

Lecture 20: Fetching Data Using HQL

Theory

HQL (Hibernate Query Language) provides a powerful way to retrieve data from databases using object-orientated syntax. Unlike SQL, HQL operates on entity objects rather than database tables.

Basic HQL Implementation

Configuration Setup:

```
SessionFactory sf = new Configuration()
    .addAnnotatedClass(com.telusko.Laptop.class)
    .configure()
    .buildSessionFactory();
```

Simple Entity Retrieval:

```
Session session = sf.openSession();

// Direct entity retrieval using get() method
Laptop l1 = session.get(Laptop.class, 3);
System.out.println(l1);

session.close();
sf.close();
```

HQL Query Execution:

```
Session session = sf.openSession();

// HQL: select * from laptop where ram=32 -> SQL equivalent
// HQL: from Laptop where ram=32
Query query = session.createQuery("from Laptop");
List<Laptop> laptops = query.getResultList();

System.out.println(laptops);

session.close();
```

Key Concepts

- **Entity-Based Queries:** Use entity names instead of table names
- **Object-Oriented:** Returns objects, not primitive data
- **Type Safety:** Compile-time checking for entity properties

Important Deprecation Notice

The `createQuery()` method has been **deprecated in Hibernate 6.6.3** but not removed. Consider using newer alternatives for future compatibility.