Proportional Units

WEEK 7

FIXED

Fixed (aka static) layout has a fixed width in pixels.

The 'container' of the website is programmed to not move (that's where the name 'static' comes from).

960px is the most widely used size for fixed-layout websites

[MEDIUM ARTICLE >>]

FLUID

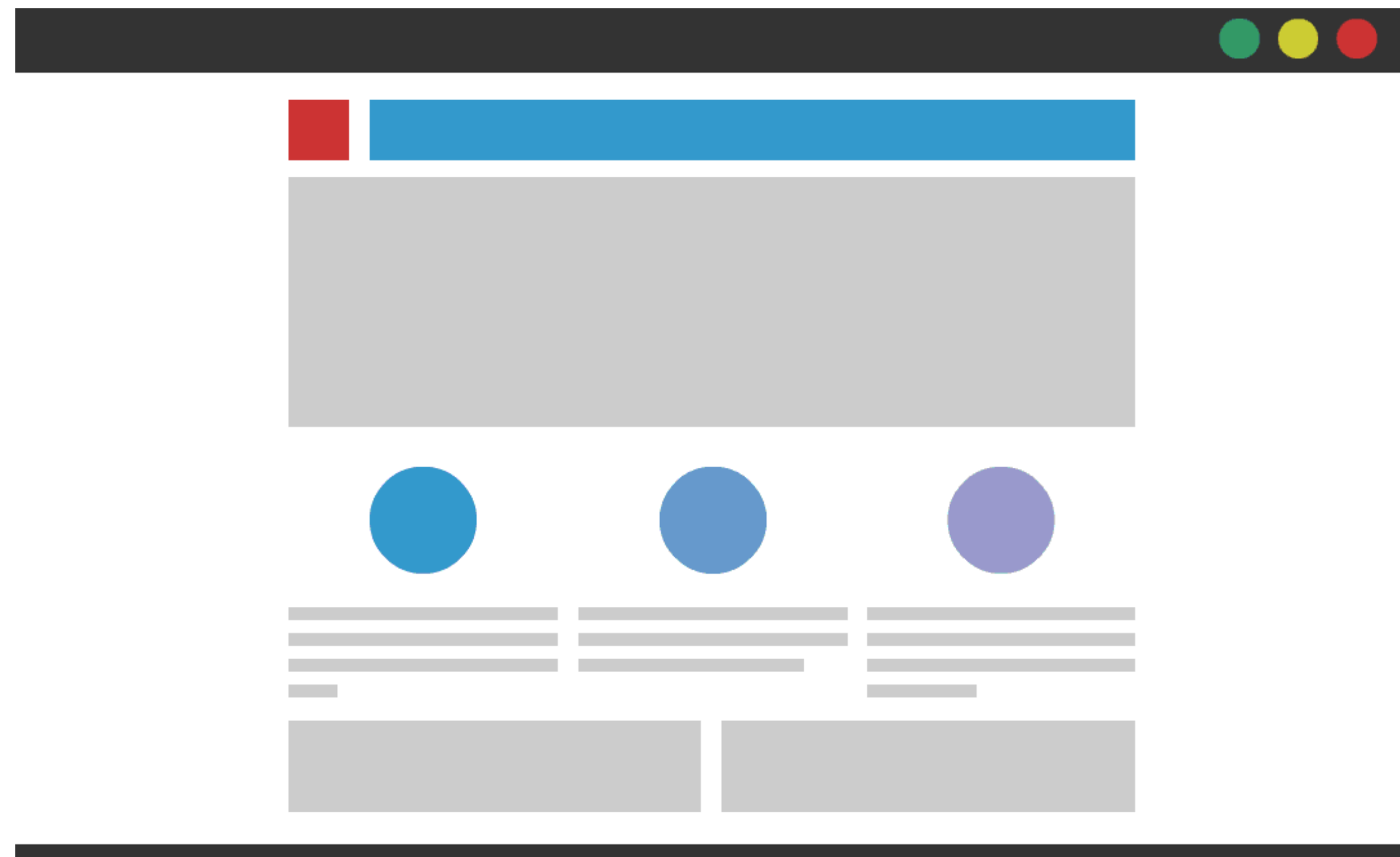Fluid layout you specify sizes not in pixels, but in percentages.

The proportion of elements stays the same.

The drawback is that on smaller screens the columns can get really narrow.

[MEDIUM ARTICLE >>]

ADAPTIVE
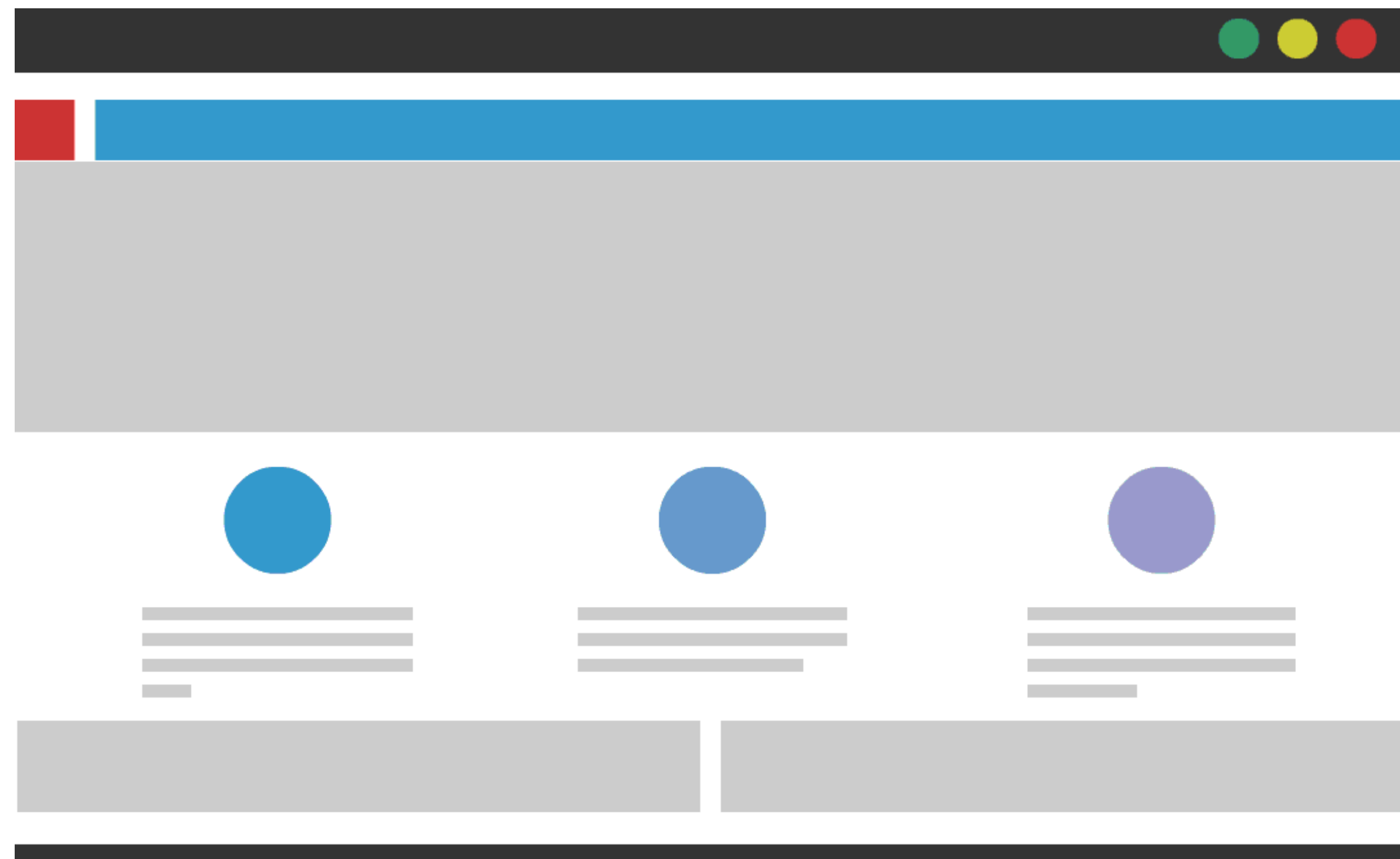

There are several versions of the layout which are displayed based on the screen size of the viewer.

[MEDIUM ARTICLE >>]

RESPONSIVE

The best of the two worlds of fluid and adaptive design.

There are several so-called breakpoints, which divide all possible screen sizes in ranges.

Provides a custom experience for whichever screen size it's viewed on.

[MEDIUM ARTICLE >>]

PROPORTIONAL UNITS ARE IMPORTANT IN SCALABLE DESIGNS

[W3Schools Reference >>]

Absolute Lengths

Unit	Description
cm	centimeters
mm	millimeters
in	inches (1in = 96px = 2.54cm)
px	pixels (1px = 1/96th of 1in)
pt	points (1pt = 1/72 of 1in)
pc	picas (1pc = 12 pt)

[W3Schools Reference >>]

Relative Lengths

em	Relative to the font-size of the element (2em means 2 times the size of the current font)
ex	Relative to the x-height of the current font (rarely used)
ch	Relative to width of the "0" (zero)
rem	Relative to font-size of the root element
vw	Relative to 1% of the width of the viewport*
vh	Relative to 1% of the height of the viewport*
vmin	Relative to 1% of viewport's* smaller dimension
vmax	Relative to 1% of viewport's* larger dimension
%	Relative to the parent element

em & rem for fonts

```css
html {
  font-size:16px;
}

div {
  font-size: 1.5em;
  border: 1px solid black;
}

#top-div {
  font-size: 2rem;
  border: 1px solid red;
}
```

em & rem for fonts

The font-size of this document is 16px.

The font-size of this div element is 2rem, which translates to 2 x the browser's font size.

The font-size of this div element is 1.5em (or 1.5 of root font size.

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vw or relative to viewport

```css
div {
    width: 50vw;
    height: auto;
    border: 2px solid red;
    font-size: 10vw;
}
```

vw or relative to viewport