



Hibernate with Annotations

By Rahul Barve



Objectives

- Introduction to Hibernate Annotations
- Introduction to JPA
- Working with Annotations
- A Simple Example



Hibernate Annotations



Hibernate Annotations

- Hibernate provides support for Mapping between Class and Table, or Field and Column using Annotations



Hibernate Annotations

- There are 2 ways to handle Annotation Based mapping:
 - Using Hibernate Annotations
 - Using JPA Annotations



What is JPA

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What is JPA

- JPA stands for Java Persistence API.
- A specification for managing entities in the application domain.



What is JPA

- It is an abstraction on the top of any ORM framework like Hibernate, Toplink, Eclipselink, Ibatis and so on.



Why JPA

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Why JPA

- Provides ease-of-use abstraction on top of JDBC.
- Application code can be isolated from database, vendor specific peculiarities and optimization.



Why JPA

- An Object-to-Relational Mapping (ORM) engine.
- Provides a query language that is tailored to work with java objects rather than relational schema.



JPA Entities



JPA Entities

- ❑ JPA manages persistency with the help of simple Java Entities.
- ❑ JPA Entities are simple POJOs.



Basic Annotations



Basic Annotations

- JPA provides 4 basic annotations:
 - `@Entity`
 - `@Table`
 - `@Id`
 - `@Column`



***@*Entity**



@Entity

- Tells the persistence provider about the entity class which is being mapped to the database table.
- Mandatory as far as annotation based metadata is concerned.



***@*Table**



@Table

- Tells the `EntityManager` service about the relational table to which the bean class maps.
- If omitted, it defaults to the unqualified name of the entity class.



***@*Column**



@Column

- Specifies the respective DB column to which the entity class field maps.
- Not required if class field name matches with the DB column name.



***a*Id**



@Id

- Identifies one or more properties that make up the primary key for the table.
- Mandatory as far as annotation based metadata is concerned.



Let's Summarize

- Introduction to Hibernate Annotations
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