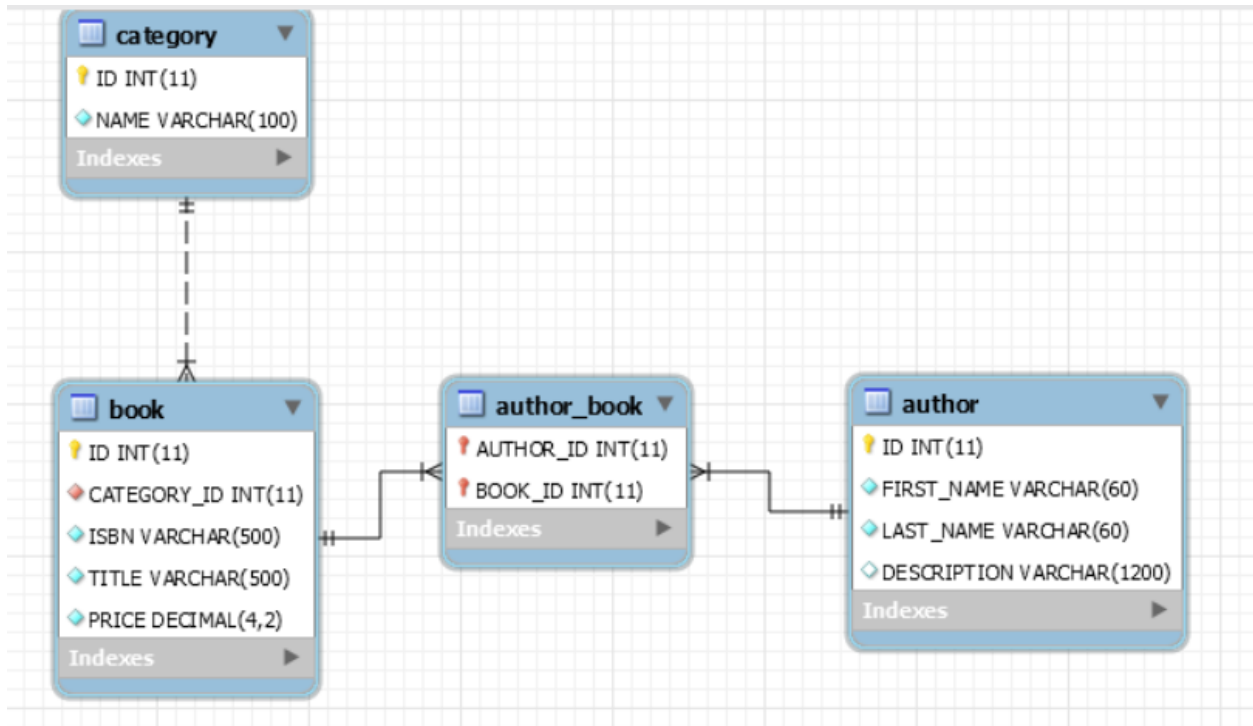


Part1-Assignment-2: Spring Hibernate

1. The program uses a databases named **hibernatedb** I created with MySql server(**User : root and password:**). We have four tables **book**, **author**, **author_book** and **category** . the schema is the same on the assignment . I copied the one on the document



2. I used the Maven command line to create my project:

```
mvn archetype:generate -DgroupId=edu.herve.spring.hibernate -SpringHibernate
```

```
-DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false
```

3. I edited the **pom.xml** and I added the necessities dependencies.
4. I created the folder **main\resources** manually .
5. I created the folder **main\resources\META-INF\sql** where I put my **shema.sql** corresponding to my database shema and **test-data.sql** to insert some data; the data are

```
mysql> select * from book;
```

ID	CATEGORY_ID	ISBN	TITLE	PRICE
1	1	1457896545	Beegining Java	61
2	1	5485632322	Java Entreprise Edit	70
3	2	5765522262	Mysql Concepts	46
4	2	7523232223	Beegining Mysql	49
5	1	4875656565	Java for non program	86
6	1	457565656	Advanced Java Concep	66

```
6 rows in set (0.00 sec)
```

```
mysql> select * from category;
```

ID	NAME
1	Java
2	Mysql

```
2 rows in set (0.00 sec)
```

```
mysql> select * from author;
```

ID	FIRST_NAME	LAST_NAME	DESCRIPTION
1	John	Smith	very young and popular author
2	Daniel	Perkins	new and revolutionary author
3	Jet	Li	From China and very well established in the authors list
4	Marcus	Wall	specialized in Mysql and brought a huge plus to this community

```
4 rows in set (0.00 sec)
```

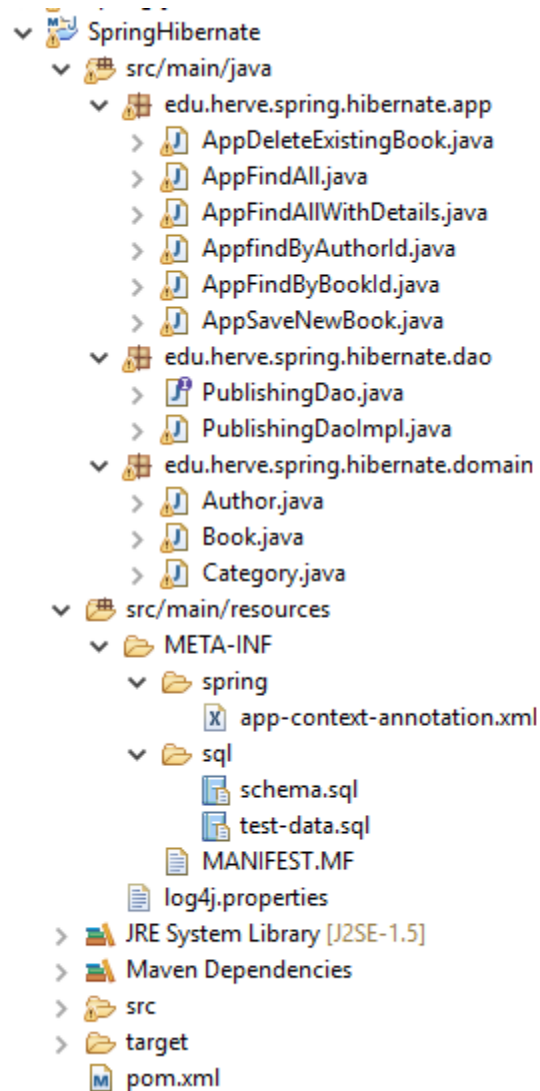
```
mysql> select * from author_book;
```

AUTHOR_ID	BOOK_ID
1	1
1	2
1	7
2	1
2	2
2	7
3	1
3	2
3	3
3	5
3	6
4	2
4	3
4	4
4	5
4	6
4	7

```
17 rows in set (0.00 sec)
```

6. I created the folder `main\resources\META-INF\spring` where I put my `app-context.xml.xml`
7. I imported my project into Eclipse IDE and I created the packages:
 - `edu.herve.spring.jdbc.domain` containing the classes **Book.java**, **Author.java** and **Category.java** corresponding to the tree tables book, author and category on the database.
 - `edu.herve.spring.jdbc.dao` containing the interface **PublishingDao.java** where i created the methods corresponding to the functionalities of my program. The class **PublishingDao DaoImpl.java** implementing the interface **PublishingDao Dao.java**.
 - `edu.herve.spring.jdbc.app` Containing the classes executing each of the functionalities listed in the assignment.
 - **AppFindAll.java** : find all books without authors and categories
 - **AppFindAllWithDetails.java**: find all books with authors and categories.
 - **AppFindByBookId.java**: find a book with authors and category by book's ID
 - **AppfindByAuthorId.java**: Find all books for one author id who has more than one book in the database.
 - **AppSaveNewBook.java**: add and save in your database a new book.
 - **AppDeleteExistingBook.java**: delete the saved book from the database.

This is the image of the structure of my project in Eclipse



8. the building and the execution of my application has the following results.
- for the methods **findAll()**

```

Hibernate: select category0_.ID as ID1_3_0_, category0_.NAME as NAME2_3_0_ fr
*****
Listing books without details:
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
-----
Book [id=2, isbn=5485632322, title=Java Entreprise Edit, price=70.0]
-----
Book [id=3, isbn=5765522262, title=Mysql Concepts , price=46.0]
-----
Book [id=4, isbn=7523232223, title=Beegining Mysql , price=49.0]
-----
Book [id=5, isbn=4875656565, title=Java for non program, price=86.0]
-----
Book [id=6, isbn=457565656, title=Advanced Java Concep, price=66.0]
-----
[WARNING] thread Thread[MySQL Statement Cancellation Timer,5,edu.herve.spring
5000

```

- for the method **findAllWithDetail()**

```

*****
Listing books with details:
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
Category - Id: 1, Name: Java
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=2, isbn=5485632322, title=Java Entreprise Edit, price=70.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=5, isbn=4875656565, title=Java for non program, price=86.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=6, isbn=457565656, title=Advanced Java Concep, price=66.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=3, isbn=5765522262, title=Mysql Concepts , price=46.0]
Category - Id: 2, Name: Mysql
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=4, isbn=7523232223, title=Beegining Mysql , price=49.0]
Category - Id: 2, Name: Mysql
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
-----

```

- For the method **findById(int id)**

```

thor3_.ID where book0_.ID=?
*****
Book, category and authors with Book id 1:
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
Category - Id: 1, Name: Java
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]

```

- For the method **save(Book newBook)**

```

Book saved with id: 7
Hibernate: select distinct book0_.ID as ID1_2_0_, category1_.ID as ID1_3_1_, author3_.ID as ID1_0_2_, book0_.CATEGORY_ID as CA
0_, book0_.PRICE as PRICE3_2_0_, book0_.TITLE as TITLE4_2_0_, category1_.NAME as NAME2_3_1_, author3_.DESCRIPTION as DESCRIPT
0_2_, author3_.LAST_NAME as LAST4_0_2_, authors2_.BOOK_ID as BOOK1_2_0_, authors2_.AUTHOR_ID as AUTHOR2_1_0_ from book book0
on book0_.CATEGORY_ID=category1_.ID left outer join author_book authors2_ on book0_.ID=authors2_.BOOK_ID left outer join auth
thor3_.ID
*****
Listing books with details:
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
-----
Book [id=2, isbn=5485632322, title=Java Enterprise Edit, price=70.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
-----
Book [id=5, isbn=4875656565, title=Java for non program, price=86.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=6, isbn=457565656, title=Advanced Java Concep, price=66.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=7, isbn=1457522GF, title=NEW BOOK, price=46.0]
Category - Id: 1, Name: Java
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=1, firstName=John , lastName=Smith, description=very young and popular author]
Author [id=2, firstName=Daniel , lastName=Perkins , description=new and revolutionary author]
-----
Book [id=3, isbn=5765522262, title=Mysql Concepts , price=46.0]
Category - Id: 2, Name: Mysql
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=4, isbn=7523232223, title=Beegining Mysql , price=49.0]
Category - Id: 2, Name: Mysql
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]

```

```
mysql> select * from book;
```

ID	CATEGORY_ID	ISBN	TITLE	PRICE
1	1	1457896545	Beegining Java	61
2	1	5485632322	Java Enterprise Edit	70
3	2	5765522262	Mysql Concepts	46
4	2	7523232223	Beegining Mysql	49
5	1	4875656565	Java for non program	86
6	1	457565656	Advanced Java Concep	66
7	1	1457522GF	NEW BOOK	46

```
7 rows in set (0.00 sec)
```

- For the method `delete(Book newBook)`

```
Book deleted with id: 7
Hibernate: delete from author_book where BOOK_ID=?
Hibernate: delete from book where ID=?
Hibernate: select distinct book0_.ID as ID1_2_0_, category1_.ID as ID1_3_1_, author3_.ID as ID1_0_2_, book0_.CATEGORY_ID as C
0_, book0_.PRICE as PRICE3_2_0_, book0_.TITLE as TITLE4_2_0_, category1_.NAME as NAME2_3_1_, author3_.DESCRIPTION as DESCRIPT
0_2_, author3_.LAST_NAME as LAST4_0_2_, authors2_.BOOK_ID as BOOK1_2_0_, authors2_.AUTHOR_ID as AUTHOR2_1_0_ from book book
0_ on book0_.CATEGORY_ID=category1_.ID left outer join author_book authors2_ on book0_.ID=authors2_.BOOK_ID left outer join aut
hor3_ on authors2_.AUTHOR_ID=author3_.ID
*****
Listing books with details:
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=2, firstName=Daniel, lastName=Perkins, description=new and revolutionary author]
Author [id=1, firstName=John, lastName=Smith, description=very young and popular author]
-----
Book [id=2, isbn=5485632322, title=Java Enterprise Edit, price=70.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
Author [id=2, firstName=Daniel, lastName=Perkins, description=new and revolutionary author]
Author [id=1, firstName=John, lastName=Smith, description=very young and popular author]
-----
Book [id=5, isbn=4875656565, title=Java for non program, price=86.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
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Book [id=6, isbn=457565656, title=Advanced Java Concep, price=66.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
-----
Book [id=3, isbn=5765522262, title=Mysql Concepts, price=46.0]
Category - Id: 2, Name: Mysql
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
-----
Book [id=4, isbn=7523232223, title=Beegining Mysql, price=49.0]
Category - Id: 2, Name: Mysql
Author [id=4, firstName=Marcus, lastName=Wall, description=specialized in Mysql and brought a huge plus to this community]
-----
```

```
mysql> select * from book;
```

ID	CATEGORY_ID	ISBN	TITLE	PRICE
1	1	1457896545	Beegining Java	60.59
2	1	5485632322	Java Entreprise Edition	69.99
3	2	5765522262	Mysql Concepts	45.98
4	2	7523232223	Beegining Mysql	48.99
5	1	4875656565	Java for non programmers	85.65
6	1	457565656	Advanced Java Concepts	65.99

```
6 rows in set (0.00 sec)
```

- For the method `findByAuthorId(int id)`

```
*****
Book, cathegory and authors with Author id 3 :
Book [id=1, isbn=1457896545, title=Beegining Java, price=61.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=2, isbn=5485632322, title=Java Entreprise Edit, price=70.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=5, isbn=4875656565, title=Java for non program, price=86.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=6, isbn=457565656, title=Advanced Java Concep, price=66.0]
Category - Id: 1, Name: Java
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
Book [id=3, isbn=5765522262, title=Mysql Concepts , price=46.0]
Category - Id: 2, Name: Mysql
Author [id=3, firstName=Jet, lastName=Li, description=From China and very well established in the authors list]
-----
```