**Contract CO1: Add New Book**

**Operation**: AddNewBook()

**Cross References:** Use Case: Add A Book to a seller repository

**Preconditions**: Seller is signed in/Registered

**Post conditions**:

- A Seller instance s calls addBook() function.

- Attributes of book were initialized.  
- Book was successfully added in the repository

**Contract CO2: Search A Book**

**Operation**: SearchBook(string keyword)

**Cross References:** Use Case: Buyer searches a book

**Preconditions**:

**Post conditions**:

- A Buyer instance b creates search instance search (instance creation).

- search takes keyword as input and gets close match results from database

- results are displayed to the buyer on screen

**Contract CO3: Message**

**Operation**: message(int senderID, string msg)

**Cross References:** Use Case: buyer and seller contact each other

**Preconditions**: both are logged in or are registered

**Post conditions**:

- A Buyer instance b or seller instance creates message instance(instance creation).

- message takes senderID & msg as input and sends message to the senderID.

- receiver receives an alert as new message is arrived.