

# Industrial Training Daily Diary

## MERN Stack Training

**Company:** Sensation Software Solutions

**Student Name:** Gurvinder Singh

**Training Duration:** 6 Months

**Day:** 26

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## Day 26 – React Routing & Form Integration with Redux and API

### Objective of the Day

The objective of Day 26 was to learn **integrating React forms with Redux** for state management and connecting them with backend APIs while maintaining proper routing using React Router.

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## Recap of React Router and Redux

Trainer started with a brief recap:

- React Router basics: BrowserRouter, Route, Link, NavLink
- Redux basics: Store, Actions, Reducers
- useSelector and useDispatch hooks

This was important to prepare for integrating forms and API calls.

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## Form Integration with Redux

Key steps covered:

- Connecting form input state to Redux store
- Dispatching actions on input change and form submission
- Storing user input globally for use across components

Example: Registration form fields (name, email, password) managed via Redux.

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## API Integration

Trainer demonstrated connecting React forms to backend API:

- Using `axios` or `fetch` to send POST requests
- Handling success and error responses
- Updating Redux state based on API response

This helps in real-time data management and maintaining global state consistency.

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## Practical Work Done

During lab session:

- Created a registration form with Redux integration
- Added routing to navigate between Home, Registration, and Success pages
- Connected form submission to mock API
- Used Redux to store form data and response messages
- Observed UI updates and validation messages

Hands-on practice helped understand end-to-end flow of forms in a MERN application.

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## Weekly Task – Week 7

Tasks assigned:

- Integrate all forms with Redux state
  - Connect forms to API endpoints
  - Implement navigation flow for multi-step forms
  - Update diary and push code to GitHub Pages
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## Importance in MERN Stack Development

Integrating React forms with Redux and APIs ensures scalable and maintainable applications. Proper routing ensures smooth navigation and consistent user experience.

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## Conclusion of Day 26

Day 26 provided practical experience in connecting React forms with Redux and backend APIs while maintaining proper routing. I can now manage form data globally and ensure smooth navigation.

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**Outcome of the Day:**

- Form state managed via Redux
- Form submission connected to API
- React Router navigation implemented
- Week 7 task assigned and started