

Java

ORM

Сергей Рыбалкин

Отметьтесь на портале



+++	---
Clean and simple SQL processing	Complex in large projects
Good performance with large data	Large programming overhead
Very good for small applications	Query is DBMS specific
Simple syntax	

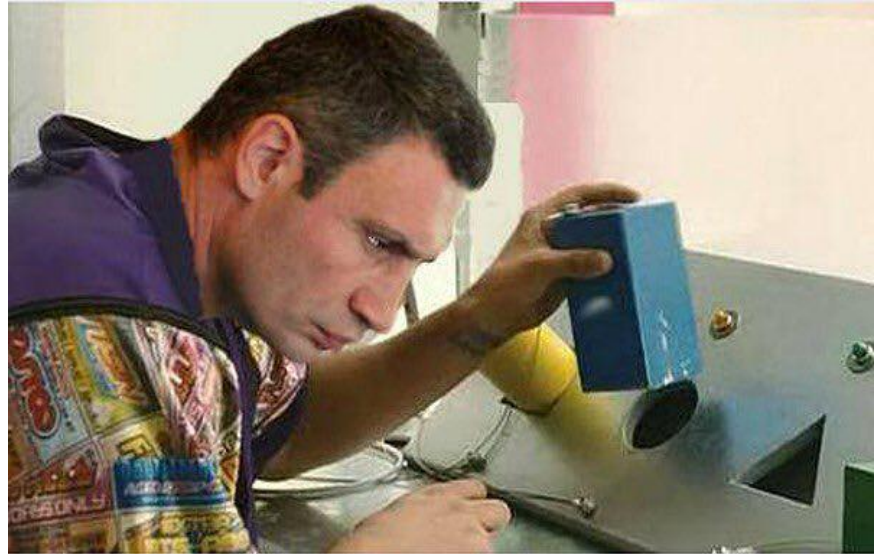
RDBMS – row in table

Java – instance of class

Data. Mismatch

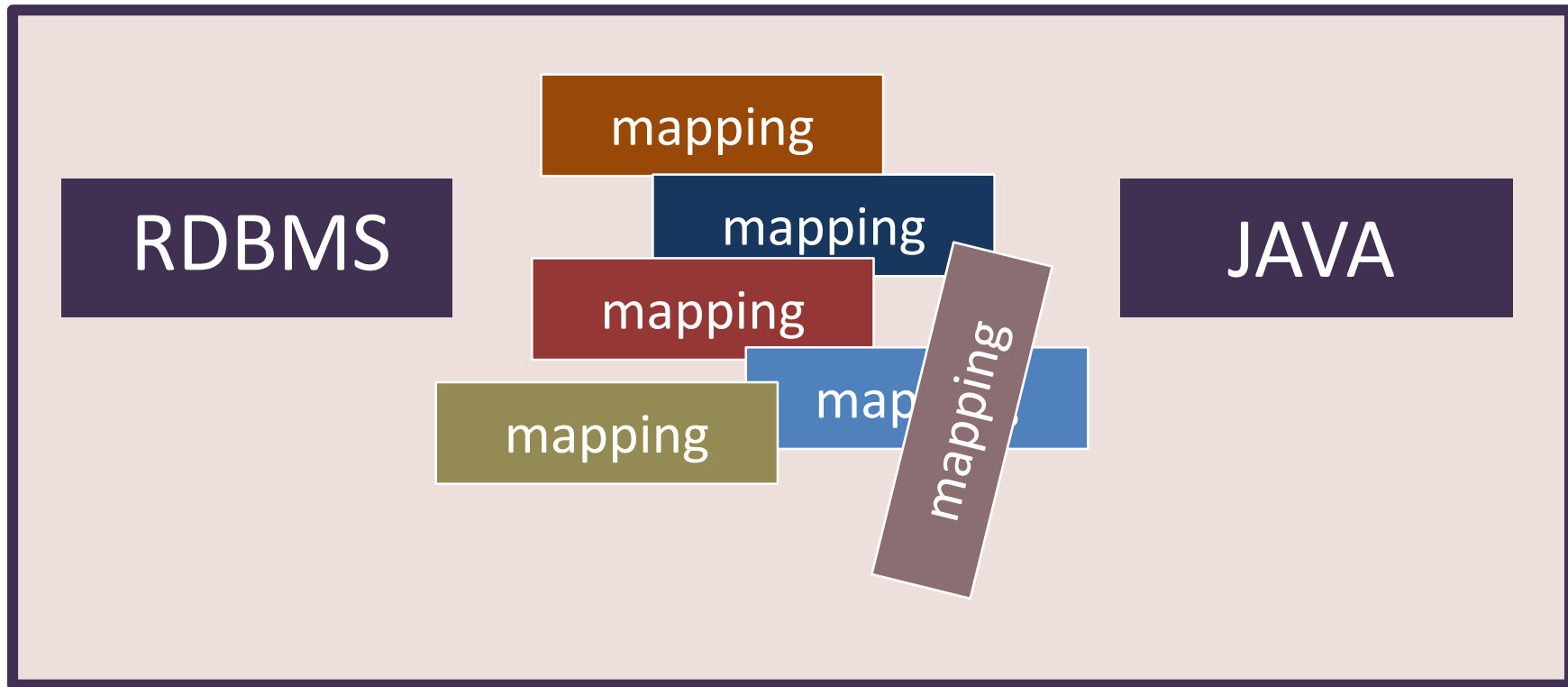
RDBMS – row in table

Java – instance of class

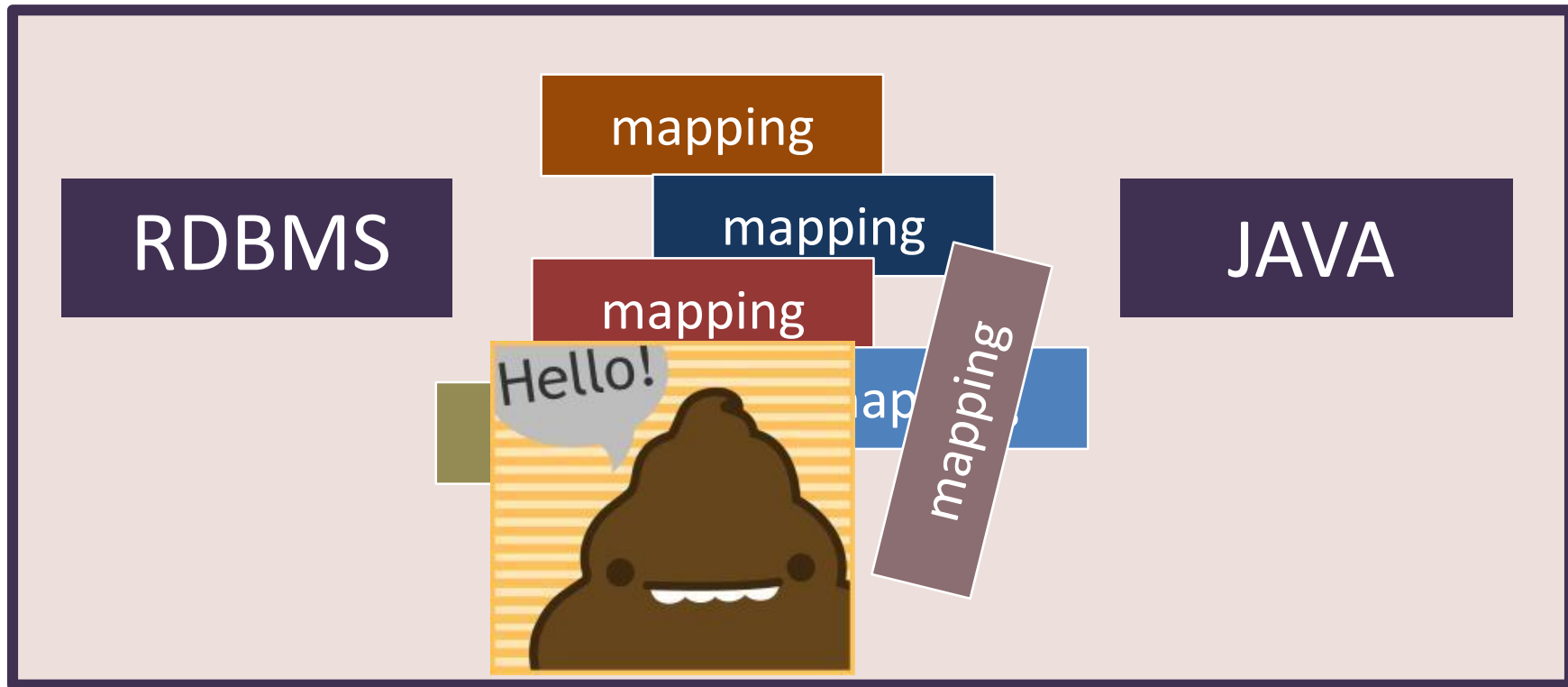


RDBMS

JAVA



Data. Convert



What about?

- inheritance
- identity
- access
- ...



We need a hero

To convert all the data

To hide sql details

To reduce boilerplate code

Based on JDBC 'under the hood'

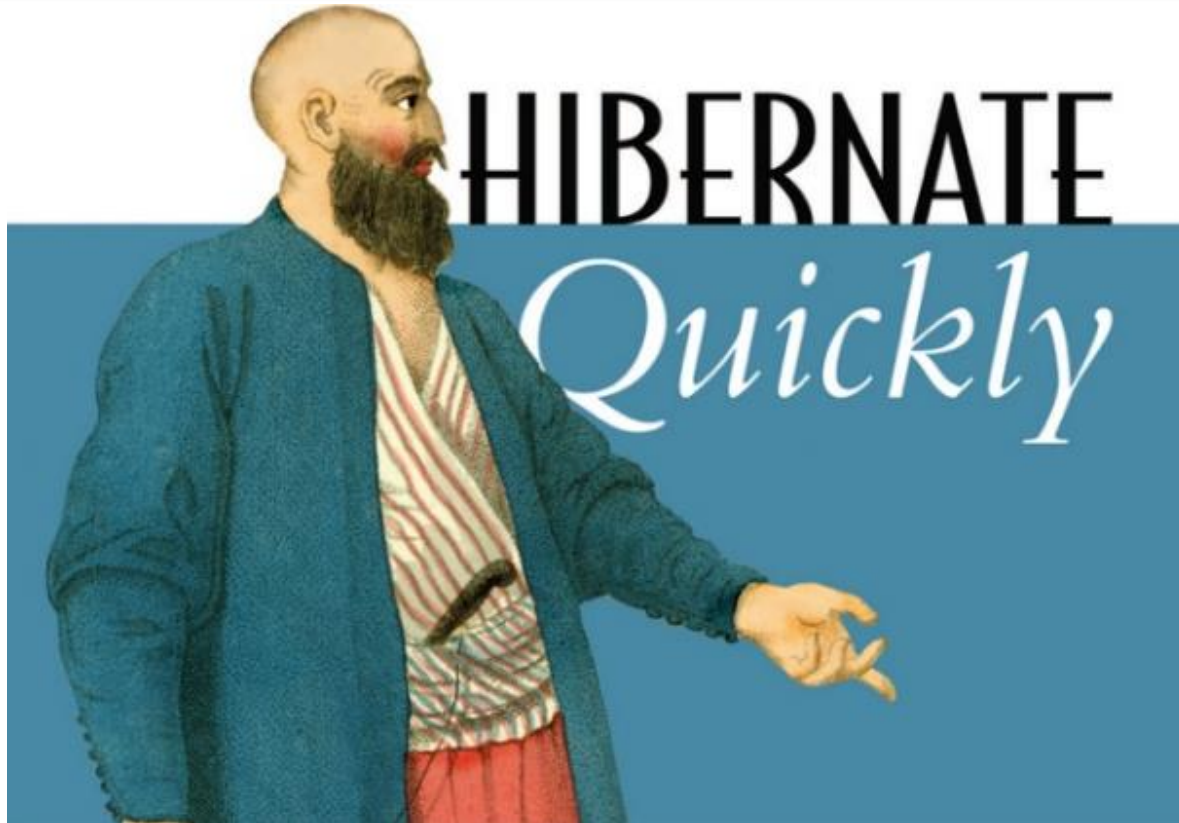


Object – Relational Mapping

- CRUD API
- object-specific query language
- mapping customization



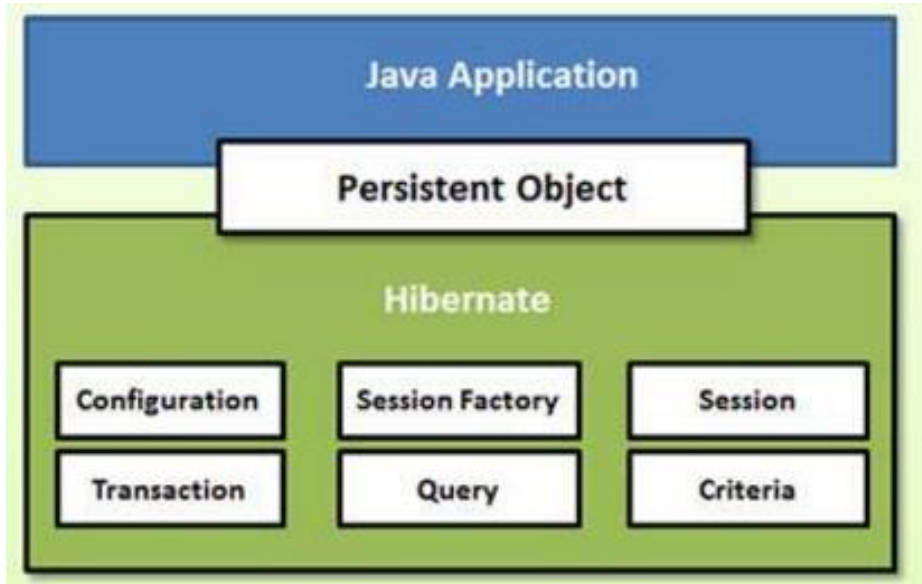
- Enterprise JavaBeans Entity Beans
- Java Data Objects
- Castor
- TopLink
- Spring DAO
- **Hibernate**
- ...



ORM. Hibernate



ORM. Hibernate



- Database connection
- Mapping

hibernate.properties
hibernate.cfg.xml

SessionFactory – factory based on config

Session – factory product to get a physical connection with a database

Query – SQL or Hibernate Query Language (HQL)

```
from Person person where name = 'Sasha'
```

```
from Match match  
where match.a is not null  
      and match.a != match.b
```

Transaction – unit of work
(underlying JDBC or JTA)

Transaction idiom

@see ru.atom.model.dao.Database

1. Implement class
2. Annotate class
3. Add mapping
4. Create table*
5. ...
6. Profit

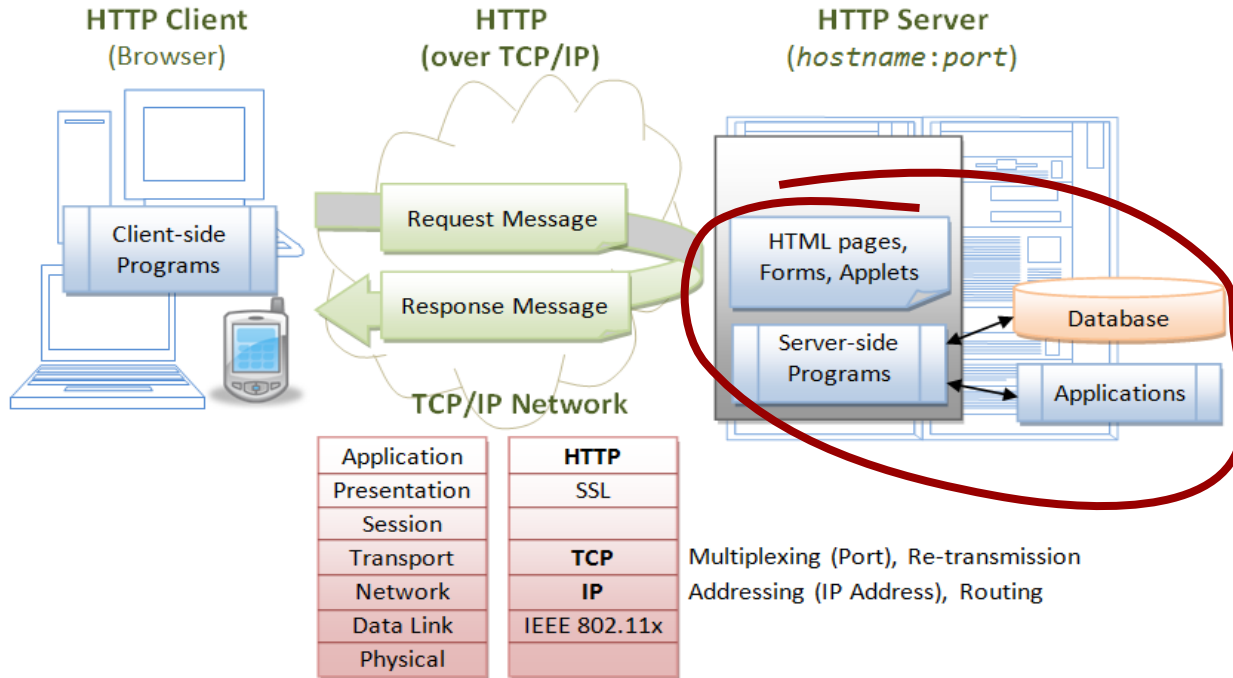


<https://www.tutorialspoint.com/hibernate/index.htm>

<https://habrahabr.ru/post/265061/>

<http://www.slideshare.net/vinayhulgar/manning-hibernate-quickly>

Tinder Server



JDBC → ORM migration



Спасибо за внимание!

Сергей Рыбалкин

s.rybalkin@corp.mail.ru