



# #1 Quantum Bookstore

Design an online book store with the following criteria:

- The book store may have an inventory of many books of these types:
  - **Paper book** which have stock and may be shipped
  - **EBook** which have a filetype and may be sent via email
  - **Showcase/Demo book** which is not for sale
- you should be able to do the following:
  - Add a book to the inventory with some details like ISBN(just any string identifier), title, year when the book is published, price
  - Remove and return outdated books that passed specific number of years
  - Buy a single book providing its ISBN, quantity, email, address
    - Reduces the quantity of the book from the inventory, throw error if not available
    - Return the paid amount.
    - Send Paper book to the ShippingService with the address provided (no implementation required)
    - Send EBook to MailService with the email provided (no implementation required)
- Provide a class to test adding, removing, buying books
- Design the system to be easily extensible, so that we don't need to modify it if we've added a new type of products