

Dear Students,

Although I would recommend you to use **Hibernate 4.3.5.Final** version for the duration of the course, as that was the version used by me while designing the course, you might still want to use the **Hibernate 5** version and you're welcome to do that, but you're going to have to make the following two changes to the **downloaded source code** (**each lab exercise comes with its downloadable source code**) to get your code working properly, otherwise you might get the strange **Exception in thread "main" org.hibernate.MappingException: Unknown entity: entity.Message** exception:

1. Use the **GenerationType.IDENTITY**<sup>1</sup> strategy in your entities for auto id generation. As shown in the following **Message** entity, for example:

```
package entity;

import javax.persistence.Column;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.GenerationType;
import javax.persistence.Id;
import javax.persistence.Table;

@Entity
@Table(name="message")
public class Message {

    @Id
    @GeneratedValue(strategy=GenerationType.IDENTITY)
    @Column(name="ID")
    private Long id;

    @Column(name="TEXT")
    private String text;

    public Message() {}
    public Message(String text) { this.text = text; }

    @Override
    public String toString() { return "Message [id=" + id + ", text=" + text + "];" }
}
```

2. Build **StandardServiceRegistry** and **Metadata** to build the **SessionFactory** from them in **HibernateUtil** class, as shown below:

```
package util;

import org.hibernate.SessionFactory;
import org.hibernate.boot.Metadata;
import org.hibernate.boot.MetadataSources;
import org.hibernate.boot.registry.StandardServiceRegistry;
import org.hibernate.boot.registry.StandardServiceRegistryBuilder;

public class HibernateUtil {
    private static final SessionFactory sessionFactory = buildSessionFactory();

    private static SessionFactory buildSessionFactory() {
        try {
            // Create the SessionFactory from hibernate.cfg.xml
            StandardServiceRegistry serviceRegistry = new StandardServiceRegistryBuilder().configure("hibemate.cfg.xml").build();
            Metadata metadata = new MetadataSources(serviceRegistry).getMetadataBuilder().build();
            return metadata.getSessionFactoryBuilder().build();

        }
        catch (Throwable ex) {
            // Make sure you log the exception, as it might be swallowed
            System.err.println("Initial SessionFactory creation failed." + ex);
            throw new ExceptionInInitializerError(ex);
        }
    }

    public static SessionFactory getSessionFactory() {
        return sessionFactory;
    }
}
```

So if you're going to use **Hibernate 4.3.5.Final** version, you **don't** have to make the above (1<sup>st</sup> and 2<sup>nd</sup>) changes to the downloaded source code.  
Once you complete the course, you could always test your code using **Hibernate 5** version and get back to me in case you happen to face any issues<sup>2</sup>.

Best,  
Deshraj

<sup>1</sup>**GenerationType.IDENTITY** was discussed at <https://www.udemy.com/hibernate-and-jpa-fundamentals/learn/v4/questions/937412> in the course  
<sup>2</sup>All the required jar files for the **Hibernate 5.0.4** version for the entire course could be downloaded from **Lecture10**