## Book -Book\_Id: int -Author: string -ISBN: string -Title: string -Copies: Copy[\*] -Loans: Loan[\*] +Copy «static» -Copy\_Id: int -Book Id: int -Book\_Ref: Book [1] -Loan\_Ref: Loan [0..1] - Copy(): void + Copy(book: Book): void + Copy(Book\_Id: int, Copy\_Id: int): void + Copy(book: Book, Copy\_Id: int): void +Loan «static» -Loan\_Id: int -Copy\_Id: int -User\_Id: int -Date\_Out: Date -Date Due: Date -Active: Boolean = True -Copy\_Ref: Copy [1] -User\_Ref: User [1] -Book\_Ref: Book [1] -Loan(): void +Loan(Copy\_Id: int, User\_Id: int, Date\_Out: Date, Date\_Due: Date) +Loan(Loan\_Id: int): void {Query Loan info from DB} +Loan(Loan\_ID: int, Copy\_Id: int, User\_Id: int, Date\_Out: Date, Date\_Due: Date) +Renew(): void +Renew(Renew\_Date: Date): void +Return(): void +Return(Return Date: Date): void +Book():void {Default Constructor} +Book(Book\_Id: int, Author: string, ISBN: string, Title: string): void +toString(): string +addCopy(Id: int): void +addCopy(): int {returns Copy\_Id} +remCopy(Id: int): void +Count(): int -loadCopies(): int +getCopies(): Copy[\*] +getID(): int +getAuthor(): String +getISBN(): String +getTitle(): String +getLoans(): Loan[\*] +setAuthor(Author: String): void +setISBN(ISBN: String): void +setTitle(Title: String): void +addLoan(Copy\_Id: int, User\_Id: int, Date Out: Date, Date Due: Date): void +returnLoan(Loan\_Id: int, Return\_Date: Date): void + renewLoan(Loan\_Id: int, Renew\_Date: Date): void loadLoans(): int

+ get(): T[\*]

