

LAZY





```
@Test
public void test_lazy() {
    Persona joan = servei.carrega(1).get();
    ...
}
```



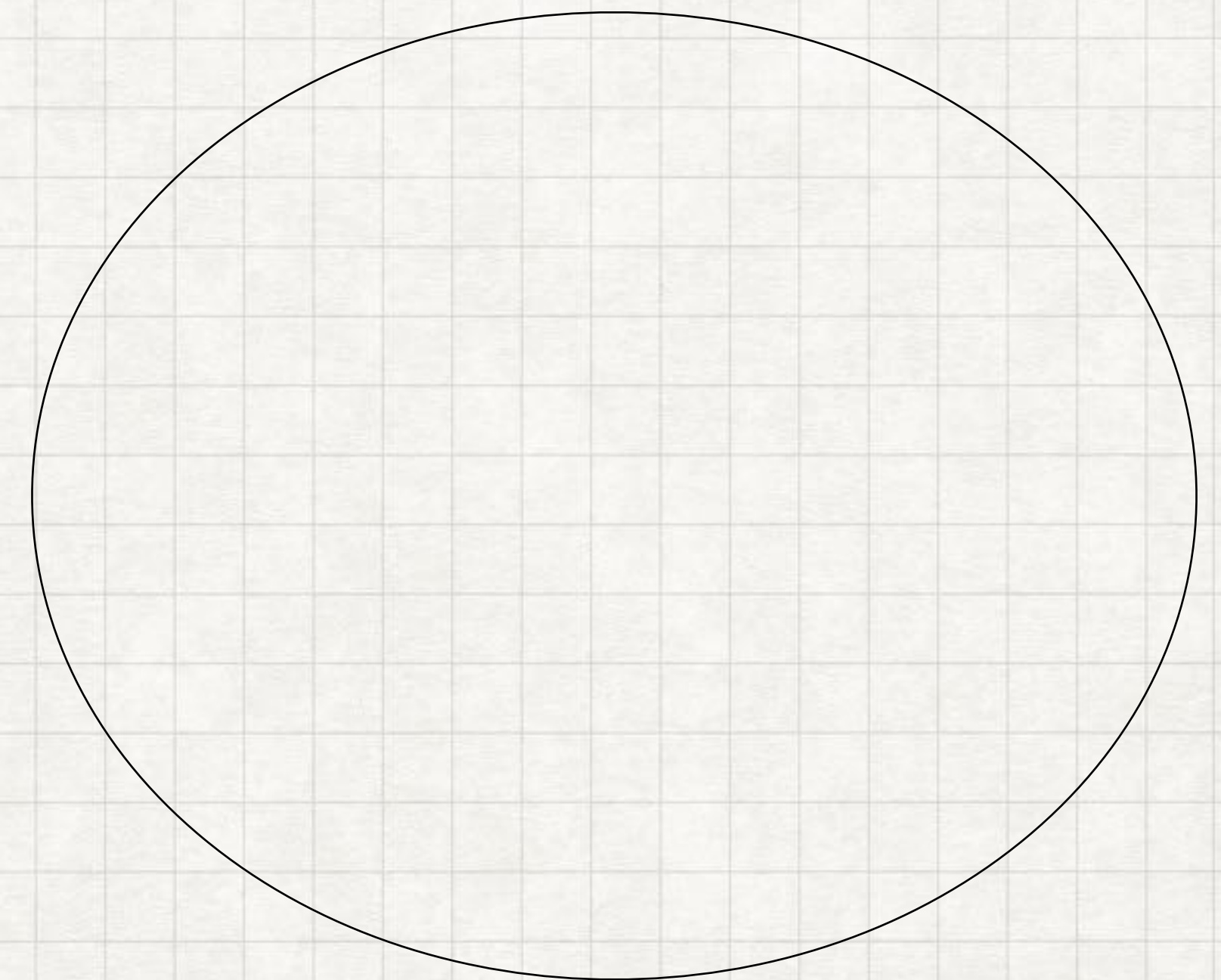


```
@Service
@Transactional
public class PersonaService {

    @Autowired
    private PersonaRepository repositori;

    public Optional<Persona> carrega(long codi) {
        return repositori.findById(codi);
    }
}
```

*transaction*



*Persistence context*



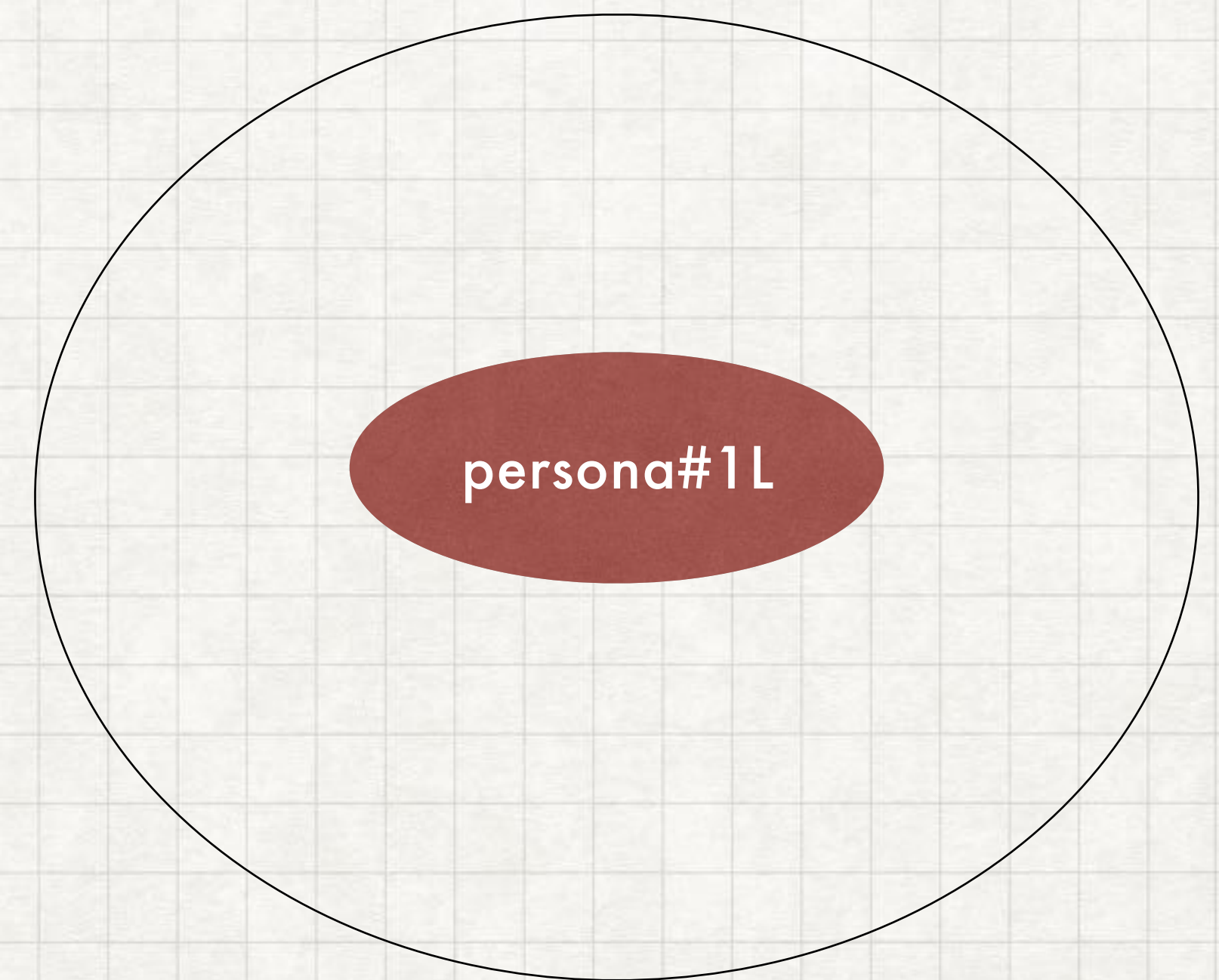


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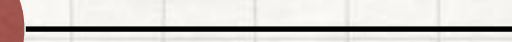
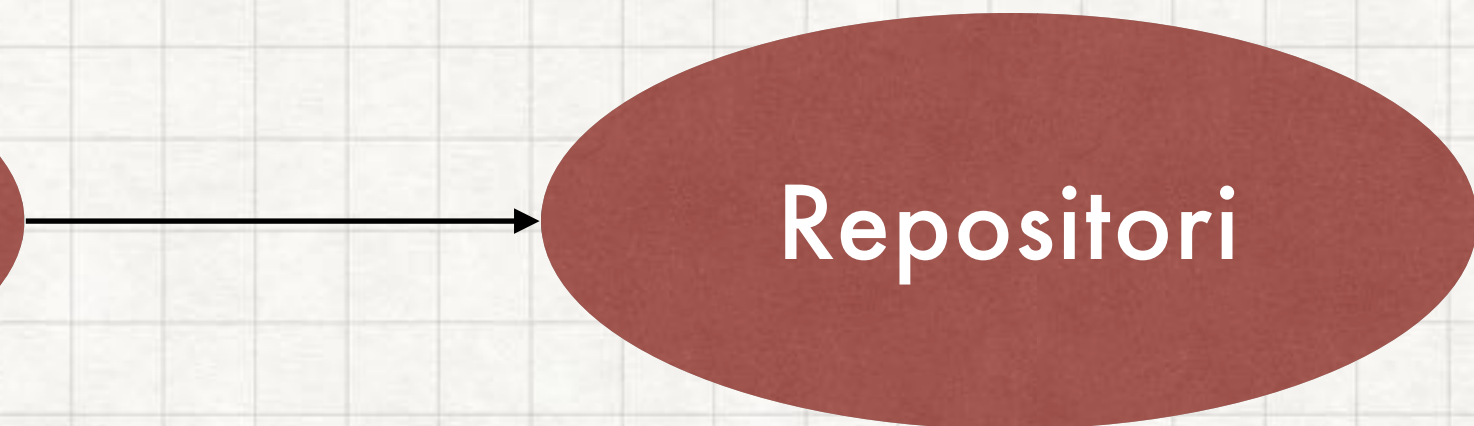
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*transaction*



*Persistence context*



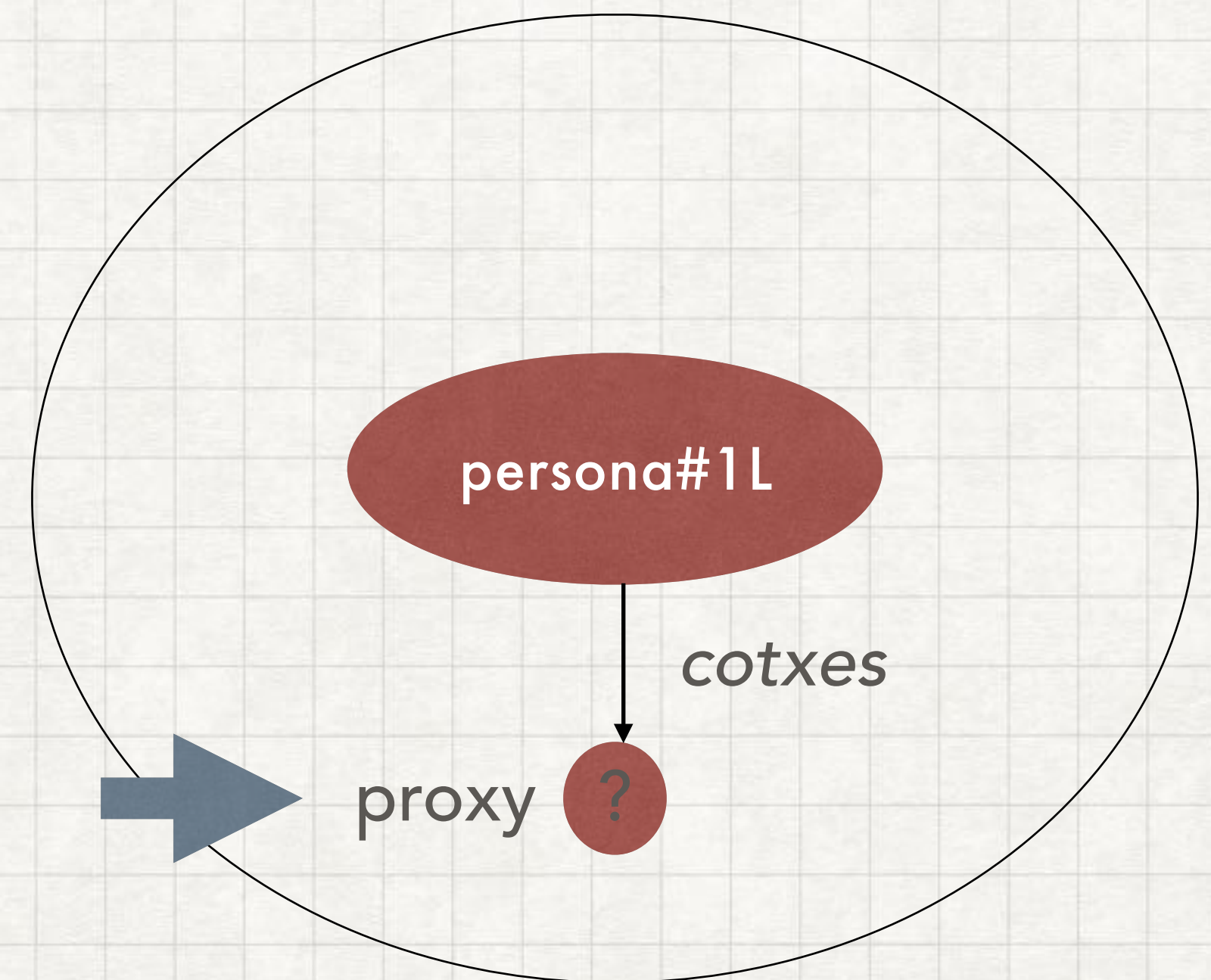


*transaction*

```
@Entity
@Table(name="T_PERSONES")
public class Persona {

    ...

    @OneToMany(mappedBy="propietari")
    private Set<Cotxe> cotxes = new HashSet<>();
    ...
}
```



*Persistence context*



“

Proxy: substitut o representat de  
l'objecte real.

En el cas de JPA, és un objecte "lleuger"  
que permet retrassar l'accés a la BBDD,  
mentre el persistence context sigui actiu.

— JPA

”





~~transaction~~

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```



cotxes

proxy



~~Persistence context~~



Test

```
@Test
public void test_lazy() {
    ...
    Assert.assertEquals(1, joan.getCotxes().size());
}
```

~~transaction~~

persona#1L

cotxes

proxy

org.hibernate.LazyInitializationException ...

~~Persistence context~~



*Lazy initialization: tècnica en diferir al màxim la càrrega d'un objecte*

org.hibernate.LazyInitializationException: failed to lazily initialize a collection of role:  
org.formacio.domain.Persona.cotxes, could not initialize proxy - no Session

Propietat que ha fallat a carregar

Terminologia Hibernate: Session == Persistence Context de JPA