HTML Advanced

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Contents

1   Semantic HTML

- Semantic HTML enhances the meaning of your content, improves accessibility, and boosts SEO.

- Semantic HTML uses elements that clearly describe their meaning in a human- and machine-readable way.

- For example, `<article>`, `<section>`, and `<nav>` tell you what kind of content they hold, unlike `<div>` or `<span>`.

1.1   Common Semantic Elements

1. `<header>` for introductory content.

2. `<nav>` for navigation links. We can have multiple `<nav>` elements in one web page.

3. `<main>` for the main content of the page.

4. `<section>` for grouping similar content together.

5. `<article>` for self-contained content.

6. `<aside>` for additional content, or ads.

7. `<footer>` for the footer portion.

8. `<time>`, `<address>`, and so on.

2   Forms and Inputs

- All this while, we have presented information to the user. Forms help us make our websites interactive by allowing the user to send us data.

```
<form action="#" method="get">
  <h2>Contact Form</h2>
  <article>
    <label for="name">Enter your name:</label>
    <input type="text" name="name" id="name" placeholder="Your name" required>
  </article>

  <article>
    <label for="email">Enter your email:</label>
    <input type="email" name="email" id="email" required>
  </article>

  <article>
    <label for="phone">Enter your phone number:</label>
    <input type="tel" name="phone" id="phone">
  </article>
```

```html
<article>
  <label for="year-of-birth">Enter your year of birth</label>
  <input type="number" name="year-of-birth" id="year-of-birth"
         min="2000" max="2005" step="1" value="2003">
</article>

<article>
  <label for="department">Enter your department:</label>
  <select name="department" id="department">
    <option value="cse">Computer Science & Engineering</option>
    <option value="ece">Electronics & Communication Engineering</option>
    <option value="ee">Electrical Engineering</option>
  </select>
</article>

<button type="submit">Submit</button>
<button type="reset">Reset</button>
</form>
```

3   Example Well-Structured Semantic HTML

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

  <head>
    <meta charset="UTF-8" >
    <meta name="viewport" content="width=device-width, initial-scale=1.0" >
    <title>Firstname Lastname - Resume</title>
  </head>

  <body>
    <header>
      <h1>Firstname Lastname</h1>
      <address>
        <ul>
          <li>Phone: 1234567890</li>
          <li>Email: <a href="mailto:firstname@email.com">firstname@email.com</a></li>
        </ul>
      </address>
    </header>

    <main>
      <section>
        <h2>Education</h2>
        <ul>
          <li>UEM Jaipur</li>
```

```html
          <li>High School</li>
        </ul>
      </section>

      <section>
        <h2>Experience</h2>
        <article>
          <h3>Technology Company</h3>
          <p>Internship for 6 months</p>
        </article>
        <article>
          <h3>Another Technology Company</h3>
          <p>Internship for 3 months</p>
        </article>
      </section>

      <section>
        <h2>Skills</h2>
        <ul>
          <li>HTML</li>
          <li>CSS</li>
          <li>JavaScript</li>
          <li>React.js</li>
        </ul>
      </section>

      <section>
        <h2>Hobbies</h2>
        <ul>
          <li>Listening to music</li>
          <li>Reading books</li>
        </ul>
      </section>
    </main>
  </body>

</html>
```