

HTML

```
<!DOCTYPE html>
<html lang="en">
```

To see this HTML code appear along with the other HTML elements, just type an exclamation point as shown here "!" and press "enter"

The <head></head> HTML element will appear when you type your exclamation point and click enter. Read the breakdown carefully below.

```
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>FORCE Workshop | Create a Responsive Website</title>
  <meta name="description" content="2-Day FORCE Workshop, a STEAM and entrepreneurship workshop for students of all ages!">
```

The <meta> HTML element is code for metadata. It is data that serves only as information for four different attributes: name, http-equiv, charset and itemprop

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/meta>

```
<link
  href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/css/bootstrap.min.css" rel="stylesheet"
  integrity="sha384-+On0xVW2eSR5OomGNYDnhzAbDsOXxcvSN1TPprVMTNDbiYZCxYbO
  O17+AMvyTG2x" crossorigin="anonymous">
  <link rel="stylesheet" href="./src/index.css">
  <link rel="preload" href="https://fonts.googleapis.com">
  <link rel="preload" href="https://fonts.gstatic.com"
  crossorigin>
  <link
    href="https://fonts.googleapis.com/css2?family=Playfair+Display&display=swap" rel="stylesheet">
```

The `<link>` HTML element is code that links your webpage to other sources or webpages on the world wide web. The `<link>` elements above are as follows in order from first to last: bootstrap css (allows you to use bootstrap's front-end open source toolkit), your css stylesheet (where you will type your code for the style of the page), google fonts, and the last three were copied and pasted as one complete code from the Playfair Display Google font.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/link>

```
<script src="https://kit.fontawesome.com/ddc3ee268a.js"
crossorigin="anonymous"></script>
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
```

```
integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UYJoMp4YLEuNSfAP+JC  
Xn/tWtIaxVXM" crossorigin="anonymous">></script>  
</head>
```

The <script> HTML element allows you to embed code from another source. In this example, you see the Font Awesome kit that allows us to use the "Poppins" sans-serif font. The second allows us to utilize JavaScript Bootstrap code. JavaScript allows you to make your website super interactive.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/script>

Remember to always close an element or your code won't work. To close the <head> element, always place a forward slash "/" in your code as shown here: </head>.

The <body></body> HTML element will appear when you type your exclamation point and click enter. Read the breakdown carefully below.

```
<body>  
  <header class="header">
```

Most websites include a header. The header is what you see at the top of a website. It usually includes a logo and a navigation menu.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/header>

Let's discuss classes. A class is an attribute. It allows you to group elements. In this case, we're using the class name "header" to apply style on the css sheet shown in this example. Always place parentheses "" around your header.

<https://developer.mozilla.org/en-US/docs/Web/SVG/Attribute/class>

```
<nav class="navbar navbar-expand-lg navbar-light bg-transparent">
  <div class="container-fluid">
    <a class="navbar-brand" title="logo" href="index.html">
      
    </a>
    <button class="navbar-toggler" type="button"
data-bs-toggle="collapse" data-bs-target="#navbarSupportedContent"
aria-controls="navbarSupportedContent" aria-expanded="false"
aria-label="Toggle navigation">
      <span class="navbar-toggler-icon"></span>
    </button>
```

As shown above with this first line of code, `<nav`, an element can have multiple classes, separated by simply hitting the spacebar. In this example, these classes were copied and pasted from bootstrap. Check out the link below for a description of what each class means.

<https://getbootstrap.com/docs/5.0/components/navbar/>

`<div>` - use the divider element to divide your content on the page

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/div>

The “container-fluid” class is from Bootstrap. Click the link to learn what it says.

<https://getbootstrap.com/docs/5.0/layout/containers/#fluid-containers>

<a> - use the anchor element to add a hyperlink to your page

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/a>

The link above makes clicking the logo in the navigation bar link back to the homepage. href="" is where you place the link. In this case, we've linked the index.html page, which is our homepage. Always put a title in your <a> links; it's required for great SEO practices.

 - use the image embed element to add an image to your page

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/img>

The image above is the official PiE logo. The alt="" attribute describes the image. src="" is where you place the file for the image. In this case, the image file is named PIE logo edited.png and it is located in the images folder. You can adjust the width from within the element or on the css page.

<button> - use the button element to add a button to your page

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/button>

This particular button was copied and pasted from bootstrap. It is the hamburger menu button. You've seen this button on apps in the corner of the screen. It's the one with 3 or 4 horizontal lines. You click this button and the menu drops down. The HTML element is an inline container for phrasing and grouping content by class. It is like <div> in that it groups content by attributes, but the difference

between the two is that <div> automatically creates a new line on your webpage and will not create a new line.

```
<div class="collapse navbar-collapse"  
id="navbarSupportedContent">  
    <ul class="navbar-nav me-auto mb-2 mb-lg-0">  
        <li class="nav-item">  
            <a class="nav-link active" title="Homepage"  
aria-current="page" href="#">Home</a>  
        </li>  
        <li class="nav-item">  
            <a class="nav-link" title="Links"  
href="src/links.html">Links</a>  
        </li>  
        <li class="nav-item">  
            <a class="nav-link" title="PiE"  
href="https://www.pieforlife.org">PiE Website</a>  
        </li>  
    </ul>
```

The HTML element is an unordered list of items. They can be rendered as a bulleted list, circles or any other way you choose to style your list. In this case, we've removed the bullet points and set the link for each item side-by-side to create our horizontal menu. If you want a numbered list, use the ordered list element instead.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ul>

```
<form class="d-flex" id="subscribe-form">
```

```
<input class="form-control me-2" id="emailinput"
type="text" placeholder="Email" aria-label="submit">
    <button class="btn btn-primary shadow-sm btnSubmit"
type="submit">Leave an email</button>
</form>
```

The `<form>` HTML element allows you to create forms for your website visitors to submit information. The form in this example is a search form template we turned into an email subscription form.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/form>

We use the `<input>` HTML element inside the `<form>` element to create interactive controls that accept the data entered into the form.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input>

```
    </div>
</div>
</nav>
</header>
```

It's important to close each element in the order it was written. Otherwise, your code will not work.

```
<div class="pagetop">
    <h1>2-Day FORCE Workshop</h1>
    <h3>Teaching Entrepreneurship and Software Development</h3>
    <p><i>developing the world's next geniuses</i></p>
</div>
```

The <h1>-<h6> HTML Section Heading elements are six different styles of headings. Every web page you create should have only ONE <h1>. There can be as many of the others as you like.

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

The <p> HTML element is the paragraph element. Read more about it:

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/p>

```
<div class="slider">
  <div class="slide-track">
    <div class="slide">
      
    </div>
    <div class="slide">
      
    </div>
    <div class="slide">
      
    </div>
    <div class="slide">
      
    </div>
    <div class="slide">
      
```

```
</div>

<div class="slide">
    
</div>
```

```
<div class="slide">
    
</div>
<div class="slide">
```

```

</div>
<div class="slide">

</div>
<div class="slide">
```

```

</div>
<div class="slide">

</div>
<div class="slide">
```

```

</div>
<div class="slide">

</div>
<div class="slide">

</div>
</div>
```

This <div> section class "title" shows the images for the slider you see on the webpage.

```
<footer>
<div class="social-links d-flex justify-content-center">

</a>
</div>
<p class="text-center mt-5 footer-text">
© 2021 Coded by Amethyst Bush El | WZDM Management Agency LLC
</p>
</footer>
```

Most websites include a footer. They are sectioned off under the <footer> HTML element. This is where you include important information about your website.

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/footer>

```
<script src="src/index.js"></script>  
</body>  
</html>
```

The <script> element shown here is where you place your JavaScript (.js) file. Without connecting your index.js file to your index.html file, your JavaScript code won't work.

Remember to always close your elements or your code won't work. To close the <body> and <html> elements, always place a forward slash "/" in your code as shown here: </body> </html>.

CSS

```
:root {  
  --primary-color: black;  
  --secondary-color: white;  
  --primary-font-family: "Playfair Display", serif;  
  --default-font-family: "Poppins", sans-serif;  
  --box-shadow: rgba(46, 46, 51, 0.08) 0px 18px 18px 0;  
}
```

Using the root element of a document makes it easy to use the same code over and over.

<https://developer.mozilla.org/en-US/docs/Web/CSS/:root>

```
body {  
  margin-top: 0;  
  padding: 0, 10px, 10px, 0px;  
  font-family: var(--primary-font-family);  
}
```

Styles everything inside the <body></body> element, which is the whole page.

```
h1,  
h2,  
h3,  
p {  
  text-align: center;  
  color: black;  
  font-family: var(--default-font-family);  
}
```

If you have elements that should be styled the same, you can group them using a comma, then add your css code. It will apply to them all.

```
h1 {  
  margin-top: -75px;  
  padding-top: -50px;  
}  
  
p {  
  font-size: 24px;  
}  
  
ol {  
  font-family: var(--default-font-family);  
  font-size: 17px;  
}
```

Separate your elements in the css stylesheet when each includes its own special style.

```
.pagetop {  
  padding: 200px 0px;  
  padding-bottom: 10px;  
}  
  
.pagetop p {  
  text-align: center;  
}
```

Use a period (.) to identify your class on the stylesheet. You have to type the period, or your stylesheet code for that particular class won't work. On this website, .pagetop styles everything within that

<div>. On the other hand, .pagetop p only styles the paragraph within the pagetop <div>.

```
.slider {
height: 250px;
margin: auto;
position: static;
width: 100%;
display: grid;
place-items: left;
overflow: hidden;
}

.slide-track {
display: flex;
width: 250px;
animation: scroll 25s linear running infinite;
}

.slide-track:hover {
animation-play-state: paused;
}

.slide {
height: 200px;
display: flex;
align-items: center;
perspective: 100px;
box-sizing: content-box;
width: 1000px;
}

* {
```

```
box-sizing: content-box;
}

.slider::before,
.slider::after {
    content: "";
    height: 100%;
    position: static;
    width: 25%;
    z-index: 2;
}

.slider::before {
    left: 0;
    top: 0;
}

.slider::after {
    right: 0;
    top: 0;
    transform: rotateZ(100deg);
}
```

These few lines of code are how we made the images in the slider <div> on the index.html page scroll, as well as pause and enlarge when we hover over it.

```
@keyframes scroll {
    0% {
        transform: translateX(0);
    }
    100% {
```

```
    transform: translateX(calc(-250px * 9));
}
}
```

The @keyframes CSS at-rule defines a particular frame, which can be fit for any device, including phones, tablets, televisions and more.

```
.curLogo {
width: 150px;
padding: 30px;
box-shadow: var(--box-shadow);
transition: transform 1s;
}

.curLogo:hover {
transform: translateZ(20px);
}

.navbar {
border-bottom: 1px solid gainsboro;
}

.navbar-light .navbar-brand {
color: black;
}

.navbar-light .navbar-nav .nav-link.active,
.navbar-light .navbar-nav .show > .nav-link {
color: black;
}

.navbar-light .navbar-nav .nav-link {
color: black;
}
```

```
}

.navbar-light .navbar-nav .nav-link {
  color: black;
}

.navbar-toggler {
  border: none;
}

.nav-item {
  color: black;
}

.navbar-brand:hover {
  color: blue;
}

.btn-primary {
  background: orange;
  color: black;
  border: 1px solid rgba(101, 149, 211, 0.08);
  transition: background 500ms ease, border-color 200ms ease;
  padding: 1px 45px;
  margin: 0 auto;
  font-size: 16px;
  width: 250px;
  padding-inline: 10px;
}

.btn-primary:hover {
  background: red;
  color: white;
  border: none;
}
```

These lines of code define how the navigation menu and all the elements and attributes within it will look.

```
.social-media {  
  width: 150px;  
}  
.social-media {  
  height: 50%;  
}
```

CLASSROOM EXERCISE: fix the error above

```
footer {  
  margin: 60px 0;  
}  
footer .social-links a {  
  margin: 0 20px;  
  color: var(--branding-color);  
  background: var(--secondary-color);  
  padding: 10px 14px;  
  border-radius: 50%;  
  font-size: 18px;  
  transition: all 100ms ease-in-out;  
  height: 50%;  
}  
  
footer .social-links a:hover {
```

```
color: white;
background: var(--branding-color);
}
.footer-text {
font-size: 12px;
}
```

This CSS code styles the overall <footer> element and the <div> for the social media icon image.

```
#links-page {
margin-top: 150px;
}
#links-page h1,
h2,
p {
font-family: var(--default-font-family);
text-align: left;
}
#links-page h2 {
font-size: 23px;
}
#links-page p {
font-size: 17px;
}
```

The id attribute assigns a unique name to an element. Like a class, it groups elements by a single name/identifier, but it is different on

the stylesheet. We use a hashtag (#) to reference it instead of a period (.)

JAVASCRIPT

```
function emailSubscribe() {  
  let name = prompt("What is your name?");  
  alert("Thanks for leaving your email. We'll be in touch, " + name +  
"!");  
}  
  
let subscribeButton = document.querySelector("#subscribe-form");  
subscribeButton.addEventListener("submit", emailSubscribe);
```

A function is an object that's used in JavaScript to render a special command when a user visits and interacts with your site. We render that command by calling the function.

https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Global_Objects/Function

In this case, we titled the function we're using as `emailSubscribe`, because when the function is called, we want our website visitors to use their email to subscribe.

The `let` statement establishes a value. In this case, we've titled the `let` statement `subscribeButton` that calls the function `emailSubscribe`, because when a visitor clicks the "submit" button, we want the command `subscribeButton` to trigger the `emailSubscribe` function. This will then prompt the question "What is your name?" Afterwards, we include that value (`name`) inside a special message for the visitor.

<https://developer.mozilla.org/en-US/docs/Web/JavaScript/Reference/Statements/let>

LINKS PAGE

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width,
initial-scale=1.0" />
    <title>Resource Links and Instructions</title>
    <meta
      name="description"
      content="Instructions for recreating the FORCE 2-Day Workshop
Responsive Website"
    />
    <link
      href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.1/dist/css/bootstrap.
min.css"
      rel="stylesheet"
      integrity="sha384-+On0xVW2eSR5OomGNYDnhzAbDsOXxcvSN1TPprVMTNDbiYZCxYbO
O17+AMvyTG2x"
      crossorigin="anonymous"
    />
    <link rel="stylesheet" href="index.css" />
    <link rel="preconnect" href="https://fonts.googleapis.com" />
    <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin
/>
    <link
```

```
      href="https://fonts.googleapis.com/css2?family=Playfair+Display&display=swap"
      rel="stylesheet"
    />
<script
  src="https://kit.fontawesome.com/ddc3ee268a.js"
  crossorigin="anonymous"
></script>
<script
  src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.bundle.min.js"
  integrity="sha384-MrcW6ZMFYlzcLA8Nl+NtUVF0sA7MsXsP1UyJoMp4YLEuNSfAP+JcXn/tWtIxVXM"
  crossorigin="anonymous"
></script>
</head>
<body>
  <header class="header">
    <nav class="navbar navbar-expand-lg navbar-light bg-transparent">
      <div class="container-fluid">
        <a class="navbar-brand" title="logo" href="../index.html">
          
        </a>
        <button
          class="navbar-toggler"
```

```
        type="button"
        data-bs-toggle="collapse"
        data-bs-target="#navbarSupportedContent"
        aria-controls="navbarSupportedContent"
        aria-expanded="false"
        aria-label="Toggle navigation"
    >
    <span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse"
id="navbarSupportedContent">
    <ul class="navbar-nav me-auto mb-2 mb-lg-0">
        <li class="nav-item">
            <a
                class="nav-link"
                title="Homepage"
                aria-current="page"
                href="../index.html"
            >Home</a>
        </li>
        <li class="nav-item">
            <a class="nav-link active" title="Links"
href="links.html"
            >Links</a>
        </li>
        <li class="nav-item">
            <a
                class="nav-link"
                title="PiE"
```

```
        
            >PiE Website</a>
        
    
```



```
<form class="d-flex" id="subscribe-form">
    <input
        class="form-control me-2"
        id="emailinput"
        type="text"
        placeholder="Email"
        aria-label="submit"
    />
    <button class="btn btn-primary shadow-sm btnSubmit"
type="submit">
        Leave an email
    </button>
</form>
</div>
</div>
</nav>
</header>
<div class="container" id="links-page">
    <h1>Instructions and Links for Recreating this Responsive
    Website</h1>
    <h2 class="mt-5">Download Chrome</h2>
    <a class="" title="Google Chrome"
        href="https://www.google.com/chrome/">
        https://www.google.com/chrome/</a>
    <p>
```

You can code on any browser, but Chrome is by far the browser most convenient when you're creating software. Begin the installation process by clicking "Download Chrome."

```
</p>

<h2 class="mt-5">Download Visual Code Studio (VS Code)</h2>

<a

  class=""

  title="Visual Studio Code"

  href="https://code.visualstudio.com/"

>https://code.visualstudio.com/</a>

<p>
```

Choose Windows or Mac and install the software onto your computer. Whenever you want to start a new index file, click on the "Open" links displayed on the screen to open a saved folder. You can also click on "New File" under "File" in the menu section to start with your index.html file.

```
</p>

<h2 class="mt-5">Prettier</h2>

<p>
```

Prettier is an extension. It tells you when there's a mistake in your code. Install through VS Code extensions. Click "Extensions," Search for "Prettier - Code formatter" and click the green button that says "install"

```
</p>

<h2 class="mt-5">Download Git</h2>

<a class="" title="Git" href="https://git-scm.com/"

>https://git-scm.com/</a>

>

<p>
```

You can code on any browser, but Chrome is by far the browser most convenient when you're creating software. Begin the installation process by clicking "Download Chrome."

</p>

<h2 class="mt-5">

Create an account on GitHub using your Google account

</h2>

https://github.com/

>

<p>

Sign in using your Google account, so you can easily connect to Netlify. You will also find plenty open-source projects seasoned developers have shared with the public on GitHub. Use them as teaching tools and inspiration for your next project.

</p>

<h2 class="mt-5">Github Desktop</h2>

<a class="" title="GitHub Desktop"

href="https://desktop.github.com/">

https://desktop.github.com/

<p>

When you click the Download button on the homepage, a zip folder will save to your computer. Open the code to install GitHub Desktop. You will update your GitHub account repositories by saving your VS Code files on your computer and then "pushing" them to GitHub.

</p>

<h2 class="mt-5">Bootstrap</h2>

https://getbootstrap.com/

```
<ol>
  <li>
    Click "Get Started" on the homepage, and the introduction page should appear.
  </li>
  <li>
    Under the bold letters "CSS," you will see code that starts with "link href"
  </li>
  <li>
    Copy the code and place it into the header section of your index.html page as shown on the links page
  </li>
</ol>
<h2 class="mt-5">Netlify</h2>
<a class="" title="Netlify" href="https://www.netlify.com/">Create an account (with GitHub)</a>
<p>
  When you create a Netlify account, use your Google account so you can easily connect to GitHub. This website allows you to host your website for free.
</p>
<h2 class="mt-5">Node.js (LTS Version)</h2>
<a class="" title="Node.js" href="https://nodejs.org/en/">https://nodejs.org/en/</a>
<p>
  Make sure you download the LTS version (Recommended for Most Users), and not the Latest Features version. Node runs in the backend.

```

You don't see it, but you need it for your responsive website to function correctly.

```
</p>
<h2 class="mt-5">MDN Web Docs</h2>
<a class="" title="Node.js"
href="https://developer.mozilla.org/en-US/"
>https://developer.mozilla.org/en-US/</a>
>
<p>
  Use the search box on this website when you need help with your
code. This is a trusted source. Stay away from W3Schools, because the
methodologies are outdated.
</p>
</div>
<script src="src/index.js"></script>
</body>
</html>
```