

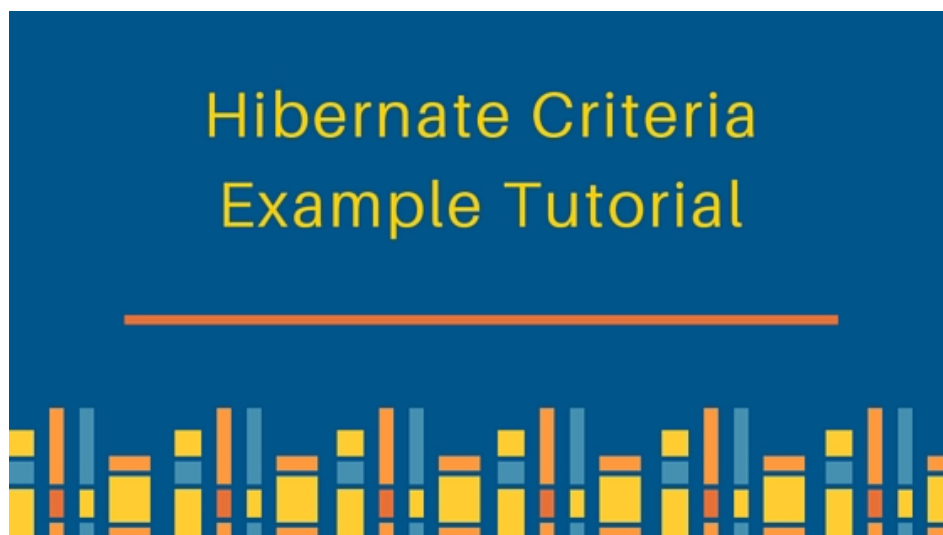
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Hibernate Criteria Example Tutorial

APRIL 2, 2018 BY [PANKAJ](#) — [9 COMMENTS](#)

Welcome to the Hibernate Criteria Example Tutorial. Today we will look into Criteria in Hibernate.

Hibernate Criteria



Most of the times, we use HQL for querying the database and getting the results. HQL is not preferred way for updating or deleting values because then we need to take care of any associations between tables.

Hibernate Criteria API provides object oriented approach for querying the database and getting results. We can't use Criteria in Hibernate to run update or delete queries or any DDL statements. Hibernate Criteria query is only used to fetch the results from the database using object oriented approach.

For my Hibernate criteria example, I will use the same setup as in my [HQL Example](#) and show you how to use Criteria in Hibernate for querying databases.

Some of the common usage of Hibernate Criteria API are;

1. Hibernate Criteria API provides Projection that we can use for aggregate functions such as sum(), min(), max() etc.
2. Hibernate Criteria API can be used with `ProjectionList` to fetch selected columns only.
3. Criteria in Hibernate can be used for join queries by joining multiple tables, useful methods for Hibernate criteria join are `createAlias()`, `setFetchMode()` and `setProjection()`
4. Criteria in Hibernate API can be used for fetching results with conditions, useful methods are `add()` where we can add Restrictions.
5. Hibernate Criteria API provides `addOrder()` method that we can use for ordering the results.

Below class shows different usages of Hibernate Criteria API, most of these are replacements of examples in HQL tutorial.

```
package com.journaldev.hibernate.main;

import java.util.Arrays;
import java.util.List;

import org.hibernate.Criteria;
import org.hibernate.FetchMode;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.Transaction;
import org.hibernate.criterion.Order;
import org.hibernate.criterion.ProjectionList;
import org.hibernate.criterion.Projections;
import org.hibernate.criterion.Restrictions;

import com.journaldev.hibernate.model.Employee;
import com.journaldev.hibernate.util.HibernateUtil;

public class HibernateCriteriaExamples {
```

```
@SuppressWarnings("unchecked")
```

When we execute above Hibernate Criteria example program, we get following output.

```
May 26, 2014 6:53:32 PM
org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>
INFO: HCANN000001: Hibernate Commons Annotations {4.0.4.Final}
May 26, 2014 6:53:32 PM org.hibernate.Version logVersion
INFO: HHH000412: Hibernate Core {4.3.5.Final}
May 26, 2014 6:53:32 PM org.hibernate.cfg.Environment <clinit>
INFO: HHH000206: hibernate.properties not found
May 26, 2014 6:53:32 PM org.hibernate.cfg.Environment buildBytecodeProvider
INFO: HHH00021: Bytecode provider name : javassist
May 26, 2014 6:53:32 PM org.hibernate.cfg.Configuration configure
INFO: HHH00043: Configuring from resource: hibernate.cfg.xml
May 26, 2014 6:53:32 PM org.hibernate.cfg.Configuration getConfigurationInputStream
INFO: HHH00040: Configuration resource: hibernate.cfg.xml
May 26, 2014 6:53:32 PM org.hibernate.internal.util.xml.DTDEntityResolver
resolveEntity
WARN: HHH000223: Recognized obsolete hibernate namespace
http://hibernate.sourceforge.net/. Use namespace http://www.hibernate.org/dtd/
instead. Refer to Hibernate 3.6 Migration Guide!
May 26, 2014 6:53:32 PM org.hibernate.cfg.Configuration doConfigure
INFO: HHH00041: Configured SessionFactory: null
Hibernate Configuration loaded
Hibernate serviceRegistry created
```

Since I am using HQL example project, you would need to import that and then add this class for it to be working.

Notice the hibernate queries executed in the output, this way you can refine your queries and get the results you are looking for. That's all for a quick roundup on Criteria in Hibernate.

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org.hibernate.HibernateException: Could not parse
configuration: hibernate.cfg.xml

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About Pankaj

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Recently I started creating video tutorials too, so do check out my videos on [Youtube](#).

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disar says

AUGUST 29, 2017 AT 8:58 AM

Hi Pankaj,
the method createQuery(...) is deprecated.
Isn't better use, instead of using Criteria, CriteriaBuilder?
However you done a very good job, your tutorials is very helpful for me.
Thanks

[Reply](#)

Pankaj says

AUGUST 29, 2017 AT 9:50 AM

Hmm, I need to look at the current version and update these. Added to my todo list. Thanks for pointing it out.

[Reply](#)

Nilesh Gattani says

JANUARY 27, 2017 AT 4:11 AM

"SELECT"

DURM.USER_ID,

DRM.RETURN_ID,

DRM.RETURN_NAME,

DBM.BANK_ID,

DBM.BANK_NAME

FROM DCP_USER_MASTER DUM

LEFT JOIN

DCP_USER_RIGHTS_MAPPER DURM

ON DUM.USER_ID=DURM.USER_ID

LEFT JOIN DCP_RETURN_MASTER DRM

ON DURM.RETURN_ID=DRM.RETURN_ID

LEFT JOIN DCP_BANK_MASTER DBM

ON DURM.BANK_ID=DBM.BANK_ID

WHERE

DUM.USER_NAME = ?

how to convert this query table data into hibernate using mapping many to many, kindly suggest me

[Reply](#)

Raju Sharma says

DECEMBER 11, 2016 AT 8:51 AM

Hello Pankaj , i want to join three table , table a and b with many to one and table b and c with one to one mapping. Then i want to display table a data , so please mail the join and mapping details and

criteria query for it .

[Reply](#)

Sunil Kale says

APRIL 20, 2016 AT 10:57 PM

```
SELECT d.level, s.slide_pk from slideimage s
LEFT JOIN studyanimal a ON s.animal_fk=a.animal_pk
LEFT JOIN study_dosage sd ON a.study_dos_fk=sd.study_dos_pk
LEFT JOIN dosage d ON sd.dosage_fk=d.dosage_pk
where s.study_fk=2
order by d.level;
```

Hi pankaj this is my query i want it using Hibernate..How to do this..Please help me i am stuck here

[Reply](#)

Rutaveej Shah says

DECEMBER 30, 2014 AT 11:12 PM

Hi panakj..

I have some doubt regarding hibernate criteria query.In a one session if i am saving a data in one table and then fetching the data from the same table using criteria in same session then my data get inserted in database.If some exception is occurred then it doesn't get rollback.Is there any solution for that.

[Reply](#)

babaye says

SEPTEMBER 14, 2014 AT 5:18 AM

Hello,

Thank you for you tutorial.

In this example :

```
criteria.setFetchMode("employee.address", FetchMode.JOIN);
criteria.createAlias("employee.address", "address");
```

The createAlias option for Join (Inner_Join by default) is overriding the FetchMode.JOIN (Outer Join). Is is the same if you change the odrer (createAlias before FetchMode) ? Is there a documentation on that ?

[Reply](#)

Trinath says

JUNE 5, 2014 AT 11:31 PM

Hi Pankaj,
Why Hibernate Converts Checked Exceptions to Un-checked Exceptions ? what is the reason behind it??
Plzz tell me..
Awaiting for Your Quick Response....
Thanx for Your Time!!!!!!!
Regards
Trinath
[Reply](#)

Pankaj says

JUNE 5, 2014 AT 11:53 PM

It's more like a design decision, if you are using Hibernate as ORM tool and something goes wrong, there is no easy way you can catch exception and then recover from it. So hibernate doesn't enforce you to catch all the exceptions and uses unchecked exceptions, something like NullPointerException.

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