

Library Management Exercise

In this exercise, you will create a simple library management system using Angular SignalStore. The goal is to build a store that manages the state of books in the library and provides functionality for users to interact with it.

Requirements

Your task is to create a page with the following functionalities:

- A table displaying a list of books. Each book should include:
 - Title
 - Author
 - Year of publication
 - Status (Available or Borrowed)
- A search input field that filters the list of books dynamically by title or author.
- A toggle button to "Show only available books" (combine it with the search)
- A button for each book that allows users to toggle its status between "Available" and "Borrowed".
- A section that shows the number of books currently available in the library.

State Management

You need to manage the following state in your SignalStore:

- **books**: An array of book objects (with properties: ``title``, ``author``, ``year``, and ``isAvailable``).
- **searchKeyword**: A string that stores the current search keyword.
- **availableCount**: A computed value that calculates the number of available books based on the current state.

Challenge

Make sure your solution includes:

- A computed property for filtering the books dynamically based on the search keyword.
- A method to toggle the status of a book.
- A computed property to calculate the number of books available.
- A lifecycle hook to initialize the state with a sample list of books when the store is created.

Design and Creativity

The implementation of the UI is up to you. Feel free to use Angular Material or any other library for designing the table and input fields. Your goal is to create an intuitive and user-friendly interface.

Bonus

- Add a modal or dialog box that opens when a book is clicked, showing more details about the book (e.g., a short description or a rating).

Good Luck!