



LEVELS OF KNOWING

1. 💪 Muscle Memory
2. 🎓 Memorized
3. 💡 Familiar; comes back with a moment of research
4. 😎 Neat, but not critical

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PROBLEMS?



1. Take a deep breath, and think it through the top. Be the computer.
2. Google it.
3. Ask other bootcampers.
4. Ask me.
5. Watch me Google it.

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MEMORY

Make it visual, physical, visceral

Star, dog, tree, nose, shoe, bee, race, apple

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GETTING STARTED

INSTALL GOOGLE CHROME

💪 Learn to open the inspector with Ctrl+Shift+I on windows; Cmd+Opt+J on mac.

If I see you working not in not-chrome, or
inspector closed I will laugh mercilessly
and help you.



SLACK CHANNEL

You've probably already been invited to channel. <http://www.grand-circus.slack.com>

If you haven't, let me know and we will added.

Class channel: #gr_ptfrontend_jan2018

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GIT AND GITHUB

git

github.com

You've all installed git and signed up for GitHub.
We'll talk more about it tomorrow.

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TERMINOLOGY

I've shared, in slack, a link to a glossary have permission to edit it. When you hear you don't recognize, stop me! Force me them! Then put the definition, in your word class Glossary.

BLOCK VS. INLINE ELEMENTS



BLOCK:



INLINE:



BLOCK VS. INLINE ELEMENTS



- Inline elements: `` `<a>` ``
- Inline block: `` `<button>` `<input>`
- Block elements: `<div>` `<p>` `` ``

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Most things are block by default. You can change an element's display any way using display:

```
span {  
    display: block;  
}  
  
div {  
    display: inline;  
}
```

GOING THE DISTANCE

px 💪, em 🎓, rem 🎓, % 🎓, vh & vw 🎓

(ch, ex, vmin, cm, mm, in, pt, pc) 🎓



THE BOX MODEL

Every HTML element is in a box, regardless of visible shape.



THE BOX MODEL

The total size of an element is a combination of the following:

- Content
- Padding
- Border
- Margin



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LET'S TALK PICTURE FRAME

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```
.my-box {  
    margin: 50px;  
    padding: 30px;  
    border: 3px solid blue;  
    width: 250px;  
    height: 300px;  
}
```



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My box!



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BREAKING IT DOWN

```
.my-box {  
  margin-top: 50px;  
  padding-left: 30px;  
  border-right-width: 3px;  
  border-right-color: blue;  
  border-right-style: dotted;  
}
```

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SHORTHAND



Top Left Bottom Right

```
.my-box {  
    margin: 50px 20px 10px 15px;  
}
```

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EXTRA SHORTHAND



Top-Bottom Left-Right

```
.my-box {  
    margin: 50px 15px;  
}
```

AUTO MARGIN

If margin is set to `auto` on an element that has a set width, it will take up as much space as possible. You can use this to center or left or right align an element. This only works for horizontally

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AUTO MARGIN

```
.my-box {  
    width: 150px;  
    margin: 10px auto;  
    border: 1px solid red;  
}
```

my box

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POSITIONING

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STATIC POSITIONING

Static positioning is the default for all elements.

"In the flow."

You'll forget about this, because it's the

```
.my-box {  
  position: static;  
}
```

RELATIVE POSITIONING

In the flow, but nudged. Still takes up space.
flow.

```
.my-span {  
  position: relative;  
  top: 10px;  
  left: 10px;  
  color: red;  
}
```

Sam: talk about what left, right, bottom, mean.

Hello, this sentence contains **my span** and
nudged a little out of place.

ABSOLUTE POSITIONING

Out of the flow! Doesn't consume space in the layout.

Positioned relative to the 'containing block' or the 'positioned ancestor'. 🎓💻

Block elements will *no longer consume the width*.

```
.my-box {  
  position: absolute;  
  top: 10px;  
  left: 10px;  
  background-color: red;  
}
```



DO IT 

FIXED POSITIONING

Out of the flow; stuck to the screen, not the scroll.

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STICKY POSITIONING

Not universally available, but keep an eye out!

caniuse.com

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FLOAT

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Lorem ipsum dolor sit amet, consectetur adipiscing elit. Integer commodo dui ex, sit amet tristique velit mollis at. Phasellus id magna ligula. In tristique tempus libero. Integer suscipit mi vitae varius semper et quis turpis. Suspendisse in urna vehicula, fringilla nisi in, suscipit nibh. Phasellus vitae ligula aliquet, venenatis sem ut, placerat turpis. Cras id metus ut nulla faucibus varius vitae sit amet sem. Nunc vitae tellus a lacus vestibulum dictum. Integer ultrices elit tortor, eu consectetur libero rhoncus vel. Integer finibus efficitur lorem.



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CLEAR ☀

Don't float things next to this!

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Sam: talk about layering rules

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FLEXBOX



You did some of this for your prework.
arrange groups of objects. For extra practice
through flexboxfroggy.com.

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CSS-GRID



Like flexbox, this is a fairly new addition to arranging whole groups of objects, but in a grid rather than a flexy one.

To learn and practice it, play through cssgridgarden.com

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DRAWING WEBSITE

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TAGS WITH MEANING

element Description

section	Container tag used for page organization
header	Container for introductory and navigation
footer	Container for footer content (site map, links, etc.)
nav	Container for a major block of navigation

TAGS WITH SPECIAL BEHAVIOR

class	Description
-------	-------------

`audio` Multimedia tag for playing audio files

`video` Multimedia tag for playing video files

`canvas` element can be used to draw graphics via

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A-TAG PSUEDO-CLASS

```
a:link { color: aliceblue; } /* unvisited link */  
a:visited { color: darkblue; } /* visited link */  
a:hover { color: lightblue; } /* mouse over link */  
a:active { color: yellow; } /* mouse click link */
```

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OTHER PSEUDO-CLASSES

class

Description

:first-child

Any element which is the first child of its parent

:first-letter

First letter of an element's content

:first-line

First line of an element's content

:last-child

Any element which is the last child of its parent

:only-child

Any element which is the only child of its parent

:empty

Any element which has no content

`:nth-child`

Any element which is the nth child
of its parent

NTH-CHILD SYNTAX

`:nth-child` takes a mathematic expression
to determine which children to select

element:`:nth-child(an + b)` { property:

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NTH-CHILD EXAMPLE

These expressions can be as complex as
Feel free to mess around with it

```
div:nth-child(3) { color:red;
```

```
p:nth-child(4n) { color:blue;
```

```
ul:nth-child:(2n + 5) { color:yell
```



NTH-CHILD EXAMPLE

Realistically though, in practice `nth-child` is only used to alternate styles for large groups of data like table rows, etc.

```
element:nth-child(even) { property: value; }
```

```
element:nth-child(odd) { property: value; }
```

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VENDOR PREFIXES

Let's look at caniuse.com

OOOOH, FANCY: CSS PROPERTIES

Property	Description
border-radius	creates rounded corners or circular elements
rgba	An alternate way to define color and opacity
opacity	Controls the transparency of an element
box-shadow	Adds a calculated shadow effect to an element
text-shadow	Adds a calculated shadow effect to an element's text
transform	Adds the ability to transform HTML elements (rotation, scale, translate)
transition	Allows for one or more properties to be applied as an animation

Property

animation

Description

Allows for one or more properties applied as an animation

RESPONSIVE DESIGN

Changes your website presentation in response to the screen size

"It responds to constrained space"

MEDIA QUERY EXAMP

```
@media (max-width: 600px) {  
    /* specific styles that apply when the site is di
```

THINGS TO DO WITH ME QUERIES

- resize images / font
- collapse navigation
- remove some larger content (video /

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FORMS

Forms are used to send data back to a server
user inputs

FORM TAGS

```
<form action="something" method="get">  
    <!-- Form inputs and other html -->  
</form>
```

METHODS AND ACTION

Action is the URL you want the data to be sent to

Method is the HTTP methods used to transform data

- GET
- POST
- PUT
- DELETE

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FORM TAGS

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TYPES OF INPUTS

- Text (type='text')
- Radio Button (type='radio')
- Checkbox (type='checkbox')
- Password (type='password')
- Date (type='date')
- Time (type='time')
- Date & Time (type='datetime')
- Email (type='email')
- Submit
- `<input type='submit' />`
- `<button type='submit' />`

VENDOR PREFIX

Newer and fancier CSS is often adopted by one browser or another first, before it's standard.

They avoid conflicts by naming these properties like `-webkit-border-radius`.

In general, developers use tools to add prefixes automatically; and we'll not talk about them now, but we will before the end of the week.

CSS FRAMEWORK

Pre-written CSS to do common things, like add objects to a grid, make responsive menus

- Bootstrap
- Bourbon / Neat / Bitters
- Bulma
- Heaps more; all with different strengths and dependencies

I am a mean horrible person 💪, and I'm going to force you mostly to use vanilla CSS -- not because it's better, but because there is No Silver Bullet.