Development of layered applications

Objectives
Using Python to solve complex problems
- Implement classes
- Develop unit tests
- Treat exceptions

Requirements
Implement an application to manage a list of books.
Consider the following layers:
- Domain layer (with class $Book$)
- Infrastructure layer (with class $BookRepository$)
- Application layer (with class $BookController$)
- User interface layer (with class $BookUI$)

Class $Book$ – information about code, list of authors, title, year, price.

Features (CRUD operations in $BookRepository$):

1. Add a new book to the library.

2. Insert a book to the library.

3. Delete a book from the library.

4. Delete all books written by a given author.

5. Delete all books in given period (two years are specified).

6. Get all books.

7. Get all books from a certain year.

8. Get all books with title containing a given word.

9. Determine the oldest book.

10. Filter books with author starting with specified letter.

11. Identify books with at least 2 authors.

12. Update book by code.

A test package should contain the unit tests for *Book* and *BookRepository*.