**Entities** are things that have attributes and relationships.

Characteristics of the object that has become an entity:

* **Persistability** – the state of the object can be accessed at a later time, even after the end of the process that has created it. (the application has control over when entity becomes persistent)
* **Identity** – every entity should have a key that uniquely identifies it
* **Transactionality** – changes made to the database either succeed of fail automcatically.
* **Granularity** – entitites are fine-grained objects that thave a set of aggregated state that is normally stored in a single place (row). Should be lightweight.

**Entity metadata –** description that enables the persistence layer to recognize, interpret and properly manage the entity. Entity metadata may be specified in two ways: annotation and xml.

**Annotations**

**javax.persistence.\* 🡨** Base package for all annotations

**XML**

JPA XML config has mostly been patterned after annotations.

**Configuration by Exception**

Configuration be exception means that the persistence engine defines defaults that apply to the majority of the applications and that users need to supply values only when they want to override the default value.