Topic : forwardRef ...

Assignment: Custom Input with ForwardRef

Scenario:

You are tasked with building a small form that includes a custom input component. The application will allow users to enter their name and focus on the input field programmatically using a button.

This assignment will help you practice using forwardRef in React with TypeScript.

Requirements:

➢ Project Setup:
- Create a new React project with a TypeScript template and name it CustomInputApp.

➢ Component Structure:

✛ Create a CustomInput Component:
- This component should use React.forwardRef to forward a ref to an input element.
- The component should render a simple input field that will receive focus when the ref is used.

✛ Create an App Component:
- This component should include the CustomInput component and a button labeled "Focus Input".
- When the "Focus Input" button is clicked, the input field inside the CustomInput component should be focused.

Tasks:

1. Using forwardRef:
- Implement the CustomInput component to use React.forwardRef to forward a ref to the input element.
- Ensure that the forwarded ref allows the parent component to focus the input field.

2. Handling Focus:
- In the App component, create a ref using React.useRef and pass it to the CustomInput component.
- Implement an event handler that triggers when the "Focus Input" button is clicked, which uses the ref to focus the input field.

3. Expected Outcome:
- A simple form where the user can enter their name.
- A button that, when clicked, focuses the input field programmatically.