

# Praktikum 5

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## 1 Aktivieren SQL Logging

In persistence.xml file:

```
<property name="eclipselink.logging.level" value="FINE"/>
<property name="eclipselink.logging.level.sql" value="FINE"/>
<property name="eclipselink.logging.parameters" value="true"/>
```

## 2 JPQL Queries und SQL Ausführungsplan

### 2.1 Query: Game Details mit Player Name

JPQL Query

```
String query = "SELECT g.gameId, g.startTime, a "
    + "FROM Game g JOIN g.answerList a "
    + "WHERE g.player.name = :playerName "
    + "ORDER BY g.gameId";
```

Erfasste SQL-Anweisung

```
SELECT g.GAME_ID, g.START_TIME, a.*
FROM GAME g
JOIN ANSWER a ON g.GAME_ID = a.GAME_ID
WHERE g.PLAYER_NAME = 'minh'
ORDER BY g.GAME_ID;
```

### 2.2 Query: Player und Game Count

JPQL Query

```
String jpql = "SELECT p.name, COUNT(g) as amount "
    + "FROM Player p JOIN Game g "
    + "WHERE p.playerId = g.player.playerId "
    + "GROUP BY p.name "
    + "ORDER BY amount DESC";
```

### SQL Anweisungen

```
SELECT p.NAME, COUNT(g.GAME_ID) as amount
FROM PLAYER p
JOIN GAME g ON p.PLAYER_ID = g.PLAYER_ID
GROUP BY p.NAME
ORDER BY amount DESC;
```

## 2.3 Query: Category Popularity

### JPQL Query

```
String jpql = "SELECT c.name, COUNT(q) as amount "
    + "FROM Question q JOIN q.category c, Game g JOIN g.answerList ga "
    + "WHERE q.questionId = ga.questionId "
    + "GROUP BY c.name "
    + "ORDER BY amount DESC";
```

### SQL Anweisungen

```
SELECT c.NAME, COUNT(q.QUESTION_ID) as amount
FROM CATEGORY c
JOIN QUESTION q ON c.CATEGORY_ID = q.CATEGORY_ID
JOIN GAME g ON q.QUESTION_ID = ga.QUESTION_ID
JOIN GAMEANSWER ga ON g.GAME_ID = ga.GAME_ID
GROUP BY c.NAME
ORDER BY amount DESC;
```