Person

- name   : String
- phone   : String
- email   : String
- addresse   : String
- gernder   : Boolean
- snn   : String
- username   : String
- password   : String
- dateOfDirth : Date

+ setName(name : String) : void
+ getName() : String
+ setPhone(phone : String) : void
+ getPhone() : String
+ setEmail(email : String) : void
+ getEmail() : String
+ setAddresse(addresse : String) : void
+ getAddresse() : String
+ setGender(gender : Boolean) : void
+ getGneder() : Boolean
+ setSnn(snn : String) : void
+ getSnn() : String
+ setUsername(username : String) : void
+ getUsername() : String
+ setPassword(password : String) : void
+ getPassword() : String
+ setDate_of_Birth(dateOfBirth : date) : void
+ get)Date_of_Birth: date(:void
+login(username:String,password:String) : Boolean
+logout():Boolean

Invoice

-date :Date
-totalAmount:Double
-book[]:Book
-memName:String

+generateInvoice(book[]:Book,memName:String):Invoice
+generateInvoice(memID:String,amount:Double):Invoice

System

-location   :String
-sectionNum :int
-librarianNum:int

+setLocation(location:String):void
+getLocation():String
+setSectionNum(sectionNum :int):void
+getSectionNum():int
+setLibrarianNum(librarianNum :int):void
+getLibrarianNum():int
+generateInvoice(memName:String,bookId[]:String):Invoice
+reserveBook(sn:String,name:String,memID:String):Book

memeber

- name   : String
- phone   : String
- email   : String
- addresse   : String
- gernder   : Boolean
- snn   : String
-type   :String
- dateOfDirth : Date
-memberName

+ setName(name : String) : void
+ getName() : String
+ setPhone(phone : String) : void
+ getPhone() : String
+ setEmail(email : String) : void
+ getEmail() : String
+ setAddresse(addresse : String) : void
+ getAddresse() : String
+ setGender(gender : Boolean) : void
+ getGneder() : Boolean
+ setSnn(snn : String) : void
+ getSnn() : String
+ setDate_of_Birth(dateOfBirth : date) : void
+ get)Date_of_Birth: date(:void
+addMember(obj: Member) :Boolean
+deleteMember(ID:String):Boolean
+editMember(ID:String,data:type) : Boolean
+searchMember)ID:String:(Boolean
+payfee(memID:String,amount:Double) : Boolean

Librarian

-Salary :Double

+addMember(obj: Member) :Boolean
+deleteMember(ID:String):Boolean
+editMember(ID:String,data:type) : Boolean
+searchMember(ID:String):Boolean
+searchBook(sn:String,name:String) : Boolean
+searchSec(sn:String,name:String) : Boolean
+getBook(sn:String,name:String,memID) : Book
+showInvoice(memName:String,bookID []:String):Invoice
+showInvoice(memID:String,amount:Double):Double

Book

-name:String
-sn:String
-price:Double
-type:String
-description:String
-auther:String
-numOfPeper:int
دار النشر:String
-numberOfBooks:int
-memberName

+set&get
+addBook(obj:Book):Boolean
+editBook(data:type,sn:String):Boolean
+deleteBook(String:sn,name:String):Boolean
+searchBook(sn:String,name:String) : Boolean
+getBook(sn:String,name:String):Book
+listBook(sn:String,name:String):[]Book

Section

-name:String
-numOfBook:int
-sn:String
-desciption:String

+set&get
+addSection(obj:Section):Boolean
+editSection(data:type,sn:String):Boolean
+deleteSection(String:sn,name:String):Boolean
+searchSection(sn:String,name:String) : Boolean
+listBook(sn:String,name:String):[]Book

Admin

+addBook(obj:Book):Boolean
+deleteBook(sn:String,name:String) : Boolean
+addSection(obj:Section):Boolean
+deleteSection(sn:String,name:String) : Boolean
+editBook(data:type,sn):Boolean
+editSection(data:type,sn):Boolean