

# HTML5 & CSS3

**Week 8**

# Today's Agenda

1- Homework & Git questions	10	mins
2- Video/Audio Tags	25	mins
3- Basic Grid	45	mins
4- Git Branches	45	mins
5- Bigger, Better Grid System	25	mins
6- Homework	10	mins

# Homework Discussion

Questions/comments on homework?

Collaboration wins you'd like to share?

# Multimedia Elements



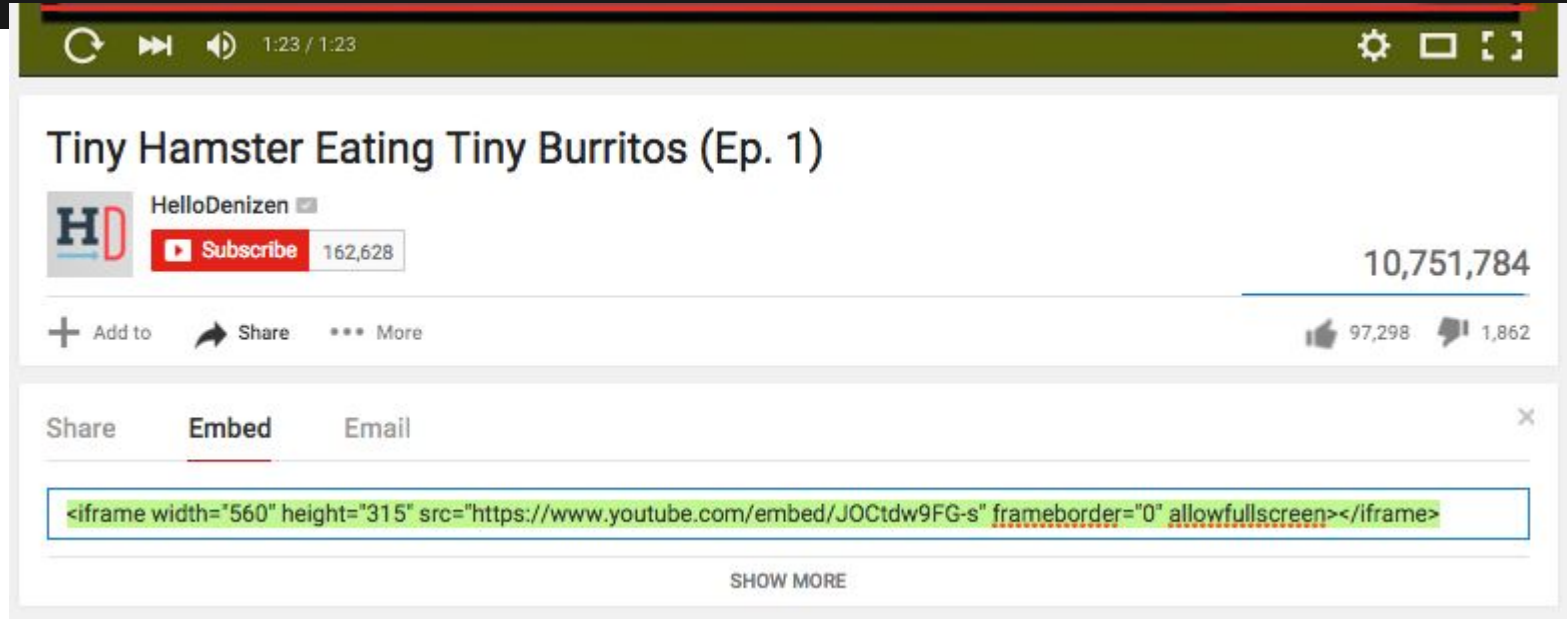
# Getting Started

- Download blank-slate.html.zip & dipper-diving.mp4 from Lesson 08 Overview
- Make a new folder in foundations/week8 called "video".
- Copy & paste unzipped contents of blank-slate.html into a new file (or save-as).
- Move dipper-diving.mp4 to foundations/week8/video

# HTML5 Multimedia

- Present multimedia files the same way you would an image
- New!
- Cool!
- Better than embedding a YouTube video!

# Embed a YouTube Video



Under “Share”, on the “Embed” tab, there’s an `<iframe>` element. Copy and paste into your HTML.

## Video Party



**Wow.**



# Why Not YouTube Always?

- You have no control over the media. If the video is taken off YouTube, your page is broken.
- You can't style the `<iframe>` element that holds it, and it will sometimes break other layout elements on page.

# <video>

## Pros:

- Styleable with CSS
- You control the availability of media
- Can stream, if source is an http or https: streaming source

## Cons:

- No copy protection; as easy to copy & save as imgs are now

# <video> Basic Syntax

**<video src="" *options*>fallback content</video>**

<video src="cool.mp4" controls>

Sorry, your browser does not support video :(  
</video>

<video src="rad.ogg" autoplay></video>

# `<video>` Better Syntax

```
<video width="320" height="240" controls>  
  <source src="cool.mp4" type="video/mp4">  
  <source src="cool.ogg" type="video/ogg">  
  Your browser does not support video :(  
</video>
```

List multiple sources- different filetypes of same content, so browsers have fallbacks.

# Inline Styles?!

Including the height and width in the video tag lets the browser know how much space to reserve for the video element when rendering the page, so the layout doesn't change after the video loads (it'll be slower than other elements on page because it's a large file).

# Video Formats

## HTML Video - Browser Support

Currently, there are 3 supported video formats for the <video> element: MP4, WebM, and Ogg:

Browser	MP4	WebM	Ogg
Internet Explorer	YES	NO	NO
Chrome	YES	YES	YES
Firefox	YES	YES	YES
Safari	YES	NO	NO
Opera	YES (from Opera 25)	YES	YES

# Video Conversion

There are lots of free, online conversion tools available if you need to convert your content to a different format.

# Responsibility

- Always show controls to users
- Never autoplay media content (unless you're RickRolling someone)
- Don't use content that you don't have license to use. If you want to use someone else's work, look for content available via Creative Commons licenses.



# Creative Commons Sources

video: <http://vimeo.com/creativecommons>

video, audio, and images:

<http://search.creativecommons.org/>

# Audio

The `<audio>` tag works almost exactly the same as `<video>`. It is used less often, so we won't cover it in depth today.

Learn more about the audio tag on your own:

[http://www.w3schools.com/tags/tag\\_audio.asp](http://www.w3schools.com/tags/tag_audio.asp)

# In Class Project

Explore sources for video, download at least one, and include it in your multimedia page with the `<video>` tag.

You can also try adding an audio tag using the mp3 file included in Lesson 08 Overview, if you'd like.

# Grid Basics



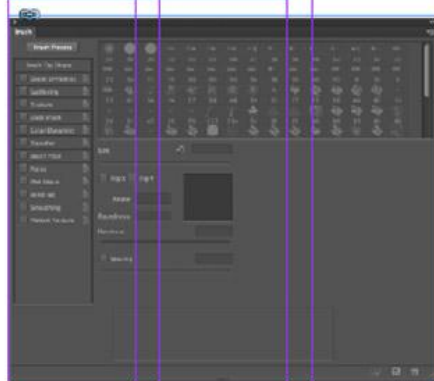
# What is a Grid?

A grid is a way to divide horizontal and vertical space on a web page into consistent units. It is very similar to how we used to style with tables. It's also the standard for most print layouts.

# Knowing Photoshop

23

## The Brushes Panel



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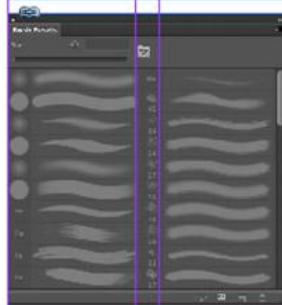
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## Special Hint: Brush Presets

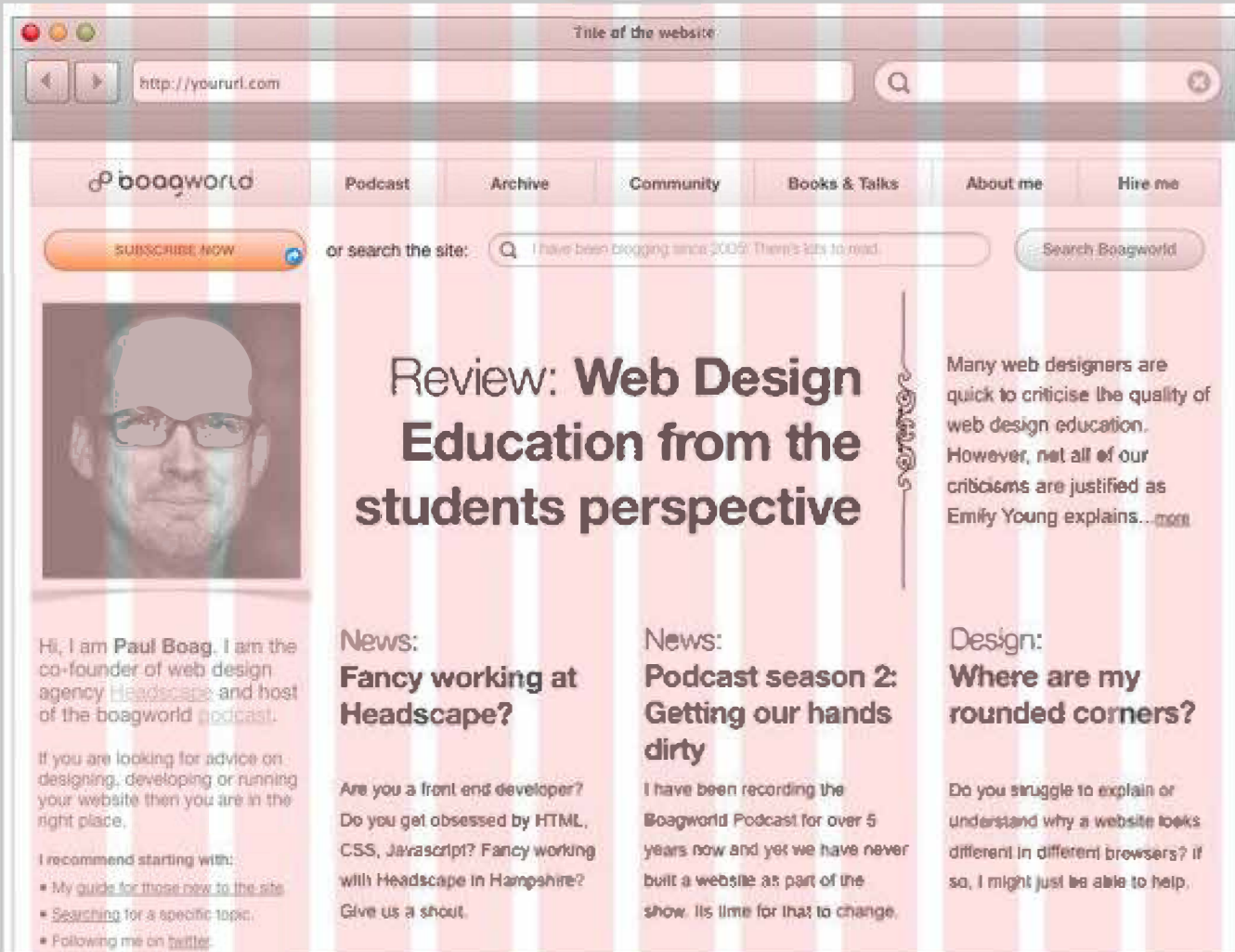
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# 5 Column Grid



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Hi, I am Paul Boag. I am the co-founder of web design agency [Headscape](#) and host of the boagworld [podcast](#).

If you are looking for advice on designing, developing or running your website then you are in the right place.

I recommend starting with:

- [My guide for those new to the site](#)
- [Searching for a specific topic](#)
- [Following me on twitter](#)

## Review: Web Design Education from the students perspective

Many web designers are quick to criticise the quality of web design education. However, not all of our criticisms are justified as Emily Young explains...[more](#)

### News: Fancy working at Headscape?

Are you a front end developer? Do you get obsessed by HTML, CSS, Javascript? Fancy working with Headscape in Hampshire? Give us a shout.

### News: Podcast season 2: Getting our hands dirty

I have been recording the Boagworld Podcast for over 5 years now and yet we have never built a website as part of the show. Its time for that to change.

### Design: Where are my rounded corners?

Do you struggle to explain or understand why a website looks different in different browsers? If so, I might just be able to help.

# How is it Used?

A row contains one or more columns. Each column is a fraction of the total width (eg:  $\frac{1}{3}$ ). Columns are styled to be the appropriate width based on their class names.



# Rules

- All content goes within columns
- Only columns may be immediate children of rows
- Each row's columns must total 12 (or the max for the grid)- if it is more, they will stack

# It Goes Deeper

Columns may also contain rows which contain more columns...

**Your Site Name**



**Title**

- this is pretty item one
- other nice one is two
- and more is three of the same

**Title**

- this is pretty item one
- other nice one is two
- and more is three of the same

**Title**

- this is pretty item one
- other nice one is two
- and more is three of the same

**Title**

**Heading**

This extension is delivering really great results! It is so easy to generate new designs based on the 960 Grid System! It is all so visual really amazing

What can we do with it?

**Title**

Here is something you might always wanted to do easy

**Title**

Here is something you might always wanted to do easy

**Title**

Here is something you might always wanted to do easy

**Title**

Here is something you might always wanted to do easy

**What More?**

And now something else? Maybe you would like two cells? Well pretty easy to do just add new row!

12  
Column  
Nested  
Grid

# Example Code

Download and unzip `basic-grid.html` from Lesson 8 Overview. We'll review how the pieces work together.

# In Class Project

Replace the simple text in basic-grid.html with real HTML elements and more content (lorem ipsum? images?). See how grid behaves with different amounts/types of content. Improve CSS to make it more realistic (add padding? remove background-color?).

# Git Branches



# Git Branches

Branches are a great way to work on a certain part of your code without affecting the rest of it.

Branches allow you to work experimentally, or work with collaborators easily.

# Branches

The default branch is “master”. It is usually used as the canonical branch- where code goes when it works well!



# Branching

- Develop different code on the same base
- Conduct exploratory work without affecting the work on master branch
- Incorporate changes to your master branch only when you are ready

# Branching in Bash

View all branches:

```
git branch
```

Switch to an existing branch:

```
git checkout branch_name
```

Create a new branch and switch to it:

```
git checkout -b branch_name
```

# Git Branches

To merge branches, checkout base branch:

```
git checkout branch-name
```

Then merge in desired branch:

```
git merge other-branch-name
```

Merges are **one way** transactions.

# In Class Project

Back to your basic-grid.html file.  
Make a noticable change to your html.  
Commit and push this file to a newly  
created repository

# In Class Project

Create and switch to a new branch

In this new branch add a <video> and/or audio

Add, Commit and Push to the new branch

```
git push -u origin newBranch
```

Switch back to your main branch

The changes aren't there?!?!?!?

Let's merge them together.

# Better Grid

**Someone Else Does the Hard Work!**

# Why Use Open Source Tools?

- save you time
- save you errors
- industry standard
  - other devs are familiar with them, or can easily find documentation about them, so have an easier time working with them, compared to idiosyncratic custom solutions

# Pitfalls of Open Source

- Someday, they'll no longer be maintained
- Documentation can be out of date
- May be too complex for you to easily understand
- May require you to fundamentally change your project
- Might not actually work



# How to Pick a Winner

- Great documentation
- Updated often
- Used widely
- Easy to add to your project, and easy to remove later
- Is on Github or Gitlab, or has source code otherwise available

# Responsive Grid System

Check it out!

<http://www.responsivegridsystem.com/>

# Note: Bootstrap

Bootstrap's grid system is the most popular choice, but it's part of a much bigger package.

Allison will talk in-depth about it Monday.

# Homework



# stp-archery styles

Write CSS (and supplemental HTML if necessary) to style your site.

At least one page should use a grid layout.

It's okay if your design evolves from the layout sketches- I don't expect it to match perfectly.

# CSS Selector Review

Only use divs and ids when absolutely necessary. Try other options first.

Most of your css selection can be accomplished with context and classes.

article.class-name	Only articles with a class of 'class-name'
header nav li	Only lis that are in navs that are in headers
a:hover	Only links that are in the hover state
p:first-child	Only ps that are the first child of their parent
li:first-of-type	Only lis that are the first li child of their parent
li:last-of-type	Only lis that are the last li child of their parent
li:not(.class-name)	All lis that don't have the class 'class-name'

# CSS Class Review

Classes should be reusable and generic. Elements can have several classes.

```
.call-to-action {  
    border: 1px solid green;  
    background-color: pink;  
}
```

```
.shadowed { box-shadow: 2px 2px 5px green; }
```

```
<div class="call-to-action shadowed"></div>
```



# Yeah!

