## **Tailwind CSS in React JS**

### What is Tailwind CSS?

Tailwind CSS is a utility-first CSS framework for rapidly building custom designs. It is a highly customizable, low-level CSS framework that gives you all of the building blocks you need to build bespoke designs without any annoying opinionated styles you have to fight to override.

## **Tailwind CSS vs Bootstrap CSS**

Tailwind CSS is a utility-first CSS framework, while Bootstrap is a component-first CSS framework. Tailwind CSS is a low-level framework that provides utility classes to build custom designs. Bootstrap is a high-level framework that provides pre-built components to build designs.

Feature	Tailwind CSS	Bootstrap CSS
Approach	Utility-first	Component-first
Customization	Highly customizable	Limited customization
Low-level	Yes	No
Opinionated	No	Yes
File size	Large	Medium
Learning curve	Steep	Moderate
Performance	Good	Moderate
Community	Large	Large
Documentation	Comprehensive	Comprehensive
Plugins	Yes	Yes
Theming	Yes	Limited
Responsive	Yes	Yes
Dark mode	Yes	No

## What are the pros and cons of Tailwind CSS?

#### **Pros of Tailwind CSS**

- 1. **Highly customizable**: Tailwind CSS is a highly customizable CSS framework that allows you to build bespoke designs without any annoying opinionated styles you have to fight to override.
- 2. **Utility-first**: Tailwind CSS is a utility-first CSS framework that provides utility classes to build custom designs.
- 3. **Low-level**: Tailwind CSS is a low-level CSS framework that gives you all of the building blocks you need to build be be designs.
- 4. **Performance**: Tailwind CSS is a performance-oriented CSS framework that generates small and optimized CSS files.
- 5. **Community**: Tailwind CSS has a large and active community that provides support and resources for developers.
- 6. **Documentation**: Tailwind CSS has comprehensive documentation that makes it easy to get started with the framework.
- 7. **Plugins**: Tailwind CSS has a plugin ecosystem that allows you to extend the framework with additional features and utilities.
- 8. **Theming**: Tailwind CSS allows you to easily customize the design of your website by changing the theme configuration.
- 9. **Responsive**: Tailwind CSS provides responsive utility classes that allow you to build responsive designs.
- Dark mode: Tailwind CSS provides dark mode utility classes that allow you to build dark mode designs.

#### **Cons of Tailwind CSS**

- Learning curve: Tailwind CSS has a steep learning curve due to its utility-first approach and large number of utility classes.
- 2. **File size**: Tailwind CSS generates large CSS files due to its utility-first approach and large number of utility classes.
- Opinionated: Tailwind CSS is an opinionated CSS framework that may not suit everyone's design preferences.
- 4. **Customization**: Tailwind CSS requires you to customize the design of your website using utility classes, which may not be suitable for all projects.
- Tooling: Tailwind CSS requires additional tooling to generate optimized CSS files, which may be a barrier for some developers.

6. **Performance**: Tailwind CSS may not be suitable for performance-critical projects due to its large CSS files and utility-first approach.

### How to install Tailwind CSS in React JS?

To install Tailwind CSS in React JS, you can use the following steps:

Create a new React JS project using Create React App.

```
npx create-react-app tailwindcss-react-checklist-app
cd tailwindcss-react-checklist-app
```

# Install tailwindcss via npm, and then run the init command to generate your tailwind.config.js file

```
npm install -D tailwindcss postcss autoprefixer
npx tailwindcss init -p
```

Configure your template paths in tailwind.config.js by Adding the paths to all of your template files in your tailwind.config.js file

```
/** @type {import('tailwindcss').Config} */
module.exports = {
  content: [
    "./app/**/*.{js,ts,jsx,tsx,mdx}",
    "./pages/**/*.{js,ts,jsx,tsx,mdx}",
    "./components/**/*.{js,ts,jsx,tsx,mdx}",
    // Or if using `src` directory:
    "./src/**/*.{js,ts,jsx,tsx,mdx}",
    ],
    theme: {
      extend: {},
    },
    plugins: [],
};
```

Create a new CSS file in your project, such as src/styles/tailwind.css, and import Tailwind CSS in the file

```
@tailwind base;
@tailwind components;
@tailwind utilities;
```

Import the CSS file in your entry file, such as src/index.js, to apply Tailwind CSS styles to your React components

```
import React from "react";
import ReactDOM from "react-dom";
import "./styles/tailwind.css";
import App from "./App";
```

# Start your React JS project and you should see Tailwind CSS styles applied to your components

```
npm start
```

You can now use Tailwind CSS utility classes in your React components to style them as needed. Lets create a simple Title component.

```
export default function Title({ text }) {
   return <h1 className="text-5xl font-bold pt-10 mb-20 text-center">{text}</h1>;
}
```

## **Project Complex checklist app**