React Class Material: Handling Form Inputs & Login Form

Session 1: Handling Form Inputs (Controlled Components)

Goal: Learn how to handle form input in React using controlled components.

PART 1: What are Controlled Components?

- Controlled components are form elements whose values are managed by React state.
- React controls the value via useState and updates it on every change.

Example:

```
import { useState } from "react";

function MyForm() {
  const [name, setName] = useState("");

  return (
    <form>
      <label>Name:</label>
      <input
        type="text"
        value={name}
        onChange={(e) => setName(e.target.value)}
      />
      <p>Hello, {name}</p>
    </form>
  );
}
```

Key Concepts:
- value={...} connects to the state.
- onChange updates state on user input.
- Works with input, textarea, select, radio, etc.

PART 2: Practice Tasks

Task 1:

- Create an input field to enter name and display Hello, [name]

Task 2:

- Add another input for surname and display Hello, [name] [surname]

Task 3 (optional):

- Add a textarea field and bind it to state

Session 2: Hands-on Building a Simple Login Form

Goal: Build a functional login form with two input fields.

PART 1: Example Code

```
import { useState } from "react";

function LoginForm() {
  const [email, setEmail] = useState("");
  const [password, setPassword] = useState("");

  const handleSubmit = (e) => {
    e.preventDefault();
    console.log("Email:", email);
    console.log("Password:", password);
    alert("Logged in as: " + email);
  };

  return (
    <form onSubmit={handleSubmit}>
      <h2>Login</h2>
      <label>Email:</label>
      <input
        type="email"
        value={email}
        onChange={(e) => setEmail(e.target.value)}
        required
```

```
      />
      <br />
      <label>Password:</label>
      <input
        type="password"
        value={password}
        onChange={(e) => setPassword(e.target.value)}
        required
      />
      <br />
      <button type="submit">Login</button>
    </form>
  );
}
```

PART 2: Tasks for Students

Task 1:

- Create a LoginForm component with email and password fields

Task 2:

- Use useState to manage both inputs

Task 3:

- Use onSubmit to log the values or show alert

Task 4 (optional):

- Validate email is not empty and password has at least 6 characters