**HTML EXERCISES:**

**index.html**

1. **Create a new file and save the file with a .html extension, such as index.html.**
2. **Start with the basic HTML structure.**

<!DOCTYPE html>: Declares the document type.

<html>: Root element of an HTML document.

<head>: Contains metadata about the document.

<title>: Sets the title displayed in the browser's tab.

<body>: Contains the visible content of the document.

**CODE:**

<!DOCTYPE html>

<html lang="en">

<head>

<title>Web Overview</title>

</head>

<body>

</body>

</html>

**3. Create the header area with navigation.**

<header>: Defines a header for a document or section.

<h1>: Defines a heading.

<nav>: Defines navigation links.

<ul>: Defines an unordered list.

<li>: Defines a list item.

<a>: Defines a hyperlink.

**CODE:**  
<header>

<h1>Your Name</h1>

<nav>

<ul>

<li><a href=“index.html">Home</a></li>

<li><a href=“about.html”>About</a></li>

<li><a href=“contact.html">Contact</a></li>

</ul>

</nav>

</header>

**4. Create the main content section. Use semantic tags, a paragraph, and a list to list the key aspects of HTML5.**

**CODE:**  
<main>

<section>

<h2>HTML5: The Backbone of the Web</h2>

<article>

<h3>What is HTML5?</h3>

<p>HTML5 is the latest standard for structuring and presenting content on the web. It provides a rich set of elements and attributes to create semantic and accessible web pages.</p>

<h3>Key Features of HTML5</h3>

<ul>

<li>Semantic Elements: For better structure and SEO.</li>

<li>Multimedia Support: For embedding audio and video directly.</li>

<li>Canvas and SVG: For creating graphics and animations.</li>

<li>Local Storage: For storing data client-side.</li>

<li>Form Input Types: For enhanced form functionality.</li>

</ul>

</article>

</section>

</main>

**5. Create the aside section, <aside> Defines content aside from the page content.**

**CODE:**  
<aside>

<h3>Related Content</h3>

<ul>

<li><a href=“locations.html">Conference Locations</a></li>

<li><a href=“cart.html">Shop</a></li>

</ul>

</aside>

**6. Create the footer.**

**CODE:**  
<footer>

<p>&copy; 2024</p>

</footer>

**7. Save and View:**

* Save the file and open it in a web browser to see the structure.

**cart.html**

1. **Add the basic HTML structure - you can copy it from the previous page.**

**CODE:**  
<!DOCTYPE html>

<html lang="en">

<head>

<title>Shopping Cart</title>

</head>

<body>

</body>

</html>

1. **Create the header.**

<header>: Defines a header for a document or section.

<h1>: Defines a level-one heading.

**CODE:**  
<header>

<h1>Shopping Cart</h1>

</header>

1. **Create the main content section.**

<main>: Defines the dominant content of the document.

<section>: Defines a thematic grouping of content.

<h2>: Defines a level-two heading.

<ul>: Defines an unordered list (empty for now).

**CODE:**  
<main>

<section>

<h2>Products</h2>

<ul></ul>

</section>

<section>

<h2>Cart</h2>

<header>

<span>0</span> Product(s) in Cart

</header>

<ul></ul>

<footer>

<button>Empty Cart</button>

</footer>

</section>

</main>

1. **Save and view.**

* This is the basic HTML structure. Later we will add JavaScript to dynamically populate the product and cart sections, handle user interactions (adding/removing items, updating quantities), and update the cart total.
* We’ll also add CSS to style the layout, colors, fonts, and overall appearance of the shopping cart.

**locations.html**

1. **Start with the basic HTML structure. Add the main section and image gallery section. The images are in an img folder in the HTML5Solutions folder, and are austin.jpg, berlin.jpg and singapore.jpg. Use figure and figcaption. At the bottom, put links in a nav tag for previous and next. We will direct them later with JavaScript, so you can leave the href blank. At the very bottom put three empty span tags in a div. We will style dots with CSS later. Save and view the page once you are finished.**

<main>: Defines the dominant content of the document.

<section>: Defines a thematic grouping of content.

<figure>: Defines self-contained content, often with a caption.

<figcaption>: Defines a caption for a figure.

<nav>: Defines navigational links.

<div>: Defines a generic container for grouping elements.

<span>: Defines an inline container for text or other inline elements.

**CODE:**

<main>

<section>

<figure>

<img src="img/austin.jpg" alt="Austin">

<figcaption>Austin</figcaption>

</figure>

<figure>

<img src="img/berlin.jpg" alt="Berlin">

<figcaption>Berlin</figcaption>

</figure>

<figure>

<img src="img/singapore.jpg" alt="Singapore">

<figcaption>Singapore</figcaption>

</figure>

</section>

<nav>

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

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

</nav>

<div>

<span></span>

<span></span>

<span></span>

</div>

</main>

**about.html**

**1. We will create a page with the basic structure, header and navigation. This will have an input field for text and a placeholder. We will also add a table with several rows (only one row is pictured below), and two fields each - one for the HTML5 tag you remember and the other for the description of that tag.**

<table>: Defines a table.

<thead>: Defines a table header.

<tr>: Defines a table row.

<th>: Defines a table header cell.

<tbody>: Defines a table body.

<tr>: Defines a table row.

<td>: Defines a table data cell.

*Optional:*

&lt; and &gt; are character entities for angle brackets.

<code>: Makes the content monospaced.

**CODE:**  
<main>

<section>

<input type="text" id="search" placeholder = "Search...">

</section>

<section>

<table>

<thead>

<tr>

<th>Tag</th>

<th>Description</th>

</tr>

</thead>

<tbody>

<tr>

<td><code>&lt;header&gt;</code></td>

<td>Header for doc or section.</td>

</tr>

</tbody>

</table>

</section>

</main>

**contact.html**

1. **Start with the basic structure and navigation, which you can copy. We will make a contact form. Save and test when finished.**
2. **Create the contact form.**

<form> defines the form element.

<label> defines labels for each input field.

<input> defines various types of input fields for user information.

type="text" for single-line text input (name, street, city).

type="email" for email addresses.

type="tel" for phone numbers.

type="number" for numeric input (age) with min and max attributes for range.

type="date" for selecting dates, with a max attribute set.

type="text" for zip code with a pattern attribute to restrict input to 5 digits.

<button> or <input type="submit"> defines a submit button.

*Optional attributes:*

placeholder for placeholder text.

pattern to add a regular expression.

required to ensure the field is filled out - it saves on a lot of JavaScript code.

min and max for min and max value in number and date fields.

id to give each field a unique identifier to get the data later.

**CODE:**  
<form>

<label for="name">Name:</label>

<input type="text" id="name" name="name" placeholder="Your Name" required>

<label for="email">Email:</label>

<input type="email" id="email" name="email" placeholder="Your Email" required>

<label for="phone">Phone Number:</label>

<input type="tel" id="phone" name="phone" placeholder="Your Phone Number">

<label for="age">Age:</label>

<input type="number" id="age" name="age" min="18" max="100" placeholder="Your Age">

<label for="birthdate">Birthdate:</label>

<input type="date" id="birthdate" name="birthdate" max="2005-12-31">

<label for="street">Street:</label>

<input type="text" id="street" name="street" placeholder="Street Address">

<label for="city">City:</label>

<input type="text" id="city" name="city" placeholder="City">

<label for="zip">Zip Code:</label>

<input type="text" id="zip" name="zip" pattern="[0-9]{5}" placeholder="Zip Code">

<button type="submit">Submit</button>

</form>