

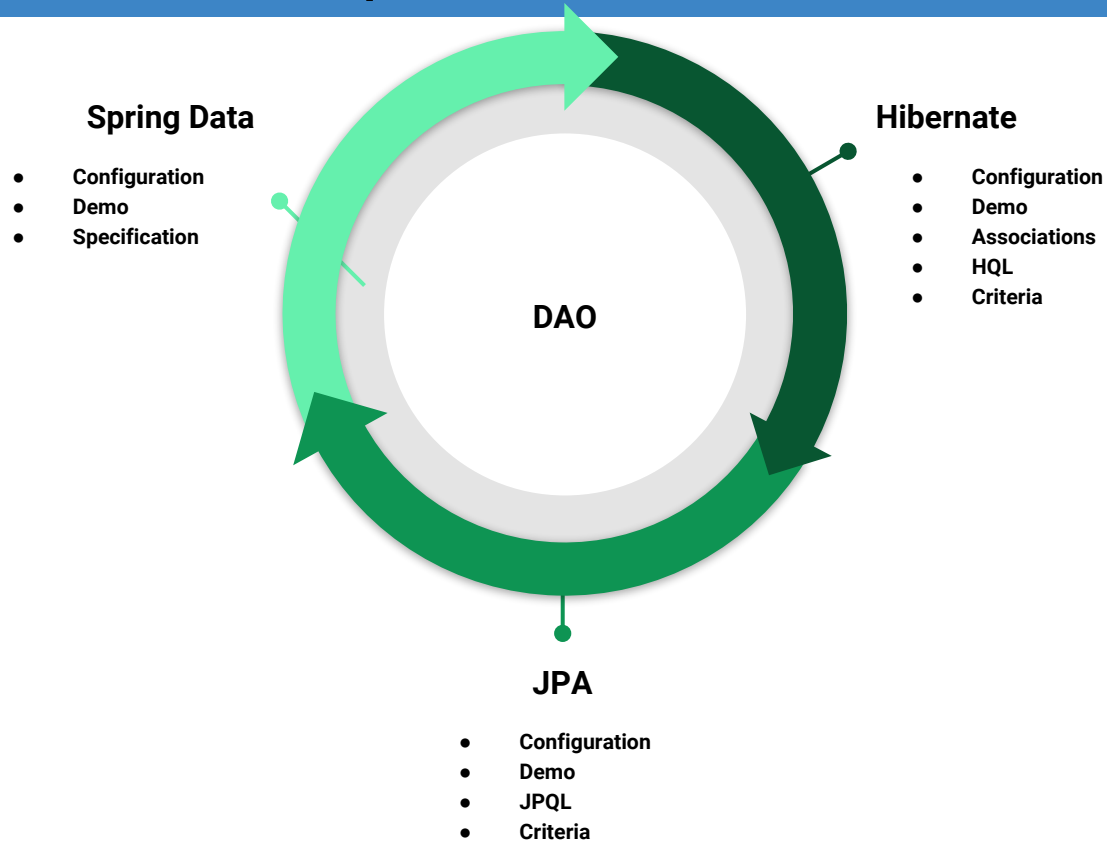
# Hibernate

hibernate-properties  
ORM  
SessionFactory  
Hibernate  
Session

object-relational-mismatch

HibernateTransactionPlatform

# DAO Layer Roadmap










# ORM








- ORM is an object relational mapping framework that provides support for mapping an object oriented domain model to a relational database.
- Hibernate ORM (Hibernate in short) is an object-relational mapping tool for the Java programming language. It provides a framework for mapping an object-oriented domain model to a relational database. Hibernate handles object-relational impedance mismatch problems by replacing direct, persistent database accesses with high-level object handling functions.

# ORM Benefits

- mapping of database records to application objects
- provides a rich object query language
- provides easy navigation through objects using their relationships
- provides automatic cache management
- identifiers are automatically propagated and managed
- reuse of ORM-specific code

# Object Relational Impedance Mismatch

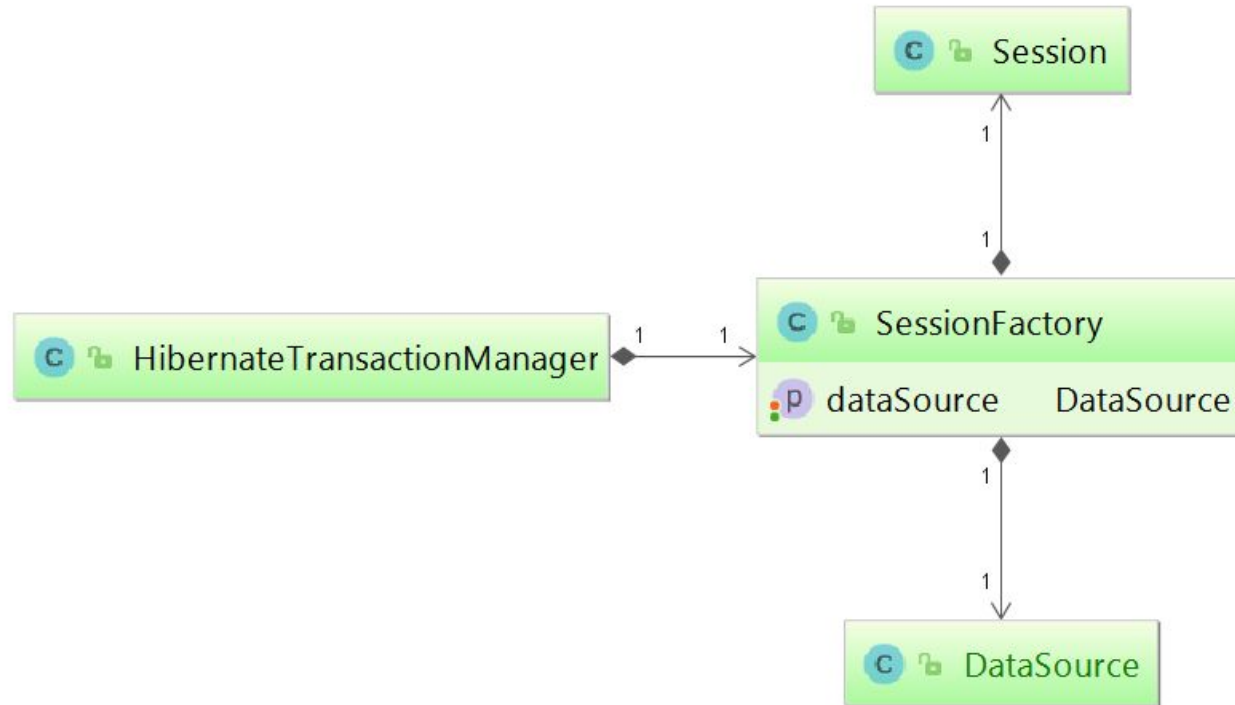
Player		
 <b>id</b>		<i>Long</i>
 <b>address</b>		<i>String</i>
 <b>email</b>		<i>String</i>
 <b>firstName</b>		<i>String</i>
 <b>lastName</b>		<i>String</i>
 <b>password</b>		<i>String</i>
 <b>username</b>		<i>String</i>

s_player		
 <b>ID</b>		int(11)
 <b>FIRST_NAME</b>		varchar(50)
 <b>USERNAME</b>		varchar(50)
 <b>LAST_NAME</b>		varchar(50)
 <b>PASSWORD</b>		varchar(50)
 <b>ADDRESS</b>		varchar(100)
 <b>EMAIL</b>		varchar(50)

# Data Model vs Object Model

	Data Model	Object Model
Identity	Primary Keys	equals()/Memory
Associations	Foreign Keys	Object References
Association Navigation	Joins	Accessors/References
Inheritance	Not Available	Available

# Hibernate Configuration





# Core Hibernate Components

- `SessionFactory` thread-safe, shareable, and immutable. Client requests obtain `Session` instances from this factory.
- `Session` interface is the hibernate component representing a single functional unit, and it is the main runtime interface between a Java application and Hibernate
- `HibernateTransactionManager` : this class is an implementation of `PlatformTransactionManager` for a single `SessionFactory`
- `LocalSessionFactoryBuilder` : this is a utility class that can be used to create a `SessionFactory` bean
- The `hibernateProperties` is a `java.util.Properties` that contains specific Hibernate properties

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