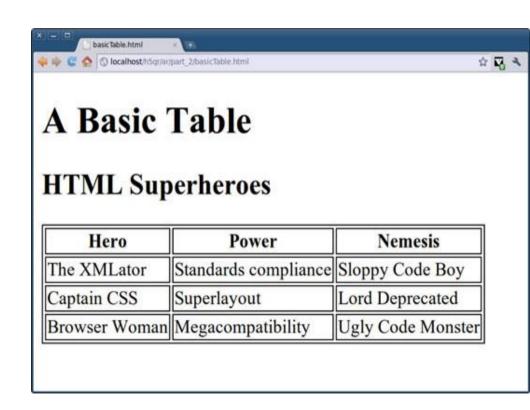**Philly Tech Sistas**

Intro to HTML & CSS

Class 2

Share Your HW

- What are you most proud of doing your HW?

- What gave you the most difficulty (if any)?

- Any questions?

TABLES

```
<table>
<caption>Table Title</caption>
<tr>
<th>Column header 1</th>
<th>Column header 2</th>
</tr>
<tr>
 <td>Data 1</td>
 <td>Data 2</td>
</tr>
</table>
```

COMMENTS

```
<!-- HTML Comment! -->
<!--
<ul>
<li>Order</li>
<li>Doesn't</li>
<li>Matter</li> </ul>
-->
```

Hint: Select code you want to "comment out" and click ⌘ + / (Mac) or CTRL + / (PC).

Group Exercise: Create a calendar

1. Create a new project called calendar

2. Inside that calendar.html, create a 7-day calendar using your weekly google or outlook or personal calendar as an example using the table tags

```html
<table style="width:100%">
  <tr>
    <th>Mon</th>
    <th>Tue</th>
    <th>Wed</th>
  </tr>
  <tr>
    <td>Mon@12: Go Running</td>
    <td>Tue@1: Go Walking</td>
    <td>Wed@2: Nap</td>
  </tr>
</table>
```

HTML5 is the latest standard of HTML

- 21 new semantic tags
- 2 new form tags
- 2 new graphics tags
- 5 new media tags

1. Video

The <video> tag allows you to embed video clips and movie streams into your HTML.

Example:

```
New School
<video width="320" height="240" controls>
  <source src="movie.mp4" type="video/mp4">
  <source src="movie.ogg" type="video/ogg">
Your browser does not support the video tag.
</video>
```

```
Old School
  <iframe width="560" height="315"
src="https://www.youtube.com/embed/WDZJPJV__bQ" frameborder="0"
allow="accelerometer; autoplay; encrypted-media; gyroscope;
picture-in-picture" allowfullscreen></iframe>
```

2. Audio

The <audio> tag allows you to embed music and other audio streams into your HTML.

<u>Example:</u>

```
<audio controls>
  <source src="sweetjams.ogg" type="audio/ogg">
  <source
src="https://media.blubrry.com/causeascene_podcast/b/content.blubrry.com/
causeascene_podcast/Vincent_J_Intondi.mp3" type="audio/mpeg">
  Oh no! You're browser doesn't support this audio so you can't hear the
latest Cause a Scene podcast!
</audio>
```

For more from Kim Crayton's podcast #causeascene click <u>here</u>

3. Main

The <main> tag specifies the main content of your file.

Example:

```
<main>
  <h1>Main Topic</h1>
  <p>Description of the main topic./p>
  <article>
    <h1>Article Title</h1>
    <p>Content for the article.</p>
  </article>
</main>
```

4. Section

The <section> tag devices the section of a document such as chapters, headers, or footers.

Example:

```
<section>
  <h1>My Hobbies</h1>
  <p>I like to crochet, read, and do yoga.</p>
</section>
```

5. Article

The `<article>` tag specifies independent, self-contained content that makes sense on its own and should be possible to distribute independently from the rest of the site. It is used for forum and blog posts, news stories, and comments.

Example:

```
<article>
  <h1>Article Title</h1>
  <p>Content for the article.</p>
</article>
```

6. Header

The <header> tag is for introductory content and navigational links.

Example:

```
<article>
  <header>
    <h1>My Trip to Russia</h1>
    <h3>Fall 2011</h3>
    <p>St. Petersburg, Russia</p>
  </header>
  <p>My time studying abroad in Russia was an incredible adventure…
  </p>
</article>
```

7. Footer

The <footer> tag defines the footer of a file or section.

Example:

```
<footer>
  <p>Written by: Jane Doe/p>
  <p>Email: <a href="mailto:janedoe@example.com">
  janedoe@example.com</a>.</p>
</footer>
```

8. Nav

The <nav> tag is used to contain navigation links.

Example:

```
<nav>
  <a href="/html/">My Hobbies</a> |
  <a href="/css/">My Recipes</a> |
  <a href="/js/">My Projects</a> |
  <a href="/jquery/">About Me</a>
</nav>
```

Group Exercise: Update Calendar Page

1. Update calendar.html:

   1. Create a navigation header, under the <head></head> tag at the top of the start of the body tag.

   2. Add an <h1> tag inside the <header> tag

   3. Add comments explaining who created the calendar

   4. Surround the table tags with <section></section> tags

   5. Add a footer tag with a copyright statement

   6. Bonus: Make certain the html outer tag has an english language attribute

```html
<html lang="en">
<body><header><!-- My header →
<nav>
<ul>
<li><a href=index.html>Home</a>
<li><a href=calendar.html>Gcal</a>
</ul>
</nav>
<h1>My Calendar</h1>
</header>
<section>
<table style="width:100%">
  <tr>
    <th>Mon</th>
    <th>Tue</th>
    <th>Wed</th>
  </tr>
</table>
</section>
<footer>Copyright 2021</footer>
```

5 min

CSS

Cascading
Style
Sheets

https://css-tricks.com/look-back-history-css/

FORMATTING

Want special formatting? Use the below tags individually or together via nesting!

Header Tags

\<h1>Header\</h1>

\<h2>2nd Header\</h2>

Formatting Tags

\<b> or \<strong>Bold\<strong>

*\<i> or \Italics*

\<u>underline\</u>

Font Tags

\Pink\

\Red\

Nested Formatting

\<h1>\Silver Header\\</h1>

Exercise: Format calendar (Embed Tags)

Update the th tags, add a strong tag inside each one

Tags Embedded
```
<table style="width:100%">
 <tr>
  <th><strong>Mon</strong></th>
  <th><strong>Tue</strong></th>
  <th><strong>Wed</strong></th>
 </tr>
```

Tags Not Embedded
```
<table style="width:100%">
 <tr>
  <th>Mon</th>
  <th>Tue</th>
  <th>Wed</th>
 </tr>
```

Basic CSS

Cascading Style Sheets

Example:

Element name {

   style-type: style-setting;

}

```
body {
    font-family: arial; //Declare Font Type
     font-size: 12px; //Declare font size
}
p //inherits font-size from body
{ font-family: times; }

h1, th {
    font-size: 24px;
    font-weight: bold; //font-weight: 700
    font-family: cursive;
    color: deeppink; //Declare font color
}

th { background-color: grey;} //background

table {   //format tables
    width: 400px;
    border: 0px;    //Set borders
}

a { color: purple; }
```

Group Exercise: Update Table Page

1. Update style.css in your online IDE

2. Make certain
   <link rel="stylesheet" href="style.css">
   is inside <Head> tag

3. Remove the strongs

4. Create rules in styles.css to apply bold formatting to the table and p tags

```css
body {
    font-family: arial;
     font-size: 12px;
}
p //inherits font-size from body
{ font-family: times; }

h1, th {
    font-size: 24px;
    font-weight: bold; //font-weight: 700
    font-family: cursive;
    color: deeppink;
}

th { background-color: grey;   }

table { width: 400px;   }

a { color: purple; }
```

CSS Selectors

IDs - Create a rule specific to one element

<h1 id="id1">My name</p>

Classname - Create a rule specific to a group

<p id="r1" class="red">Red font</p>

<p id="r2" class="red>More Red</p>

<p id="p1" class="pink">Pink font</ p >

<p id="p2" class="pink">More Pink</ p >

Example:

- #id   {   style-type: style-setting; }
- .classname {   style-type: style-setting; }
- element#id { ...}
- element.classname { ... }

```css
body {
    font-family: arial;
     font-size: 12px;
}


p.red {
    color: red;
}

p.pink { color: pink; }
```

5 min

Responsive Design

We can use responsive design to make elements and layouts automatically adjust in size or shape depending on the window size of the browser.

In this section we'll cover:

1. The Viewport
2. Media Queries

1. The Viewport

Handle page scaling across multiple mediums

Without Viewport meta tag

⇒

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Ut wisi enim ad minim veniam, quis nostrud exerci tation

With Viewport meta tag

⇐

How to set the Viewport

Use the *meta* tag to set the viewport!

```
<head>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
<head>
```

Can You Do it?

YES! You CAN!!

"I felt intense impostor syndrome. "
https://www.womenwhocode.com/

"44% of women said they felt less entitled to promotions"
- The Female Lead Study

Take Home Exercises

Create a Blog Website!

Create a blog post using HTML5

Update the Viewport

Add multiple blog pages

Add responsive CSS & Navigation

Exercise: Create blog posts

Create a new project called blog. Inside the main create multiple blog posts using the article tag

- Create one HTML page containing 3 different blog posts
    - Each blog post should be in its own article tag
    - One blog post should use the video tag
    - Create one blog post about accessibility
    - Create another blog post about your goals
    - Add a header tag up top

Sample Blog Content

```
<article class="blog-post">
  <h2 class="blog-post-title">Post 1</h2>
  <p class="blog-post-meta">June 21, 2019 by <strong>Jane</strong></p>
  <p>This is an example blog post <a href="http://tabbycats.club/">and here is a
link</a>, where does it take you?</p>
  <blockquote>
    <p>A thought provoking quote.</p>
  </blockquote>
  <p>A sentence that includes <em>italics for emphasis</em>. Not terribly exciting...
I'm sure you can come up with something more creative than this!</p>
  <h2>Example Heading</h2>
  <p>Share your thoughts on a topic here.</p>
  <h3>Example Sub-heading</h3>
  <p>More thoughts.</p>
  <pre><code>An example code block</code></pre>
  <p>An explanation of the code block.</p>
</article>
```

Exercise: Add styles

Update the style.css tab with the code in the box below

The first rule will style any blog-post, div or article section

The second rule will   add responsive queries for mobile devices

```css
.blog-post, div, article {
    padding: 40px;
    background: silver;
}

@media only screen and (min-width: 400px)
{
    img {
        width: 35%;
    }
}
```

BONUS Exercise: Add Navigation

Add the below header tag at the top of the page right under the open <body> tag

```
<header>
<nav>
<ul class="dropdown-menu">
    <li><a href="#youtube">Youtube</a></li>
    <li><a href="#accessibility">Accessibility</a></li>
    <li><a href="#goals">Goals</a></li>
</ul>
</nav>
</header>
```

BONUS Exercise: Set the Viewport

Add the viewport to the head tag of your blog post

```
<head>
  <meta name="viewport" content="width=device-width,initial-scale=1.0">
<head>
```

Adjust the size of your browser to see how it adjusts

Using Chrome, right click on the page, choose inspect, click on the mobile icon in the lower left corner and choose the different phone options from the drop downs at the top of the page

Learn More

Learn More

W3Schools Links

CSS: https://www.w3schools.com/css/default.asp
CSS Examples: https://www.w3schools.com/css/css_examples.asp
HTML: https://www.w3schools.com/html/

Mozilla Reference Links

HTML5: https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5
More HTML Elements: https://developer.mozilla.org/en-US/docs/Web/HTML/Element

Extra Slides

Web Accessibility

An introduction

Websites should be usable by everyone. We need to make conscious effort to remove barriers to interaction and access.

Specifically, we need to be mindful of our visitors':

- Vision
- Hearing
- Motor skills
- Cognitive abilities
- Medical conditions (such as epilepsy)

https://www.webdevelopmentgroup.com/2017/09/508-compliance-making-websites-accessible-for-people-with-disabilities/

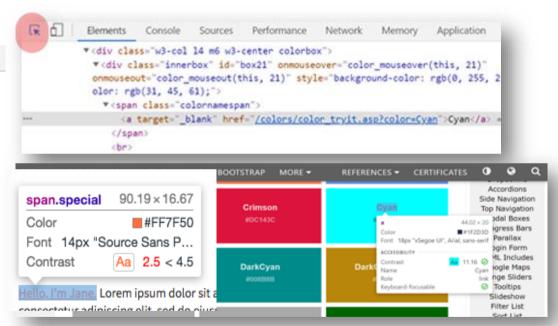# Tip 1: Aim for a high contrast ratio

Effective contrast

Ineffective Contrast

Tip 1: Use effective color contrast.	→ 6.0	Tip 1: Use effective color contrast. → 2.8
Tip 1: Use effective color contrast.	→ 14.7	Tip 1: Use effective color contrast. → 2.0
Tip 1: Use effective color contrast.	→ 8.7	Tip 1: Use effective color contrast. → 2.7
Tip 1: Use effective color contrast.	→ 10.5	Tip 1: Use effective color contrast. → 2.4
Tip 1: Use effective color contrast.	→ 9.2	Tip 1: Use effective color contrast. → 4.3

Exercise: Test color contrast in Browser

1. Right Click inspect element
2. Click the select icon
3. Hover over the <th> elements

Get inspired by high contrast color schemes.

2. CSS Media Queries: Responsive Images

We can use **CSS media queries** to display different images (or adjust the width) depending on the window size:

- If Window *greater than* 400px display the large logo
- If Window *less than* 400px display small logo

```css
img {
    content:'large_logo.jpg';
    width: 100%;
}

@media only screen and (min-width: 400px) {
    img {
        content:'small_logo.jpg'; //or width: 50%;
        //width: 50%;
    }
}
```

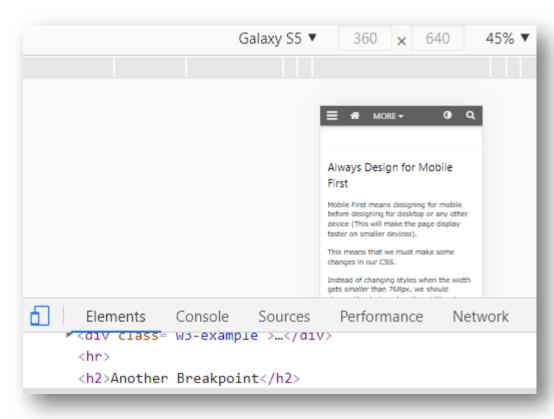# 2. CSS Media Queries: Hide Elements

We can use **CSS media queries** to hide elements depending on the window size. In this example, when the window size is less than 600px; the description is removed.

```css
@media screen and (max-width: 600px) {
  p.item-description {
    display: none;
  }
}
```

```html
<p>Aloe Vera Plant</p>
<p class=item-description> A low maintenance house plant whose
leaves can be used for medicinal and cosmetic purposes.</p>
```

Testing Media Queries in the Browser

- Click inspect element
- Click the double monitor icon

Learn More

CSS: https://www.w3schools.com/css/default.asp

More HTML Elements: https://developer.mozilla.org/en-US/docs/Web/HTML/Element

Font Tags: https://www.geeksforgeeks.org/html-font-tag

W3Schools: https://www.w3schools.com/html/

HTML5: https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/HTML5

Web accessibility: https://developer.mozilla.org/en-US/docs/Web/Accessibility

Web accessibility: https://developers.google.com/web/fundamentals/accessibility/