

Structure of an HTML file

≡ Week 2

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A standard HTML file consists of two main parts:

1. **Head Section:** Contains metadata and links to resources.
2. **Body Section:** Contains the content visible to users.

Here is an example of a complete HTML file:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document Title</title>
  <link rel="stylesheet" href="styles.css">
  <script src="script.js" defer></script>
</head>
<body>
  <header>
    <h1>Welcome to My Website</h1>
    <nav>
      <ul>
        <li><a href="#about">About</a></li>
        <li><a href="#services">Services</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
    </nav>
  </header>
  <main>
    <section id="about">
```

```
        <h2>About Us</h2>
        <p>This is the about section.</p>
    </section>
    <section id="services">
        <h2>Our Services</h2>
        <p>Details about services go here.</p>
    </section>
</main>
<footer>
    <p>&copy; 2024 My Website</p>
</footer>
</body>
</html>
```

Element Breakdown

1. Document Type Declaration

```
<!DOCTYPE html>
```

- Declares the document as an HTML5 file.
- Ensures consistent rendering across browsers.

2. `<html>` Element

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

- The root element of the HTML document.
- The `lang` attribute specifies the language of the content.

3. `<head>` Section

Contains metadata about the document.

Key Elements:

- `<meta>` Tag: Provides metadata.

```
<meta charset="UTF-8">
```

- `charset` : Specifies the character encoding (UTF-8 is standard).
- **<title> Tag**: Sets the title of the document (displayed in browser tabs).

```
<title>Document Title</title>
```

- **Resource Links:**

- **Stylesheets**: Links CSS files.

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

- **Scripts**: Links JavaScript files.

```
<script src="script.js" defer></script>
```

- `defer` : Ensures the script loads after the HTML is parsed.

4. **<body> Section**

Contains content displayed on the web page.

Structure:

1. **<header>**

- Typically contains branding, logos, and navigation.

```
<header>
  <h1>Welcome to My Website</h1>
  <nav>...</nav>
</header>
```

2. **<main>**

- Holds the primary content.

```
<main>
  <section id="about">...</section>
```

```
<section id="services">...</section>
</main>
```

3. `<footer>`

- Contains footer information like copyright and links.

```
<footer>
  <p>&copy; 2024 My Website</p>
</footer>
```

Semantic HTML Elements

- `<header>`: Defines the header section.
- `<nav>`: Defines navigation links.
- `<main>`: Represents the main content.
- `<section>`: Groups related content.
- `<footer>`: Defines the footer section.

HTML Best Practices

1. Use Semantic Elements:

- Improves readability and accessibility.
- Helps search engines understand page structure.

2. Follow Indentation Rules:

- Ensures code is clean and readable.

3. Add Descriptive Attributes:

- Use `alt` for images and meaningful `title` attributes.

4. Minimize Inline Styles:

- Use external stylesheets for maintainability.