

## MERN Stack Training

**Company:** Sensation Software Solutions

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**Training Duration:** 6 Months

**Days:** 22

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### Objective of the Day

The objective of Day 22 was to learn **React Event Handling, Forms, and Controlled Components**. The focus was on handling user input, managing form data using state, and understanding real-time data updates.

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### Work Done on Day 22

The session started with a revision of **State and useState hook** learned on Day 21. After that, the trainer introduced **event handling in React**, such as `onClick`, `onChange`, and `onSubmit`.

It was explained that React uses **synthetic events**, which work similarly across all browsers and improve performance.

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### React Event Handling

The trainer demonstrated how events are handled in React using arrow functions.

#### Example:

```
<button onClick={() => alert("Button Clicked")}>
  Click Me
</button>
```

This helped in understanding how user actions trigger functions inside components.

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### Forms and Controlled Components

After events, the concept of **forms in React** was explained. The trainer emphasized that React uses **controlled components**, where form inputs are controlled by state.

#### Example:

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

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

```
    return (  
      <input  
        type="email"  
        value={email}  
        onChange={ (e) => setEmail(e.target.value) }  
      />  
    );  
  }  
}
```

This example showed how input values are updated in real time using state.

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## Hands-on Practice

During practice, we created:

- Simple login form
- Registration form layout
- Input validation using state

This day helped in understanding how user data is captured in React applications.

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## Conclusion

Day 22 was important for learning **user input handling**, which is a core requirement for real-world applications like login forms and To-Do apps.