

Objectives:

- Explain the need and benefits of component lifecycle in React
- Identify various lifecycle hook methods
- List the sequence of steps in rendering a component

Need and Benefits of Component Lifecycle:

- Helps in handling side effects (e.g., API calls)
- Provides hooks to control component behavior at specific phases (mounting, updating, unmounting)
- Improves performance and error handling

Important Lifecycle Hooks:

1. constructor()
2. componentDidMount()
3. shouldComponentUpdate()
4. componentDidUpdate()
5. componentWillUnmount()
6. componentDidCatch()

Rendering Sequence:

1. constructor
2. render
3. componentDidMount

Hands-on Lab:

- Implemented `componentDidMount` to fetch blog posts from API
- Used `componentDidCatch` for error boundaries
- Displayed post titles and content using `Post` class component