**1- output below - Explanation: before each execution of a method in Service layer, our aspect will called first.**

TARGET CLASS : edu.mum.service.UserService.save

TARGET CLASS : edu.mum.service.UserCredentialsService.update

TARGET CLASS : edu.mum.service.UserService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.ItemService.update

13:47:23,057 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.ItemService.update

13:47:23,335 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.UserService.update

TARGET CLASS : edu.mum.service.ItemService.findByCategoryName

13:47:23,590 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.ItemService.findItemCriteria

13:47:23,681 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**2- explicit pointcut output below. Explanation: this should output same as in #1 as it's just reusing same advice**

TARGET CLASS : edu.mum.service.UserService.save

TARGET CLASS : edu.mum.service.UserCredentialsService.update

TARGET CLASS : edu.mum.service.UserService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.CategoryService.save

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.ItemService.update

14:23:38,789 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.ItemService.update

14:23:39,011 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.UserService.update

TARGET CLASS : edu.mum.service.ItemService.findByCategoryName

14:23:39,421 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.ItemService.findItemCriteria

14:23:39,524 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**3- explicit pointcut - change .. into Long. Explanation: aspect will be applied to only findOne method as it's only method that have 1 parameter of type Long.**

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

14:27:43,920 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.CategoryService.findOne

14:27:44,261 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

14:27:44,512 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

14:27:44,607 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**4- explicit pointcut - change Long to (). Explnation: no method call exist that have 0 parameters.**

14:31:16,318 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

14:31:16,552 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

14:31:16,710 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

14:31:16,805 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**5- explicit pointcut - change Long to () and add getAll() call in TestItems.Java. Explnation: only 1 call exist to getAll() so aspect will be executed once.**

14:32:45,255 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

14:32:45,482 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.UserService.findAll

14:32:45,687 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

14:32:45,784 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**6- explicit pointcut - with a combination of a within() and an args(). I used @Pointcut("within(edu.mum.service..\*) && args(Long)"), so it will execute only on method calls with 1 argument of type Long.ord**

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

14:42:11,695 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.CategoryService.findOne

TARGET CLASS : edu.mum.service.CategoryService.findOne

14:42:11,914 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

14:42:12,109 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TARGET CLASS : edu.mum.service.UserService.findOne

TARGET CLASS : edu.mum.service.UserService.findOne

14:42:12,193 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes

**7- Explanation: only Save & Update methods will be tracked as they are only ones accepting user parameter.**

TARGET CLASS : edu.mum.service.UserService.save, User Name: John Doe

TARGET CLASS : edu.mum.service.UserService.save, User Name: Jane Doe

01:06:40,268 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

01:06:40,347 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

TARGET CLASS : edu.mum.service.UserService.update, User Name: Jane Doe

01:06:40,435 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

\*\*\*\*\*\*\*\*\*\* NamedQuery -> Items by Category : Sports \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Item Name : Sled

Item Name : Skates

\*\*\*\*\*\*\*\*\*\* find By Buyer Or Seller \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

01:06:40,523 WARN HibernateJpaDialect:347 - JDBC Connection to reset not identical to originally prepared Connection - please make sure to use connection release mode ON\_CLOSE (the default) and to run against Hibernate 4.2+ (or switch HibernateJpaDialect's prepareConnection flag to false

Item Name : Shoes