

## ProSensia Internship Report

### Week 6 - Day 5

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**Topics:** Forms in React, Lifting State Up

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#### ◆ Forms in React

Today, I learned how to handle user input through forms in React. Unlike regular HTML forms where the DOM handles input state, React manages form data using component state (via `useState`).

Key concepts:

- Controlled components: Inputs that are tied to component state using `useState`.
- `onChange` handler: Updates the state with each keystroke.
- `onSubmit` event: Used to handle form submission.
- Preventing default browser behavior using `e.preventDefault()`.

Example:

jsx

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```
const [name, setName] = useState("");
```

```
<form onSubmit={handleSubmit}>
```

```
  <input type="text" value={name} onChange={(e) => setName(e.target.value)} />
```

```
  <button type="submit">Submit</button>
```

```
</form>
```

This gives more control over user data and enables validation, formatting, or conditional logic.

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#### ◆ Lifting State Up

I also learned about *lifting state up*, which is a common React pattern used to share state between sibling components.

Key ideas:

- When multiple components need access to the same data, the shared state should be moved to their **common ancestor**.
- The parent component manages the state and passes it down via props.
- This helps keep state centralized and predictable.

Example use case:

A form with two inputs that affect the same output message.

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### Key Takeaways

- React promotes the idea of a single source of truth for form inputs.
- Controlled components provide more flexibility than uncontrolled ones.
- Lifting state up helps manage shared state more effectively and cleanly.