Castor

JDO Extensions for the XML Code Generator

Open Source Student Project

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Castor

"Castor is an Open Source data binding framework for Java."

"It's the shortest path between **Java objects**, **XML documents** and **relational tables**." [1]

[1] http://www.castor.org

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Java-to-XML Binding


```
<?xml version="1.0"?>
<Person id="47">
    <Surname>Doe</Surname>
    <GivenName>John</GivenName>
</Person>
```
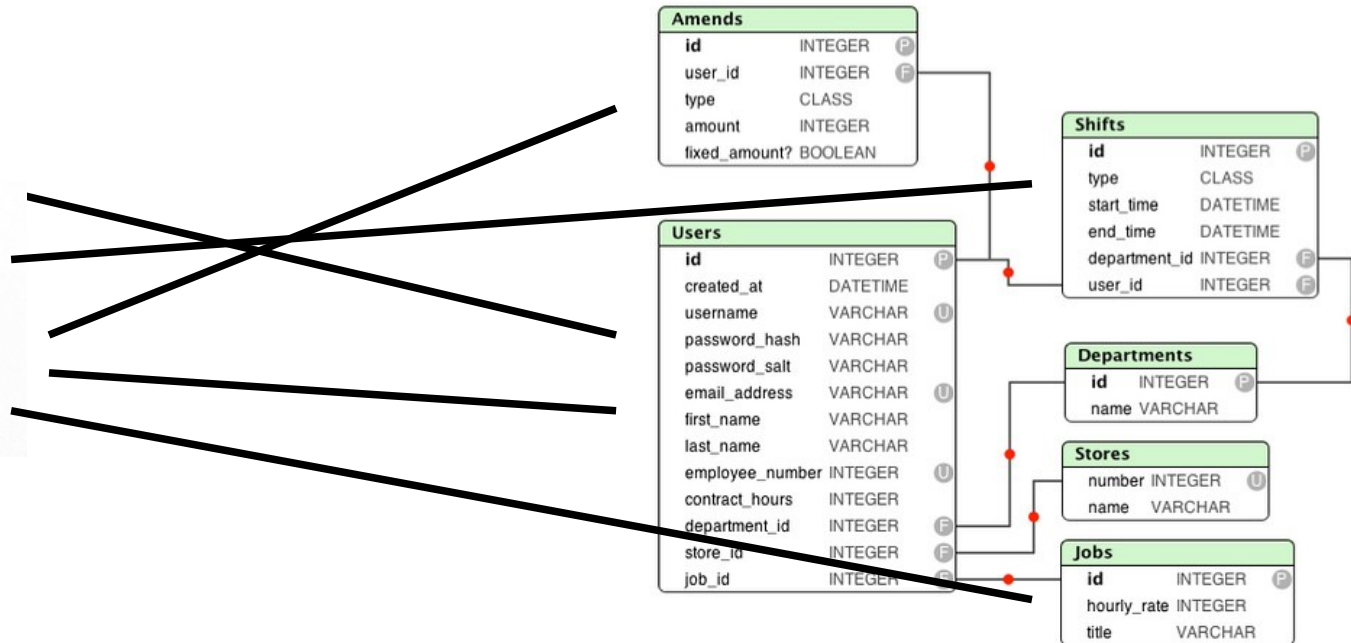
marshalling/unmarshalling
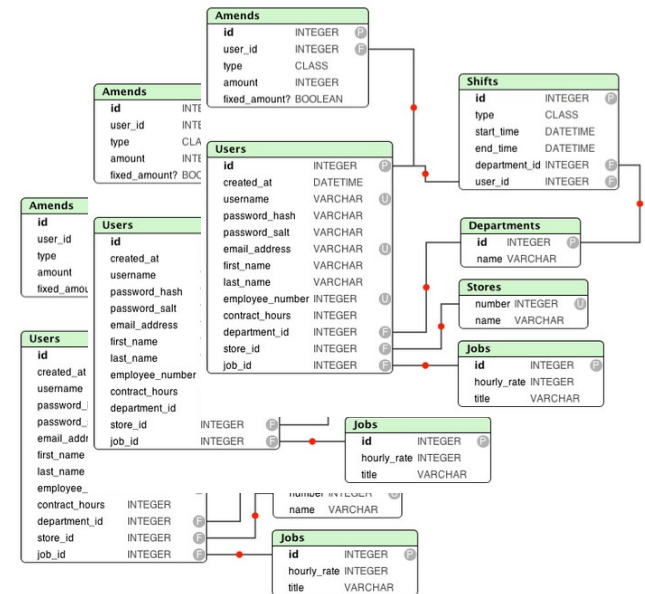
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Java-to-SQL Persistierung

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Who wants to write mapping files
for heaps of POJOs?

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XML Source Generator generates POJOs

```
<xsd:complexType name="Person">
   <xsd:sequence>
        <xsd:element name="Surname"
            type="xsd:string"/>
        <xsd:element name="GivenName"
            type="xsd:string"/>
   </xsd:sequence>
</xsd:complexType>
```

POJOs

JDO Extensions
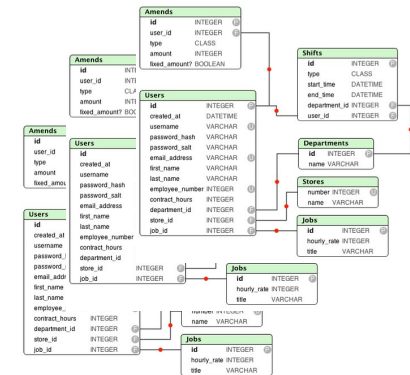
JDO Source Generator reads JDO annotations and generates mapping descriptors

annotated
XML schema

JDO Extensions

JDO Source Generator

```xml
<xsd:complexType name="Person">
    <xsd:annotation>
        <xsd:appinfo>
                <jdo:table name="person" identity="id" />
        </xsd:appinfo>
    </xsd:annotation>

...

</xsd:complexType>
```

JDO Extensions

JDO Source Generator

```
...
   <xsd:sequence>
        <xsd:element name="Id" type="xsd:integer"/>
        <xsd:annotation>
            <xsd:appinfo>
                <jdo:column name="id" type="jdo:integer" />
            <xsd:appinfo>
        </xsd:annotation>
        <xsd:element name="Surname" type="xsd:string"/>
        <xsd:annotation>
            <xsd:appinfo>
                <jdo:column name="surname" type="jdo:string" />
            </xsd:appinfo>
        </xsd:annotation>
        <xsd:element name="GivenName" type="xsd:string"/>
   </xsd:sequence>
</xsd:complexType>
```

JDO Extensions

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JDO Source Generator

```
<jdo:table .../>

<jdo:column .../>

<jdo:one-to-one .../>

<jdo:one-to-many .../>
```

Benefits

Castor

New feature!

People involved!

Simple persistence

Mapping of relations

Users

Get rid of repetive tasks

> Gain motivation ;-)

Benefits

Students

Mentored software project
Expertise in open source projects

Community Process and Mailing Lists
Prototyping & Scrum
Test Driven Development

Keep participating!

Participate

Castor

Join development mailing lists
Write a patch ;-)

Apache Cocoon
http://cocoon.apache.org
Castor
http://www.castor.org

GsoC 2009 (Google Summer of Code)
Application deadline: April 7th!

http://code.google.com/soc/

Thanks to flickr users: captainblackadder, kubina, refractedmoments & caius