

MERN Stack Training

Company: Sensation Software Solutions

Student Name: Gurvinder Singh

Training Duration: 6 Months

Days: 81

Objective

The objective of Day 82 was to implement the **User Profile page**, allowing users to view and edit their personal information, including name, email, phone number, and shipping address. Backend endpoints for fetching and updating user data were connected to the frontend, ensuring authenticated users could manage their account details securely.

Work Done

- **Backend** **User** **Profile** **Routes**
Created GET and PUT endpoints for `/user/profile`. The GET endpoint fetched user details, while the PUT endpoint allowed updates. Minimal authentication ensured only the logged-in user could access and modify their own information.
 - **Frontend** **Profile** **Page**
Designed a clean, form-based layout using React. Inputs for name, email, phone, and address were pre-filled with user data fetched from the backend. Tailwind CSS provided spacing, fonts, and button styling, maintaining consistency with the rest of the application.
 - **Form** **Validation**
Implemented frontend validation to ensure that mandatory fields were not empty, email format was correct, and phone numbers were numeric. Error messages appeared inline for better user understanding.
 - **Integration** **and** **Data** **Binding**
Connected form fields to backend endpoints using `fetch/axios`. Updates submitted by

the user reflected immediately on the page without requiring a reload, providing real-time feedback.

- **Authentication**

Checks

Profile page access was restricted to logged-in users. Unauthorized access attempts redirected users to the login page. Buttons and form actions were disabled for guests to prevent data manipulation.

Hands-On Practice

- Tested retrieving user information from backend and populating the profile form.
 - Edited details and submitted changes, verifying successful updates in the backend.
 - Checked invalid inputs and observed proper validation messages.
 - Ensured access restriction for non-authenticated users.
 - Verified responsive layout on desktop, tablet, and mobile devices.
-

Observations

- Users could now securely view and edit their personal information.
 - Integration of backend routes with frontend forms provided real-time updates.
 - Validation and auth checks ensured data security and usability.
 - The design was consistent with other UI modules and responsive across devices.
-

Conclusion

Day 82 successfully completed the **User Profile feature**, allowing secure and efficient account management for users. Backend integration, frontend design, validation, and authentication were all verified, providing a polished and professional user experience.