### **DESIGNING A PORTFOLIO WEBSITE WITH HTML AND CSS** UNDERSTANDING THE BASICS

1. **HTML (HyperText Markup Language):** This is the structure of your webpage. It defines the content and its organization.
2. **CSS (Cascading Style Sheets):** This is the presentation layer. It styles the HTML elements, controlling their appearance, layout, and behavior.

### PLANNING YOUR WEBSITE

* 1. **DEFINE YOUR GOALS:** Determine what you want your portfolio to achieve. Are you looking to showcase your skills, find a job, or simply share your work?

What is the purpose of the portfolio? Typically, it’s to showcase your skills, projects, and resume

* 1. **CREATE A SITEMAP/WIREFRAME:** Outline the structure of your website. Decide on the pages you'll need (e.g., home, about, projects, contact).  
       
     Sketch out a simple layout of how they want the portfolio to look, either on paper or using a tool like Figma.

**SECTIONS OF A TYPICAL PORTFOLIO WEBSITE**

* 1. **Header/Navigation Bar**: Links to other sections or external profiles like LinkedIn, GitHub, etc.
  2. **Hero Section**: Introduction with a profile image, name, and a catchy tagline.
  3. **About Section**: A brief bio or personal statement.
  4. **Skills Section**: Highlight the technologies and tools they're proficient in.
  5. **Projects Section**: Showcase of projects with images, descriptions, and links to live demos or code repositories.
  6. **Contact Section**: A form or links to contact methods.
  7. **Footer**: Social media links, copyright notice, etc.

1. **GATHER YOUR CONTENT:** Collect all the necessary materials, including images, text, and links.

**2. BASIC HTML STRUCTURE**

<!--Start with a basic HTML skeleton to define the structure of the page-->

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>My Portfolio</title>

<link rel="stylesheet" href="styles.css">

</head>

<body>

<!-- Navigation Bar -->

<header>

<nav>

<ul>

<li><a href="#about">About</a></li>

<li><a href="#skills">Skills</a></li>

<li><a href="#projects">Projects</a></li>

<li><a href="#contact">Contact</a></li>

</ul>

</nav>

</header>

<!-- Hero Section -->

<section id="hero">

<h1>Welcome to My Portfolio</h1>

<p>Hi, I'm [Your Name], a passionate web developer.</p>

<img src="your-photo.jpg" alt="Your Profile Photo">

</section>

<!-- About Section -->

<section id="about">

<h2>About Me</h2>

<p>[A brief bio about yourself]</p>

</section>

<!-- Skills Section -->

<section id="skills">

<h2>Skills</h2>

<ul>

<li>HTML</li>

<li>CSS</li>

<li>JavaScript</li>

<!-- Add more skills -->

</ul>

</section>

<!-- Projects Section -->

<section id="projects">

<h2>Projects</h2>

<!-- Each project can be displayed in a card-like structure -->

<div class="project-card">

<h3>Project Name</h3>

<img src="project-image.jpg" alt="Project Screenshot">

<p>Description of the project.</p>

<a href="https://github.com">View Project</a>

</div>

</section>

<!-- Contact Section -->

<section id="contact">

<h2>Contact Me</h2>

<form>

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

<input type="text" id="name" name="name" required>

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

<input type="email" id="email" name="email" required>

<label for="message">Message:</label>

<textarea id="message" name="message" required></textarea>

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

</form>

</section>

<!-- Footer -->

<footer>

<p>&copy; 2024 My Portfolio</p>

<div>

<a href="https://github.com">GitHub</a>

<a href="https://linkedin.com">LinkedIn</a>

<!-- More social links -->

</div>

</footer>

</body>

</html>

**3. STYLING WITH CSS**

**GENERAL TIPS:**

1. Use **external CSS** to keep the HTML clean and maintainable.
2. Apply **mobile-first design** principles to ensure the site is responsive.
3. Use **flexbox** or **CSS grid** for layout, especially in project sections or to align items.

**BASIC CSS STYLING:**

/\* Reset some default browser styles \*/

\* {

margin: 0;

padding: 0;

box-sizing: border-box;

}

/\* Body Styling \*/

body {

font-family: Arial, sans-serif;

line-height: 1.6;

background-color: #f4f4f4;

}

/\* Navigation Styling \*/

header {

background: #333;

color: #fff;

padding: 1rem;

text-align: center;

}

header ul {

list-style: none;

}

header ul li {

display: inline;

margin: 0 10px;

}

header a {

color: #fff;

text-decoration: none;

}

header a:hover {

text-decoration: underline;

}

/\* Hero Section \*/

#hero {

background-color: #282828;

color: white;

padding: 50px 0;

text-align: center;

}

#hero h1 {

font-size: 3rem;

}

#hero img {

width: 150px;

border-radius: 50%;

margin-top: 20px;

}

/\* About Section \*/

#about {

padding: 50px;

background-color: #fff;

text-align: center;

}

/\* Skills Section \*/

#skills {

padding: 50px;

background-color: #f4f4f4;

text-align: center;

}

#skills ul {

list-style: none;

padding: 0;

}

#skills ul li {

display: inline-block;

background: #333;

color: white;

padding: 10px;

margin: 5px;

border-radius: 5px;

}

/\* Projects Section \*/

#projects {

padding: 50px;

background-color: #fff;

}

.project-card {

background: #f9f9f9;

padding: 20px;

border: 1px solid #ddd;

border-radius: 10px;

margin-bottom: 20px;

text-align: center;

}

.project-card img {

max-width: 100%;

border-radius: 10px;

}

.project-card a {

display: inline-block;

margin-top: 10px;

padding: 10px 20px;

background: #333;

color: white;

text-decoration: none;

border-radius: 5px;

}

.project-card a:hover {

background: #555;

}

/\* Contact Section \*/

#contact {

padding: 50px;

background-color: #f4f4f4;

}

#contact form {

display: flex;

flex-direction: column;

align-items: center;

}

#contact input, #contact textarea {

margin-bottom: 10px;

padding: 10px;

width: 100%;

max-width: 600px;

}

/\* Footer \*/

footer {

background: #333;

color: #fff;

padding: 10px 0;

text-align: center;

}

footer a {

color: #fff;

margin: 0 10px;

text-decoration: none;

}

**4. ENHANCEMENTS AND RESPONSIVENESS**

**Responsive Design**: Ensure the website looks good on all devices. Start by using **media queries** to adjust styles for smaller screens.

Example Media Query for Mobile Devices:

@media (max-width: 768px) {

#hero h1 {

font-size: 2rem;

}

header ul li {

display: block;

margin: 10px 0;

}

.project-card {

margin-bottom: 30px;

}

}

**Optimize Images**: Ensure all images are optimized for fast loading by using formats like JPEG or PNG and appropriate sizes.

**Accessibility**: Use semantic HTML tags (e.g., <header>, <section>, <footer>) and ensure all images have meaningful alt text.

**5. FINAL TOUCHES**

1. **Test the design** on different browsers and devices.
2. **Validate HTML and CSS** using validators (e.g., [W3C Validator](https://validator.w3.org/)).
3. **Optional Enhancements**:
   1. Use **CSS transitions** for hover effects.
   2. Add **custom fonts** using Google Fonts.
   3. Use **icons** from libraries like FontAwesome for social media links.

**6. DEPLOYMENT**

We will deploy our portfolios using platforms like GitHub Pages, Netlify, or Vercel, which offer free hosting for static websites.