

Responsive CSS

CS 390 – Web Application Development

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September 6, 2023



Callout: Machine Learning @ Purdue

If you can view this screen, I am making a mistake.

Outline

- ① Why It's Worth Your Time
- ② Some Static Stuff
- ③ Animations
- ④ ETC

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- Animations and Transitions make websites look very cool.
- We **want to write less JavaScript**.

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- `fixed`: Positions elements relative to the viewport

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<code>align-items</code>	Orientation within child elements

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You can also compound rules to **subset** targets. This targets descendants of specific elements.

Syntax: `target1target2 { k: v; }`

English: Apply to all target2's that are descendants² of target1's.

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Fantastic reference: <https://specificity.keegan.st/>

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<code>calc</code>	Perform arithmetic operations

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@charset	Regular	Define character encoding
@supports	Nested	Apply if property is supported
@media	Nested	Apply viewport specific rules
@keyframes	Nested	Keyframes
@import	Regular	Use remote CSS styles

Variables in CSS

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These are accessible only within their defined attribute by default.

Common best practice is to make it accessible globally:

`:root { --property-name: value; }` using the root pseudo-class.

Variables in CSS (Contd.)

These values can then be accessed using the `var(--property-name)` function. **Example:**

style.css

```
:root {
    --background-color: blue;
}

h1 {
    background-color: var(--background-color);
}

h2 {
    background-color: var(--background-color);
}
```

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A: That's pretty much it! (did the gambit work?)

More formally, **transitions** handle smooth state changes of updating properties.

Animations allow more fine-grained control using keyframes to define the state of the update, and do not need to be triggered by updates within properties.

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Multiple transitions can be defined by using comma-separation. Unlike fonts, these are applied in parallel; not as fallback.

Animations

Animations allow us fine-grained access of the scene, using **keyframes** for controlling the manipulation.

Syntax:

```
style.css

@keyframes <name>
{
  from | 0% {
    k: v;
  }

  to | 100% {
    k: v;
  }
}
```

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Thank you!

Have an awesome rest of your day!

Slides: <https://cs.purdue.edu/homes/jsetpal/slides/r-css.pdf>

If anything's incorrect or unclear, please ping jsetpal@purdue.edu
I'll patch it ASAP.