

Training Day 25 Report

Date: 24 July 2025

Project: MERN Notes App

Topic Covered: Error Handling and Notifications

On the twenty-fifth day, we added user-friendly error handling and notifications across the app. This included showing success messages for actions and error alerts for failures.

Concepts Learned

- Handling API errors in React with `try/catch`.
- Displaying alerts and notifications (using libraries like `react-toastify` or custom alerts).
- Differentiating between success, warning, and error messages.

React Toastify Setup

Installed with:

```
1 npm install react-toastify
```

Configured in `App.js`:

```
1 import { ToastContainer } from 'react-toastify';
2 import 'react-toastify/dist/ReactToastify.css';
3
4 function App() {
5   return (
6     <>
7       <Routes> ... </Routes>
8       <ToastContainer position="top-right" autoClose={3000} />
9     </>
10   );
11 }
```

Showing Notifications

Example in `Signup.js`:

Listing 1: Displaying success and error toasts

```
1 import { toast } from 'react-toastify';
2
3 const handleSubmit = async (e) => {
4   e.preventDefault();
5   try {
6     const res = await axios.post('/api/users/signup', formData);
7     localStorage.setItem('userInfo', JSON.stringify(res.data));
8     toast.success('Signup successful!');
9   } catch (err) {
```

```

10     toast.error(err.response?.data?.message || 'Signup failed');
11   }
12 };

```

Notifications for Notes Actions

Listing 2: Create, update, delete feedback

```

1  const createNote = async (note) => {
2    try {
3      const res = await api.post('/notes', note);
4      setNotes([...notes, res.data]);
5      toast.success('Note created!');
6    } catch {
7      toast.error('Error creating note');
8    }
9  };
10
11 const deleteNote = async (id) => {
12   try {
13     await api.delete(`/notes/${id}`);
14     setNotes(notes.filter(n => n._id !== id));
15     toast.info('Note deleted');
16   } catch {
17     toast.error('Error deleting note');
18   }
19 };

```

Testing Notifications

- Successfully signed up → “Signup successful!” toast appeared.
- Tried duplicate signup → “User already exists” error displayed.
- Created and deleted notes → correct success/info toasts appeared.
- Tested network failure → error toast displayed properly.

Outcome of the Day

- Implemented global notification system using React Toastify.
- Added success, info, and error toasts for authentication and notes actions.
- Improved user experience with clear, immediate feedback.