

Implement an SPA application “Book catalog”. You can use any framework or library.

Requirements:

1. Store data using Firestore and [Firestore SDK](#);
2. On the main page the list of all books should be displayed;
3. Books should be grouped by publication year. Groups should be sorted in descending order (new books come first). Books inside a group are sorted alphabetically;
4. User should be able to add and delete books;
5. The system should be able to recommend a good book to the user:
  - a. A good book should be published at least 3 years ago or earlier;
  - b. From all these books you should pick ones with the highest rating;
  - c. If there are several good books matching the criteria - pick one at random;

Book data:

- name (required, no longer than 100 characters);
- list of authors (book should have at least one author);
- publication year (optional, greater than 1800);
- rating (optional, integer value from 0 to 10, 0 by default);
- ISBN (optional);

Data output structure sample:

- Recommended book
- 2020
  - Book A
  - Book B
- 2018
  - Book I
  - Book W
  - Book Q
- 2015
  - Book E
- Books without a year
  - Book P

Additional functionality (optional to implement):

1. ISBN validation;
2. Ability to change the grouping criteria (group by rating, author);
3. Book editing;

Test data sample:

### **The Clean Coder: A Code of Conduct for Professional Programmers**

Author: Martin, Robert

Publication year: 2011

Rating: 9

ISBN: 978-0137081073

### **7 Habits Of Highly Effective People**

Author: Covey, Stephen R.

Publication year: 2004

Rating: 9  
ISBN: 978-1863500296

**The Color of Magic**

Author: Pratchett, Terry  
Publication year: 2013  
Rating: 8  
ISBN: 9780062225672

**Press Reset: Ruin and Recovery in the Video Game Industry**

Author: Jason Schreier  
Publication year: 2021  
Rating: 10

**The Inmates Are Running the Asylum**

Author: Cooper, Alan  
Publication year: 2004  
Rating: 8  
ISBN: 978-0672326141

**The Three Musketeers**

Author: Alexandre Dumas

**Clean Code: A Handbook of Agile Software Craftsmanship**

Author: Robert C. Martin  
Publication year: 2008  
Rating: 9  
ISBN: 978-0132350884

**George and the Big Bang**

Author: Hawking, Stephen; Hawking, Lucy  
Publication year: 2013  
ISBN: 978-1442440067