CS544 EA

Hibernate

EntityManager: Retrieving Entity Objects

em.find() and em.getReference()

- .find() and .getReference() are very similar
  - Both **retrieve an entity by its primary key** value
  - SELECT * FROM … WHERE id = …
  - If an entity is already cached the DB is not hit
  - What's the difference?

```
em.getTransaction().begin();
Person p1 = em.find(Person.class, 1L);
```

```
em.getTransaction().begin();
Person p1 = em.getReference(Person.class,1L);
```

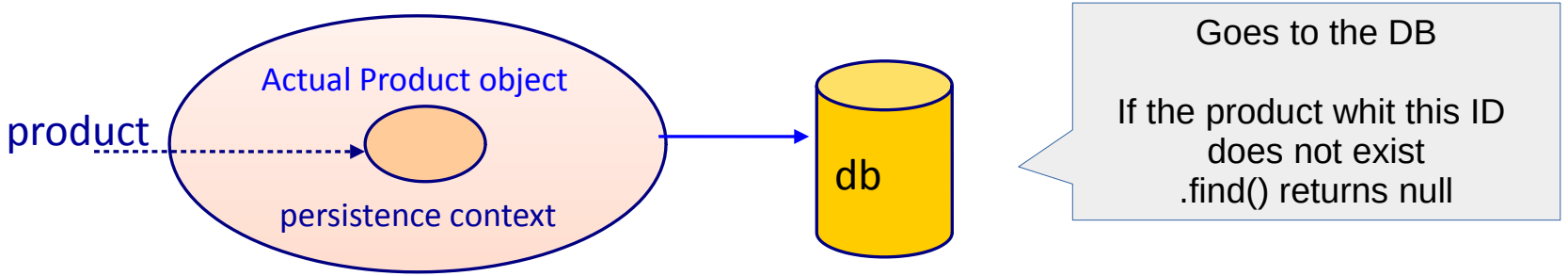
Difference

- .find() retrieves the object **right away**
  - Creating a DB hit right away

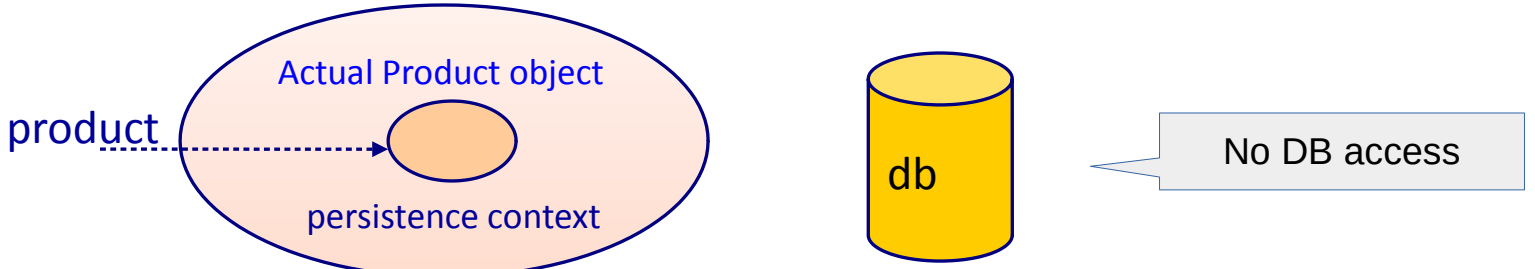
- .getReference() **provides a proxy**
  - Does not load the object’s values until first needed

.find()

Product product = em.find(Product.class, 1L);



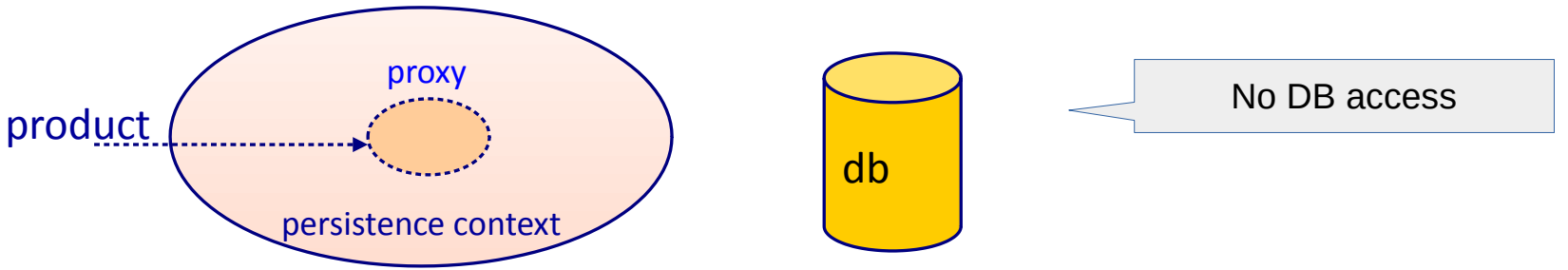
product.getPrice()



Model by Prof. Rene de Jong

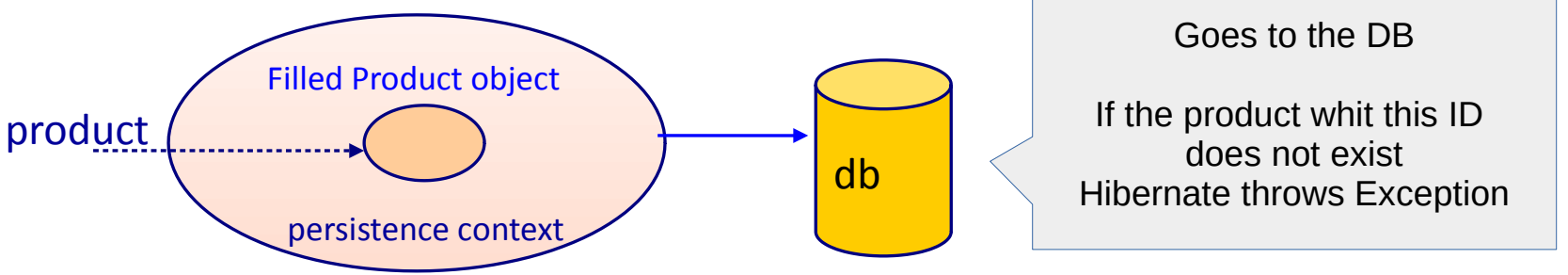
.getReference()

Product product = em.getReference(Product.class, 1L);



product.getPrice()

Model by Prof. Rene de Jong



When to use .getReference()

.getReference() is especially useful **combined** with **.remove()**

```
Person p1 = em.find(Person.class, 1L);
em.remove(p1);
```

- 2 DB hits
  - One for .find()
  - One for .remove()

```
Person p1 = em.getReference(Person.class, 1L);
em.remove(p1);
```

- 1 DB hit
  - 0 for .getReference()
  - 1 for .remove()