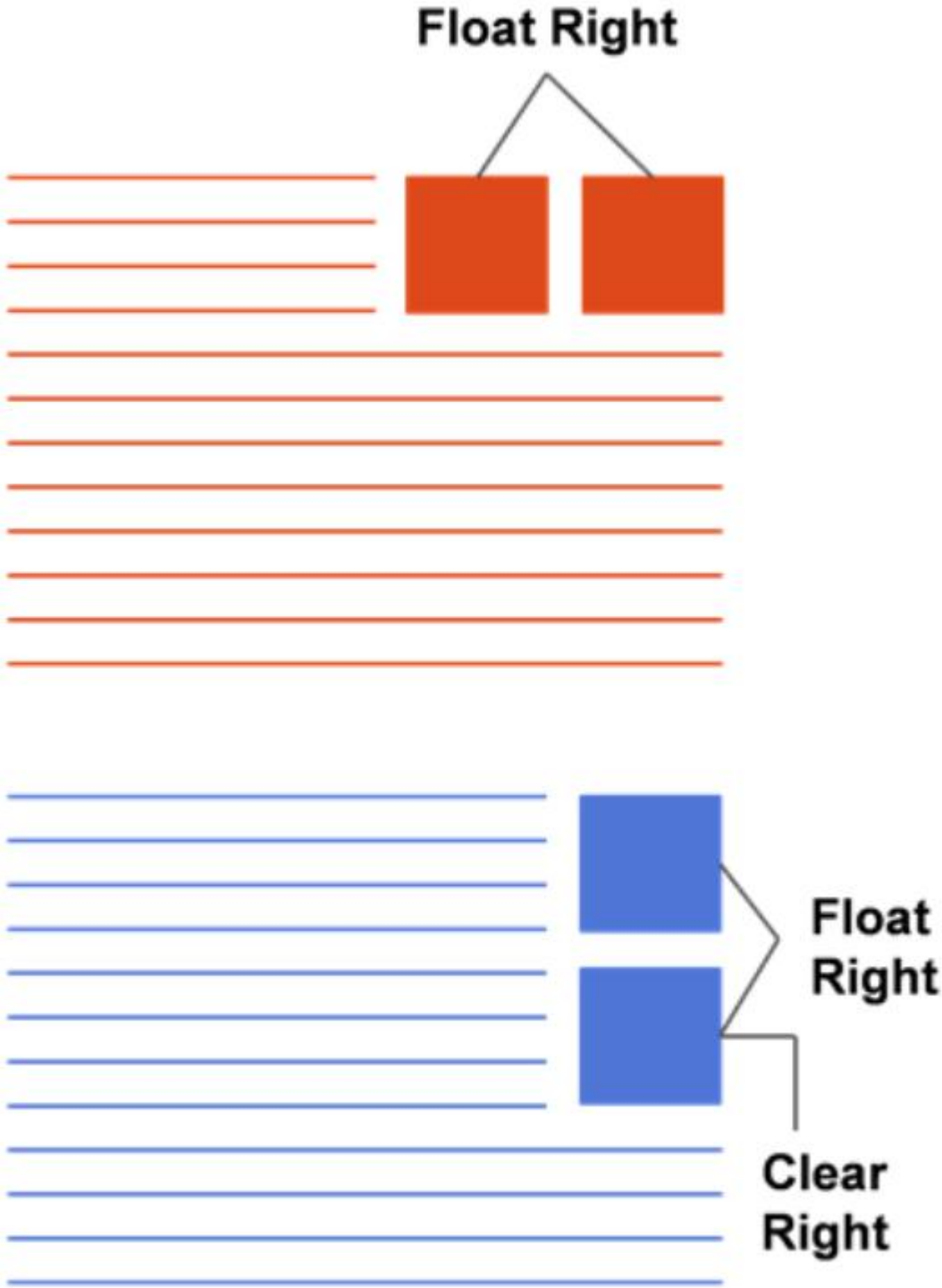
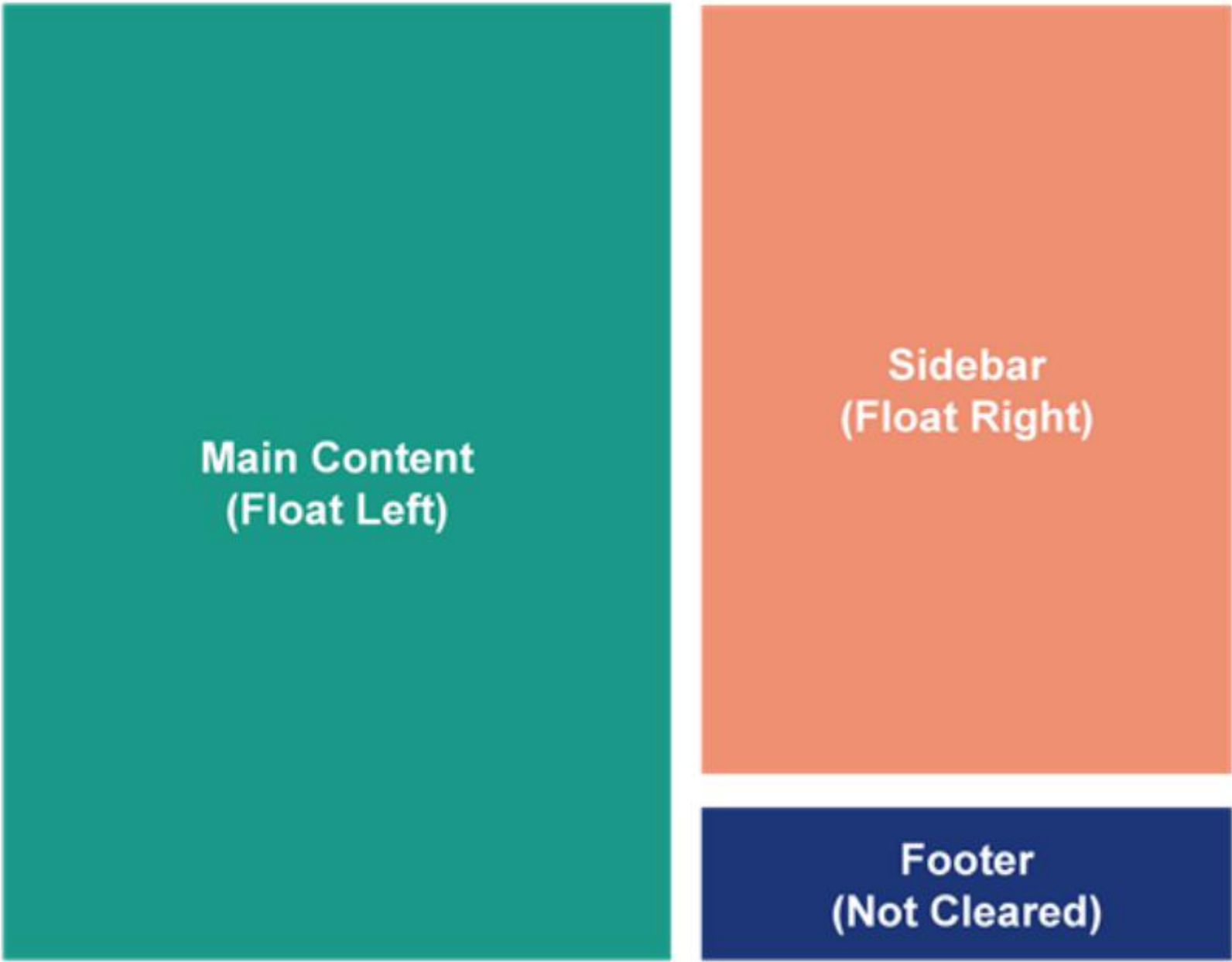
Float Right

Source: CSS Solid

The Float element is taken out of the normal layout flow of the document and stuck to the left-hand side of its parent container (when CSS value is given as **left** for the float property)

Clearing floats – Clear property can be used to stop the following element from moving up.

Float and Clear Float



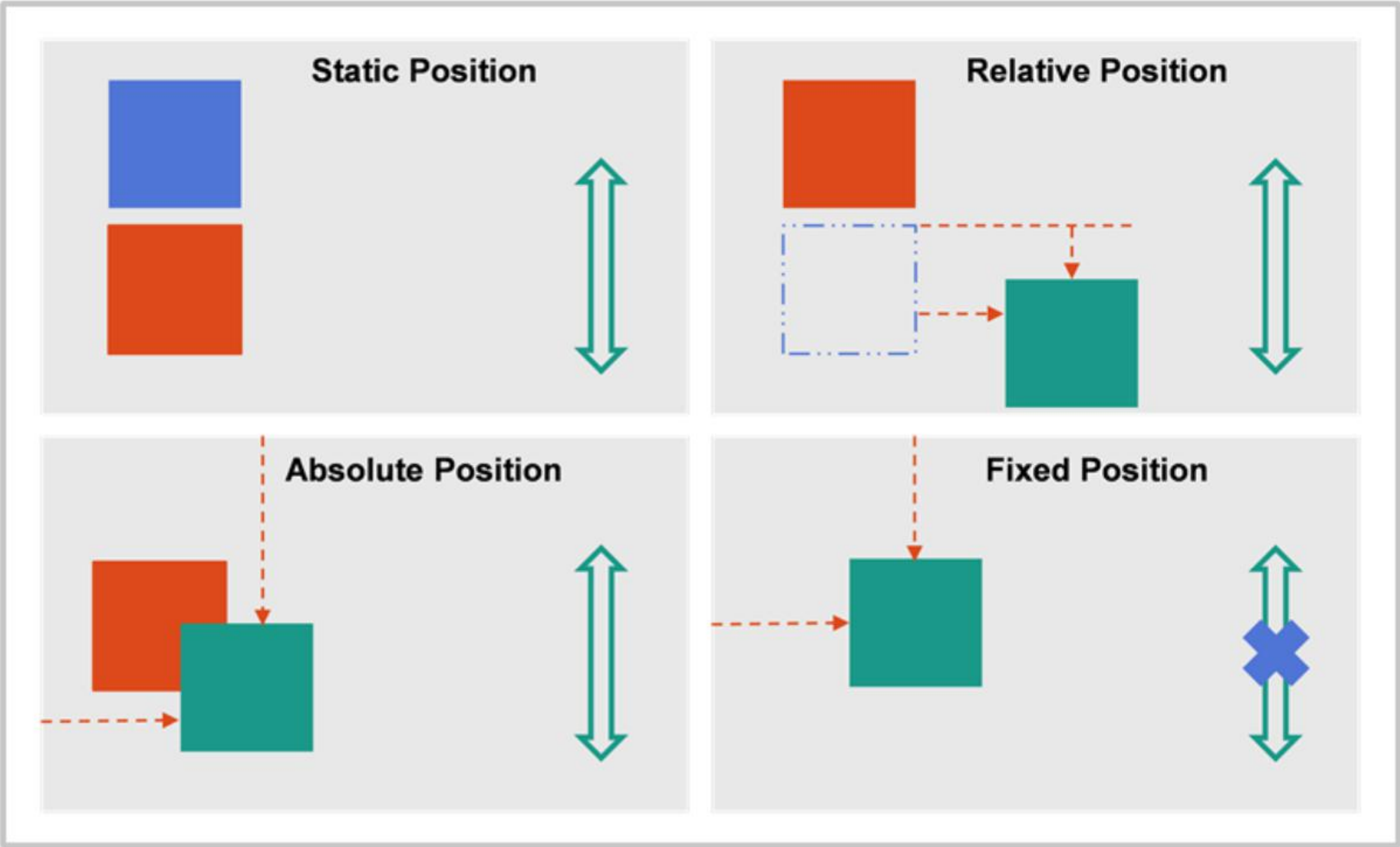
Static: This is the default position that every element gets. It means, the element is positioned according to the normal flow of the page.

Absolute: The element is positioned relative to the nearest positioned ancestor. If it has no positioned ancestor, it uses the document body and moves along with page scrolling. They are removed from the normal flow and can overlap elements. Example: Caption on top of an image

Relative: This is similar to Static positioning, but once the positioned element has taken its place, the final position, including the overlap feature, can be modified.

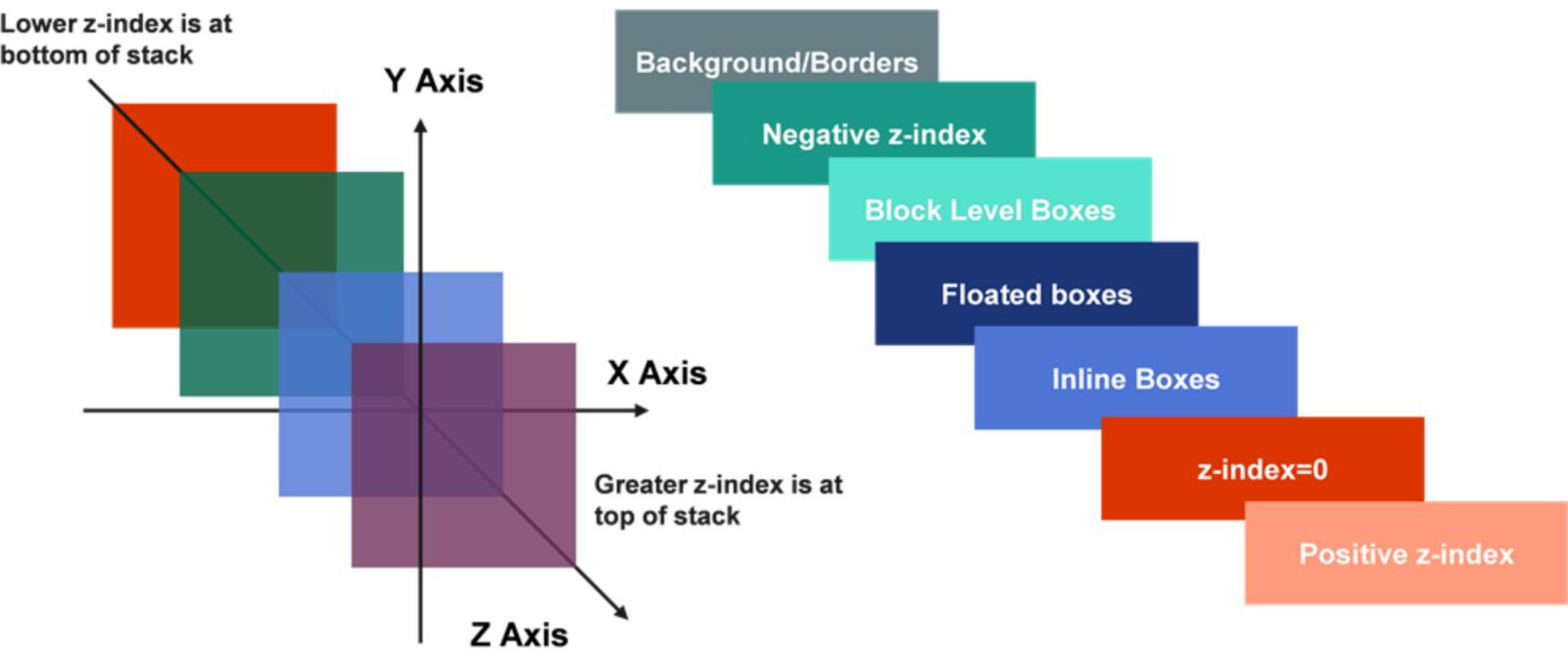
Fixed: Usually fixes an element in place relative to the visible portion of the viewport, so it always stays in the same place even while scrolling. The element is removed from the normal document flow, and no space is created for the element in the page layout. Example: Fixed Header

CSS Positions



z-index and Stack Order

We can change the stack order of an element using z-index property.



Flexbox

Sample flexbox example

Flexbox

Flexbox is a one-dimensional layout method for arranging items in rows or columns. Items flex (expand) to fill additional space or shrink to fit into smaller spaces..

Why Flexbox?

For a long time, the only reliable cross-browser compatible tools available for creating CSS layouts were features like floats and positioning. These work, but in some ways they're also limiting and frustrating. Some of the simple layout designs are either difficult or impossible to achieve with such tools. Flexbox makes a lot of layout tasks much easier.

How Flexbox Works?

To start with, we need to select which elements are to be laid out as flexible boxes. To do this, we set a special value of display on the parent element of the elements you want to affect.

The element we've given a display value of flex to is acting like a block-level element in terms of how it interacts with the rest of the page, but its children are laid out as flex items. The next section will explain in more detail what this means. Note also that you can use a display value of inline-flex if you wish to lay out an element's children as flex items, but have that element behave like an inline element.

Useful Tips

- A float property does not work if the elements have **display: none;** property set.
- You should always set a width on floated items, otherwise, the results can be unpredictable.
- If the float property has inherit value, the element receives the float value from its parent.
- There is nothing like **float: center;** to make an element float to the center. However, we can achieve this by inputting `display: flex;` and `justify-content: center.`
- Adding a hidden element after the parent element method of `.clearfix` is preferred over setting the **overflow: auto;** method.

Self-Check

Have you ever noticed when you add margins to an element, the expected space does not occur?



Self-Check: Solution

Have you ever noticed when you add margins to an element, the expected space does not occur?

Correct Answer: It's because of margin collapsing.

Explanation: When two elements have the margin set and the margins touch, the larger of the two remains, and the smaller one disappears.



Self-Check

Which of the following property sets the distance between an element's right border and the rightmost edge of its content?

- a. Auto
- b. Margin-right
- c. Padding-right
- d. Padding-left



Self-Check: Solution

Which of the following property sets the distance between an element's right border and the rightmost edge of its content?

- a. Auto
- b. Margin-right
- c. **Padding-right**
- d. Padding-left

Explanation: Padding is the property that sets the distance between an element border and its content. So, option C is the correct answer.



Self-Check

Which elements don't float even after setting them with the float property?



Self-Check: Solution

Which elements don't float even after setting them with the float property?

Answer: The absolute and fixed positioned elements.

Explanation: Absolute and fixed positioned elements are already taken away from the normal flow of the document.



Self-Check

Is there any other alternative to the clearfix hack?



Self-Check: Solution

Is there any other alternative to the clearfix hack?

Answer: **Yes, you can achieve this by setting the wrapper's overflow property to a value other than the visible.**



Self-Check

- Using floats sometimes break our layout unexpectedly. How can it be solved?
- Is there any instance where we should stop using floats?



Self-Check

- Using floats sometimes break our layout unexpectedly. How it can be solved?
- Is there any instance where we should stop using floats?

Answer: Probably, and when we use responsive design, we should stop using floats.

Now, what is responsive design?

We'll find it out in the next sprint.

