



Day 28

“Web Development + Security”

CSS Object-fit and Object-cover:

What is object-fit?

Object-fit defines how the content (like `` or `<video>`) should be resized to fit its container. It works only on replaced elements (like ``, `<video>`, `<canvas>`).

Syntax:

object-fit: value;

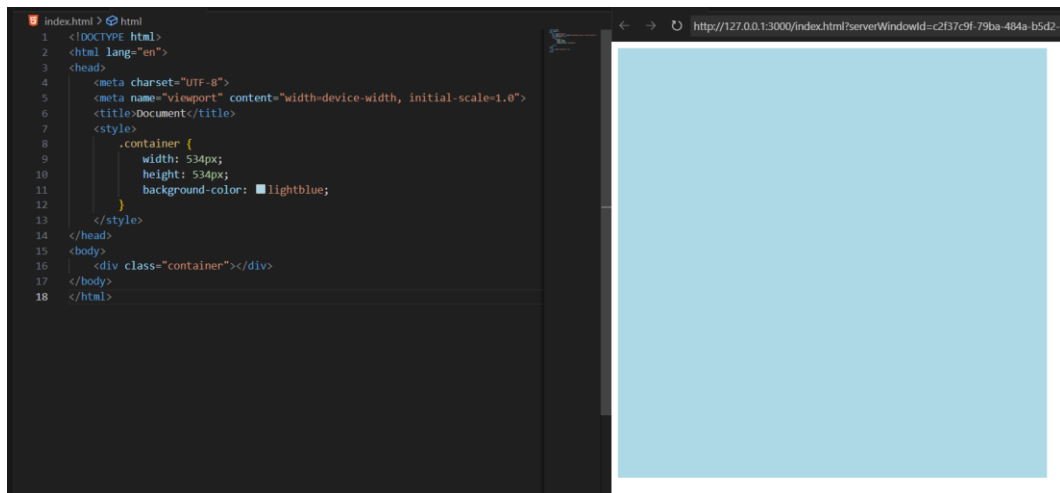
Common values:

Value	Description	Visual Result
fill (default)	Image stretches to fill the box, may get distorted	Image may look squished
contain	Image fits <i>entirely</i> inside container, keeping aspect ratio	May leave empty space
cover	Image fills container, <i>cropping extra parts</i> to maintain aspect ratio	Best for backgrounds, profile pics
none	Image keeps original size	May overflow
scale-down	Like none or contain, whichever is smaller	Auto fit

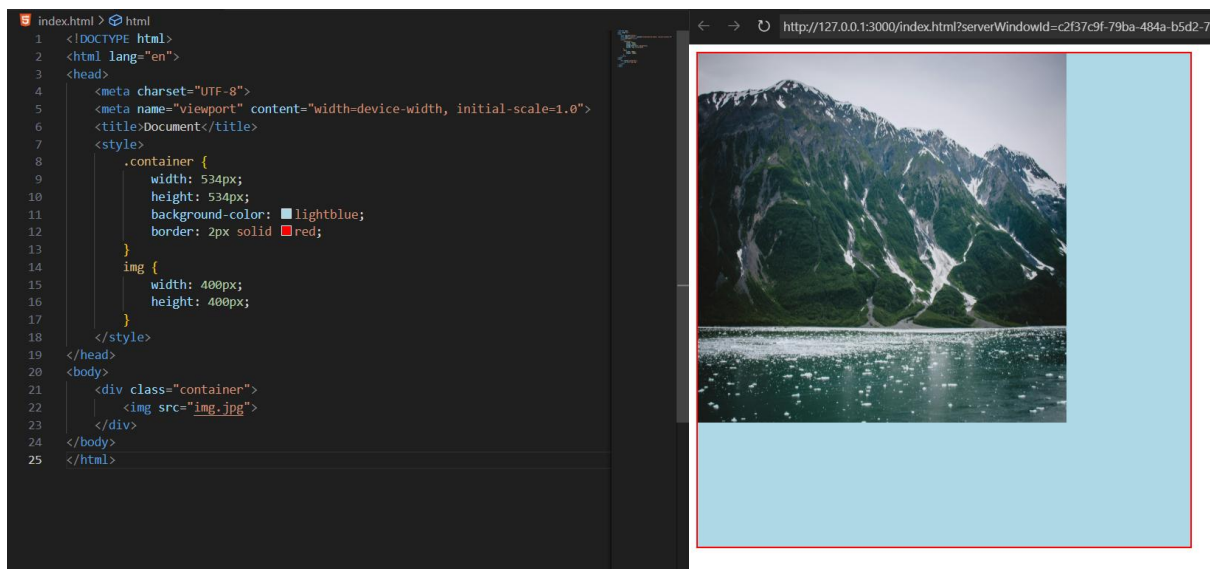
Object-position

Controls which part of the image stays visible (when cropping happens in cover mode).

A very basic example: without these properties

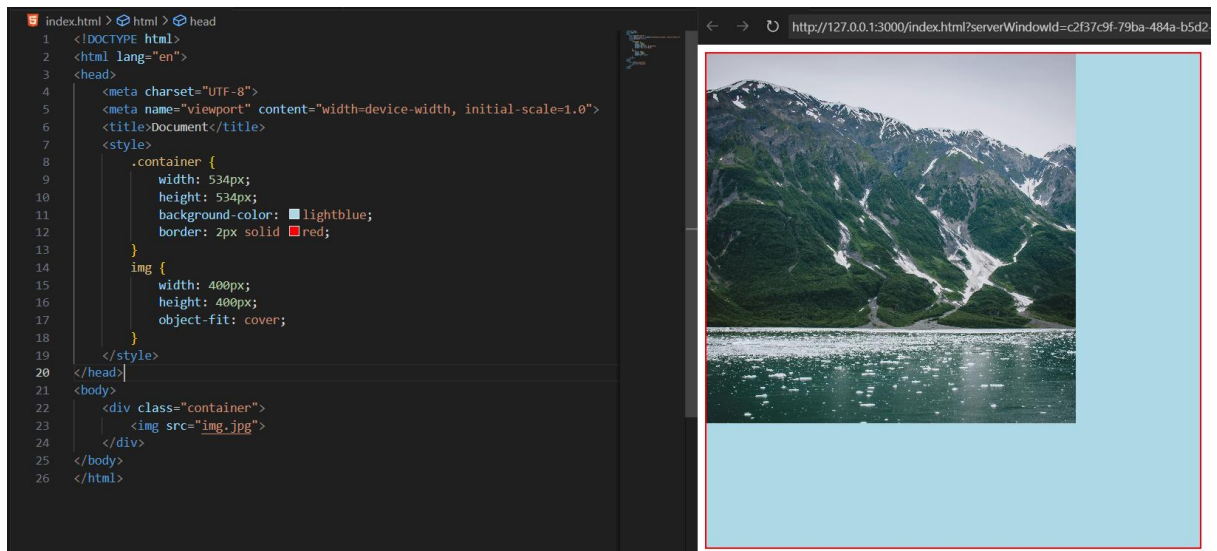


Now, we just add an image to it:

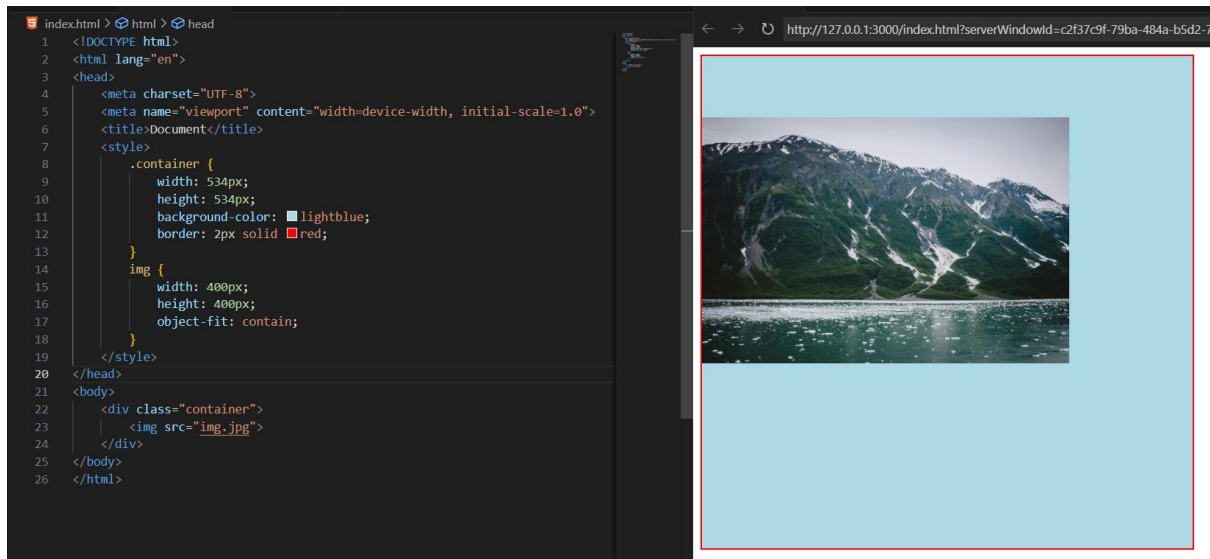


Clearly, we can see that image is not clear, so instead of finding the perfect height and width which we can assign to the image, we can use the object-fit.

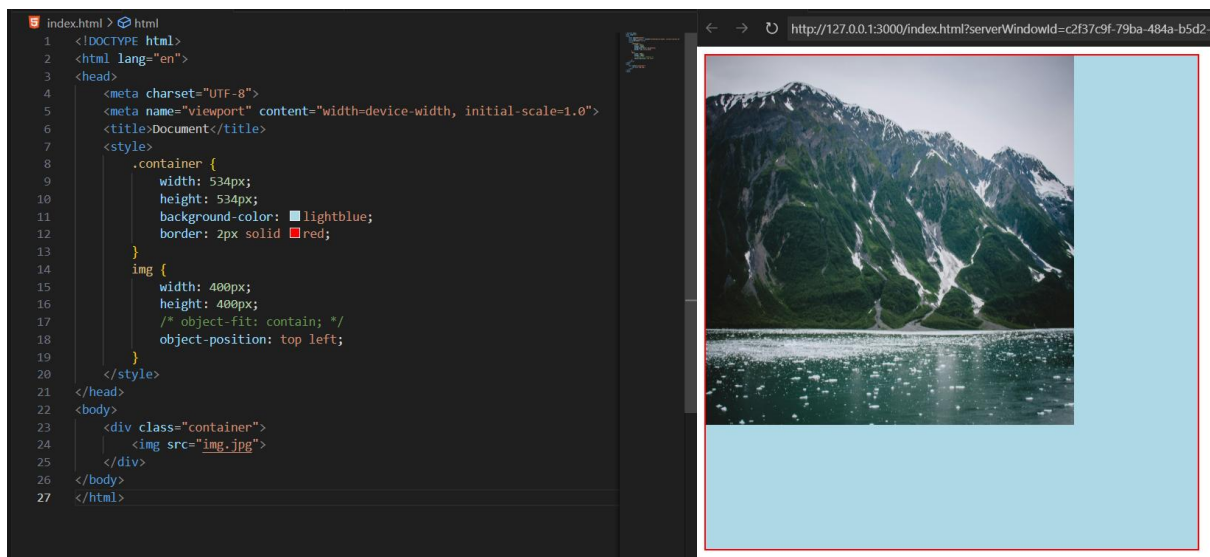
Now, we will use the object-fit:cover, in case we allow the cropping of image in order to full fill the aspect ratio:



Now, we wish that the image should not get cropped, then we will use object-fit: contain, as shown below:



Now, in case we want that a certain position of the image should be shown, then we will use the property called object-position:



CSS Filters:

What is a CSS Filter?

The filter property lets you apply graphical effects to elements, such as blur, brightness, contrast, grayscale, sepia, hue rotation, and more.

You can apply filters to:

-
- <video>
- <div> (with background images)
- Any HTML element

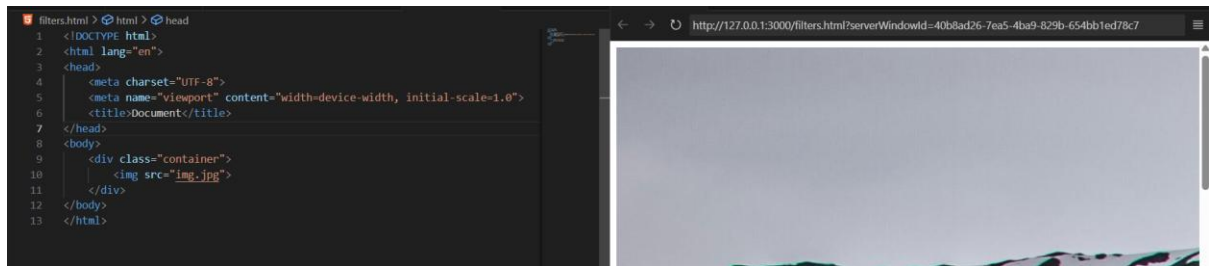
Syntax:

```
selector {  
  filter: filter-type(value);  
}
```

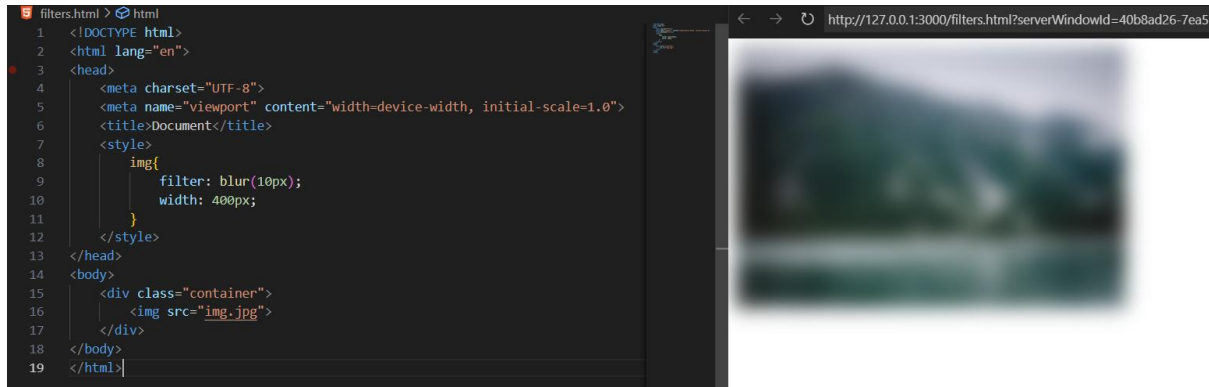
Common filter functions:

Filter	Description	Example
blur(px)	Adds a blur effect	blur(5px)
brightness(%)	Adjusts brightness	brightness(150%)
contrast(%)	Adjusts contrast	contrast(120%)
grayscale(%)	Converts to grayscale	grayscale(100%)
sepia(%)	Adds warm brown tones	sepia(100%)
invert(%)	Inverts colors	invert(100%)
hue-rotate(deg)	Rotates colors on the hue wheel	hue-rotate(90deg)
saturate(%)	Increases/decreases color intensity	saturate(200%)
drop-shadow(x y blur color)	Adds a shadow behind an element	drop-shadow(5px 5px 10px gray)

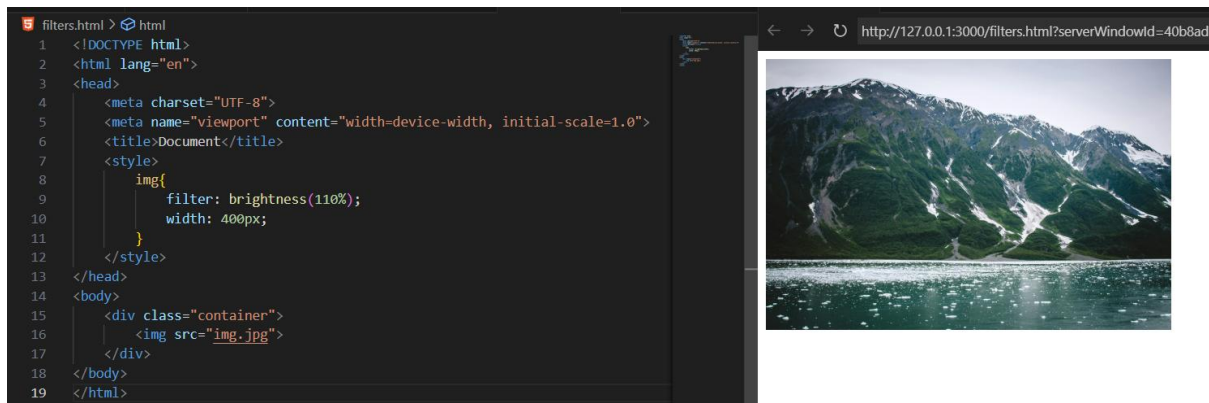
A basic code showing the image: without any filters



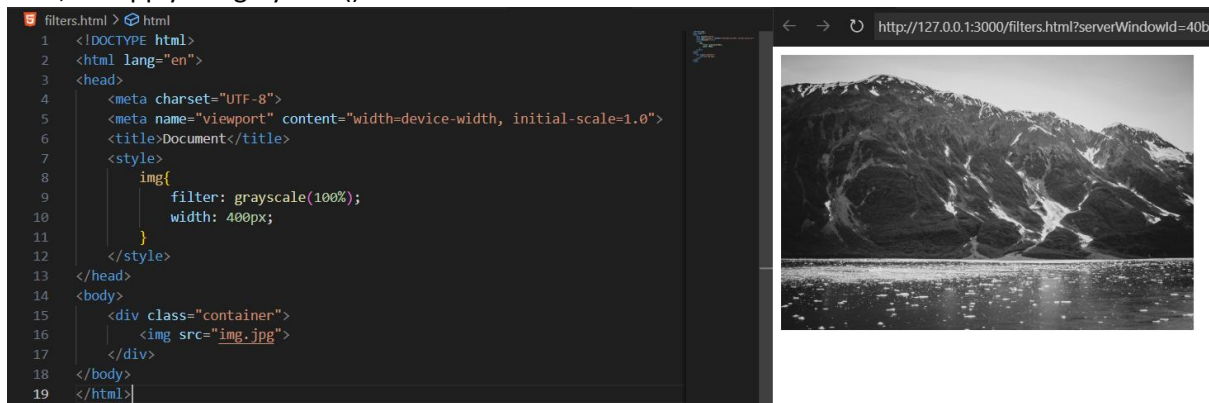
Now, we apply the blur():



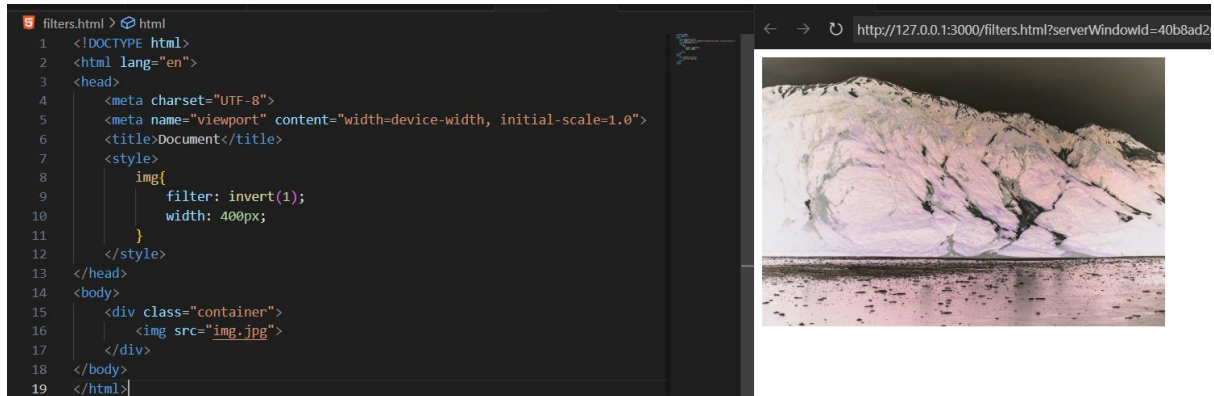
Now, we apply brightness():



Now, we apply the grayscale():



Now, we apply the invert(): 1 gives this, while 0 gives normal.



--The End--