Training Day 10 Report

Date: 7 July 2025

Topic Covered: Creating the GET Route to Fetch a Single Note by ID

On the tenth day of MERN stack training, we implemented the API endpoint to retrieve a specific note from the database using its unique ID. This will allow the frontend to view or edit a specific note.

Understanding Route Parameters

Route parameters in Express are defined with a colon (`:`) in the URL and allow dynamic values to be passed. In our case:

- The client sends a GET request to `/api/notes/:id`.

- The backend extracts the `id` and queries MongoDB for that specific note.

Implementing the Route

Inside `backend/routes/noteRoutes.js`:

```
router.get('/:id', async (req, res) => {
    try {
        const note = await Note.findById(req.params.id);
        if (!note) {
            return res.status(404).json({ message: 'Note not found' });
        }
        res.json(note);
    } catch (error) {
        res.status(500).json({ error: error.message });
    }
});
```

Key points:

- Used `req.params.id` to access the note ID from the URL.

- Checked if the note exists before returning it.

Testing the Endpoint

- Used Postman to send a GET request to `http://localhost:5000/api/notes/<noteID>`.

- Verified that the correct note was returned in JSON format.

- Tested with an invalid ID to confirm error handling.

Outcome of the Day

- Learned how to use route parameters in Express.

- Successfully created and tested the API endpoint for fetching a single note by ID.

- Backend now supports retrieving specific notes for viewing or editing.