Person
- # name: String
- # address: String
- + Person(name: String, address: String)
- + getName(): String
- + getAddress(): String
- + setName(name: String): void
- + setAddress(address: String): void

extends

Account
- - id: int
- - password: String
- - status: AccountStatus
- + Account(id: String, password: String)
- + getId(): int
- + getPassword(): String
- + getStatus(): AccountStatus
- + resetPassword(password: String): void
- + setStatus(status: AccountStatus): void

1 — has — 1

LibraryCard
- - cardNumber: String
- - barcode: String
- - join: DateTime
- - active: boolean
- + getCardNumber(): String
- + getBarcode(): String
- + joinAt(): DateTime
- + isActive(): boolean

Publisher
- - name: String
- - email: String
- - phone: String
- - address: String
- + Author(name: String, email: String, phone: String, address: String)
- + getName(): String
- + getEmail(): String
- + getPhone(): String
- + getAddress(): String
- + setName(name: String): void
- + setEmail(email: String): void
- + setPhone(phone: String): void
- + setAddress(address: String): void

Author
- - email: String
- - description: String
- + Author(name: String, email: String)
- + Author(name: String, email: String, description: String)
- + getEmail(): String
- + getDescription(): String
- + setEmail(email: String): void
- + setDescription(desc: String): void

Written by

Librarian
- - nip: String
- + Librarian(id: int, nip: String, password: String)
- + getNip(): String
- + addBook(): boolean
- + blockMember(): boolean
- + unblockMember(): boolean

Member
- - username: String
- - dateOfMembership: DateTime
- + Member(id: int, username: String, password: String)
- + getUsername(): String
- + setUsername(username: String): void

makes

Book
- - title: String
- - subject: String
- - numberOfPages: int
- - ISBN: String
- - publicationDate: DateTime
- + Book(title: String, numberOfPages: int)
- + getTitle(): String
- + getSubject(): String
- + getNumberOfPages(): int
- + getISBN(): String
- + getYearOfPublish(): DateTime
- + setTitle(title: String): void
- + setSubject(subject): void
- + setNumOfPage(nop: String): void
- + setPublicationDate(pub: String): void

Published by

Rack
- - number: int
- - block: char
- + getNumber(): int
- + getBlock(): char

placed at

BookReservation
- - id: String
- - date: DateTime
- - status: ReservationStatus
- - type: ReservationType
- + getDate(): DateTime
- + getStatus(): ReservationStatus
- + getType(): ReservationType

Store →

Reservation
- - reservation: List<BookReservation>
- + getUsername(): String
- + setUsername(username: String): void

detailed

BookItem
- - id: String
- - format: BookFormat
- - status: BookStatus
- + BookItem(id: String, format: BookFormat)
- + getId(): String
- + getFormat(): BookFormat
- + getStatus(): BookStatus
- + setStatus(status: BookStatus): void

Add / Update

Borrow / Return

extends

ReservationDetails
- - dueTo: int
- - returnDate: DateTime
- + getDueTo(): int
- + getReturnDate(): DateTime

store

Catalog
- - booksList: List<Book>
- + getBooksList(): List<Book>
- + updateCatalog(): boolean

**<<Interface>>
SearchCatalog**
- + searchByTitle(title: String): Book
- + searchByAuthor(author: String): Book
- + searchByPubDate(pub: String): Book

**<<Interface>>
FilterCatalog**
- + filterByTitle(title: String): List<Book>
- + filterByAuthor(author: String): List<Book>
- + filterByPubDate(pub: String): List<Book>

ENUM

**<<Enumeration>>
BookStatus**
Available
Reserved
Lost

**<<Enumeration>>
BookFormat**
HardCover
PaperBack
NewsPaper
Magazine
AudioBook
Journal

**<<Enumeration>>
AccountStatus**
Active
Closed
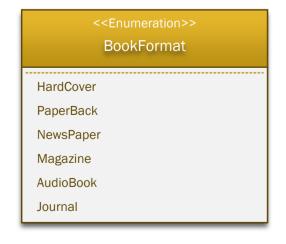BlackList
None

**<<Enumeration>>
ReservationType**
Borrowed
Returned

**<<Enumeration>>
ReservationStatus**
Waiting
Pending
Completed
Canceled
None