# 1. Simple Association (one-to-one)

### Definition:
Our first relationship is a simple association. In this relationship, one first-rank class holds a reference to a single instance of another first-rank class and they are related by a common PK.

### Scenario:
We have two first-rank classes, Foo and Bar which are related to each other as follows:

```
Bar Foo.getBar() // returns corresponding Bar instance
```

### Hibernate Mapping:
In Hibernate, this could be mapped as follows:

```
<class name="Foo" table="foo"
    ...
    <one-to-one name="bar" class="Bar"/>
</class>
```

### Table Schema:

**Foo**
id

**Bar**
id

No extra columns are needed to support this relationship. Instead both Foo and Bar must share the same PK values to be part of a one-to-one assocation.

If you create suitable instances of Foo and Bar with a shared PK, then retrieving a Foo will automatically retrieve the corresponding Bar.

### Bidirectionality:
This relationship can be bidrectional, with Bar having getFoo(), by simply adding a similar mapping and Foo property to Bar.