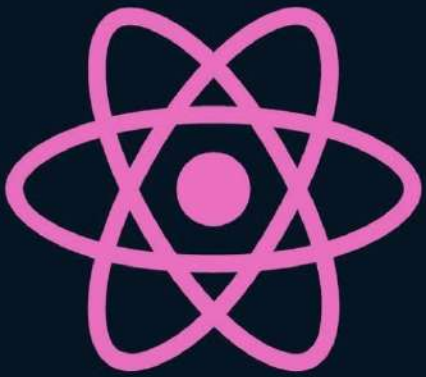
@pyplane_code

# Context API



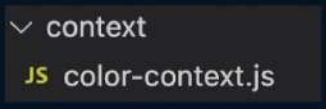
# Introduction

Context API is a solution for a more elegant way of passing data between components by creating global variables, without the need to pass props down the component three manually

TO GET STARTED:

create a react app:
n*px create-react-app context-app*

Add context folder with color-contex.js inside



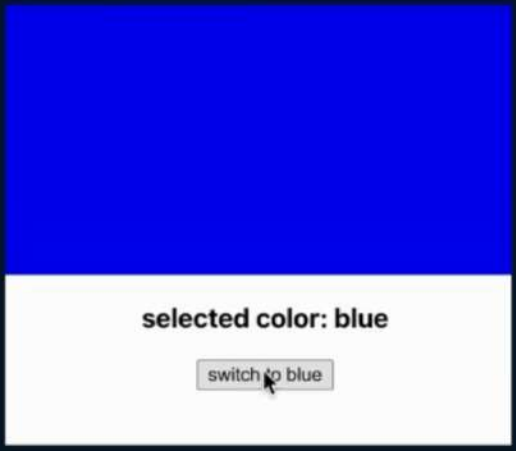

Add components folder with two sample files:


# What we are building

We will be able to access global color variable and change it directly from the components:

ComponentA


ComponentB



# color-context.js

Let's create our global state inside the color-context.js file

```
import { createContext, useState } from 'react';

export const ColorContext = createContext({
    selectedColor : null,
    onColorChange: (newColor) => {},
})

export const ColorContextProvider = ({children}) => {
    const [color, setColor] = useState('red')

    const handleColorChange = (c) => {
        setColor(c);
    }

    const contextValue = {
        selectedColor: color,
        onColorChange: handleColorChange,
    }

    return (
        <ColorContext.Provider value={contextValue}>
            {children}
        </ColorContext.Provider>
    )
}
```

# Wrap our App

Now in order to use the color content in our application - we need to wrap our App with the ColorProvider

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
import {ColorContextProvider} from './context/color-context';

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <ColorContextProvider>
      <App />
    </ColorContextProvider>
  </React.StrictMode>
);
```

# Component A

Let's take a look at an example how we could access and modify global state in component-a.js

```
import { useContext } from "react";
import { ColorContext } from "../context/color-context";

const ComponentA = () => {
    const colorCtx = useContext(ColorContext);
    const {selectedColor, onColorChange} = colorCtx;

    return (
        <>
            <h1 style={{color: selectedColor}}>
                hello world
            </h1>
            <button onClick={()=>onColorChange('green')}>
                change to green
            </button>
            <button onClick={()=>onColorChange('blue')}>
                change to blue
            </button>
        </>
    );
}

export default ComponentA;
```

# Component B

Let's also take a look at a similar example where we could use our newly created color context in a different component

```
import { useContext } from "react";
import { ColorContext } from "../context/color-context";


const ComponentB = () => {
    const colorCtx = useContext(ColorContext)
    const {selectedColor, onColorChange} = colorCtx

    return (
        <>
            <div
                style={{
                    backgroundColor: selectedColor,
                    width: '100%', height:500
                }}
            >
            </div>
            <h3>selected color: {selectedColor}</h3>
            <button onClick={()=> onColorChange('blue')}>
                switch to blue
            </button>
        </>
    );
}

export default ComponentB;
```