

Library Management : Phase 6: User Interface Development

Introduction

This phase focuses on building an intuitive Lightning experience for different library roles (Teacher, Student, Librarian/Admin).

Using Lightning App Builder, Record Pages, Tabs, Home Page Layouts, Utility Bar, plus a custom LWC and Apex integration, a seamless UI was delivered to every user type.

1. Lightning App Builder

- Customized Pages for Each Role: Different Lightning Record Pages were designed for Book/Resource – Teacher View and Book/Resource – Student View (and optionally Librarian/Admin View).

Role-Based Components: Each page displays only the components relevant to that specific role, e.g.

- Teacher: can upload resources, create assignments, view students' borrowing history.
- Student: can search books, borrow/return, view personal borrowing history.
- Librarian/Admin: can add/edit/delete books, manage stock, approve requests.

- Tabs & Home Layouts: Tabs and Home Page Layouts were set up separately for Teacher, Student, and Librarian/Admin so each profile lands on the correct workspace.

Utility Bar: Added quick-access actions and shortcuts in the Utility Bar for commonly used features by each role, e.g.

Librarian/Admin: "Add New Book," "View Overdue Items," "Send Notifications."

Lightning App Builder

The Lightning App Builder provides an easy to use graphical interface for creating custom Lightning pages for Salesforce Lightning Experience and mobile app. Lightning pages are built using Lightning components—compact, configurable, and reusable elements that you can drag and drop into regions of the page in the Lightning App Builder.

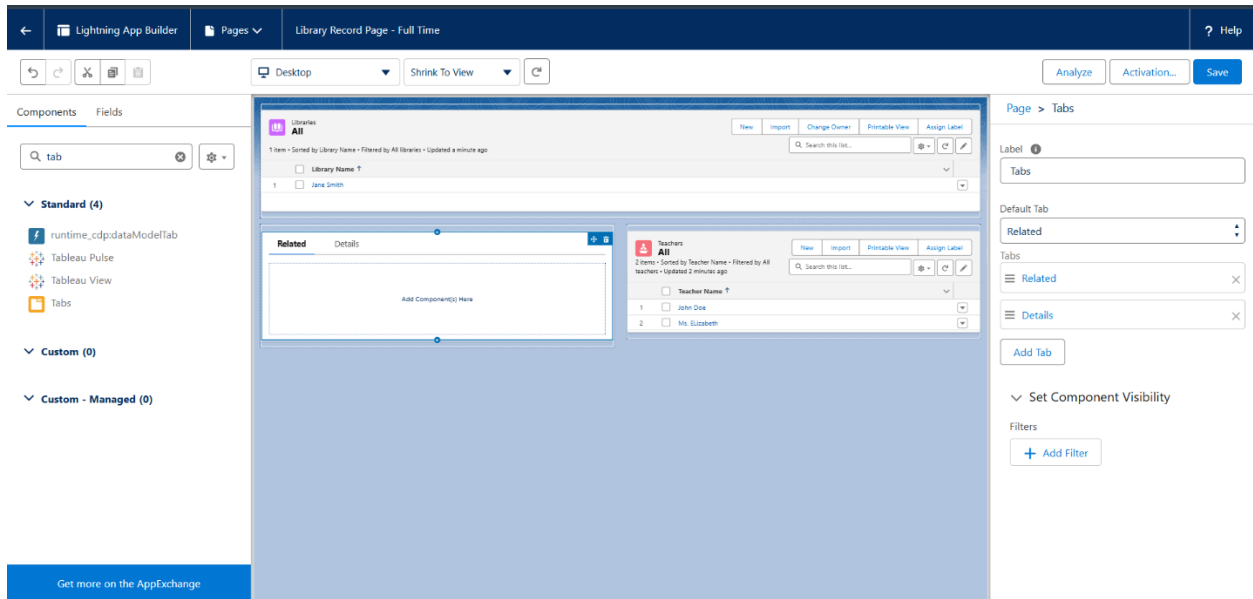
View: **All** [Create New View](#)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other **All**

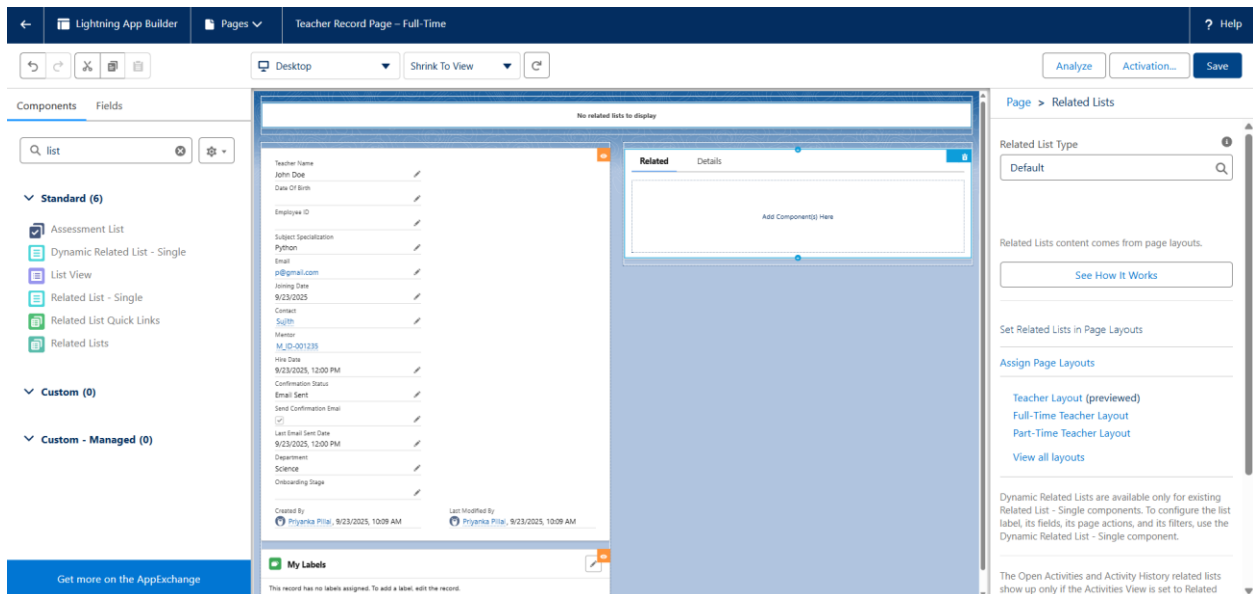
Action	Label	Name	Namespace Prefix	Description	Type	Created By	Last Modified By
Edit Clone Del	Full-Time Teacher	Full_Time_Teacher			Record Page	cse, 9/22/2025, 3:32 AM	cse, 9/22/2025, 3:33 AM
Edit Clone Del	Home Page Default	Home_Page_Default			Home Page	cse, 8/14/2025, 6:07 AM	cse, 8/14/2025, 6:07 AM
Edit Clone Del	Home Page Default1	Home_Page_Default1			Home Page	cse, 8/14/2025, 6:21 AM	cse, 8/14/2025, 6:25 AM
Edit Clone Del	Library Home	Library_Home			Record Page	cse, 9/23/2025, 9:42 PM	cse, 9/23/2025, 9:45 PM
Edit Clone Del	Library Record Page - Full-Time	Library_Record_Page_Full_Time			Record Page	cse, 9/21/2025, 7:44 AM	cse, 9/22/2025, 3:44 AM
Edit Clone Del	Teacher Record Page - Full-Time	Teacher_Record_Page_Full_Time			Record Page	cse, 9/21/2025, 7:35 AM	cse, 9/21/2025, 7:35 AM

2. Record Pages (Teacher & Student Views)

- Teachers need quick access to class resources and student borrowing history. Students need an easy way to browse and request library materials. Two record pages were created with appropriate components:
- Library Resource – Teacher View: shows resource summary, related student borrow/return history, and an upcoming assignments/resources LWC.
- Library Resource – Student View: optimized for quick browsing, book request/renewal, and viewing personal borrowing history.
- Activated per profile/record type so each user sees the correct page automatically.



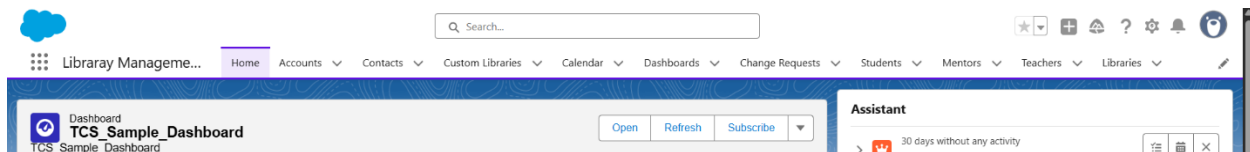
Library(Record Page)



Teacher(Record Page)

3. Tabs

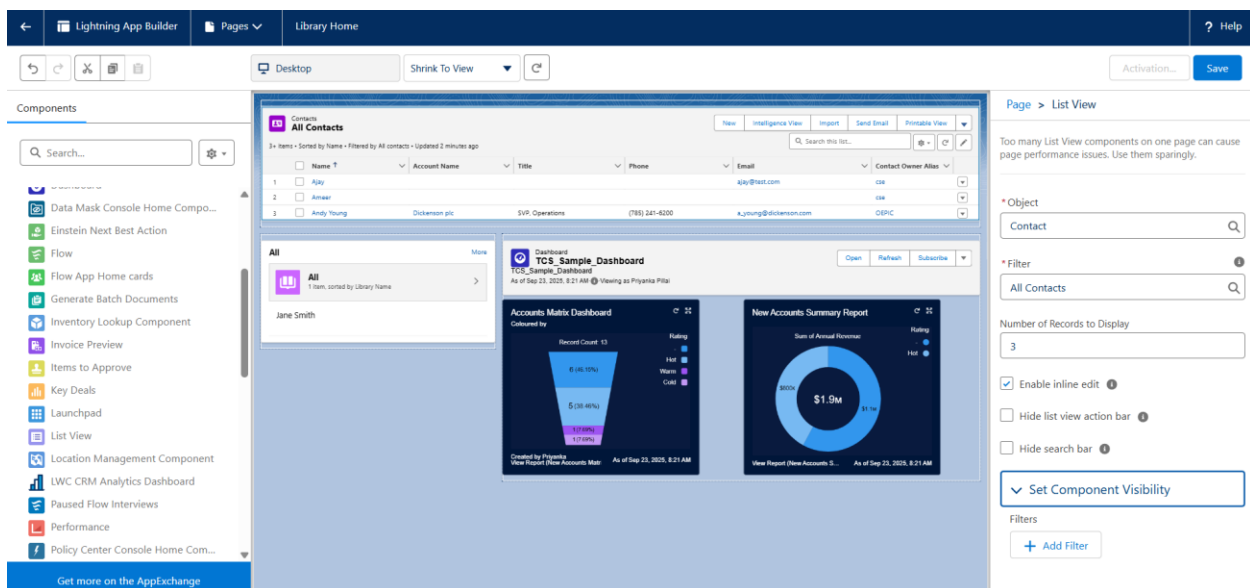
All major library objects (**Books/Resources, Borrow Requests, Students/Teachers, Classes**) were exposed as tabs in the **Library Management Lightning App** so Teachers, Students, and Librarians can navigate quickly to the areas they need.



Tabs in App

4. Home Page Layouts

A custom **Library Management Home Page** was built that displays dashboard components such as **Upcoming Book Returns**, **Recent Borrow Requests**, **Popular Books**, and **Overdue Items Report Chart** to give Teachers, Students, and Librarians a real-time view of library activity.



Library Home Page Layout