

Web Fonts

Wie kommen Schriften ins Web?

```
font-family: "myFont", Georgia, serif;
```

Wie kommen Schriften ins Web?

Systemschriften

Arial
Verdana
Tahoma
Trebuchet MS
Times New Roman
Georgia
Courier New
Brush Script MT
Impact

hosted Fonts



self-hosted Fonts

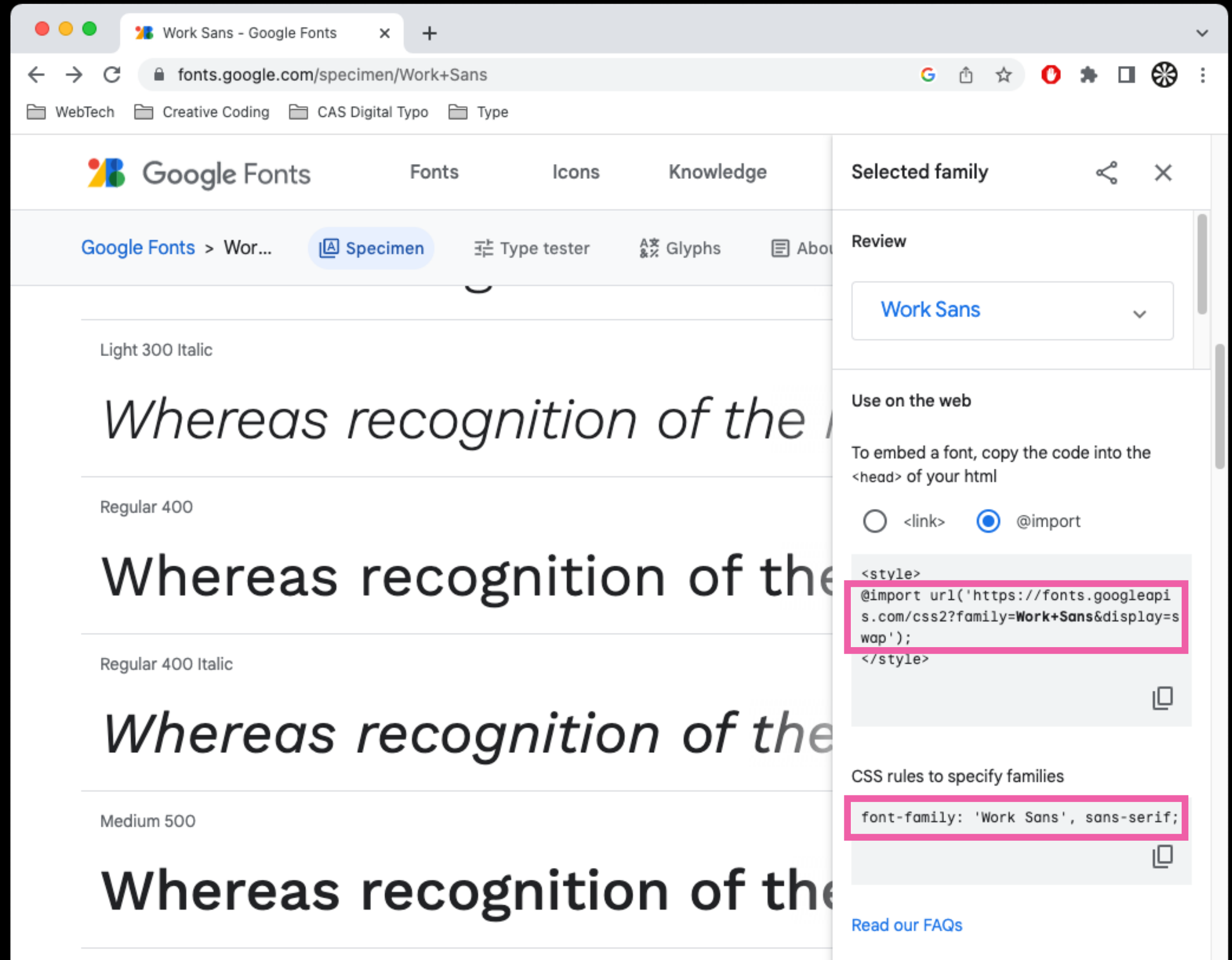
@fontface

Hosting via Google Fonts

@import-Link ins CSS

→ ganz oben einfügen

CSS Regel für Selektoren



Self-Hosting



myWebFont.woff2

```
@font-face {  
  font-family: 'meineSchrift';  
  src: url('fonts/myWebFont.woff2')  
  format('woff2');  
}
```

Self-Hosting



myWebFont.woff2

```
@font-face {  
    font-family: 'meineSchrift';  
    src: url('fonts/myWebFont.woff2')  
    format('woff2');  
}
```

Wenn die Datei in Ordner «fonts» liegt.

Fallback



```
@font-face {  
  font-family: 'meineSchrift';  
  src: url('fonts/myWebFont.woff2') format('woff2'),  
  src: url('fonts/myWebFont.woff') format('woff');
```

myWebFont.woff2

Flexible Typesetting

Schriftart

Champions grease the wheels of change. They are obstacle clearers, problem insulators and praise singers. Treat them with the reverence they deserve. Thinking back to Samantha at the council, without her the redesign would have stumbled at numerous hurdles. It's also the case that we helped her navigate and clear those hurdles. With Samantha smoothing the way, the design maintained its (and our) integrity and it got launched to the praise of civil servants and grateful residents. Samantha may have been our champion, but the ultimate winners were the client and it's end users.

Times New Roman, 21pt

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Verdana, 21pt

Schriftart

Champions

Times New Roman, 110 pt

Champions

Verdana, 110 pt

Schriftgrösse

Champions

Times New Roman, 110 pt

Champions

Verdana, 96 pt

Zeilenabstand

Champions grease the wheels of change. They are obstacle clearers, problem insulators and praise singers. Treat them with the reverence they deserve. Thinking back to Samantha at the council, without her the redesign would have stumbled at numerous hurdles. It's also the case that we helped her navigate and clear those hurdles. With Samantha smoothing the way, the design maintained its (and our) integrity and it got launched to the praise of civil servants and grateful residents. Samantha may have been our champion, but the ultimate winners were the client and it's end users.

Times New Roman, 21/25 pt

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Verdana, 21/25 pt

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Times New Roman, 21/25 pt

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Verdana, 21/27 pt

Zeilenabstand

Champions grease the wheels of change. They are obstacle clearers, problem insulators and praise singers. Treat them with the reverence they deserve. Thinking back to Samantha at the council, without her the redesign would have stumbled at numerous hurdles. It's also the case that we helped her navigate and clear those hurdles.

Verdana, 21/26 pt

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Verdana, 21/29 pt

Zeilenabstand

- zu definieren je nach x-Höhe der Schrift
- grösser bei breiterer Spalte

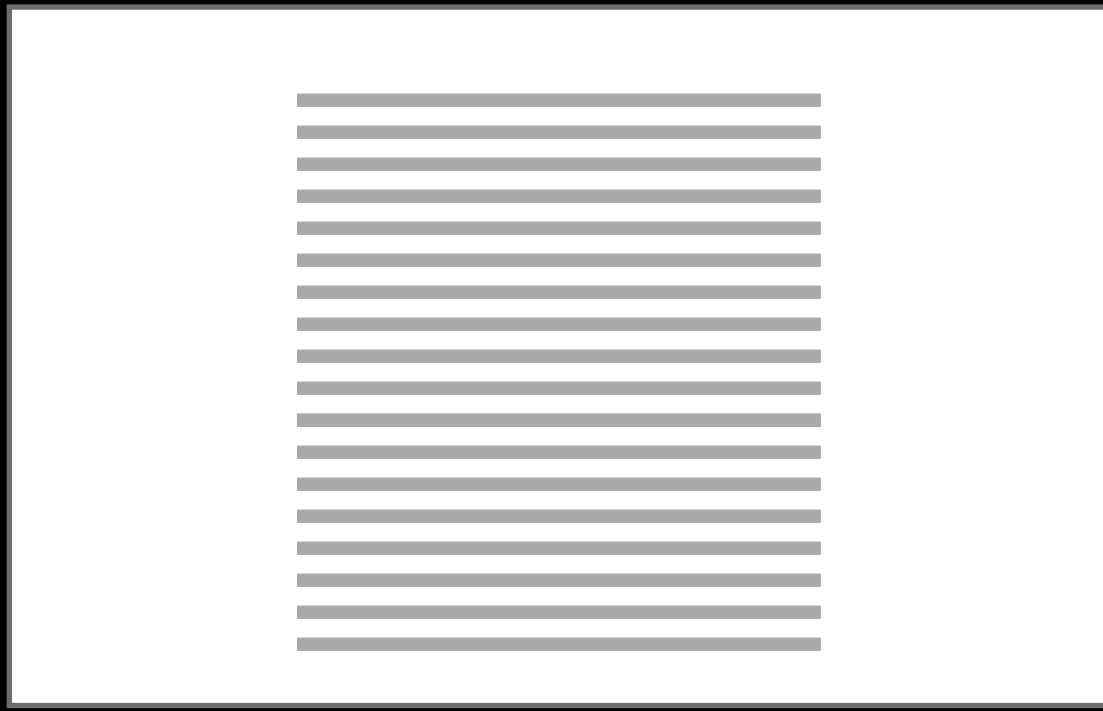
Zeilenabstand im CSS

abhängig von Schriftgrösse

```
font-size: 60px;  
line-height: 1.3; /*78px*/
```

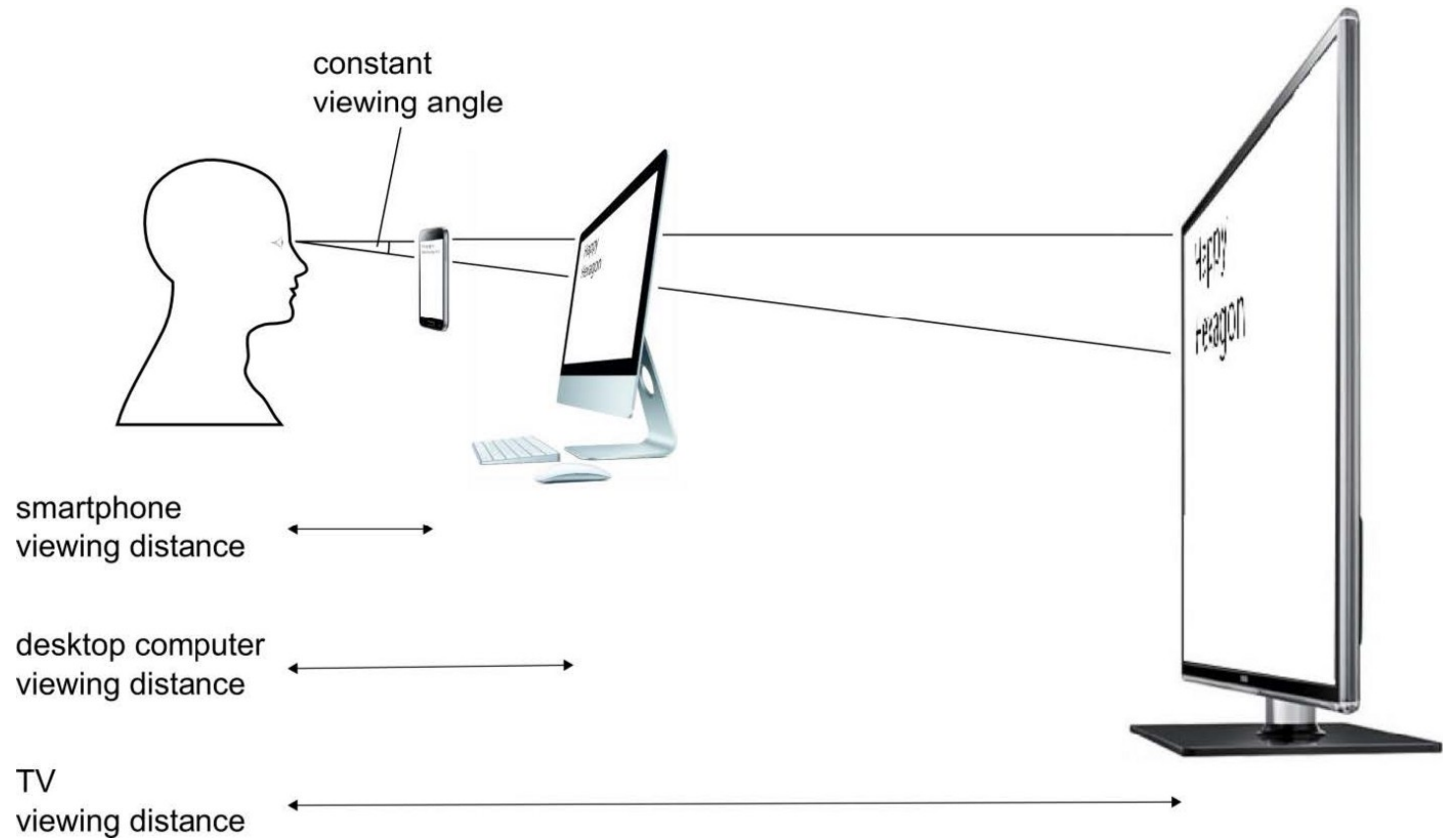
- ohne Einheit
- multipliziert den Wert der Schriftgrösse

Spaltenbreite



- ca. 55 Zeichen, 45–75 Zeichen
- Abhängig von Layout/Viewport

Lesedistanz



Relative Schriftgrößen

Schrift flexibel setzen: Abhängigkeiten definieren

Größen

→ abhängig von Breakpoints

Schriftgrösse abhängig von Breakpoints

Zum Beispiel:

```
h1 { font-size: 60px; }
h2 { font-size: 36px; }
h3 { font-size: 24px; }
p  { font-size: 16px; }

@media (max-width: 767px) {
  h1 { font-size: 48px; }
  h2 { font-size: 28px; }
  h3 { font-size: 19px; }
  p  { font-size: 14px; } }
```

Relative Schriftgrößen

Schrift flexibel setzen: Abhängigkeiten definieren

Größen

- abhängig von Breakpoints
- abhängig von root Element

Standard Schriftgrösse im Browser

Basis Schriftgrösse
im root Element:

```
:root { font-size: 16px; }
```

oder besser für die Accessibility:

```
:root { font-size: 100%; }
```

Standard Schriftgrösse im Browser

Basis Schriftgrösse
im root Element:

```
:root { font-size: 16px; }
```

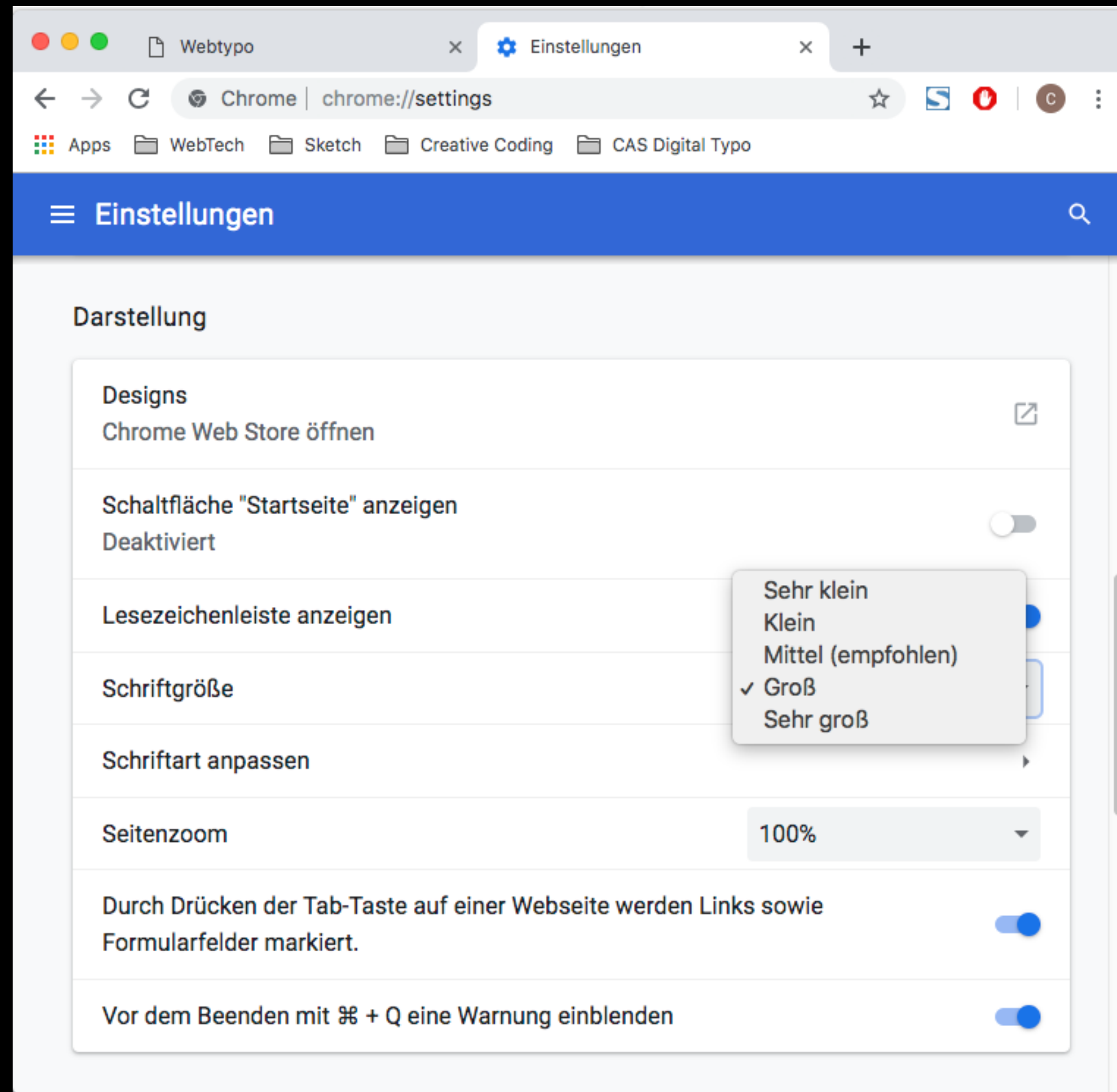
16 px = 1 rem

oder besser für die Accessibility:

```
:root { font-size: 100%; }
```

100% = 1 rem

Mit der Angabe in Prozent werden die individuellen Einstellungen für Standard-Schriftgrössen im Browser übernommen.



Einstellungen für Standard-Schriftgrößen können im Browser angepasst werden.

Schriftgrößen in rem (root element)

Umrechnen in rem

```
h1 { font-size: 3.75rem; /*60px*/ }
```

```
h2 { font-size: 2.25rem; /*36px*/ }
```

```
h3 { font-size: 1.5rem; /*24px*/ }
```

```
p { font-size: 1rem; /*16px*/ }
```

Schriftgrösse abhängig von root element

Schriftgrößen für einzelne Breakpoints definieren,
abhängig vom root Element.

```
@media (max-width: 1200px) {  
  h1 { font-size: 3rem; }  
}
```

```
@media (max-width: 900px) {  
  h1 { font-size: 2.6rem }  
}
```

Anpassung der Schriftgrösse je
nach Selektor (h1, h2, p etc.)
und für jeden Breakpoint

Schriftgrösse abhängig von root element

Schriftgrößen des root Elements direkt anpassen.

```
@media (max-width: 1200px) {  
  :root { font-size: 20px; }  
}
```

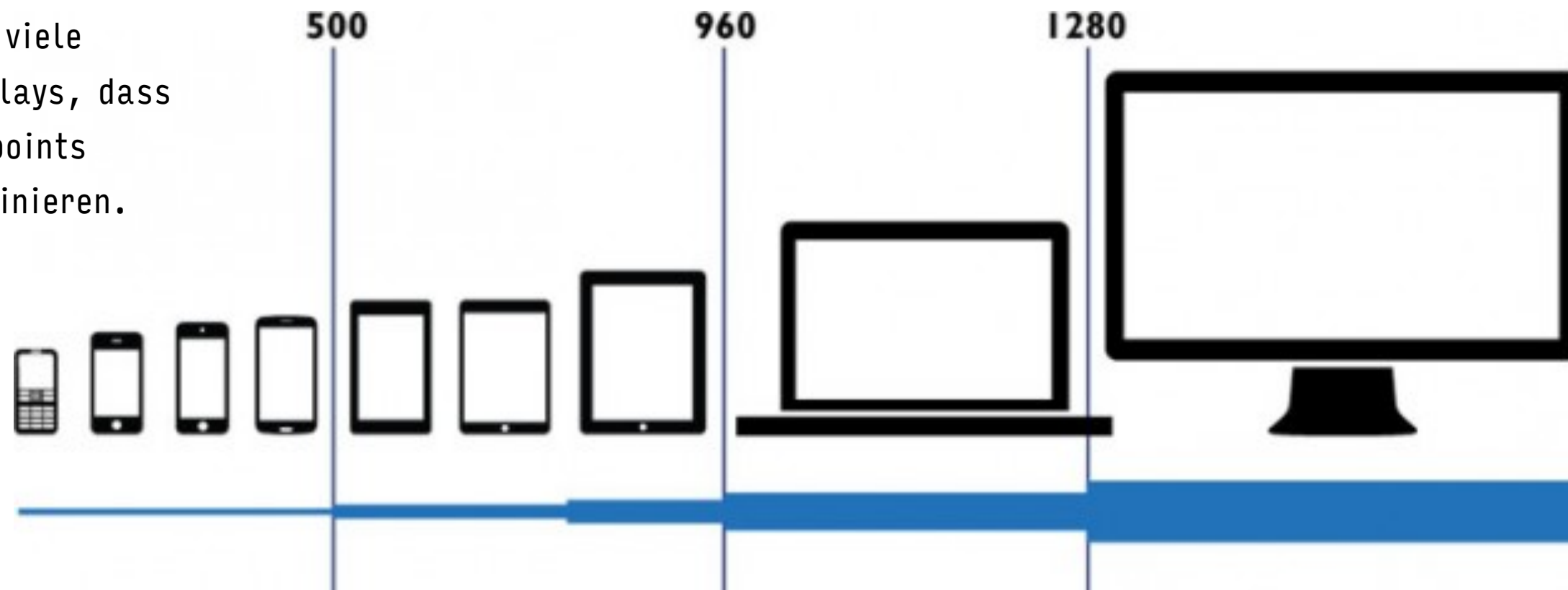
Anpassung der Schriftgröße im root
für jeden Breakpoint. Damit skalieren
sich alle Textelement proportional mit.

oder besser für die Accessibility in %:

```
@media (max-width: 1200px) {  
  :root { font-size: 120%; }  
}
```

Breakpoints

Früher gab es Pixelwerte, an denen man sich orientieren konnte. Inzwischen gibt es aber so viele unterschiedlich grosse Displays, dass es mehr Sinn macht, Breakpoints abhängig vom Layout zu definieren.



iPhone SE



iPhone 12 mini



iPhone 7, 8, SE 2



iPhone X, XS, 11 Pro



iPhone 12, 12 Pro



iPhone 11, XR



iPhone 11 Pro Max, XS Max, 7 Plus, 8 Plus



iPhone 12 Pro Max

Vier Typoelemente

- Lesegrösse abhängig von Schriftform (u.a. x-Höhe)
- Zeilenabstand abhängig von Schriftform und allenfalls Zeilenlänge
- Spaltenbreite abhängig von Viewport und Lesbarkeitsregeln
- Schriftgrößen abhängig von:
 - root Element
 - Texthierarchie
 - Breakpoints