

## Training Day-17 report

12 July, 2025

Today's work focused on expanding the **Book Management System** by implementing additional user-facing features on both the **backend** and **frontend**. The day included enhancing data accessibility through search and pagination, as well as integrating file preview and download capabilities.

### Work Undertaken:

#### 1. Backend Enhancements:

- Added logic for the following features in the book controller:
  - **Search:** Implemented filtering logic based on title, author, etc.
  - **Pagination:** Enabled server-side pagination to handle large datasets efficiently.
  - **Preview and Download:**
    - Used the **Cloudinary-hosted file URLs**, stored in the database, to generate preview and download links.
    - Ensured both features are secure and publicly accessible where appropriate.

#### 2. Frontend Interface Development:

- Built basic UI components including:
  - **Header and Footer**
  - **Navigation Bar (Navbar)**
  - **Login Form** (partially complete)
- Prepared layout structure for the upcoming user interactions and views.

### Key-Learnings:

- Learned how to **leverage external file URLs (from Cloudinary)** to implement preview and download functionality in a clean and efficient manner.
- Gained experience in implementing **search and pagination** logic at the controller level.
- Continued refining skills in building **user interface components** and preparing for full frontend integration.

### Conclusion:

Today's work significantly improved the system's usability and content accessibility. With backend logic now supporting advanced features and frontend skeletons in place, the focus for tomorrow will be on completing the login flow and building out additional interface components.