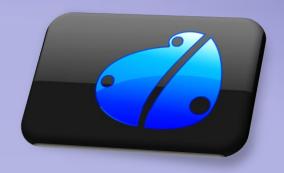
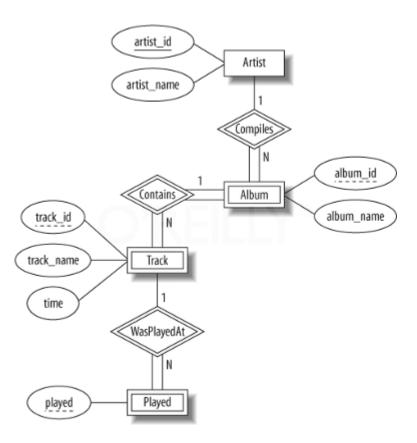
Tema 2B-3



E-R y las notaciones

- Algunas consideraciones sobre notación
  - Los esquemas E-R más comunes NO son los que hemos presentado aquí.
  - Casi cada entorno software tiene el suyo, más o menos cercano a lo que podemos entender como un estándar.
    - Solo pretendemos mostrar algunos, no estudiarlos
  - Los conceptos representables, independientemente de la notación, son los mismos, o casi.

de Chen



http://www.oreilly.com/catalog/learnmysql/figs/I\_2\_tt60.png

- Crow's foot
  - oracle

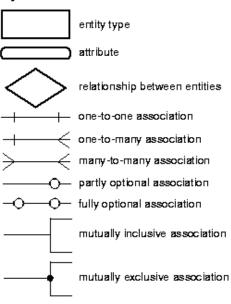
#### Definitions:

entity something about which data is collected, stored, and maintained attribute a characteristic of an entity relationship an association between entities

entity type a class of entities that have the same set of attributes

record an ordered set of attribute values that describe an instance of an entity type

## Symbols:



### Examples:

One A is associated with one B:



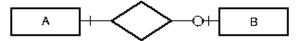
One A is associated with one or more B's:



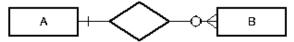
One or more A's are associated with one or more B's:



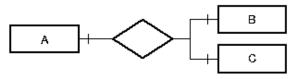
One A is associated with zero or one B:



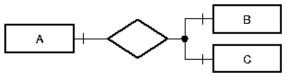
One A is associated with zero or more B's:



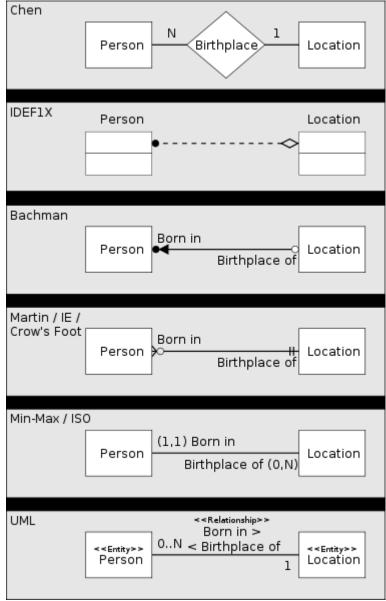
One A is associated with one B and one C:



One A is associated with one B or one C (but not both):







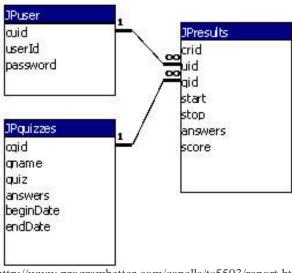


- ¿Esto es E-R?
  - Lo cierto es que muchos programas utilizan o permiten el uso de esta forma (Access, MySQL Workbench...)

Ciertas limitaciones casi obligadas por el

modelo relacional

¿relaciones N:M?



http://www.programbetter.com/capella/ts5503/report.html

