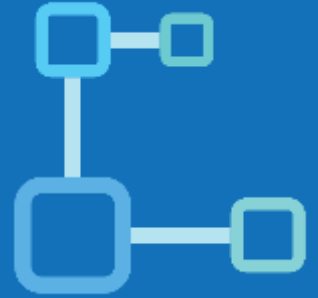




CSS UNITS (INTRODUCTION)



Some things @netlink

CSS units

| | | |
|--|---|--|
| <p>CSS has 2 kinds of units: absolute & relative</p> <p>absolute: px, pt, pc, in, cm, mm</p> <p>relative: em, rem, ch, ex, vw, vh, %</p> | <p>rem</p> <p>the root element's font size</p> <pre>html { font-size: 14px; }</pre> <p>this means 1rem = 14px everywhere in the document</p> | <p>em</p> <p>the current element's font size</p> <p>these 3 elements have different values of 1em</p> |
| <p>0 is the same in all units</p> <pre>.btn { margin: 0; }</pre> <p>you don't need to say 0px or 0em, 0 is always the same</p> | <p>in, cm, mm</p> <p>Great for print stylesheets, not so good for web</p> <p>vw, vh</p> <p>100vw is the viewport width 100vh is the viewport height</p> | <p>rem & em help with accessibility</p> <pre>.modal { width: 20rem; }</pre> <p>this scales nicely if the user increases their browser's default font size</p> |

Introduction

- CSS has several options for which units to use when determining the size of various CSS properties.
- Learning all your options for CSS units can be key for styling in a way that's easy to manage and looks great on any screen.

What is a CSS Unit?

- A CSS unit determines the size of a property you're setting for an element or its content.
- For example, if you wanted to set the property margin of a paragraph, you would give it a specific value. This value includes the CSS unit.

Let's look at a small example:

```
p {  
    margin: 20px;  
}
```

Css units

%

Relative to the value of parent element. 100% is the width of the parent element

em

Relative to the font-size of the parent element.

vh

equal to 1% of the height of the browser window size.

px

Pretty self explanatory .Absolute length in pixel

rem

Relative to font-size of the root element.

vw

equal to 1% of the width of the browser window size.



“What’s the best unit to use here?”

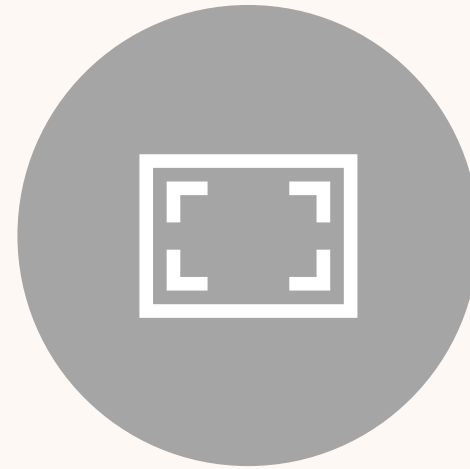
“When to use which unit?”



The length unit in CSS is of two types:-



ABSOLUTE LENGTH



RELATIVE LENGTH

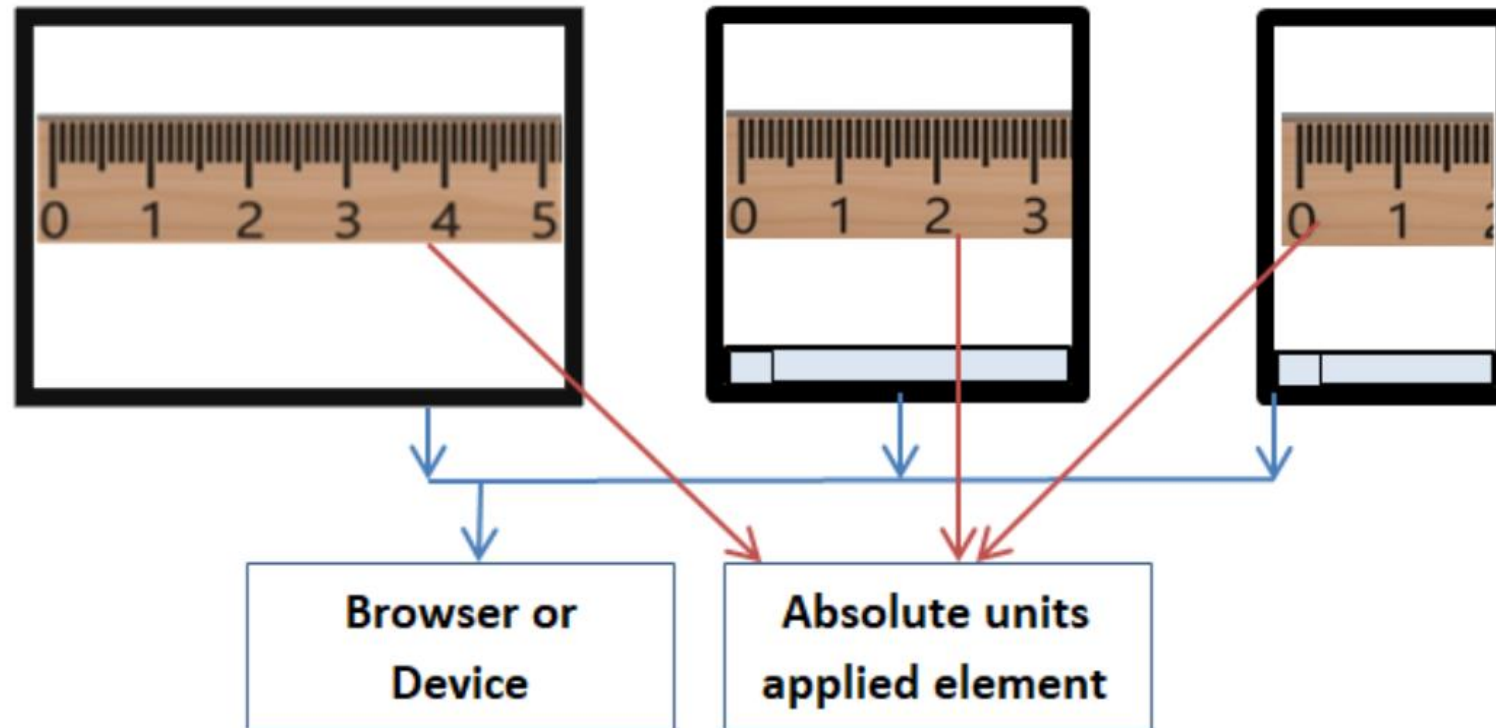
Absolute Units

- Absolute units will be the same regardless of screen size or other settings.
- Absolute units are fixed across everywhere else. Also, it remains absolute if the output device has a higher resolution.



Absolute Unit

Absolute units.



Absolute Units

| | |
|----|---|
| in | inches - 1in is equal to 2.54cm. |
| cm | centimeters - 1cm is equal to 96px/2.54. |
| mm | millimeters - 1mm is equal to 1/10 of 1cm. |
| pt | points — the points used by CSS are equal to 1/72nd of 1in. |
| pc | picas — 1pc is equal to 12pt. |
| px | pixel units — 1px is equal to 0.75pt. |

Relative Unit



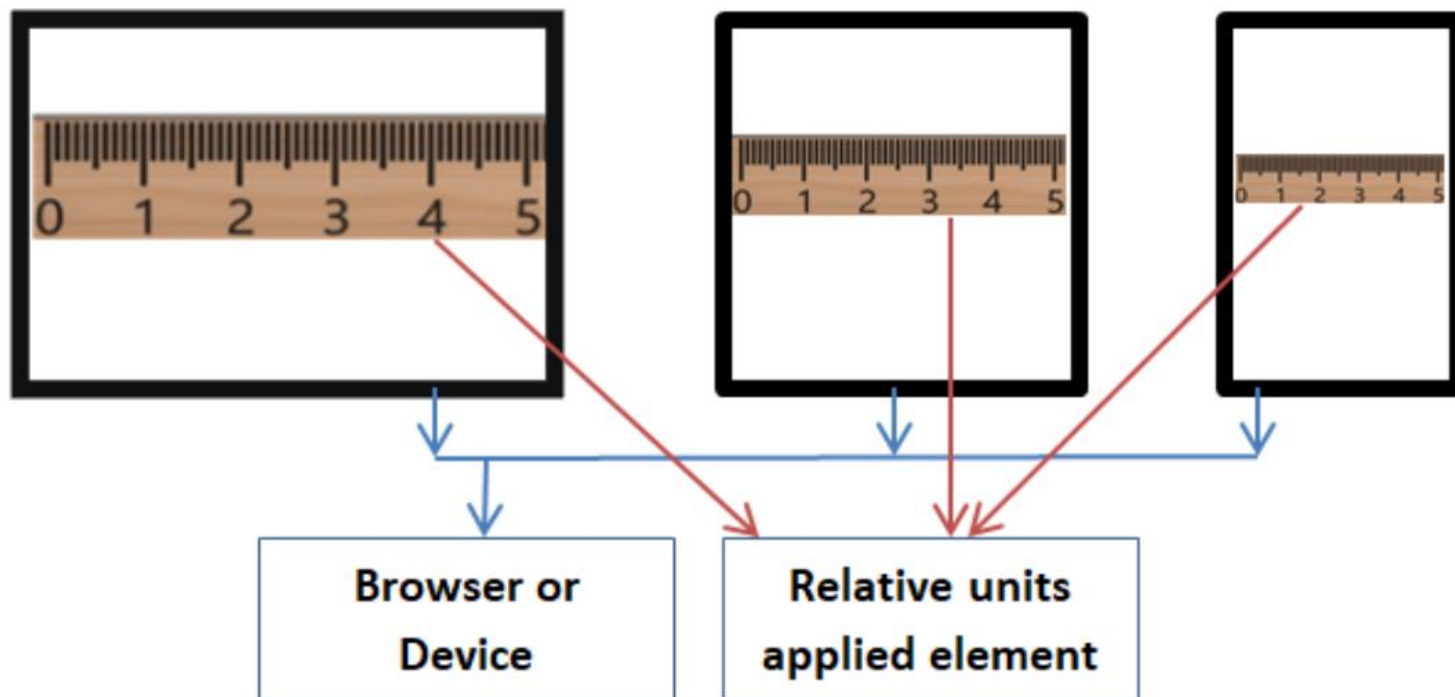
Relative units change relative to the element's current font-size or other settings.



It is good for use on-screen, if screen size varies so much depending on the device, then these relative length units are perfect because it changes with the different rendering mediums.

Relative Unit

Relative units.



★ CSS Units ★

px (absolute)

Avoid using `px` for font-sizes. Use mostly for small details like border and shadow.

- fixed in size
- not responsive
- overrides user's browser preferences

% (relative)

I recommend using percentages for layouts and width/height. For example, laying out links on navbar, placing images inside a div, etc.

- size is defined as percentage of another value (mostly parent element)
- sometimes size is defined as percentage of the element itself

em (relative)

You can use `em` for font-size and margin/padding. Use `em` when you want to adjust margin/padding based on that element's font-size (if font-size is big, you maybe want bigger spacing).

- changes behavior based on property.
- 1 em = parent font-size
- if parent doesn't have a size, defaults to 16px (body)

rem (relative)

You can also use `rem` for font-size and margin/padding. `rem` is easier to work with than `em` because it's more consistent.

- relative to root HTML, no matter what (default is 16px)
 - you can change the root HTML size. For example, if you change it to 20px, 1 rem will always be 20px.

vw/vh (relative)

vw/vh are relative to the width/height of the browser window. 100vw means full width of the screen. Use vw/vh for bigger layouts, like background.

- useful for responsive websites because everything scales

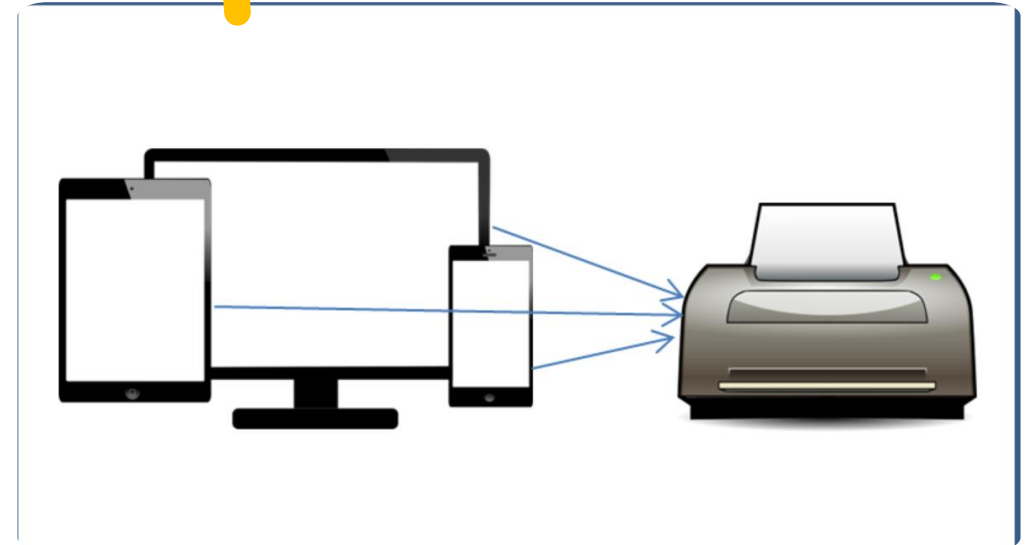
ch

`ch` is relative to the width of the number 0 of the current font. `ch` is used to size the width of a paragraph. In general, you want a 45-70 character wide column for readability.

- You would use it like this:
max-width: 40ch;
This sets the width of the column to a maximum of 40 characters per line.

Different devices

- Web pages can be viewed using different types of devices (cellphones, tablets, laptops, PCs).
- Each device height and width can be different.
- **It is better to use relative units in web pages (for screen use).**
- **For printing purpose, absolute size can be used.**





Thank you

