

Web Design

Best Practices, Part 2: Implementation

Two Key Ideas



Layout



Navigation

Let's recap

What were we doing last class?



Meeting #3: Design and Layout

TODAY's GOAL: Discuss the design of your company website and brainstorm different layout ideas together.

1. **Each person in your team should contribute a layout idea.**
2. **Take photos of each idea and upload the photos into the meeting minutes.** (embed the photo from your phone into google docs and clearly indicate who's idea belongs to who).
3. **Secretary:** Write a brief summary / description of each idea.
4. After EVERYONE has shared their ideas, spend 10 minutes discussing 1 more FINAL layout plan. Be prepared to share your company's plan on FRIDAY with another team to get feedback.

Submit the minutes into your team's folder.

Collaborating on a design

Doing a “mock-up” is a great way to plan a layout design before you start to program it. This technique works for websites, game UI, and desktop applications.

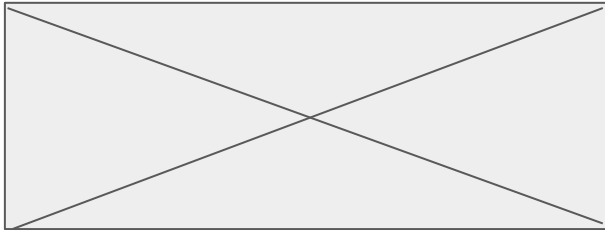
There are professional tools available (Adobe Fireworks) but we can do it for free by creating a series of Google Slides pages that use our chosen styles and colors of our website. (You could also create your design on Inkscape or Photoshop if you want).



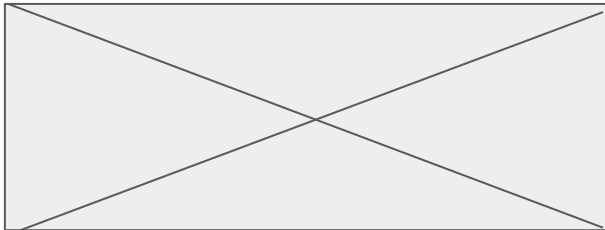
See the following 2 slides for sample home pages...

OUR COMPANY

[Home](#) | [Our Product](#) | About Us



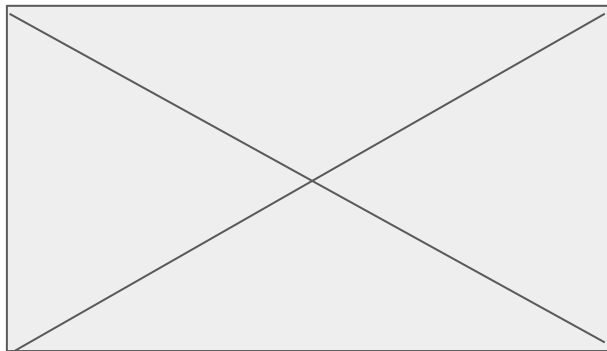
Suggestion: YOU CAN USE GOOGLE SLIDES to make the final version of your layout template. That way it's already in your presentation and it already uses web-safe fonts. You can do a lot with google slides.



You can even make the slides interactive by hyperlinking to a second page. [CLICK HERE](#) to visit another page of this presentation!

The Product

[Home](#) | [Our Product](#) | About Us



Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent lobortis sodales consectetur. Donec vel libero pellentesque urna mollis vehicula. Mauris magna leo, varius vel egestas a, ornare ut dui. Praesent sit amet sodales erat. Nunc mauris ipsum, malesuada non consequat ultrices, lobortis non sapien. Aliquam efficitur ultrices nisi eget efficitur.

Color Palettes



Different combinations of colors can look either good or bad.
That is where a **Color Palette** Comes in!

Try out these apps to **find a great color palette** to use on your website:

- + <http://paletton.com>
- + <https://coolors.co>


The key is to avoid using TOO MANY colors and also to be **consistent** with the colors you choose. Usually a website has a color theme that is used across all pages.



Meeting #4: Peer Feedback (NEXT CLASS)

Step 1: Prepare! Get ready to explain to another group what your company is all about and to show them your layout ideas.

- ☐ What is your company name?
- ☐ What do you make / sell?
- ☐ What is each person's job? (the one they chose to research)
- ☐ What is your company's layout plan for the site?



Do these choices make sense?

Min of 3
pages >>

- ☐ **Home Page:** What will the home page look like?
- ☐ **Product / Service Pages:** What will the sub-pages look like?
- ☐ **Employee Pages:** What will each person's individual page look like?

Step 2: Meet with another company. Each group should be given a chance to share their ideas and receive feedback.



Meeting Minutes: 1 person from each team should be recording minutes so that you have a record of the conversation. Make sure to write down any great ideas that each team has and any feedback they give you on your ideas.

As always, submit the meeting minutes in the shared folder.



How do you *implement*
these decisions in HTML?

A website without any layout or CSS

You can only control the
ORDER of the information
but you can't control the
POSITION of elements.

This is what we have been
doing up until now.

[Hello World](#)

- [Home](#)
- [About Us](#)
- [Contact Us](#)
- [Search](#)

Hello World Title!

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Etiam viverra est et erat euismod blandit congue metus porttitor. Duis sollicitudin, ante at tincidunt accumsan, nisi leo rhoncus mi, id tempus dui velit a risus. Aenean gravida, dolor ac mollis fermentum, felis metus laoreet felis, vitae ullamcorper justo turpis sit amet nisi. Mauris laoreet turpis eget elit sodales eget vehicula sem consequat! Aliquam erat volutpat. Quisque auctor, metus non molestie semper, felis diam tempus leo, eget rutrum est arcu vitae orci. Mauris vitae mi in eros semper consectetur nec vulputate lectus! Suspendisse ac auctor libero. Duis ut neque euismod leo aliquet bibendum quis in enim. Quisque iaculis nisi tortor. Praesent quis tortor est. Integer eleifend iaculis magna. In et urna ac lectus rhoncus accumsan? Cras sodales lectus ac ligula dignissim sit amet luctus nisi dignissim! Ut neque metus, sagittis ut blandit at, gravida at urna.

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- [Metus non molestie semper, felis diam tempus leo, eget rutrum est arcu vitae orci. Mauris vitae mi in eros semper consectetur nec vulputate lectus](#)
- [Felis metus laoreet felis, vitae ullamcorper justo turpis sit amet nisi. Mauris laoreet turpis eget elit sodales](#)
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- [Ut neque metus, sagittis ut blandit at, gravida at urna](#)

Latest News

- **February 27th - Dolor sit amet**

[In et urna ac lectus rhoncus accumsan...](#)

- **March 3rd - Lorem Ipsum**

[Lorem ipsum dolor sit amet, consectetur adipiscing elit...](#)

- **July 7th - Gami Suscipit**

[Quisque iaculis nisi tortor. Praesent quis tortor est. Integer eleifend iaculis magna...](#)

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Core Layout Technique

Using “Division”

The **<div>** element

Separates your HTML into different sections. Allows you to control the position and style of each section independently.

A website will typically have at least 1 div to function as a CONTAINER to hold the content.

Inside `<body>` use the `<div>` tag to hold content:

```
<body>
```

```
    <div>
```

```
        <h1>Title Goes Here!</h1>
```

```
        <p>This is some content</p>
```

```
    </div>
```

```
    <div>
```

```
        <p> This is some content </p>
```

```
    </div>
```

```
</body>
```

It is like a body INSIDE the body... like an organ!

Styling Divs in CSS

Inside your css, simply use the **div** selector:

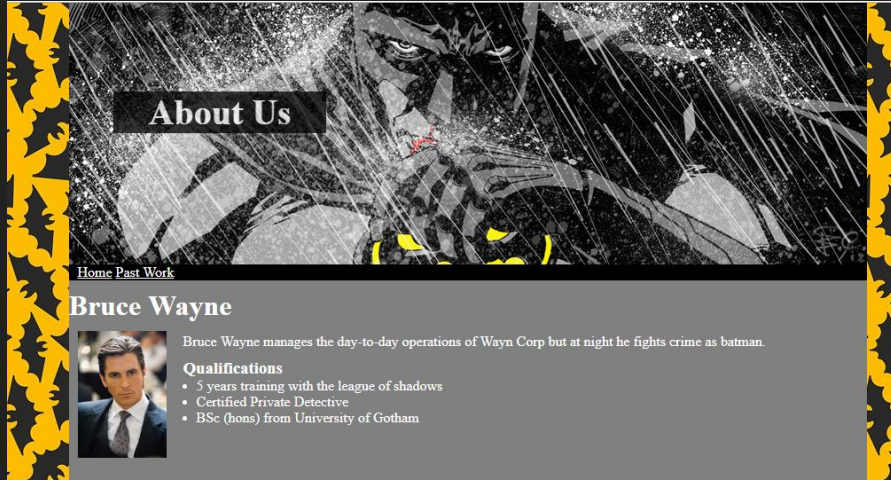
```
div {  
    background-color: yellow;  
}
```



But what if we want
more than 1 DIV and we
want them to have
different styles?

Basic Layout Examples on Repl.IT

Batman: <https://repl.it/@LanzSingbeil/ICS2O-BatmanCSS-1>



Spiderman: <https://repl.it/@LanzSingbeil/ICS2O-Spiderman>



The **class** attribute

A class allows you to designate any HTML element as part of a group.

Like a *classroom*: There are many different people in this class but everyone is studying the same thing. They have some common characteristics.

Assign a class in HTML

```
<div class="container">
```

...

```
</div>
```

```
<div class="navigation">
```

...

```
</div>
```

Describe its style in CSS

```
.container {
```

```
}
```

```
.navigation {
```

```
}
```

CSS uses a
full stop

- followed by
the name of
the class.

The **class** attribute : EXAMPLE

Assign a class in HTML

```
<div class="container">

    <h1>Title Goes Here!</h1>

    <p>This is some content</p>

</div>

<div class="nav">

    <a href="#">link</a>

</div>
```

Describe its style in CSS

```
.container {

    background-color: yellow;

}

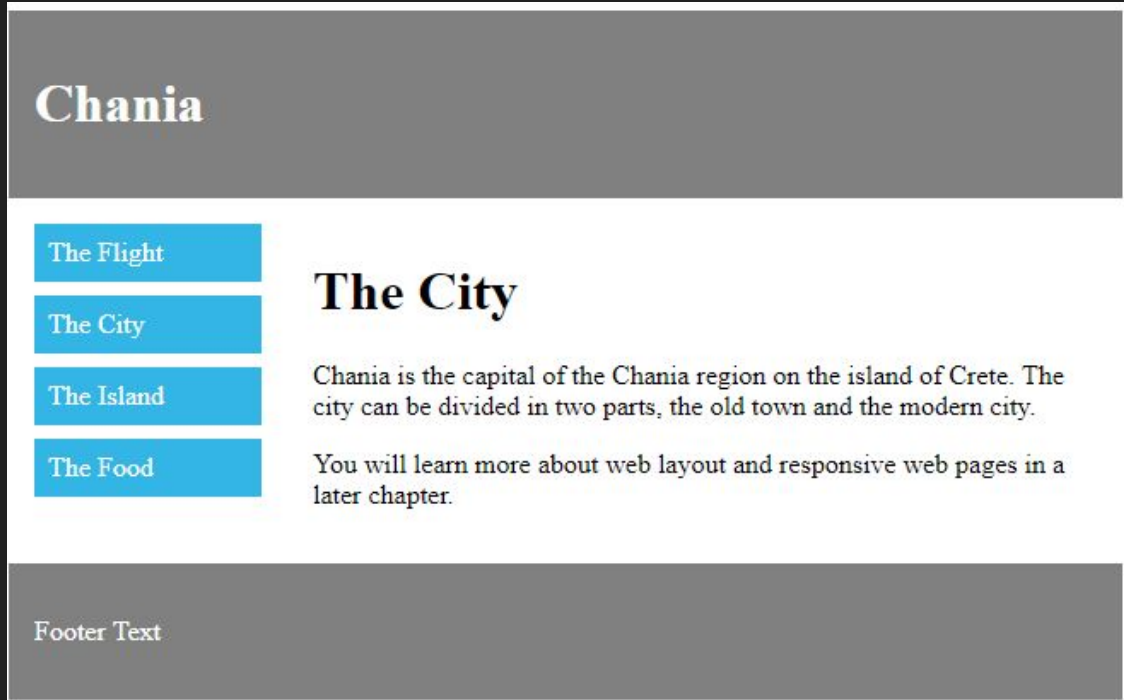
.nav {

    background-color: orange;
    width:20%;

}
```

The **class** attribute : Complete Example

https://www.w3schools.com/css/tryit.asp?filename=trycss_layout_cols



Example of using
classes in CSS

Shows how to use the
float property
combined with classes
and navigation.

Nested <div> tags

All <div> tags can be thought of as containers. This means you can NEST them. You can put a div inside of a div!

```
<body>
```

```
  <div>
```

```
    <h1>Title Goes Here!</h1>
```

```
    <p>This is some content</p>
```

```
  <div>
```

```
    <p>This is some content</p>
```

```
  </div>
```

```
</div>
```

```
</body>
```

The **Style** Attribute

Remember how you can use the style attribute to code CSS?

```
<body>
```

```
<div style="background-color:red;">
```

```
<h1>Title Goes Here!</h1>
```

```
<p>This is some content</p>
```

```
<div style="margin:0 auto; width:80%; background-color: yellow;">
```

```
<p> This is some contents </p>
```

```
</div>
```

```
</div>
```

```
</body>
```

Example
Showing
nested <div>
tags and the
style attribute.

This can come in handy in some situations.

It is recommended that you use the class function instead as it will be easier to make style changes.

Optional: Using #ID selectors

https://www.w3schools.com/cssref/sel_id.asp

ID selectors are another way to define unique items to style in your CSS.

All IDs must be unique. No elements can have the same ID.

Different from classes where one object can have 1 or more classes and/or many objects can share the same class.

Using an ID in HTML:

```
<p id="uniqueID">  
    This is my special paragraph.  
</p>
```

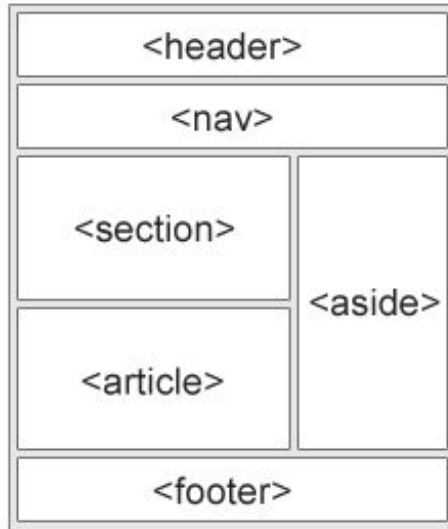
Styling an ID in CSS:

```
#uniqueID {  
    color:#936c6c;  
}
```

HTML5 Layout Techniques

Websites often display content in multiple columns (like a magazine or newspaper).

HTML5 offers new semantic elements that define the different parts of a web page:



- `<header>` - Defines a header for a document or a section
- `<nav>` - Defines a container for navigation links
- `<section>` - Defines a section in a document
- `<article>` - Defines an independent self-contained article
- `<aside>` - Defines content aside from the content (like a sidebar)
- `<footer>` - Defines a footer for a document or a section
- `<details>` - Defines additional details
- `<summary>` - Defines a heading for the `<details>` element

Setting position in different ways

position: absolute;

Absolute position is not recommended for the entire website but can be handy in some cases.

Example:

```

```

https://www.w3schools.com/css/css_positioning.asp

Removing Default Styles (Codecademy, 2018)

Web browsers have default styles for margins and padding which can cause some annoying issues when you want to control all the styles.

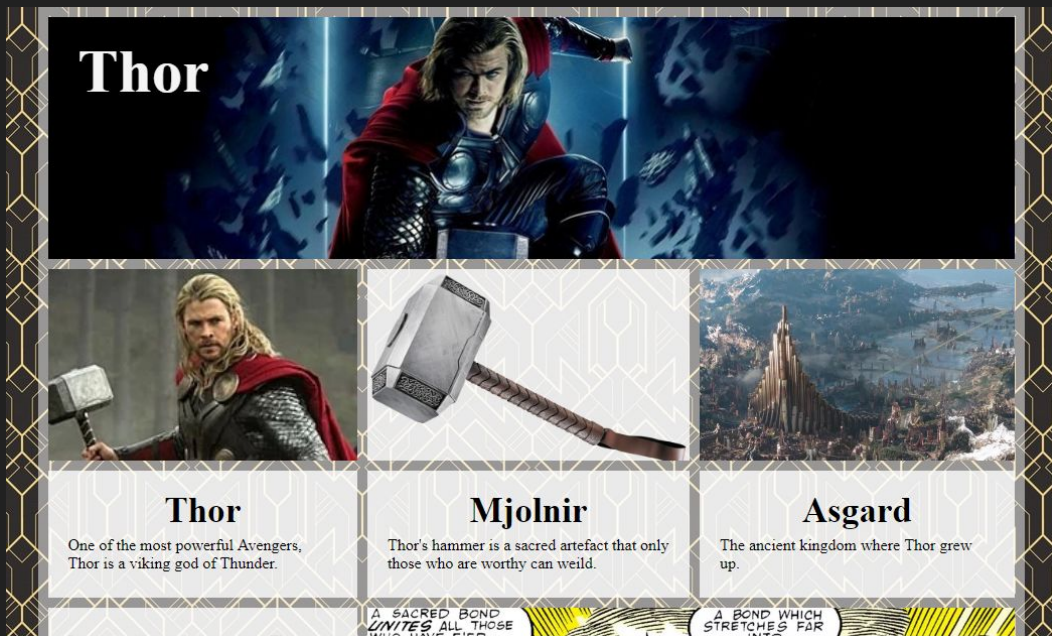
“Many developers choose to reset these default values so that they can truly work with a clean slate.”

```
* {  
  margin: 0;  
  padding: 0;  
}
```

Add this at the top of
your stylesheet.

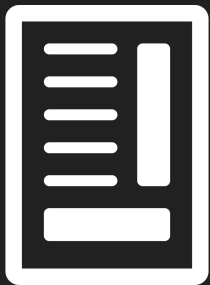
Using Grid Layout

The above techniques use float and position to manage content. Another approach is to use **Grid Layout**: https://www.w3schools.com/css/css_grid.asp



See the Thor Example:
<https://repl.it/@LanzSingbeil/IC-S2O-Thor-Grid-Layout-Example>

Layout Activity



Based on your research notes, start to create a first draft of your individual web pages. Try out a few different layout techniques.



Navigation

Your pages should link together so I can jump between them.

Website Files: index.html, name-bio.html, & style.css

Contents of index.html:

Info about your role in the company and your qualifications

Contents of name-bio.html:

Info about your past work experience AND your education (school and program)

Style Requirements:

- ☐ use divs with classes and/or HTML5 techniques to lay out and style both pages.
- ☐ Try out position controls, grid layout, margins, and padding to layout your content.