

RESPONSIVE DESIGN

Das Layout der Seite passt sich dem Ausgabemedium an.

VORAUSSETZUNG

Verhindert das "verkleinern" der Website auf kleinen Ausgabemedien

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

MEDIA QUERIES

```
/* Media Query (Desktop First) */
aside {
  float: left;
  width: 50%;
}
@media (max-width: 50em) {
  aside {
    float: none;
    width: auto;
  }
}
/* Vertical Media Query */
@media (min-height: 500px) { }
/* Media Query für Druck */
@media print { }
```

- Media Queries ^{Medienabfragen} ordnen CSS Angaben einem Ausgabemedium zu.
- Media Queries bestimmen also die Darstellung auf verschiedenen Medien.

DESKTOP FIRST

V3.Bootstrap Breakpoints

```
/* Erst Default Desktop Styling und anschließend ... */
/* Large Devices, Wide Screens */
@media (max-width : 1200px) { }
/* Medium Devices, Desktops */
@media (max-width : 992px) { }
/* Small Devices, Tablets */
@media (max-width : 768px) { }
/* Extra Small Devices, Phones */
@media (max-width : 480px) { }
/* Custom, iPhone Retina */
@media (max-width : 320px) { }
```

MOBILE FIRST

V5.Bootstrap Breakpoints

```
/* Erst Default Mobile Styling und anschließend ... */
/* Small devices (landscape phones, 576px and up) */
@media (min-width: 576px) { }
/* Medium devices (tablets, 768px and up) */
@media (min-width: 768px) { }
/* Large devices (desktops, 992px and up) */
@media (min-width: 992px) { }
/* X-Large devices (large desktops, 1200px and up) */
@media (min-width: 1200px) { }
/* XX-Large devices (larger desktops, 1400px and up) */
@media (min-width: 1400px) { }
```

BEST PRACTICES

- Nutze Breakpoints dort wo das Design bricht.
- Versuche Breakpoints in rem oder em zu definieren.
- Vermeide order (Umplatzieren von Elementen mittels CSS)
- Beachte auch Vertical Media Queries

VERGLEICH MOBILE- & DESKTOP FIRST

```
/* Desktop first */
aside {
  float: left;
  width: 50%;
}
@media (max-width: 50rem) {
  aside {
    float: none;
    width: auto;
  }
}
```

```
/* Mobile first */
@media (min-width: 50rem) {
  aside {
    float: left;
    width: 50%;
  }
}
```

FLUID GRIDS

Brauchen wir Media Queries?

HTML

CSS

Result

EDIT ON CODEPEN

<h2>Multicol</h2>

<div class="wrapper multicol">

Observatory, though a lofty one, was attended with so much danger and confusion as to be barren of results. The departure, owing to stormy weather, was hurried and illordered, so that the velocity in rising was excessive, the net constricted the rapidly-swelling globe, and the volumes of out-rushing gas half-allocated the voyagers. Then a large rent occurred, and a thinning of the rapidly-rising gas reduced the necessity of flinging away all they possessed, their instruments only excepted. The landing, in a vineyard, was happily not attended with disaster, and within a month the same two colleagues attempted a second aerial excursion, again in wet weather.</p>

</div>

<h2>Flexbox</h2>

and a second horizontal flexbox, as if to make

1x

0.5x

0.25x

Run

Multicol

The first ascent, made in June from the Paris Observatory, though a lofty one, was attended with so much danger and confusion as to be barren of results. The departure, owing to stormy weather, was hurried and illordered, so that the velocity in rising was excessive, the net constricted the rapidly-swelling globe, and the volumes of out-rushing gas half-allocated the voyagers. Then a large rent occurred, and a thinning of the rapidly-rising gas reduced the necessity of flinging away all they possessed, their instruments only excepted. The landing, in a vineyard, was happily not attended with disaster, and within a month the same two colleagues attempted a second aerial excursion, again in wet weather.</p>

Quelle: Using Media Queries For Responsive Design In 2018