Week 5 Portfolio
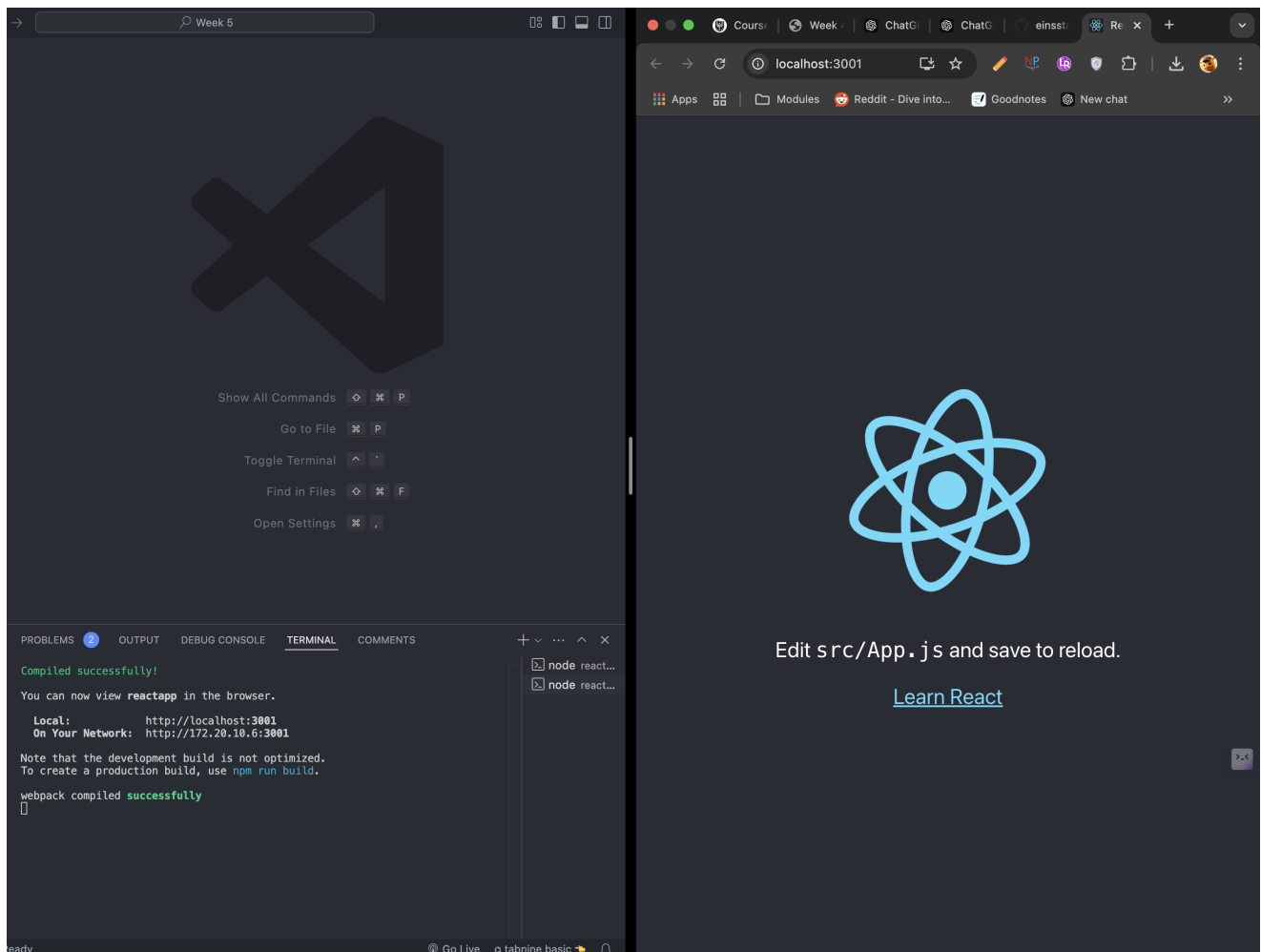
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Introduction to React Programming
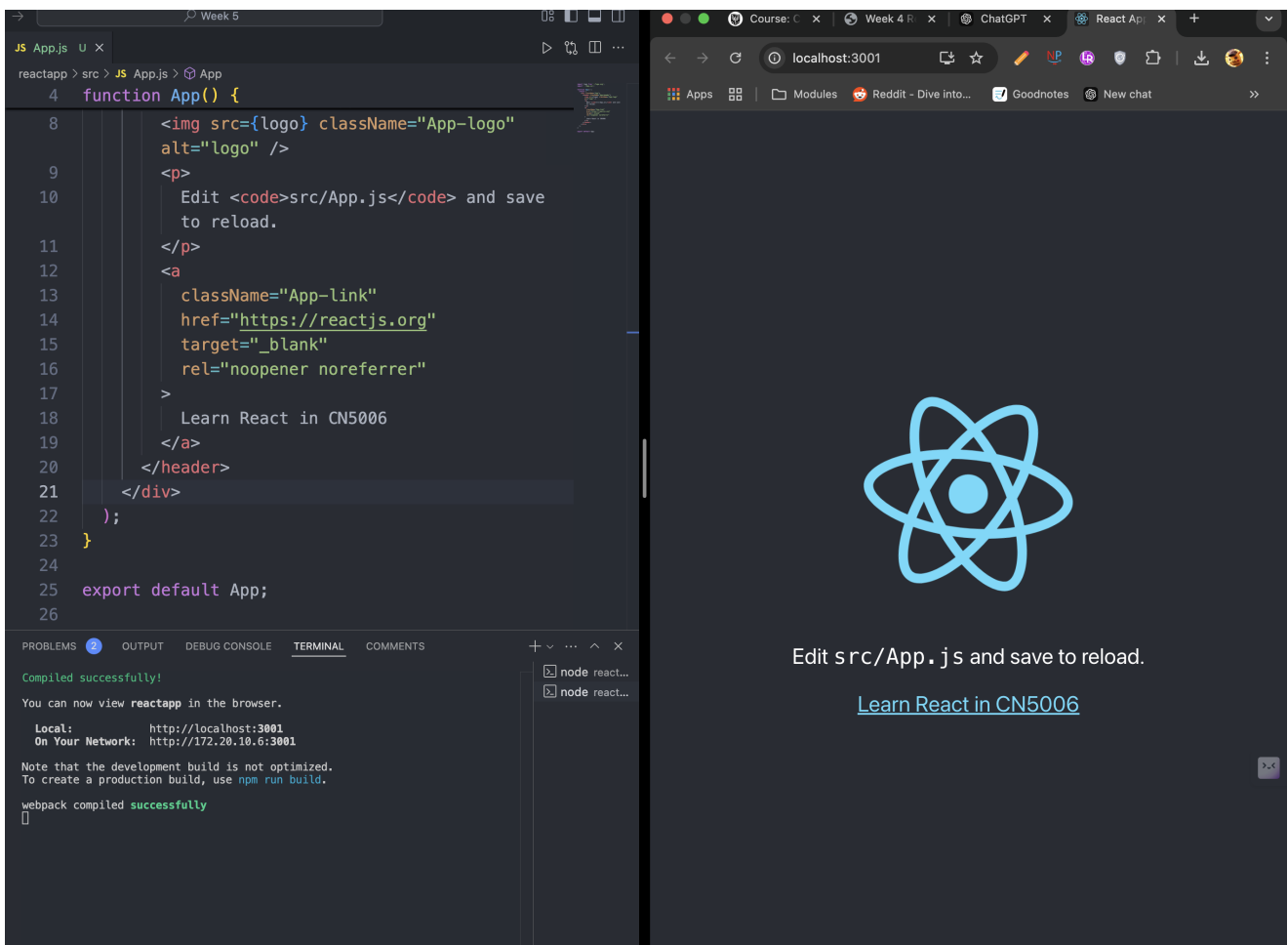
1. Screenshots

React app running
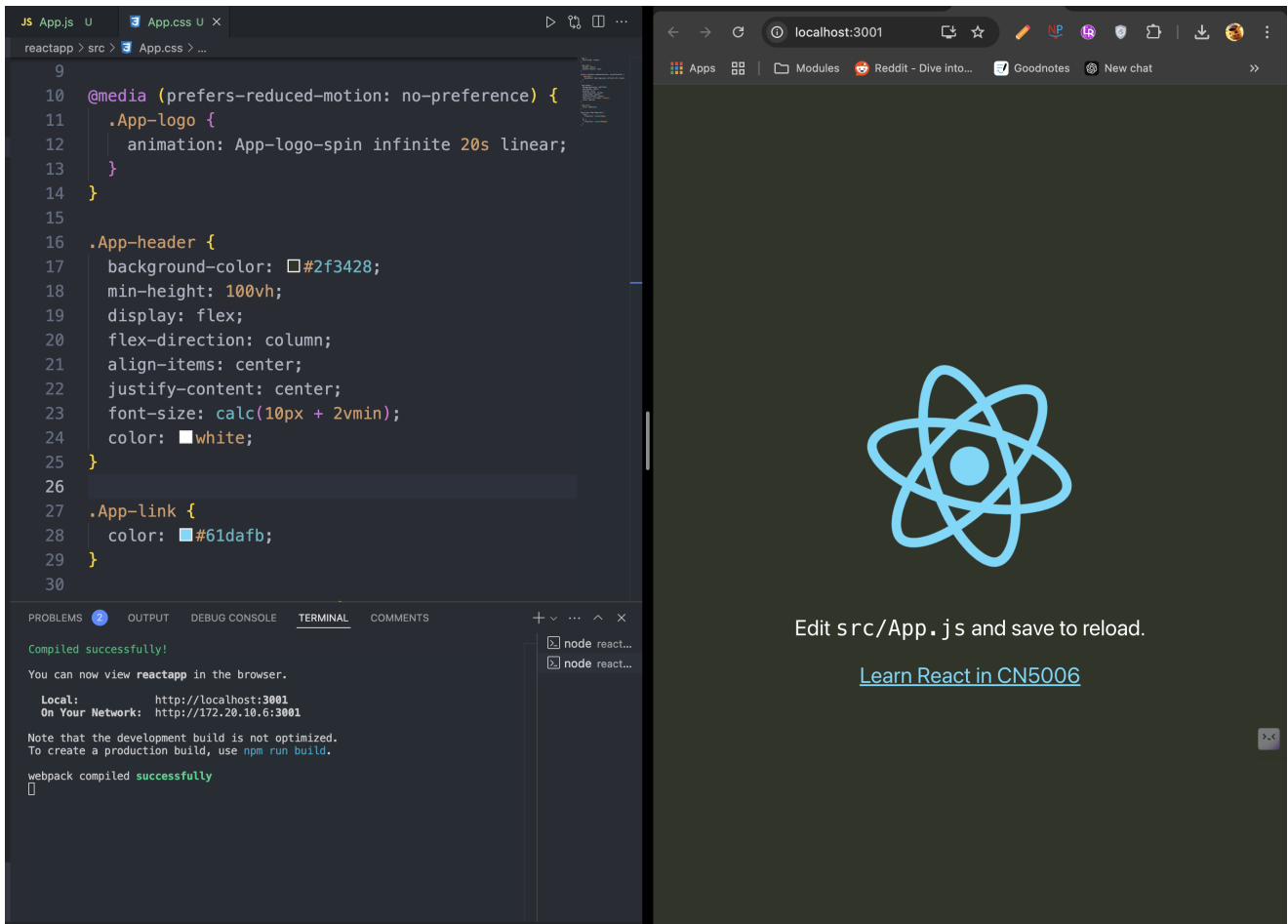

Task 1: Change the text appearing into your React Application

Changed the text to "Learn React in CN5006"

Task 2: Change the background color of your application:

Task3 : Creating stateless function component using React

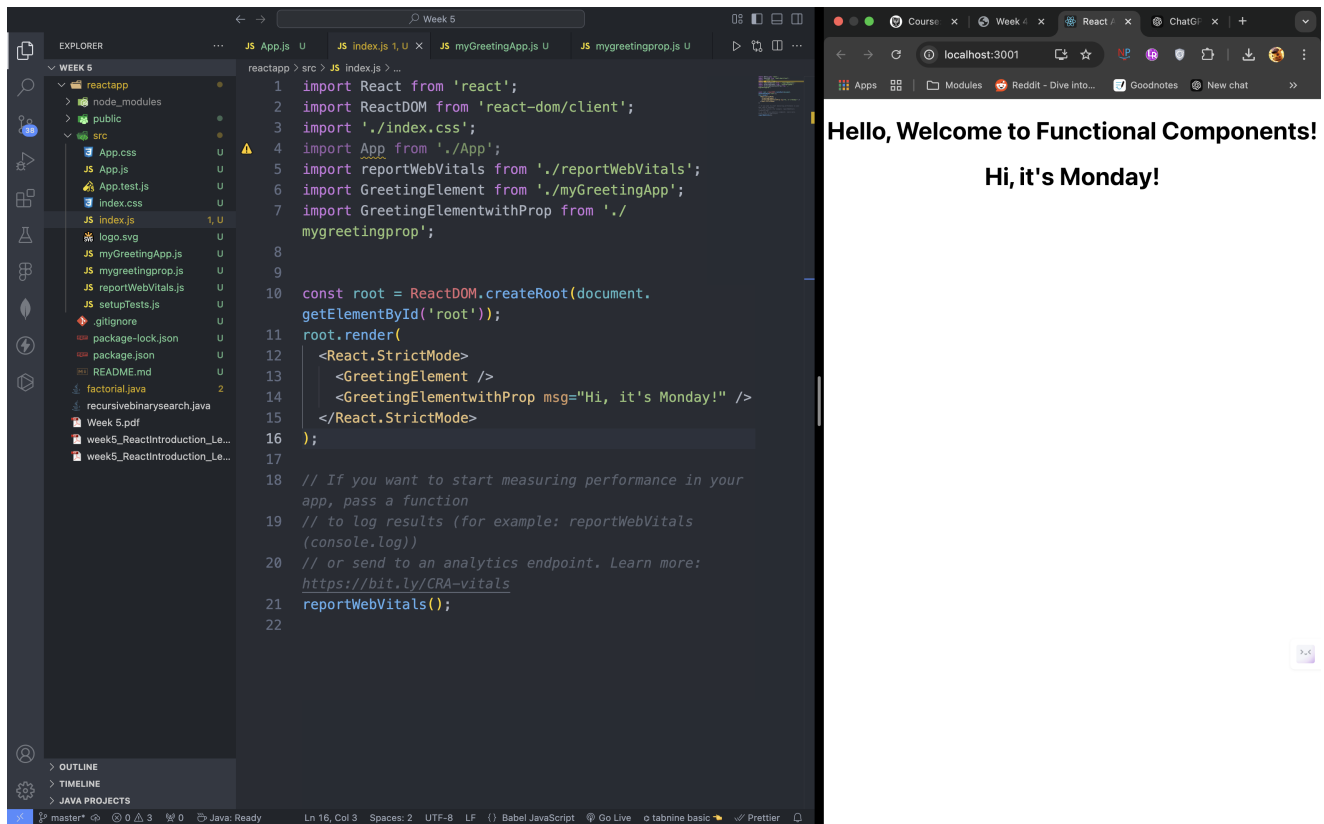Firstly, I created a new file myGreetingApp.js, then in that file I defined a functional component called `GreetingElement` . Next, imported it to `index.js` file to render.
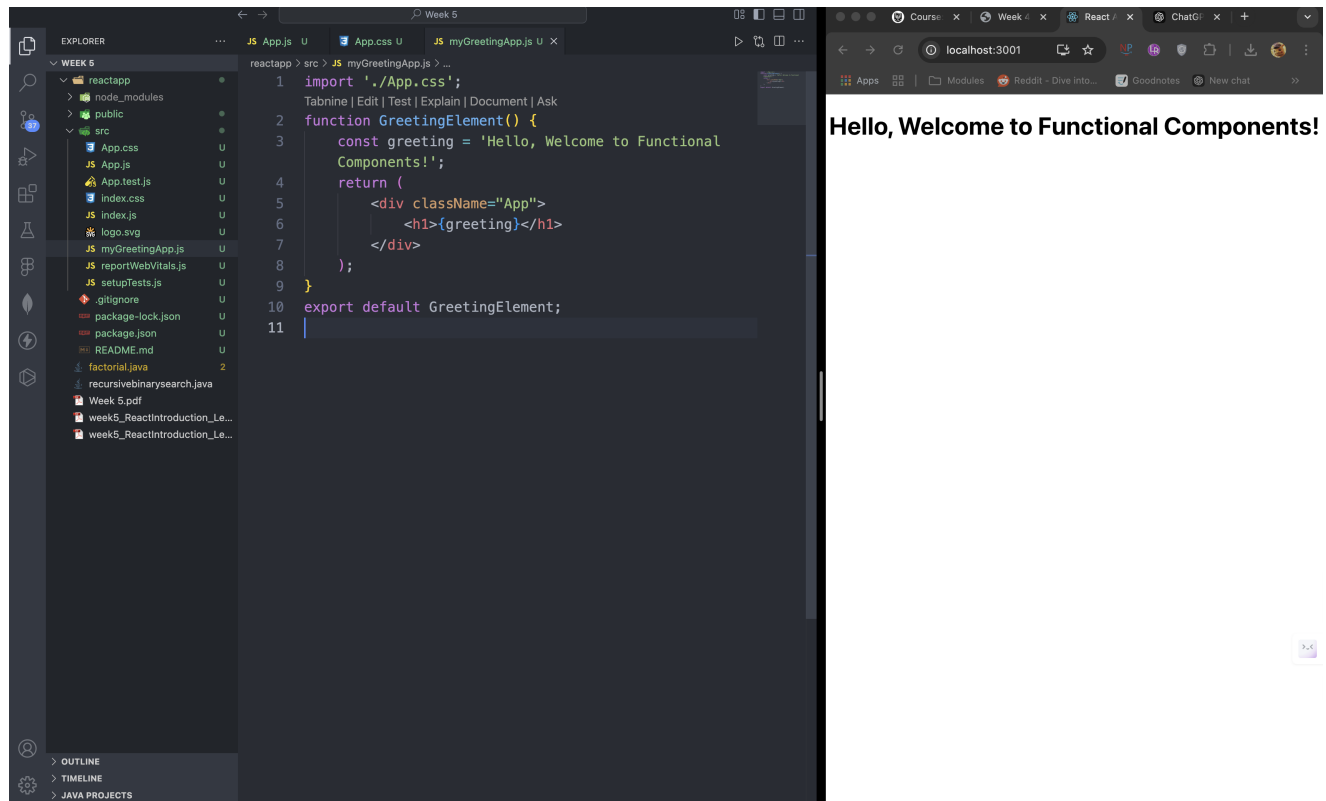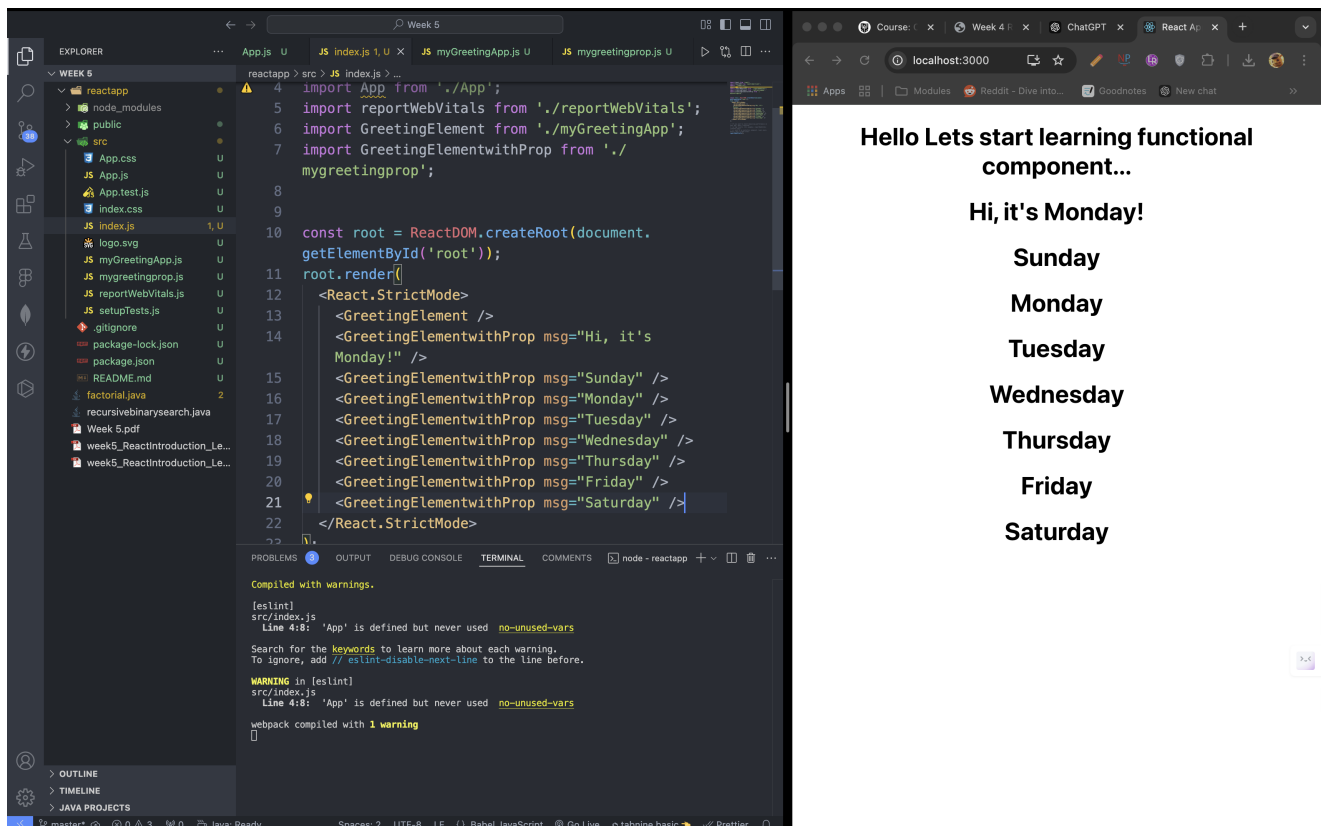

Task 4 Creating the Functional Component using properties

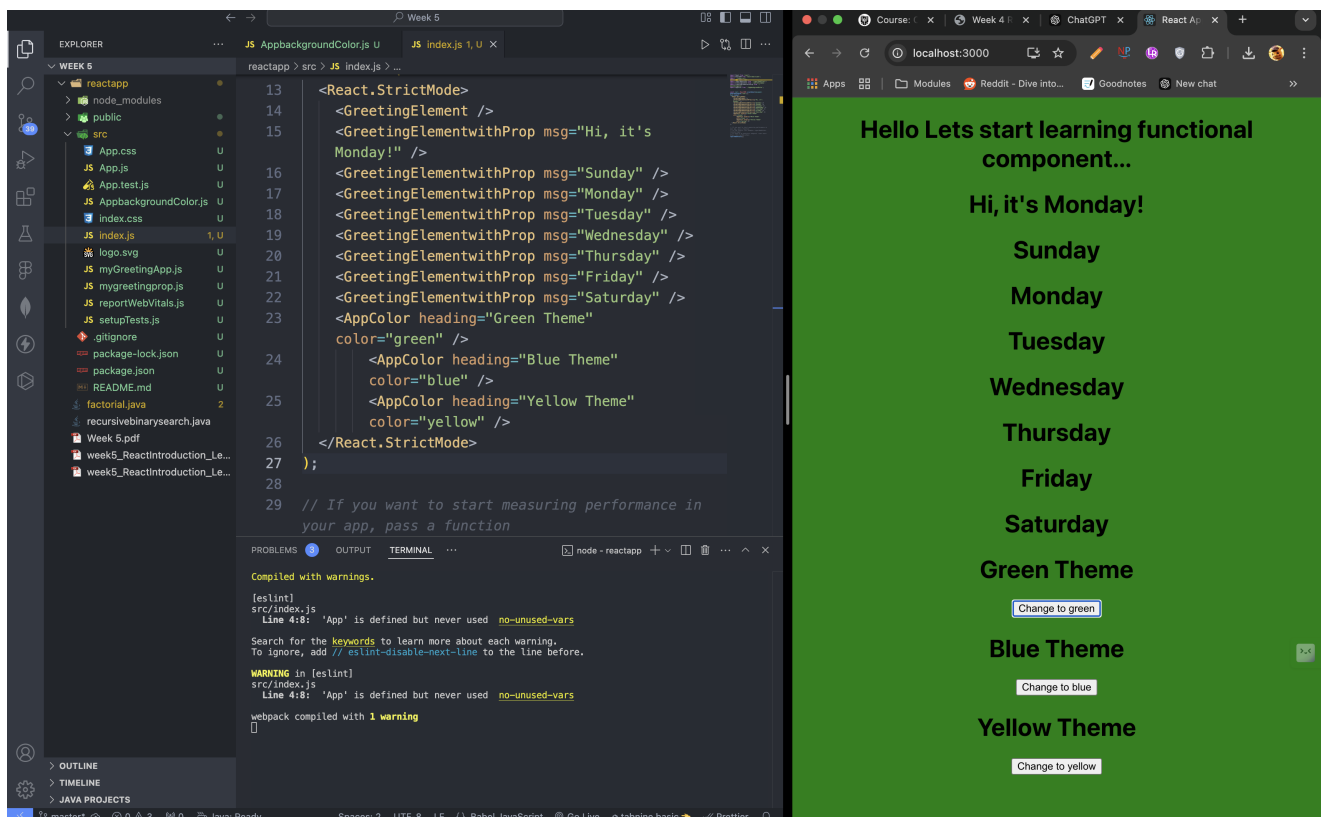Created a new file `myGreetingProp.js` and defined a component with properties:
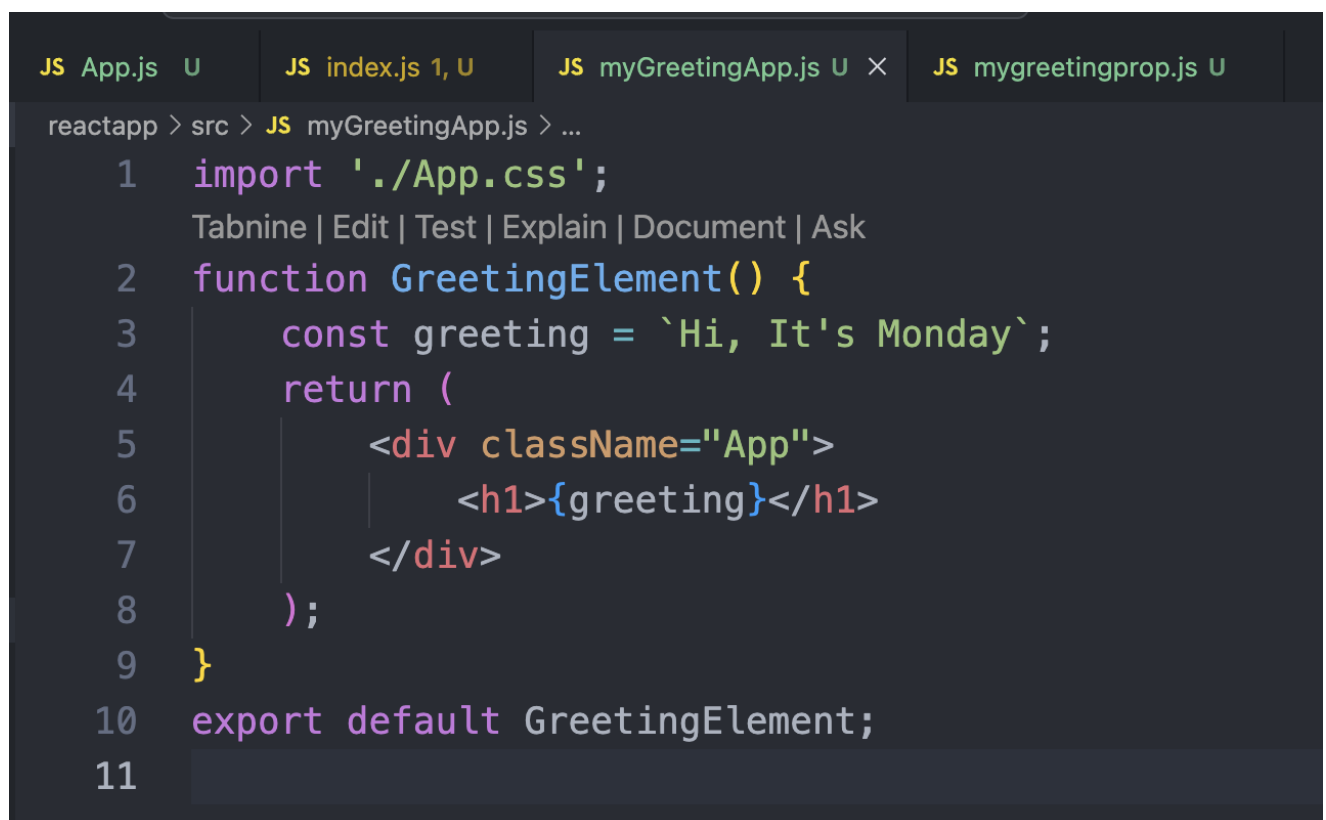
Task 5 Display Seven Days of Week

Task 6: Functional Components with Buttons

Tabnine | Edit | Test | Explain | Document | Ask

```js
function AppColor(props) {
    function changeBackgroundColor(e) {
        document.body.style.background = props.color;
        alert(`Background color changed to ${props.color}`);
    }
    return (
        <div className="App">
            <h1>{props.heading}</h1>
            <button onClick={changeBackgroundColor}>
                Change to {props.color}
            </button>
        </div>
    );
}
export default AppColor;
```

```js
<React.StrictMode>
  <GreetingElement />
  <GreetingElementwithProp msg="Hi, it's Monday!" />
  <GreetingElementwithProp msg="Sunday" />
  <GreetingElementwithProp msg="Monday" />
  <GreetingElementwithProp msg="Tuesday" />
  <GreetingElementwithProp msg="Wednesday" />
  <GreetingElementwithProp msg="Thursday" />
  <GreetingElementwithProp msg="Friday" />
  <GreetingElementwithProp msg="Saturday" />
  <AppColor heading="Green Theme" color="green" />
    <AppColor heading="Blue Theme" color="blue" />
    <AppColor heading="Yellow Theme" color="yellow" />
</React.StrictMode>
);

// If you want to start measuring performance in
   your app, pass a function
```

PROBLEMS 3   OUTPUT   TERMINAL

Compiled with warnings.

[eslint]
src/index.js
   Line 4:8: 'App' is defined but never used   no-unused-vars

Search for the keywords to learn more about each warning.
To ignore, add // eslint-disable-next-line to the line before.

WARNING in [eslint]
src/index.js
   Line 4:8: 'App' is defined but never used   no-unused-vars

webpack compiled with 1 warning

Hello Lets start learning functional component...

Hi, it's Monday!

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Green Theme

Change to green

Blue Theme

Change to blue

Yellow Theme

Change to yellow

2. Questions

1. **What is React & What do you understand by React component, what command do you use to create a React component with or without property?**

React is a library for building UI using reusable components. Create a component using `function ComponentName(props)` or `class ComponentName extends React.Component`.

2. **What command will you use to render the newly created component named as MyReact?**

We can use `ReactDOM.render(<MyReact />, document.getElementById('root'));`.

3. **Suppose the MyReact Component has a property heading, write the code to render the MyReact Component, and pass the message to the property heading as "this is my first element."**

ReactDOM.render(

,

document.getElementById('root')

);

4. `<AppColor heading="This is first element" lbl="Name :" color="green" />`

What is the name of the React Component?
The name is `AppColor`.

How many properties does this component use?
It uses three properties: `heading`, `lbl`, and `color`.

5. **Look at the following Code:**

function GreetingElementwithProp(props) {

   return (

Wellcome , {props.studentname}

;

   );

} export default ??????

what will you write to make this export function correctly? Hint you need to replace ??????

answer - `export default GreetingElementwithProp;`

6. **Add a function that takes two properties as numbers, adds these numbers on button click, and displays the sum**.

```
function AddNumbers(props) {
  function handleClick() {
    alert(`Sum: ${props.num1 + props.num2}`);
  }
  return <button onClick={handleClick}>Add Numbers</button>;
}
```

3. Reflection

This lab was pretty interesting and a bit challenging at times. I started by creating a React app and changing the text, which felt like a good intro to how React works. Changing the background color was simple but gave me a better understanding of styles. Creating functional components was a cool experience—I liked how I could pass props like "Hi, it's Monday" and see it display on the page.

The button task where I added events to change the background color was the most fun because I could actually interact with the app in my chrome browser. I got stuck for a bit on exporting functions, but once I figured out the correct syntax, it was okay. JSX was a bit odd to grasp at first, combining HTML and JavaScript, but it's starting to make sense now. Overall, I learned a lot and feel like I'm getting the hang of React basics.