

Training Day-21 report

16 July, 2025

Today marked the **completion of the basic Book Management System**, along with the development of a **QR Code Generator** using React. The session focused on final UI integration, feature restriction based on user roles, and exploring a new React-based utility project.

Work Undertaken:

1. Book Management System Finalization:

- Developed the **Search Results Page** to display all matched books.
- Integrated key features into the results view:
 - **Pagination**
 - **Download and Preview**
 - **Update and Delete** (restricted to the **original uploader** of the file)
- Faced difficulty with **pagination logic**, as it required dynamic rendering and backend coordination. However, other features mirrored the functionality of the home page and were easier to implement.

2. QR-Code-Generator-(React_Project):

- Built a simple yet functional **QR Code Generator** using the **react-qr-code** library.
- Designed the interface to allow users to input text and generate a corresponding QR code instantly.
- Faced an import issue with **Header and Footer components**:
 - Initially, the issue appeared to be a random internal error.
 - After spending about an hour, realized it was due to a **typo in the file name**.
 - Even after fixing it, the error persisted until **restarting VS Code**, which finally resolved the issue (likely due to an internal caching glitch).

Key-Learnings:

- Gained practical experience in **role-based access control** for update/delete permissions.
- Understood how to implement **pagination in search results**—a vital feature for data-heavy applications.
- Explored React's **component import behavior** and how even small typos can be cached, leading to persistent build errors.

Conclusion:

Today concluded the Book Management project with all essential features in place and fully functional. Additionally, working on the QR Code Generator was a refreshing shift, offering insights into UI-focused utility apps in React. Looking forward to building on both of these projects in future iterations.