

In React, the `useContext` hook is used to access the value of a context that has been created using the `createContext` function. Context provides a way to pass data through the component tree without having to pass props manually at every level. Here's an example of how to use `useContext` in a React application:

Suppose you have a simple application where you want to provide a theme (e.g., light or dark mode) throughout your component tree using context.

First, create a context for your theme:

```
// ThemeContext.js
import { createContext } from 'react';

const ThemeContext = createContext();

export default ThemeContext;
```

Next, create a provider component that will provide the theme to its children:

```
// ThemeProvider.js
import React, { useState } from 'react';
import ThemeContext from './ThemeContext';

const ThemeProvider = ({ children }) => {
  const [theme, setTheme] = useState('light');

  const toggleTheme = () => {
    setTheme(theme === 'light' ? 'dark' : 'light');
  };

  return (
    <ThemeContext.Provider value={{ theme, toggleTheme }}>
      {children}
    </ThemeContext.Provider>
  );
};

export default ThemeProvider;
```

In this example, `ThemeProvider` provides both the theme value and a function to toggle the theme to its children components.

Now, let's create a component that uses the `useContext` hook to access the theme:

```
// ThemedButton.js
import React, { useContext } from 'react';
import ThemeContext from './ThemeContext';

const ThemedButton = () => {
  const { theme, toggleTheme } = useContext(ThemeContext);

  return (
    <button onClick={toggleTheme} style={{ background: theme === 'light' ? 'white' : 'black', color:
theme === 'light' ? 'black' : 'white' }}>
      Toggle Theme
    </button>
  );
};

export default ThemedButton;
```

In this component, we're using `useContext` to access the `theme` and `toggleTheme` function from the context.

Finally, use the `ThemeProvider` at the top level of your application to wrap the components that need access to the theme:

```
// App.js
import React from 'react';
import ThemedButton from './ThemedButton';
import ThemeProvider from './ThemeProvider';

const App = () => {
  return (
    <ThemeProvider>
      <div>
        <h1>Theme Example</h1>
        <ThemedButton />
      </div>
    </ThemeProvider>
  );
};

export default App;
```

Now, when you click the "Toggle Theme" button inside `ThemedButton`, it will update the theme in the entire application because it's using the context provided by `ThemeProvider`.

This is a simple example of how to use `useContext` in React to share data or state across components without having to pass props down manually.