# The assumptions:

### These are the assumptions that I followed when developing this library system:

1. Assuming that this library system APIs will only be used by the API user, since there is no requirement saying must implement security or JWT token with different roles (admin and member). By right in real world example, we need to have two user roles. Admin and member must login to the system to perform book loan actions (borrow and return).
2. Case insensitive are allowed for book's title, author and ISBN.
3. Since the requirements indicates that the ISBN number uniquely identifies a book in the following way:

- 2 books with the same title and same author but different ISBN numbers are considered as different books

- 2 books with the same ISBN numbers must have the same title and same author

Multiple copies of books with same ISBN number are allowed in the system.

**Example, an actual book can have two ISBNs (10 and 13):**

Book Title: Your Invisible Power

Book Author: Genevieve Behrend

Book ISBN-10: 1603865136

Book ISBN-13: 978-1603865135

Hence, this library system is designed with two books with same title and author but different ISBN provided (regardless of ISBN-10 and ISBN-13), they are considered as different books with different ID.

My initial plan was to standardize the ISBN to only ISBN-13 throughout the system. Meaning, when the API user provides ISBN-10, we will auto convert using ISBN formula to ISBN-13 and store in the database. However after I went through multiple times of understanding the above requirements for ISBN numbers, I decided to make ISBN-10 and ISBN-13 as different book eventhough the books have same title and author.

1. The provided ISBN with - hyphen and spaces will be removed to standardize the ISBN format in this library system.
2. Swagger API doc is disabled for Production environment.
3. Assuming that this library system will be running on Docker Desktop or Amazon EKS Cluster (Kubernetes). So I provided two separate GitHub action workflows files.