## Exercises:

## Introduction

We continue with the hibernateExcerises project. In the previous workshop we used a Many\_To\_One relationship between Book and Author.

In this way, the Book class has information about the author. But the Author class does not have any information about the books.

We can get this information by having a one to many relationship in author class. So we change the direction of the relationship from *many to one* from Book class to Author class to *one to many* relationship from Author to Book.

## Overview

In this exercise:

- We will practice having two classes and make a one to many relationship between these two classes and see how it will affect our database.
- We use tables Author and Book. We map the Author class to the Book class and make a one to many relationship. It means that a book can be written by only one author but an author can write one or more books.
- In this exercise, we use Set as the collection.
- We test our code by creating some books and an author.

## **Tasks**

- Do the necessary changes in the Author and Book classes (adding property, adding annotations in Author, removing annotation in Book and any code about the Author, changing the constructors, etc)
- Add a method in your Author class to add a book to the set of books written by the author
- Remember that you need a get method to get the set of books.
- Drop both tables from ij.
- In the main method, create three books and one author and save (persist, insert) them in the database and run the code.
- Run the code and see the results in ij. How many tables do you have now?
- Now retrieve the author from the database by its id. (get method on session) and then retrieve the books for this specific author and print them.

- Change your setting from creating the third table to having foreign key using @JoinColumn (name="AUTHOR\_FK")
- Drop tables in the ij.
- Test your code by creating new books. Run the code. How many tables do you have in ij? What did @JoinColumn do?