

## ECS 189H WEB PROGRAMMING

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### Stylin'

- Start with pheasant.html, no css
- Text is usually left-justified
- To center:  
`text-align: center;`

### Fonts

- Usually a good idea to select your fonts; the default font depends on your Web browser and is often not pretty.
- Rule of thumb: sans-serif fonts for Web pages are easier to read. Serif fonts are better in print documents.

Serif      Sans-Serif

### Font stacks

- font-family: "Lucida Sans Unicode", "Lucida Grande", sans-serif;
- Every browser has some collection of fonts. But no guarantee that the exact one you want for your Web page is there.
  - Specify a stack of acceptable fonts in order of preference; we'll take any sans-serif font if the first two are not there.
  - This is a property assigned to an element. If we assign it to the `<body>`, it is inherited by all contents.

### Images

- The image can have a fixed width and height; they'll get cut off on small windows/screens (generically, viewport). In CSS:  
`width: 500px;`
- Can be assigned to a specific percentage of the viewport.
- Getting too big or too small is bad – why?
- Min-width and max-width set limits on how big or small to go.

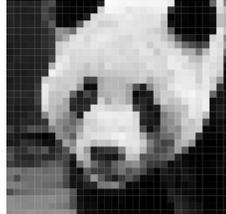
### Lengths in CSS

- `min-width: 200px;`
- px is a unit; it means pixel.
  - What's a pixel?

## Lengths in CSS

min-width: 150px;

- px is a unit; it means pixel.
- What's a pixel?



## Responsive image width

max-width: 500px;  
min-width: 200px;  
width: 50%;

- This is an element of responsive design – page appearance responds to different-sized screens, from phones to large monitors.

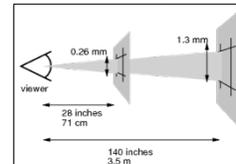
## Lengths in CSS

- What's a pixel?  
On a device, one colored dot making up the image you see.
- We'll call this a device pixel; it's a piece of hardware.
- This Samsung Galaxy has the same width in pixels as my laptop.
- Also, you hold it closer to your face.
- So should we specify the image width in cm instead? Screen width?



## Lengths in CSS

- px in CSS does not refer to device pixels, but reference pixels.
- According to the W3C, a reference pixel is the visual angle subtended by a pixel on a 96dpi device held 28 inches away from the eye.



## Targeting screen size

- Rule of thumb: let the browser handle sizing!
  - Specify image sizes in reference pixels.
  - Can also use fixed sizes, appropriate in some situations.
- Browser's handling of font sizes
  - The browser's default font size should be readable from the expected viewing distance.
  - It is known in CSS as "medium"
  - Other sizes vary from "xx-small" to "xx-large"

## Default Layout

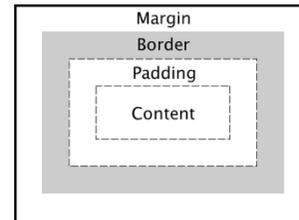
- The default layout is the normal document flow.
- The default layout stacks HTML block elements one on top of another, and puts inline elements one after the other from left to right.
- Some block elements that stack by default:  
<p>, <h1>, <ul>, <nav>(nav bar), <div>
- Some phrasing elements:  
<a>, <b> (bold), <i>(italics), <img>
- lmg?

## Flowing text around an image

- IMG is inline!
- If the image is before the paragraph, the paragraph stacks itself under it, because the paragraph is block.
- If the image is part of the paragraph, it looks weird...
- To make the text fill up the space around the image, give the image a float property in the CSS.  
float: left;
- We say the text “floats” around the image.

## The box model

- Blocks can be surrounded by boxes to keep them from butting up against each other.



## Example

```
p {  
  background-color: lightblue;  
  margin: 30px;  
  padding: 10px;  
}
```

- The margin keeps the paragraph from hitting the edges of the body
- The padding keeps the text from hitting the edges of the paragraph

## Spacing around image

- The margin keeps the text from hitting the edge of the paragraph, but nothing keeps it from hitting the edge of the image.
- How to fix?

## Spacing around image

- The margin keeps the text from hitting the edge of the paragraph, but nothing keeps it from hitting the edge of the image.
- How to fix?
  - Add padding to the image; but this makes it move down.
  - Add padding just to the right side of the image:  
padding-right: 10px;

## Beyond the default layout

The screenshot shows a website layout for Davis Food Co-Op. At the top, there is a navigation bar with links for ABOUT, GOOD FOOD, COOK & LEARN, FEEDBACK, and SUSTAINABILITY. Below the navigation bar, there is a promotional banner for "WEEKLY SPECIALS" from April 5-11, 2017. The banner features two main items: "HASS AVOCADO 4/\$5" and "BUTTERNUT SQUASH FARM From Terra Firma Farm 99¢ /LB". The banner also includes a "LOCAL" logo and a "WEEKLY SPECIALS" logo. Below the banner, there is a "FEEL GOOD, SHOP DAVIS" section with a "QUOTE BOARD" and a "MEMBERSHIP" section. The "QUOTE BOARD" features a quote about a cracker, and the "MEMBERSHIP" section includes a "Free Tasting - La Rioja Wines" event.

## Flexbox

- Helps us arrange boxes on a Web page, while letting them change size to fill the viewport
- Becoming part of the CSS standard, supported by current browsers
- Possibly? replacing layout frameworks like Bootstrap.
  
- Our simple task: get the footer to the bottom of the page!