core

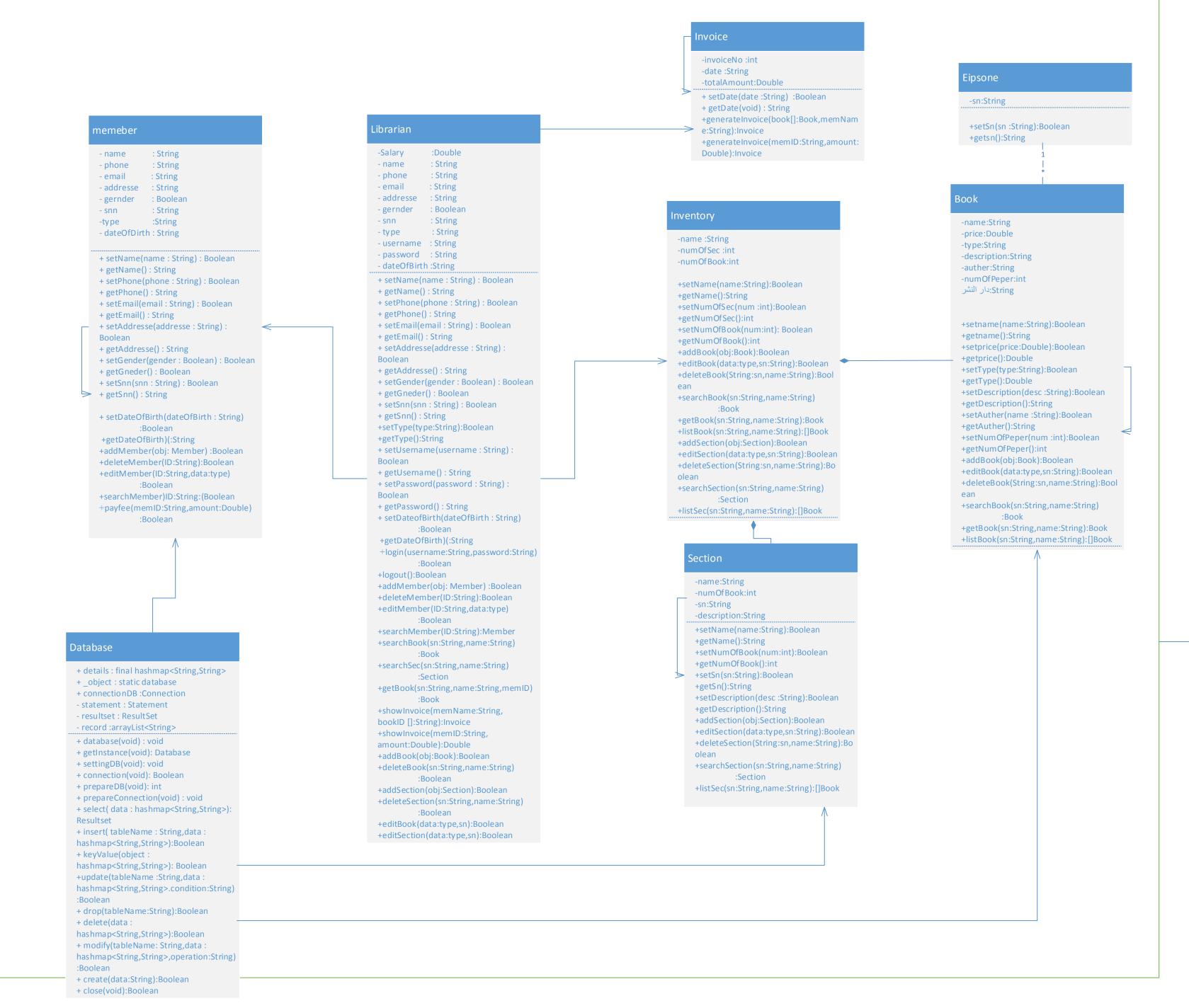**Validation**

+validateName(name:String):static Boolean
+validateAddress(address:String)static Boolean
+validateEmail(email:String):static Boolean
+validateSsn(ssn:String):static Boolean
+validatePhone(phone:String):static Boolean
+validateUsername(username:String)static Boolean
+validatesn(sn:String):static Boolean

assosiation to all classes

Invoice

-invoiceNo :int
-date :String
-totalAmount:Double

+ setDate(date :String) :Boolean
+ getDate(void) : String
+generateInvoice(book[]:Book,memName:String):Invoice
+generateInvoice(memID:String,amount:Double):Invoice

Eipsone

-sn:String

+setSn(sn :String):Boolean
+getsn():String

memeber

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

+ setName(name : String) : Boolean
+ getName() : String
+ setPhone(phone : String) : Boolean
+ getPhone() : String
+ setEmail(email : String) : Boolean
+ getEmail() : String
+ setAddresse(addresse : String) : Boolean
+ getAddresse() : String
+ setGender(gender : Boolean) : Boolean
+ getGneder() : Boolean
+ setSnn(snn : String) : Boolean
+ getSnn() : String

+ setDateOfBirth(dateOfBirth : String) :Boolean
+getDateOfBirth():String
+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
- name   : String
- phone   : String
- email   : String
- addresse   : String
- gernder   : Boolean
- snn   : String
- type   : String
- dateOfBirth :String

+ setName(name : String) : Boolean
+ getName() : String
+ setPhone(phone : String) : Boolean
+ getPhone() : String
+ setEmail(email : String) : Boolean
+ getEmail() : String
+ setAddresse(addresse : String) : Boolean
+ getAddresse() : String
+ setGender(gender : Boolean) : Boolean
+ getGneder() : Boolean
+ setSnn(snn : String) : Boolean
+ getSnn() : String
+setType(type:String):Boolean
+getType():Boolean
+ setUsername(username : String) : Boolean
+ getUsername() : String
+ setPassword(password : String) : Boolean
+ getPassword() : String
+ setDateofBirth(dateOfBirth : String) :Boolean
+getDateOfBirth():String
+login(username:String,password:String) :Boolean
+logout():Boolean
+addMember(obj: Member) :Boolean
+deleteMember(ID:String):Boolean
+editMember(ID:String,data:type) :Boolean
+searchMember(ID:String):Member
+searchBook(sn:String,name:String) :Book
+searchSec(sn:String,name:String) :Section
+getBook(sn:String,name:String,memID) :Book
+showInvoice(memName:String,bookID []:String):Invoice
+showInvoice(memID:String,amount:Double):Double
+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

Inventory

-name :String
-numOfSec :int
-numOfBook:int

+setName(name:String):Boolean
+getName():String
+setNumOfSec(num :int):Boolean
+getNumOfSec():int
+setNumOfBook(num:int): Boolean
+getNumOfBook():int
+addBook(obj:Book):Boolean
+editBook(data:type,sn:String):Boolean
+deleteBook(String:sn,name:String):Boolean
+searchBook(sn:String,name:String) :Book
+getBook(sn:String,name:String):Book
+listBook(sn:String,name:String):[]Book
+addSection(obj:Section):Boolean
+editSection(data:type,sn:String):Boolean
+deleteSection(String:sn,name:String):Boolean
+searchSection(sn:String,name:String) :Section
+listSec(sn:String,name:String):[]Book

Book

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

+setname(name:String):Boolean
+getname():String
+setprice(price:Double):Boolean
+getprice():Double
+setType(type:String):Boolean
+getType():Double
+setDescription(desc :String):Boolean
+getDescription():String
+setAuther(name :String):Boolean
+getAuther():String
+setNumOfPeper(num :int):Boolean
+getNumOfPeper():int
+addBook(obj:Book):Boolean
+editBook(data:type,sn:String):Boolean
+deleteBook(String:sn,name:String):Boolean
+searchBook(sn:String,name:String) :Book
+getBook(sn:String,name:String):Book
+listBook(sn:String,name:String):[]Book

GUI

Section

-name:String
-numOfBook:int
-sn:String
-description:String

+setName(name:String):Boolean
+getName():String
+setNumOfBook(num:int):Boolean
+getNumOfBook():int
+setSn(sn:String):Boolean
+getSn():String
+setDescription(desc :String):Boolean
+getDescription():String
+addSection(obj:Section):Boolean
+editSection(data:type,sn:String):Boolean
+deleteSection(String:sn,name:String):Boolean
+searchSection(sn:String,name:String) :Section
+listSec(sn:String,name:String):[]Book

Database

+ details : final hashmap<String,String>
+ _object : static database
+ connectionDB :Connection
- statement : Statement
- resultset : ResultSet
- record :arrayList<String>

+ database(void) : void
+ getInstance(void): Database
+ settingDB(void): void
+ connection(void): Boolean
+ prepareDB(void): int
+ prepareConnection(void) : void
+ select(data : hashmap<String,String>): Resultset
+ insert(tableName : String,data : hashmap<String,String>):Boolean
+ keyValue(object : hashmap<String,String>): Boolean
+update(tableName :String,data : hashmap<String,String>,condition:String) :Boolean
+ drop(tableName:String):Boolean
+ delete(data : hashmap<String,String>):Boolean
+ modify(tableName: String,data : hashmap<String,String>,operation:String) :Boolean
+ create(data:String):Boolean
+ close(void):Boolean