

## Library Book Management Application

Develop a Python application for managing books in a library. Each book is characterized by:

- **Title:** Title of the book.
- **Author:** Author of the book.
- **Genre:** Genre of the book. Must be one of the following: "Fiction", "Romance" and "Science".
- **Year:** The publication year of the book.

### Functional Requirements:

1. **Add a New Book:** (2p) -> *add\_book(title, author, genre, year)*
  - Validate the genre, ensuring it is one of the allowed values.
  - Validate the year, ensuring it is a positive number.
  - If validation fails, display an appropriate message and not add the book.
2. **Delete Old Books:** (2p) -> *delete\_books\_before\_year(year)*
  - Remove all books published earlier than a given year.
3. **Display Fiction Books:** (2p) -> *display\_fiction()*
  - Display all the books from Fiction (Genre = Fiction) sorted based on the Publication year.
4. **View Book List:** (1p) -> *display\_books()*
  - Display all books in the list.
5. **Initialize Books dataset:** (1p)
  - Initialize the application with at least three predefined books.

Example data entries

- Book("1984", "George Orwell", "Fiction", 1949),
- Book("Sapiens", "Yuval Noah Harari", "Non-Fiction", 2011),
- Book("The Hobbit", "J.R.R. Tolkien", "Fantasy", 1937)
- Book("Dune", "Frank Herbert", "Fiction", 1965),
- Book("The Road", "Cormac McCarthy", "Romance", 2006),

### Other Requirements:

- Ensure the application is layered (e.g., separation of concerns using service and repository layers, separate modules). **(you will only receive 50% of the grade otherwise)**
- Style: documentation, clarity of code, tests (1p)