

◇ CSS Level 1 (Basics)

1 Introduction to CSS

2 Three Ways to Apply CSS

☒ Inline CSS (Applied directly inside an HTML element)

```
<p style="color: blue; font-size: 20px;">This is inline CSS</p>
```

☒ Internal CSS (Defined inside `<style>` in the `<head>` section)

```
<style>
  p {
    color: red;
    font-size: 18px;
  }
</style>
<p>This is internal CSS</p>
```

☒ External CSS (Defined in a separate `.css` file and linked using `<link>`)

```
/* styles.css */
p {
  color: green;
  font-size: 16px;
}
```

```
<link rel="stylesheet" href="styles.css">
<p>This is external CSS</p>
```

◇ Explanation:

- **Inline CSS** applies to a single element.
- **Internal CSS** applies styles within the same document.
- **External CSS** is the preferred method for large projects.

3 Difference Between ID (`#id`) and Class (`.class`)

- `#id` is unique and used for a single element.

- **.class** can be applied to multiple elements.

Example:

```
#unique {  
  color: blue;  
}  
  
.common {  
  font-weight: bold;  
}
```

```
<p id="unique">This is styled using an ID</p>  
<p class="common">This is styled using a class</p>  
<p class="common">This is another element with the same class</p>
```

4 Background Color

Example:

```
body {  
  background-color: lightblue;  
}
```

5 Text Styling

☒ Text Color

```
p {  
  color: red;  
}
```

☒ Width & Height

```
div {  
  width: 200px;  
  height: 100px;  
  background-color: yellow;  
}
```

☒ Font Styling

```
p {  
  font-size: 20px;  
  font-style: italic;  
  font-weight: bold;  
  font-family: Arial, sans-serif;  
}
```

☒ Text Alignment & Transformation

```
h1 {  
  text-align: center;  
  text-transform: uppercase;  
}
```

☒ 6 Spacing

☒ Padding & Margin

```
div {  
  padding: 20px;  
  margin: 30px;  
  background-color: lightgray;  
}
```

☒ Border & Border Radius

```
div {  
  border: 2px solid black;  
  border-radius: 10px;  
}
```

☒ 7 Background Images

```
body {  
  background-image: url("background.jpg");  
  background-repeat: no-repeat;  
  background-size: cover;  
}
```

```
background-position: center;
}
```

8 Display Property

☒ inline, block, inline-block

```
span {
  display: inline;
}

div {
  display: block;
}

button {
  display: inline-block;
  width: 100px;
  height: 40px;
}
```

9 Positioning

☒ relative, absolute, fixed, static

```
.relative {
  position: relative;
  left: 20px;
}

.absolute {
  position: absolute;
  top: 50px;
  left: 100px;
}

.fixed {
  position: fixed;
  top: 0;
  width: 100%;
  background-color: black;
  color: white;
}

.static {
```

```
position: static;
}
```

◇ CSS Level 2 (Advanced Topics)

1 Flexbox

Flexbox is used for layout alignment.

☒ `display: flex`

```
.container {
  display: flex;
}
```

☒ `justify-content` (Aligns items horizontally)

```
.container {
  justify-content: center;
}
```

☒ `align-items` (Aligns items vertically)

```
.container {
  align-items: center;
}
```

Example:

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

```
<div class="container">
  <div>Box 1</div>
  <div>Box 2</div>
  <div>Box 3</div>
</div>
```

2 Building a Header & Navbar

```
nav {  
  background-color: black;  
  padding: 10px;  
}  
  
nav a {  
  color: white;  
  text-decoration: none;  
  margin: 10px;  
}
```

```
<nav>  
  <a href="#">Home</a>  
  <a href="#">About</a>  
  <a href="#">Contact</a>  
</nav>
```

3 z-index (Layer Control)

```
.box1 {  
  position: absolute;  
  z-index: 2;  
}  
  
.box2 {  
  position: absolute;  
  z-index: 1;  
}
```

4 Creating a Footer

```
footer {  
  background-color: gray;  
  text-align: center;  
  padding: 20px;  
}
```

5 Box Shadows

```
.box {  
  width: 200px;  
  height: 100px;  
  box-shadow: 5px 5px 10px gray;  
}
```

6 Full Page Layout (Header, Body, Footer)

```
header, footer {  
  background-color: darkblue;  
  color: white;  
  text-align: center;  
  padding: 20px;  
}  
  
.content {  
  padding: 20px;  
}
```

```
<header>Header</header>  
<div class="content">Main Content</div>  
<footer>Footer</footer>
```

7 Animations

☒ @keyframes Example

```
@keyframes example {  
  from {background-color: red;}  
  to {background-color: yellow;}  
}  
  
div {  
  width: 100px;  
  height: 100px;  
  background-color: red;  
  animation-name: example;  
  animation-duration: 2s;  
}
```

8 Responsive Design

```
@media (max-width: 600px) {  
  body {  
    background-color: lightgray;  
  }  
}
```
