

## Difference Between `getCurrentSession()` and `openSession()`

Hibernate ke do important methods — `getCurrentSession()` aur `openSession()` — ke beech ka clear difference diya gaya hai.

| Point                  | <code>getCurrentSession()</code>   | <code>openSession()</code>                                  |
|------------------------|--|---|
| Meaning                | Current transaction ke sath bound session deta hai                                       | Har baar ek naya independent session banata hai             |
| Session creation       | Agar transaction chal rahi hai to wahi session use karta hai; nahi hai to error deta hai | Hamesha naya session banata hai                             |
| Transaction dependency | Hamesha transaction ke andar hi kaam karta hai   | Transaction ke bina bhi kaam karta hai                      |
| Session close          | Hibernate automatically close karta hai jab transaction commit hoti hai                  | Tumhe manually <code>session.close()</code> karna padta hai |
| Use case               | Jab Spring ke <code>@Transactional</code> annotation use kar rahe ho                     | Jab manually session handle kar rahe ho (without Spring)    |
| Performance            | Efficient — kyunki ek hi session use hota hai transaction ke andar                       | Har baar naya session banta hai, thoda overhead hota hai    |
| Error possibility      | Agar transaction na ho to <code>HibernateException</code> deta hai                       | Koi error nahi deta, bas tumhe close karna padta hai        |
| Thread binding         | Session current thread se bind hota hai  | Session kisi thread se bind nahi hota                       |
| Example                | <code>sessionFactory.getCurrentSession()</code>  | <code>sessionFactory.openSession()</code>                   |

### Simple Summary

`getCurrentSession()` — 'Transaction ke andar hi kaam karta hai, auto close hota hai.'

`openSession()` — 'Har baar naya session deta hai, manually close karna padta hai.'

### Suggestion:

- Agar tum Spring + Hibernate use kar rahe ho (jisme `@Transactional` laga hai), to `getCurrentSession()` best hai.
- Agar tum pure Hibernate use kar rahe ho bina Spring ke, to `openSession()` use karo.