



# **An Introduction to HTML, CSS & JavaScript**

And other cool stuff if we have time ;)



# The Plan

- Start with HTML
- Learn a bit of CSS
- Learn basic JavaScript
- Learn some best practices
- Hacking stuff or a large(r) project

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Hard core programmers don't use CSS. Have you seen the GCC Compiler home page[1]? Just kidding, it's important!

[1] <http://gnu.org/software/gcc>

# Why learn?

- It's not for everyone
- If it is for you, it can be rewarding
- There is always something new to try
- Job opportunities doing something you love
- Cool offices



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Learning to program can be very tedious. Some people don't really find it that interesting.

If you do like it, it can be very rewarding. I've had a lot of fun creating robots, retro game controllers, my own games, and other cool apps to make my life easier.

I hop subjects all the time. This has been one of the few subjects that I've yet to run out of things to try next.

## What you'll need

- A CodePen.io account
- A place to export projects when we are done
- An interest in learning how to code



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We'll use the new projects feature in CodePen as our development environment.



## What you won't need

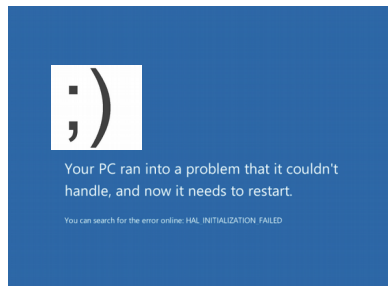
- Online Games
- YouTube
- Facebook
- Twitter
- Anything that isn't what we're working on

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I don't want anyone getting behind, and I want to get past the beginning so we can make cool stuff. I like cool stuff.

# Things could change

- These slides will be constantly updated
- Stop me if you have questions
- Your input is welcome
- Creative ways to break stuff are encouraged



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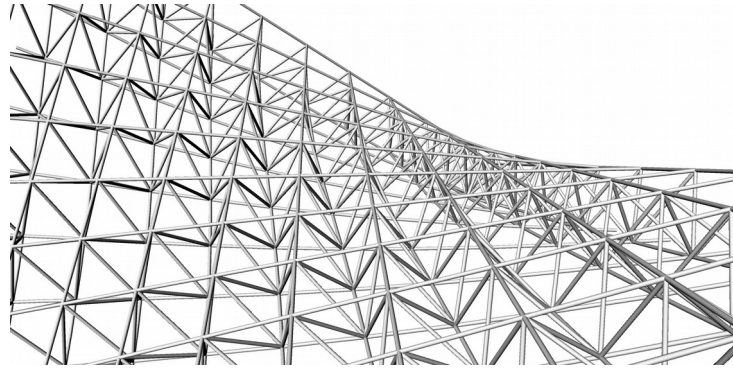
Just don't break the school's computer :P  
So let's get started with some HTML!



# HTML

## The Structure





# HTML

## The Structure

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HTML provides the basic structure and defines content of your web page.





# Tags everywhere!

HTML consists of tags, usually an opening and a closing tag with content inside.

These are used to define the content on your web page.

```
<p>My Paragraph</p>  
<h1>My heading</h1>  
<h2>My smaller heading</h2>
```

*Would create something like:*

My Paragraph  
**My heading**  
My smaller heading

Notice a closing tag is the opening tag with a / before the tag name.

# Self closing tags

Not all tags need content.

```
<p>Hello<br />world</p>
```

*Would create:*

```
Hello  
world
```

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A line break for example doesn't have a closing tag and the / is after the tag name.

Also tags can be nested inside other tags.



## Different tags do different things

There are tags for:

- Paragraphs
- Dividers
- Lines
- Input fields
- Sliders
- Tables
- Images
- Embedding other pages
- [And a lot more](#)

# Nesting tags

Tags are usually nested inside other tags.

```
<div>  
  <p>Paragraph 1</p>  
  <p>Paragraph 2</p>  
  <p>Paragraph 3</p>  
  
  <ul>  
    <li>List item 1</li>  
    <li>List item 2</li>  
  </ul>  
</div>
```

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For example you might have a section (div) with multiple paragraphs and a bulleted list in it.

Note: the indentation is not necessary but it makes it easier to read.

# Basic web page format

- Define the DOCTYPE
- It is all inside a html tag
- Stuff describing the page goes in “head”
- Content goes in “body”

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <p>
      This is a
      paragraph.
    </p>
  </body>
</html>
```

Note: the paragraph will render as one line, but that's why we have br tags. Breaks in text in your HTML just count as a single space.

# Attributes

It is possible to add extra data to tags. This data can:

- Change the tags appearance or behavior
- Help JavaScript find them
- Specify which CSS styles are applied
- Go [here](#) for more info

```

```

```
<button class="button-primary">  
  Click Me  
</button>
```

```
<input id="name" value="jim"  
type="text">
```

# Try it out!

- Create a page with a form
- Have a header tag
- Have two fields with inputs filled in with default values
- Have a select box

## Example Form

First Name   
Last Name   
Age

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If you already know HTML try to find an HTML5 feature that you didn't know about and add it to the page



# Project #1

A Basic Blog





## The Specs

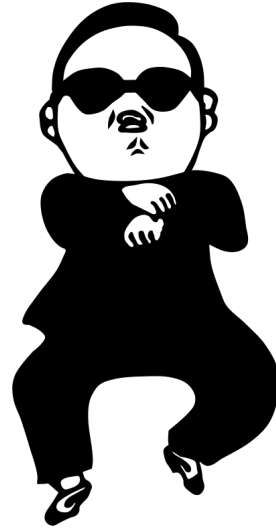
- 2 Pages
  - About you
  - Photo Gallery
- Pages link to each other
- Pages need a header and a title
- Info on the pages doesn't have to be real
- [lipsum.com](http://lipsum.com) can be used for filler text
- Use more than paragraph tags to format text

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If you want more of a challenge, try to find and use some new semantic HTML5 tags.

If you get done early, try looking into the semantic HTML5 tags.

We will review, do a little show and tell at the end, and spend some time doing Q&A.



**CSS!**

Web Development With Style

# Basic structure

- Selector(s)
- Body
- Attributes

```
p {
  font-weight: bold;
  color: #00FF00;
}

* {
  background-color: black;
}

.main-title, .sub-title {
  font-style: italic;
}

input[type="text"] {
  padding: 5px;
}
```

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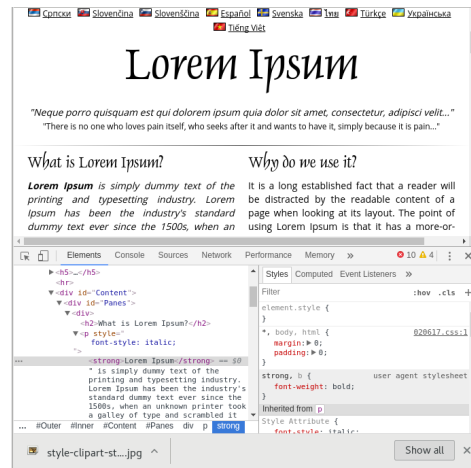
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# Inspecting Pages

- Right click and select “Inspect Element”
- See the HTML, CSS & JavaScript a page
- Other Resources:
  - W3schools
  - Google
  - [developer.mozilla.org](http://developer.mozilla.org)





# Getting the slides

<http://repo.lupnix.org/slides/CodingClub.pdf>