interface:BookDAO

+ searchBooks(String searchCriteria): List<Book>
+ addBook(Book book): boolean
+ updateBook(Book book): boolean
+ deleteBook(int isbn): boolean
+ getBooksAvailable(): List<Book>
+ countTotalBooksBorrowed(): int

---

interface:LoanDAO

+ borrowBook(Loan loan): booloan
+ returnBook(Loan loan): boolean

---

class:LoanDAOImpl

borrowBook(Loan loan): boolean
returnBook(Loan loan): boolean

Use

---

interface:LibrarianDAO

+authenticateLibrarian(String email, String code): Librarian
+doesEmailExist(email): boolean
+doesCodeExist(code): boolean
+addLibrarian(Librarian librarian): boolean

---

class:LibrarianDAOImpl

+authenticateLibrarian(String email, String code): Librarian
+doesEmailExist(email): boolean
+doesCodeExist(code): boolean
+addLibrarian(Librarian librarian): boolean

Use

---

class:BookDAOImpl

+ searchBooks(String searchCriteria): List<Book>
+ addBook(Book book): boolean
+ updateBook(Book book): boolean
+ deleteBook(int isbn): boolean
+ getBooksAvailable(): List<Book>
+ countTotalBooksBorrowed(): int

Use

---

class:Loan

- subscriberId: int
- bookIsbn: int
- borrowDate: Sting
- returnDate: Sting

+ Loan(int subscriberId, int bookIsbn, String borrowDate, String returnDate)
+ getSubscriberId() : int
+ getBookIsbn(): isbn
+ getBorrowDate(): String
+ getReturnDate(): String
+ setSubscriberId(int SubscriberId): void
+ setBookIsbn(int BookIsbn):void
+ setBorrowDate(int borrowDate):void
+ setReturnDate(int returnDate):void

---

interface:UserDAO

+ addUser(): boolean

---

class:UserDAOImpl

+ addUser(): boolean
+ addUser(): boolean

Use

---

class:Librarian

- email: String
- code: String
- name: String

+ getEmail(): String
+ getCode(): Sting
+ getName(): String
+ setEmail(): String
+ setCode(): Sting
+ setName(): void

---

class:Book

- isbn: int
- title: String
- author: String
- quantity: int

+ Book(String title, int isbn, String author, int quantity)
+ getTitle(): String
+ getAuthor(): String
+ getIsbn(): int
+ getQuantity(): int

0.*

---

class:User

- subscriberId: int
- phone: int
- name: String
- email: String

+ getId(): int
+ gePhone(): int
+ getIsbn(): int
+ getEmail(): String
+ setId(): void
+ setPhone(): void
+ setSubscriberIsbn(): void
+ setId(subscriberId): void

0.*