Lesson 03 Demo 04
Create a Component that Re-renders

Objective: To create a component in React that re-renders with a prop input

Tools Required: Node terminal, React app, and Visual Studio Code

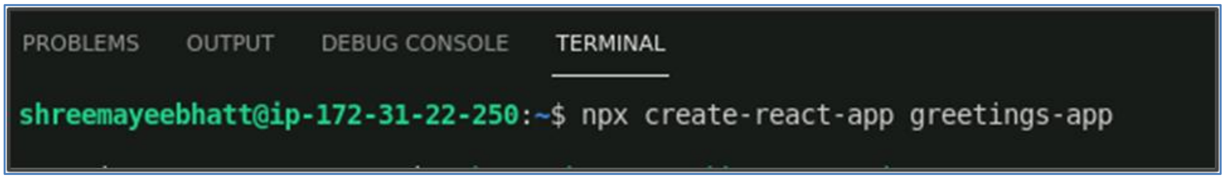
Prerequisites: Knowledge of creating a React app and understanding of the folder structure

Steps to be followed:

1. Create a new **React** app
2. Configure the file **src/App.js**
3. Create a new file called **Greetings.js**
4. Run the app and verify the functionality

Step 1: Create a new React app

1.1. Open your terminal and run the following command to create a new **React** app: **npx create-react-app greetings-app**



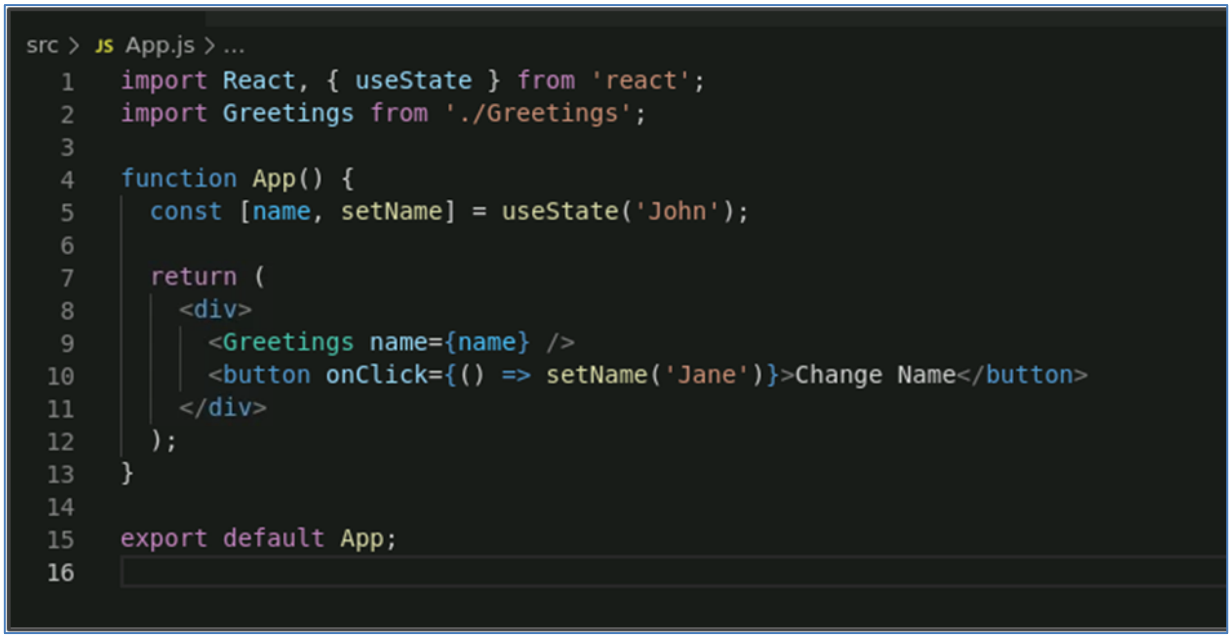
```
shreemayeebhatt@ip-172-31-22-250:~$ npx create-react-app greetings-app
```

1.2. Navigate into the newly created project directory by running the following command: **cd greetings-app**

Step 2: Configure the file src/App.js

2.1 Open the React project in the Visual Studio code and navigate through the project directory of **greetings-app** to open the **src/App.js** file and replace the existing code in **App.js** with the following code:

```
import React, { useState } from 'react';
import Greetings from './Greetings';

function App() {
  const [name, setName] = useState('John');

  return (
    <div>
      <Greetings name={name} />
      <button onClick={() => setName('Jane')}>Change Name</button>
    </div>
  );

}

export default App;
```



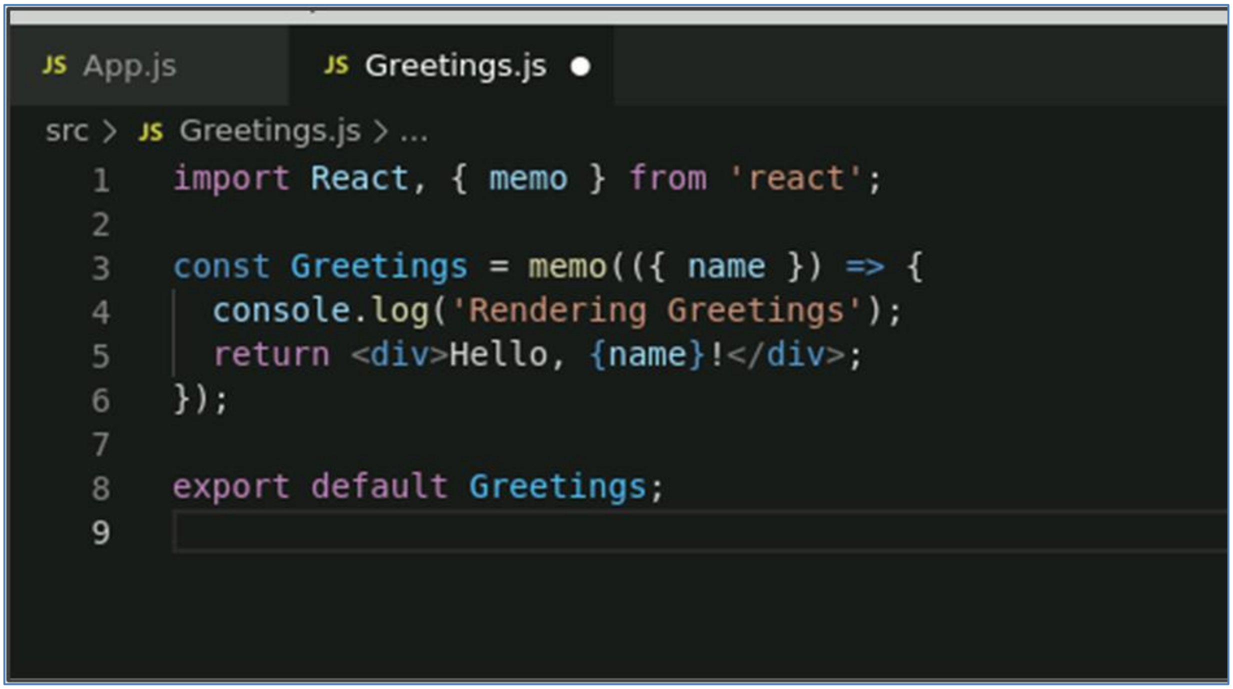
```
import React, { useState } from 'react';
import Greetings from './Greetings';

function App() {
  const [name, setName] = useState('John');

  return (
    <div>
      <Greetings name={name} />
      <button onClick={() => setName('Jane')}>Change Name</button>
    </div>
  );
}

export default App;

```

This code defines the **App** component that renders the **Greetings** component and a button to change the name prop.

Step 3: Create a new file called Greetings.js

3.1 In your code editor, create a new file called **Greetings.js** inside the **src** directory
3.2 Copy and paste the provided code into the **Greetings.js** file:

```
import React, { memo } from 'react';

const Greetings = memo(({ name }) => {
  console.log('Rendering Greetings');
  return <div>Hello, {name}!</div>;
});

export default Greetings;
```

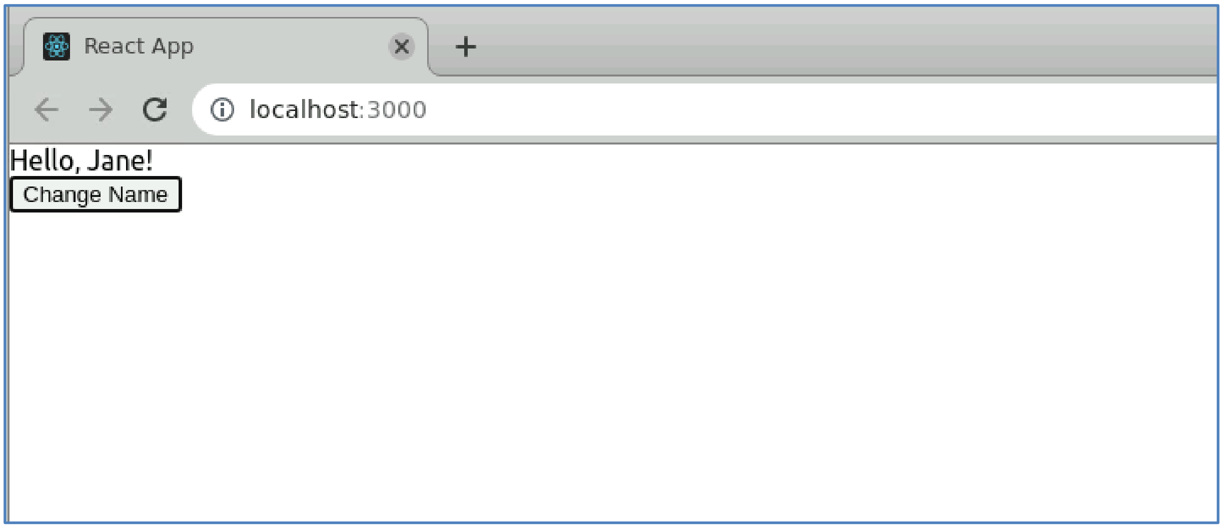


```
import React, { memo } from 'react';

const Greetings = memo(({ name }) => {
  console.log('Rendering Greetings');
  return <div>Hello, {name}!</div>;
});

export default Greetings;
```

Step 4: Run the app and verify the functionality

4.1 Go to the terminal and execute the command **npm start** within the project directory **greetings-app** to run the app

4.2 Once the server starts successfully, open **http://localhost:3000** in your browser to view the app



Hello, Jane!

In the browser, you will see the default greeting message **Hello, John!** rendered by the **Greetings** component. Click the **Change Name** button to update the **name** state to **Jane** and trigger a re-render of the **Greetings** component with the new name prop value.

With this, you have successfully created a React program to re-render with a prop input.