

Creating an Object Relational Mapper Using an Object Metamodel



José Paumard

PHD, JAVA CHAMPION, JAVA ROCK STAR

@JosePaumard <https://github.com/JosePaumard>



Agenda



Creating an EntityManager

In the Hibernate way

Understanding the write operation

Then model and implement the read operation

Mostly live coding!



Saving Objects to a Database





We need a class: Person

A database: H2 Database

A table to add instances of Person in

```
public class Person {  
    @PrimaryKey  
    private long id;  
    @Column(name="age")  
    private int age;  
    @Column(name="name")  
    private String name;  
  
    // getters and setters  
}
```

Here is our **Person** class, with **two** annotations:

- **primary key**
- **column**



Demo



Let us see some code!

Let us build this system

First create the in-memory database

Then the Person table

Then write and read some data in it



Module Wrap Up



What did you learn?

A application of the Reflection API

How to introspect an object

How to store it in a database

This is how all the ORM frameworks work

And the XML / JSON mappers

