

1. Tailwind CSS Concept

Tailwind CSS is a **utility-first CSS framework**. Each class represents **one CSS property**, so you compose HTML elements using these small CSS utilities instead of writing custom CSS rules.

2. Tailwind vs Regular CSS

Regular CSS:

```
.button {  
    background-color: #2563eb;  
    color: white;  
    padding: 10px 20px;  
    border-radius: 6px;  
    font-weight: bold;  
}  
  
<button class="button">Click Me</button>
```

Tailwind CSS:

```
<button class="bg-blue-600 text-white px-5 py-2 rounded font-bold">Click Me</button>
```

Each Tailwind class is a **predefined CSS property**.

3. CSS Equivalents of Tailwind Classes

Tailwind Class **CSS Property**

bg-blue-600	background-color: #2563eb;
text-white	color: white;
px-5	padding-left: 1.25rem; padding-right: 1.25rem;
py-2	padding-top: 0.5rem; padding-bottom: 0.5rem;
rounded	border-radius: 0.25rem;
font-bold	font-weight: 700;
text-center	text-align: center;
shadow-md	box-shadow: 0 4px 6px rgba(0,0,0,0.1);

4. Tailwind Utility-First Principle

Instead of writing a CSS rule like:

```
.card {  
  padding: 20px;  
  background-color: white;  
  border-radius: 8px;  
  box-shadow: 0 4px 6px rgba(0,0,0,0.1);  
}
```

You write in HTML:

```
<div class="p-5 bg-white rounded-lg shadow-md">Card content</div>
```

5. Responsive and State CSS

Tailwind classes let you add **media queries and pseudo-classes** directly:

- **Responsive example:**

```
<div class="p-2 md:p-6">Content</div>
```

Equivalent CSS:

```
div { padding: 0.5rem; }  
  
@media (min-width: 768px) { div { padding: 1.5rem; } }
```

- **Hover example:**

```
<button class="bg-blue-500 hover:bg-blue-700">Click</button>
```

Equivalent CSS:

```
button { background-color: #3b82f6; }  
  
button:hover { background-color: #1d4ed8; }
```

6. Why Tailwind is Just CSS

- Every class is a **CSS property or group of properties**.
 - You don't write selectors; the HTML class itself becomes the selector.
 - It generates a **CSS file with all utilities**, and unused ones are removed in production
-

```
<!DOCTYPE html>
```

```
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Tailwind CSS Example</title>
  <script src="https://cdn.tailwindcss.com"></script>
</head>

<body class="bg-gray-100 font-sans">

  <!-- Header -->
  <header class="bg-white shadow-md py-6">
    <div class="container mx-auto text-center">
      <h1 class="text-3xl font-bold text-gray-800">Welcome to Our Website</h1>
      <p class="text-gray-600 mt-2">We create modern and responsive layouts using Tailwind CSS</p>
    </div>
  </header>

  <!-- Main Section -->
  <main class="container mx-auto px-4 py-12">
    <!-- Cards Section -->
    <section class="text-center mb-12">
      <h2 class="text-2xl font-semibold text-gray-800 mb-4">Our Services</h2>
      <p class="text-gray-600 mb-8">High-quality services to boost your business</p>

      <div class="grid grid-cols-1 md:grid-cols-3 gap-8">
        <div class="bg-white p-6 rounded-lg shadow-md">
          <h3 class="text-xl font-bold mb-2">Web Development</h3>
          <p class="text-gray-600">Fast and responsive websites using modern technologies</p>
        </div>
        <div class="bg-white p-6 rounded-lg shadow-md">
```

```
<h3 class="text-xl font-bold mb-2">UI/UX Design</h3>
<p class="text-gray-600">User-friendly and visually appealing interfaces</p>
</div>
<div class="bg-white p-6 rounded-lg shadow-md">
  <h3 class="text-xl font-bold mb-2">SEO Optimization</h3>
  <p class="text-gray-600">Improve your website's search engine ranking</p>
</div>
</div>
</section>

<!-- Call to Action Section -->
<section class="text-center">
  <h2 class="text-2xl font-semibold text-gray-800 mb-4">Get Started</h2>
  <p class="text-gray-600 mb-6">Start building your project with Tailwind today</p>
  <button class="bg-blue-600 text-white px-6 py-3 rounded-lg hover:bg-blue-700 font-bold">
    Start Now
  </button>
</section>
</main>

<!-- Footer -->
<footer class="bg-white py-6 mt-12 shadow-inner">
  <div class="container mx-auto text-center text-gray-600">
    © 2025 Tailwind CSS Example. All rights reserved.
  </div>
</footer>

</body>
</html>
```
