Hibernate with Annotation

### Example to create the hibernate application with Annotation

There are 4 steps to create the hibernate application with annotation.

1. **Add the jar file for oracle (if your database is oracle) and annotation**
2. **Create the Persistent class**
3. **Add mapping of Persistent class in configuration file**
4. **Create the class that retrieves or stores the persistent object**

3 files totally ok, After Run main class ok.

Nov 30, 2017 3:51:23 PM org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>

INFO: HCANN000001: Hibernate Commons Annotations {4.0.5.Final}

Nov 30, 2017 3:51:23 PM org.hibernate.Version logVersion

INFO: HHH000412: Hibernate Core {4.3.11.Final}

Nov 30, 2017 3:51:23 PM org.hibernate.cfg.Environment <clinit>

INFO: HHH000206: hibernate.properties not found

Nov 30, 2017 3:51:23 PM org.hibernate.cfg.Environment buildBytecodeProvider

INFO: HHH000021: Bytecode provider name : javassist

Nov 30, 2017 3:51:23 PM org.hibernate.cfg.Configuration configure

INFO: HHH000043: Configuring from resource: /hibernate.cfg.xml

Nov 30, 2017 3:51:23 PM org.hibernate.cfg.Configuration getConfigurationInputStream

INFO: HHH000040: Configuration resource: /hibernate.cfg.xml

Nov 30, 2017 3:51:23 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!

Nov 30, 2017 3:51:23 PM org.hibernate.cfg.Configuration doConfigure

INFO: HHH000041: Configured SessionFactory: null

Nov 30, 2017 3:51:23 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

WARN: HHH000402: Using Hibernate built-in connection pool (not for production use!)

Nov 30, 2017 3:51:23 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000401: using driver [oracle.jdbc.driver.OracleDriver] at URL [jdbc:oracle:thin:@localhost:1521:xe]

Nov 30, 2017 3:51:23 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000046: Connection properties: {user=system, password=\*\*\*\*}

Nov 30, 2017 3:51:23 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000006: Autocommit mode: false

Nov 30, 2017 3:51:23 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

INFO: HHH000115: Hibernate connection pool size: 20 (min=1)

Exception in thread "main" org.hibernate.exception.JDBCConnectionException: Error calling Driver#connect

at org.hibernate.engine.jdbc.connections.internal.BasicConnectionCreator$1$1.convert(BasicConnectionCreator.java:122)

at org.hibernate.engine.jdbc.connections.internal.BasicConnectionCreator.convertSqlException(BasicConnectionCreator.java:140)

at org.hibernate.engine.jdbc.connections.internal.DriverConnectionCreator.makeConnection(DriverConnectionCreator.java:58)

at org.hibernate.engine.jdbc.connections.internal.BasicConnectionCreator.createConnection(BasicConnectionCreator.java:75)

at org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl.configure(DriverManagerConnectionProviderImpl.java:106)

at org.hibernate.boot.registry.internal.StandardServiceRegistryImpl.configureService(StandardServiceRegistryImpl.java:111)

at org.hibernate.service.internal.AbstractServiceRegistryImpl.initializeService(AbstractServiceRegistryImpl.java:234)

at org.hibernate.service.internal.AbstractServiceRegistryImpl.getService(AbstractServiceRegistryImpl.java:206)

at org.hibernate.engine.jdbc.internal.JdbcServicesImpl.buildJdbcConnectionAccess(JdbcServicesImpl.java:260)

at org.hibernate.engine.jdbc.internal.JdbcServicesImpl.configure(JdbcServicesImpl.java:94)

at org.hibernate.boot.registry.internal.StandardServiceRegistryImpl.configureService(StandardServiceRegistryImpl.java:111)

at org.hibernate.service.internal.AbstractServiceRegistryImpl.initializeService(AbstractServiceRegistryImpl.java:234)

at org.hibernate.service.internal.AbstractServiceRegistryImpl.getService(AbstractServiceRegistryImpl.java:206)

at org.hibernate.cfg.Configuration.buildTypeRegistrations(Configuration.java:1887)

at org.hibernate.cfg.Configuration.buildSessionFactory(Configuration.java:1845)

at org.hibernate.cfg.Configuration.buildSessionFactory(Configuration.java:1930)

at com.javatpoint.Test.main(Test.java:9)

Caused by: java.sql.SQLException: ORA-01017: invalid username/password; logon denied

at oracle.jdbc.driver.DatabaseError.throwSqlException(DatabaseError.java:112)

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:331)

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:283)

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:278)

at oracle.jdbc.driver.T4CTTIoauthenticate.receiveOauth(T4CTTIoauthenticate.java:785)

at oracle.jdbc.driver.T4CConnection.logon(T4CConnection.java:362)

at oracle.jdbc.driver.PhysicalConnection.<init>(PhysicalConnection.java:414)

at oracle.jdbc.driver.T4CConnection.<init>(T4CConnection.java:165)

at oracle.jdbc.driver.T4CDriverExtension.getConnection(T4CDriverExtension.java:35)

at oracle.jdbc.driver.OracleDriver.connect(OracleDriver.java:801)

at org.hibernate.engine.jdbc.connections.internal.DriverConnectionCreator.makeConnection(DriverConnectionCreator.java:55)

... 14 more

Error-----change db password and run main class ok.

Nov 30, 2017 3:53:33 PM org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>

INFO: HCANN000001: Hibernate Commons Annotations {4.0.5.Final}

Nov 30, 2017 3:53:33 PM org.hibernate.Version logVersion

INFO: HHH000412: Hibernate Core {4.3.11.Final}

Nov 30, 2017 3:53:33 PM org.hibernate.cfg.Environment <clinit>

INFO: HHH000206: hibernate.properties not found

Nov 30, 2017 3:53:33 PM org.hibernate.cfg.Environment buildBytecodeProvider

INFO: HHH000021: Bytecode provider name : javassist

Nov 30, 2017 3:53:33 PM org.hibernate.cfg.Configuration configure

INFO: HHH000043: Configuring from resource: /hibernate.cfg.xml

Nov 30, 2017 3:53:33 PM org.hibernate.cfg.Configuration getConfigurationInputStream

INFO: HHH000040: Configuration resource: /hibernate.cfg.xml

Nov 30, 2017 3:53:34 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!

Nov 30, 2017 3:53:34 PM org.hibernate.cfg.Configuration doConfigure

INFO: HHH000041: Configured SessionFactory: null

Nov 30, 2017 3:53:34 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

WARN: HHH000402: Using Hibernate built-in connection pool (not for production use!)

Nov 30, 2017 3:53:34 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000401: using driver [oracle.jdbc.driver.OracleDriver] at URL [jdbc:oracle:thin:@localhost:1521:xe]

Nov 30, 2017 3:53:34 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000046: Connection properties: {user=system, password=\*\*\*\*}

Nov 30, 2017 3:53:34 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000006: Autocommit mode: false

Nov 30, 2017 3:53:34 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

INFO: HHH000115: Hibernate connection pool size: 20 (min=1)

Nov 30, 2017 3:53:35 PM org.hibernate.dialect.Dialect <init>

INFO: HHH000400: Using dialect: org.hibernate.dialect.Oracle9Dialect

Nov 30, 2017 3:53:36 PM org.hibernate.dialect.Oracle9Dialect <init>

WARN: HHH000063: The Oracle9Dialect dialect has been deprecated; use either Oracle9iDialect or Oracle10gDialect instead

Nov 30, 2017 3:53:36 PM org.hibernate.engine.jdbc.internal.LobCreatorBuilder useContextualLobCreation

INFO: HHH000424: Disabling contextual LOB creation as createClob() method threw error : java.lang.reflect.InvocationTargetException

Nov 30, 2017 3:53:36 PM org.hibernate.engine.transaction.internal.TransactionFactoryInitiator initiateService

INFO: HHH000399: Using default transaction strategy (direct JDBC transactions)

Nov 30, 2017 3:53:36 PM org.hibernate.hql.internal.ast.ASTQueryTranslatorFactory <init>

INFO: HHH000397: Using ASTQueryTranslatorFactory

Nov 30, 2017 3:53:37 PM org.hibernate.tool.hbm2ddl.SchemaExport execute

INFO: HHH000227: Running hbm2ddl schema export

Nov 30, 2017 3:53:39 PM org.hibernate.tool.hbm2ddl.SchemaExport perform

ERROR: HHH000389: Unsuccessful: drop table emp500 cascade constraints

Nov 30, 2017 3:53:39 PM org.hibernate.tool.hbm2ddl.SchemaExport perform

ERROR: ORA-00942: table or view does not exist

Nov 30, 2017 3:53:41 PM org.hibernate.tool.hbm2ddl.SchemaExport execute

INFO: HHH000230: Schema export complete

successfully saved

Now, 1st time saved state of object in db check it ok.

After checking db table in oracle 2 rows inserted ok.

Second save with same data db table error ok.

hbm2ddl.auto means::::

hibernate.**hbm2ddl**.**auto** Automatically validates or exports schema DDL to the database when the SessionFactory is created. With create-drop, the database schema will be dropped when the SessionFactory is closed explicitly. ... create: creates the schema, destroying previous data.

Nov 30, 2017 4:09:02 PM org.hibernate.annotations.common.reflection.java.JavaReflectionManager <clinit>

INFO: HCANN000001: Hibernate Commons Annotations {4.0.5.Final}

Nov 30, 2017 4:09:02 PM org.hibernate.Version logVersion

INFO: HHH000412: Hibernate Core {4.3.11.Final}

Nov 30, 2017 4:09:02 PM org.hibernate.cfg.Environment <clinit>

INFO: HHH000206: hibernate.properties not found

Nov 30, 2017 4:09:02 PM org.hibernate.cfg.Environment buildBytecodeProvider

INFO: HHH000021: Bytecode provider name : javassist

Nov 30, 2017 4:09:02 PM org.hibernate.cfg.Configuration configure

INFO: HHH000043: Configuring from resource: /hibernate.cfg.xml

Nov 30, 2017 4:09:02 PM org.hibernate.cfg.Configuration getConfigurationInputStream

INFO: HHH000040: Configuration resource: /hibernate.cfg.xml

Nov 30, 2017 4:09:02 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!

Nov 30, 2017 4:09:02 PM org.hibernate.cfg.Configuration doConfigure

INFO: HHH000041: Configured SessionFactory: null

Nov 30, 2017 4:09:02 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

WARN: HHH000402: Using Hibernate built-in connection pool (not for production use!)

Nov 30, 2017 4:09:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000401: using driver [oracle.jdbc.driver.OracleDriver] at URL [jdbc:oracle:thin:@localhost:1521:xe]

Nov 30, 2017 4:09:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000046: Connection properties: {user=system, password=\*\*\*\*}

Nov 30, 2017 4:09:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl buildCreator

INFO: HHH000006: Autocommit mode: false

Nov 30, 2017 4:09:03 PM org.hibernate.engine.jdbc.connections.internal.DriverManagerConnectionProviderImpl configure

INFO: HHH000115: Hibernate connection pool size: 20 (min=1)

Nov 30, 2017 4:09:03 PM org.hibernate.dialect.Dialect <init>

INFO: HHH000400: Using dialect: org.hibernate.dialect.Oracle9Dialect

Nov 30, 2017 4:09:03 PM org.hibernate.dialect.Oracle9Dialect <init>

WARN: HHH000063: The Oracle9Dialect dialect has been deprecated; use either Oracle9iDialect or Oracle10gDialect instead

Nov 30, 2017 4:09:03 PM org.hibernate.engine.jdbc.internal.LobCreatorBuilder useContextualLobCreation

INFO: HHH000424: Disabling contextual LOB creation as createClob() method threw error : java.lang.reflect.InvocationTargetException

Nov 30, 2017 4:09:04 PM org.hibernate.engine.transaction.internal.TransactionFactoryInitiator initiateService

INFO: HHH000399: Using default transaction strategy (direct JDBC transactions)

Nov 30, 2017 4:09:04 PM org.hibernate.hql.internal.ast.ASTQueryTranslatorFactory <init>

INFO: HHH000397: Using ASTQueryTranslatorFactory

Nov 30, 2017 4:09:05 PM org.hibernate.tool.hbm2ddl.SchemaUpdate execute

INFO: HHH000228: Running hbm2ddl schema update

Nov 30, 2017 4:09:05 PM org.hibernate.tool.hbm2ddl.SchemaUpdate execute

INFO: HHH000102: Fetching database metadata

Nov 30, 2017 4:09:05 PM org.hibernate.tool.hbm2ddl.SchemaUpdate execute

INFO: HHH000396: Updating schema

Nov 30, 2017 4:09:07 PM org.hibernate.tool.hbm2ddl.TableMetadata <init>

INFO: HHH000261: Table found: SYSTEM.EMP500

Nov 30, 2017 4:09:07 PM org.hibernate.tool.hbm2ddl.TableMetadata <init>

INFO: HHH000037: Columns: [firstname, id, lastname]

Nov 30, 2017 4:09:07 PM org.hibernate.tool.hbm2ddl.TableMetadata <init>

INFO: HHH000108: Foreign keys: []

Nov 30, 2017 4:09:07 PM org.hibernate.tool.hbm2ddl.TableMetadata <init>

INFO: HHH000126: Indexes: [sys\_c004288]

Nov 30, 2017 4:09:07 PM org.hibernate.tool.hbm2ddl.SchemaUpdate execute

INFO: HHH000232: Schema update complete

Nov 30, 2017 4:09:07 PM org.hibernate.engine.jdbc.spi.SqlExceptionHelper logExceptions

WARN: SQL Error: 1, SQLState: 23000

Nov 30, 2017 4:09:07 PM org.hibernate.engine.jdbc.spi.SqlExceptionHelper logExceptions

ERROR: ORA-00001: unique constraint (SYSTEM.SYS\_C004288) violated

Nov 30, 2017 4:09:07 PM org.hibernate.engine.jdbc.batch.internal.AbstractBatchImpl release

INFO: HHH000010: On release of batch it still contained JDBC statements

Exception in thread "main" org.hibernate.exception.ConstraintViolationException: could not execute statement

at org.hibernate.exception.internal.SQLStateConversionDelegate.convert(SQLStateConversionDelegate.java:129)

at org.hibernate.exception.internal.StandardSQLExceptionConverter.convert(StandardSQLExceptionConverter.java:49)

at org.hibernate.engine.jdbc.spi.SqlExceptionHelper.convert(SqlExceptionHelper.java:126)

at org.hibernate.engine.jdbc.spi.SqlExceptionHelper.convert(SqlExceptionHelper.java:112)

at org.hibernate.engine.jdbc.internal.ResultSetReturnImpl.executeUpdate(ResultSetReturnImpl.java:211)

at org.hibernate.engine.jdbc.batch.internal.NonBatchingBatch.addToBatch(NonBatchingBatch.java:62)

at org.hibernate.persister.entity.AbstractEntityPersister.insert(AbstractEntityPersister.java:3124)

at org.hibernate.persister.entity.AbstractEntityPersister.insert(AbstractEntityPersister.java:3581)

at org.hibernate.action.internal.EntityInsertAction.execute(EntityInsertAction.java:104)

at org.hibernate.engine.spi.ActionQueue.executeActions(ActionQueue.java:465)

at org.hibernate.engine.spi.ActionQueue.executeActions(ActionQueue.java:351)

at org.hibernate.event.internal.AbstractFlushingEventListener.performExecutions(AbstractFlushingEventListener.java:350)

at org.hibernate.event.internal.DefaultFlushEventListener.onFlush(DefaultFlushEventListener.java:56)

at org.hibernate.internal.SessionImpl.flush(SessionImpl.java:1258)

at org.hibernate.internal.SessionImpl.managedFlush(SessionImpl.java:425)

at org.hibernate.engine.transaction.internal.jdbc.JdbcTransaction.beforeTransactionCommit(JdbcTransaction.java:101)

at org.hibernate.engine.transaction.spi.AbstractTransactionImpl.commit(AbstractTransactionImpl.java:177)

at com.javatpoint.Test.main(Test.java:26)

Caused by: java.sql.SQLException: ORA-00001: unique constraint (SYSTEM.SYS\_C004288) violated

at oracle.jdbc.driver.DatabaseError.throwSqlException(DatabaseError.java:112)

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:331)

at oracle.jdbc.driver.T4CTTIoer.processError(T4CTTIoer.java:288)

at oracle.jdbc.driver.T4C8Oall.receive(T4C8Oall.java:743)

at oracle.jdbc.driver.T4CPreparedStatement.doOall8(T4CPreparedStatement.java:216)

at oracle.jdbc.driver.T4CPreparedStatement.executeForRows(T4CPreparedStatement.java:955)

at oracle.jdbc.driver.OracleStatement.doExecuteWithTimeout(OracleStatement.java:1169)

at oracle.jdbc.driver.OraclePreparedStatement.executeInternal(OraclePreparedStatement.java:3285)

at oracle.jdbc.driver.OraclePreparedStatement.executeUpdate(OraclePreparedStatement.java:3368)

at org.hibernate.engine.jdbc.internal.ResultSetReturnImpl.executeUpdate(ResultSetReturnImpl.java:208)

... 13 more

Error Bcoz **hbm2ddl.auto** is update. Constraint Error.

So now Change to create ok.

On create with change of values updating existed to changed values and saving in db but when u retrieve 904 Error:

Now, search emp500>>>Now click and it is fetching ok.