

HTML and CSS Full Course Content

HTML: HyperText Markup Language

1. Introduction to HTML

- **What is HTML?**
 - HTML is the standard markup language for creating web pages.
- **HTML Structure:**

```
<!DOCTYPE html>
<html>
  <head>
    <title>Page Title</title>
  </head>
  <body>
    <h1>Welcome to HTML!</h1>
    <p>This is a paragraph.</p>
  </body>
</html>
```

2. Basic HTML Tags

- **Headings:** <h1> to <h6>
Example:

```
<h1>Main Heading</h1>
<h3>Subheading</h3>
```

- **Paragraphs:** <p>
Example:

```
<p>This is a paragraph of text.</p>
```

- **Lists:**
 - Ordered List:

```
<ol>
  <li>Item 1</li>
  <li>Item 2</li>
</ol>
```

- Unordered List:

```
<ul>
  <li>Item A</li>
  <li>Item B</li>
</ul>
```

3. Links and Images

- **Links:** <a>
Example:

```
<a href="https://example.com" target="_blank">Visit Example</a>
```

- **Images:**
Example:

```

```

4. Tables

- **Creating Tables:**

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>John</td>
    <td>30</td>
  </tr>
</table>
```

5. Forms

- **Form Elements:**

```
<form action="/submit" method="POST">
  <label for="name">Name:</label>
  <input type="text" id="name" name="name">
  <button type="submit">Submit</button>
</form>
```

6. Semantic HTML

- **Common Semantic Tags:**
 - <header>, <nav>, <article>, <footer>, <section>

CSS: Cascading Style Sheets

1. Introduction to CSS

- **What is CSS?**
 - CSS is used to style HTML elements.
- **CSS Syntax:**

```
selector {  
  property: value;  
}
```

2. Types of CSS

- **Inline CSS:**

```
<p style="color: red;">This is red text.</p>
```

- **Internal CSS:**

```
<style>  
  p {  
    font-size: 16px;  
  }  
</style>
```

- **External CSS:**
Link an external CSS file:

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

3. Selectors

- **Universal Selector (*)**: Styles all elements.
- **Class Selector (.classname)**:

```
.highlight {  
  color: blue;  
}
```

- **ID Selector (#id)**:

```
#main-heading {  
  font-size: 24px;  
}
```

4. Box Model

- **Understanding Margins, Borders, Padding, and Content:**
Example:

```
div {  
  margin: 10px;  
  padding: 20px;  
  border: 2px solid black;  
  width: 200px;  
}
```

5. Layouts

- **Flexbox:**

```
.container {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
}
```

- **Grid:**

```
.grid {  
  display: grid;  
  grid-template-columns: repeat(3, 1fr);  
}
```

6. Responsive Design

- **Media Queries:**

```
@media (max-width: 768px) {  
  body {  
    font-size: 14px;  
  }  
}
```

7. CSS Transitions and Animations

- **Transitions:**

```
button {  
  transition: background-color 0.3s ease;  
}
```

- **Animations:**

```
@keyframes slide {  
  from {  
    transform: translateX(0);  
  }  
  to {  
    transform: translateX(100px);  
  }  
}
```
