# **CSS Media Queries**

CSS2 Introduced Media Types

The @media rule, introduced in CSS2, made it possible to define different style rules for different media types.

Examples: You could have one set of style rules for computer screens, one for printers, one for handheld devices, one for television-type devices, and so on.

Unfortunately these media types never got a lot of support by devices, other than the print media type.

CSS3 Introduced Media Queries

Media queries in CSS3 extended the CSS2 media types idea: Instead of looking for a type of device, they look at the capability of the device.

Media queries can be used to check many things, such as:

* width and height of the viewport
* width and height of the device
* orientation (is the tablet/phone in landscape or portrait mode?)
* resolution

Using media queries are a popular technique for delivering a tailored style sheet to desktops, laptops, tablets, and mobile phones (such as iPhone and Android phones).

## Further [Clickhere](https://www.w3schools.com/css/css3_mediaqueries.asp)

## CSS Animations

CSS allows animation of HTML elements without using JavaScript or Flash!

the following are animation properties:

* @keyframes
* animation-name
* animation-duration
* animation-delay
* animation-iteration-count
* animation-direction
* animation-timing-function
* animation-fill-mode
* animation

## What are CSS Animations?

An animation lets an element gradually change from one style to another.

You can change as many CSS properties you want, as many times as you want.

To use CSS animation, you must first specify some keyframes for the animation.

Keyframes hold what styles the element will have at certain times.

## The @keyframes Rule

When you specify CSS styles inside the @keyframes rule, the animation will gradually change from the current style to the new style at certain times.

To get an animation to work, you must bind the animation to an element.

The following example binds the "example" animation to the <div> element. The animation will last for 4 seconds, and it will gradually change the background-color of the <div> element from "red" to "yellow":

### **Example**

/\* The animation code \*/  
@keyframes example {  
  from {background-color: red;}  
  to {background-color: yellow;}  
}  
  
/\* The element to apply the animation to \*/  
div {  
  width: 100px;  
  height: 100px;  
  background-color: red;  
  animation-name: example;  
  animation-duration: 4s;  
}

**Note:** The animation-duration property defines how long an animation should take to complete. If the animation-duration property is not specified, no animation will occur, because the default value is 0s (0 seconds).

In the example above we have specified when the style will change by using the keywords "from" and "to" (which represents 0% (start) and 100% (complete)).

Further [Clickhere](https://www.w3schools.com/css/css3_animations.asp)

CSS Flexbox Layout Module

Before the Flexbox Layout module, there were four layout modes:

* Block, for sections in a webpage
* Inline, for text
* Table, for two-dimensional table data
* Positioned, for explicit position of an element

The Flexible Box Layout Module, makes it easier to design flexible responsive layout structure without using float or positioning.

Link [Clickhere](https://www.w3schools.com/css/css3_flexbox.asp)

References

<https://www.w3schools.com/css/css3_mediaqueries.asp>

<https://www.w3schools.com/css/css3_flexbox.asp>

https://www.w3schools.com/css/css3\_animations.asp