Today

- Review
- Print styles
- Media Queries
- Feature Queries
- Fonts
- Rems + Ems

Flex & Grid

One direction & Two directions

Flex (↓ OR →)

Great at 1 dimensional layout

Works from the content outward

Grid (↓ AND →)

Great at 2 dimensional layout

Works from the layout inward

Let's play flex or grid?

Q: I have stuff I want to space equally on the page and it's different sizes?

A: Flexbox

Q: I want my row to always be as large as the largest content in it?

A: Grid

Q: I want two of my divs to overlap?

A: Grid

Q: I want certain elements to span twice as wide as others?

A: Grid

Q: I want alignment horizontally but I don't care if they line up vertically?

A: Flexbox

Q: I want super easy auto-margins (think login button)?

A: Flexbox

Q: I need a card grid with different heights?

A: Flexbox

Grid > Flex

Flex > Grid

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Applying CSS to specific Media

Ex: make it look different when you print it out

Old: Link Tag

`<link rel="stylesheet" media="print" href="printer.css">`

New: CSS Query

```
@media print {
    ???
}
```

When and how would I use?

To focus on printed content

```css
@media print {
    #header, #footer, #nav {
        display: none;
    }
}
```

```css
@media print {
    #main {
        font-family: serif;
    }
}
```

```css
@media print {
    #main {
        font-size: 12pt;
    }
}
```

@page

```
@page {size: 8in 10in;}
@page {margin: .75in;}
```

@page

```css
@page normal {size: portrait;
                    margin: .5in;}
@page rotate {size: landscape;

                    margin: .2in;}


#main {page: normal;}
#gallery {page: rotate;}
```

Media Queries

Modify styles based on device type, screen properties or resolution

Sizing

```
@media (min-width: 10em) and
(orientation: landscape) { }
```

`@media (width <= 10em) { }`

@media (10em <= width <= 20em) { }

Features

@media (not(hover))

@media (not(color))

Devices

```
@media
  (max-device-width: 42mm)
  and (min-device-width: 38mm) {  }
```

Q: Do I use with Grid/Flex?

A: Yes

Flex by Orientation

```css
@media (orientation: portrait) {
  .container {
    flex-direction: column;
  }
}
```

Style by Feature

Feature Queries

```
@supports (display: grid ) {
    #main {display: grid;}
}
```

Feature Inside Media

```
@supports (display: grid ) {
    @media (orientation: portrait) {}
    @media (orientation: landscape) {}
}
```

Fonts

5 Families

Serif

Times New Roman

Sans Serif

Helvetica

Monospace
Courier

Monospace hello

Sans Serif hello
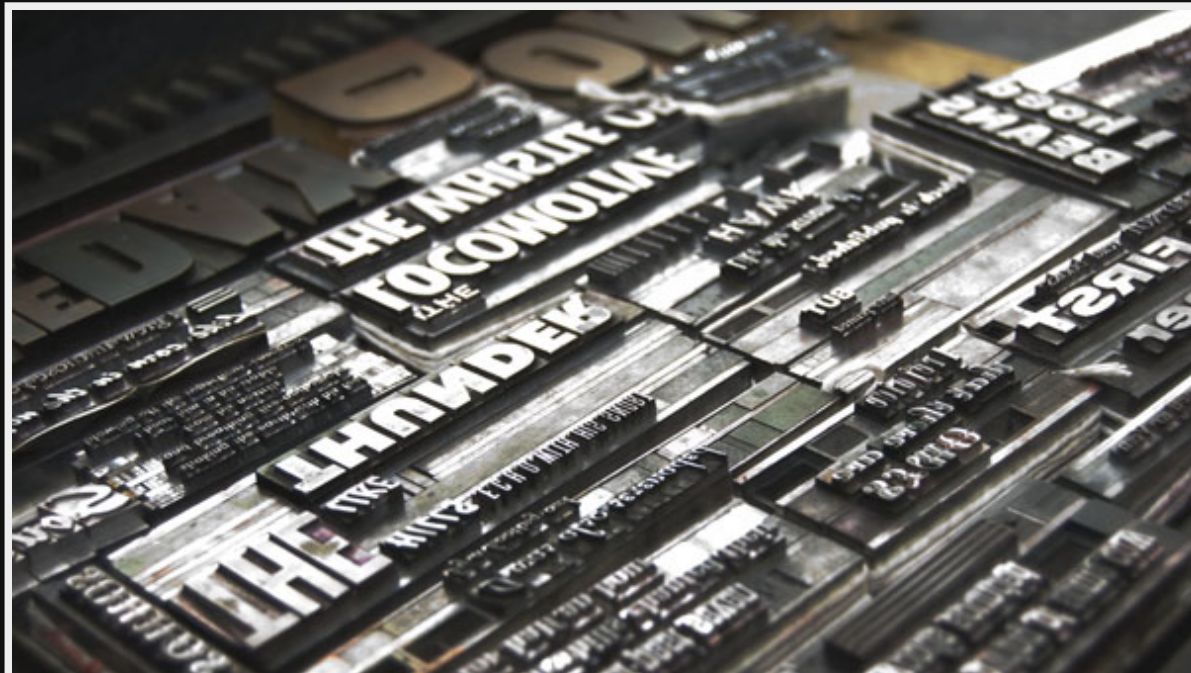
Cursive

Fantasy

Safest Web Fonts?

- Arial
- Helvetica
- Times New Roman
- Courier

Sizing

The em box

font-size sets the size of the designer chosen em-box for a font

Uniform height pieces, set to width of uppercase M (square/box)

Smart defaults

font-size: small / medium / large

medium 16px, default

small * 1.5 = medium

large * .66 = medium

Q: What do I inherit?

A: The computed value

Example with keywords

Example with ems

Browser defaults

Example with ems

Ems and Rems

Example scaling

The Final.