Media queries

Media queries rules are a type of CSS rules that allow you to create a block of code that will only be processed on devices that meet the criteria specified as a condition:

```
@media screen and (*condition*) {
    /* CSS rules */
}

@media screen and not (*condition*) {
    /* CSS rules */
}
```

With this method, we specify that we want to apply the CSS styles to particular media types (screen: screens only, in this case) that meet the conditions specified in parentheses.

Although less common, you can also specify denied @media rules using the not keyword, which will apply CSS as long as a certain condition is not met. Multiple media query conditions can also be separated by commas.

There are the following types of media:

Media Type	Meaning
screen	Monitors or computer screens. It is the most common.
print	Print media documents or print preview screens.
speech	Text readers for the blind (Before aural, which is now obsolete).
all	All devices or media. The one used by default.

Examples of media queries

Let's see a classic example of media queries in which we define different styles depending on the device we are using. Note that in the code there are 3 @media blocks where CSS styles are defined for each of these types of devices.

The code would be the following:

```
@media screen and (max-width: 640px) {
    .menu {
      background: blue;
    }
}
```

```
@media screen and (min-width: 640px) and (max-width: 1280px) {
    .menu {
        background: red;
    }
}
@media screen and (min-width: 1280px) {
    .menu {
        background: green;
    }
}
```

The previous example shows an element (with menu class) with a specific background color, depending on the type of media with which the page is displayed:

```
Blue for resolutions less than 640 pixels wide (mobile).
Red for resolutions between 640 pixels and 1280 pixels wide (tablets).
Green for resolutions greater than 1280 pixels (desktop).
```

The number of @media rule blocks used is up to the web developer, as it is not mandatory to use a specific number. They can be used from a single media query, to multiple of them throughout the entire CSS document.

Keep in mind that media queries can also be indicated from HTML, using the k tag:

```
k rel="stylesheet" href="mobile.css"
    media="screen and (max-width: 640px)">

k rel="stylesheet" href="tablet.css"
    media="screen and (min-width: 640px) and (max-width: 1280px)">

k rel="stylesheet" href="desktop.css"
    media="screen and (min-width: 1280px)">
```

Feature Types

In the previous examples we have only used max-width and min-width as feature types to use in media query conditions. However, we have a list of feature types that we can use:

Feature type	Values	When does it apply?
width	size	Whether the device is exactly the indicated size.
min-width	size	If the device has a width size larger than indicated.
max-width	size	If the device has a width size smaller than indicated.
aspect-ratio	aspect-ratio	If the device fits the listed aspect ratio.
orientation	landscape portrait	If the device is placed in portrait or landscape mode.