

Value Business Rules in ORM

(Chapter 6)

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Some diagrams in this lecture are based on [1]

Keywords: Value constraints, Cardinality, multiplicity, Rules, Business Rules, Business logic derivation rules, integrity constraints

Conceptual Schema Design Steps

1. From examples to elementary facts



2. Draw fact types and apply population check



3. Combine entity types



4. Add uniqueness constraints



5. Add mandatory constraints



6. Add subtype relations and other constraints



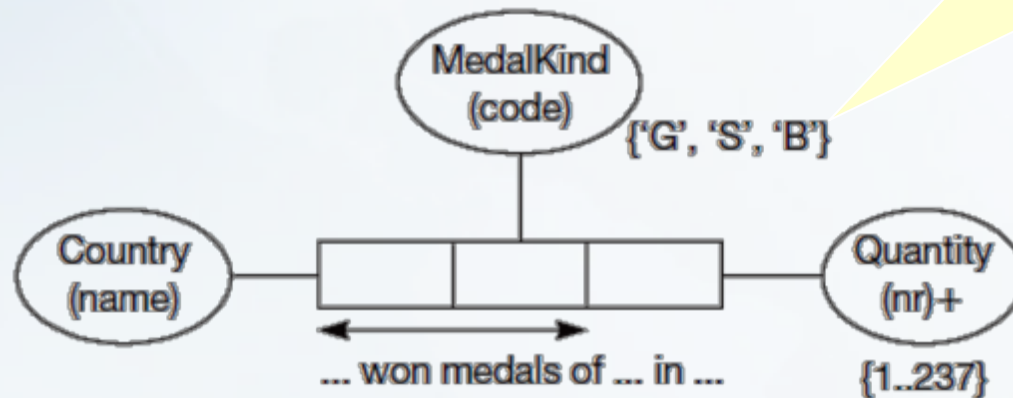
7. Final checks, & schema engineering issues



What is a Value Constraint?

Called **Value Constraint**

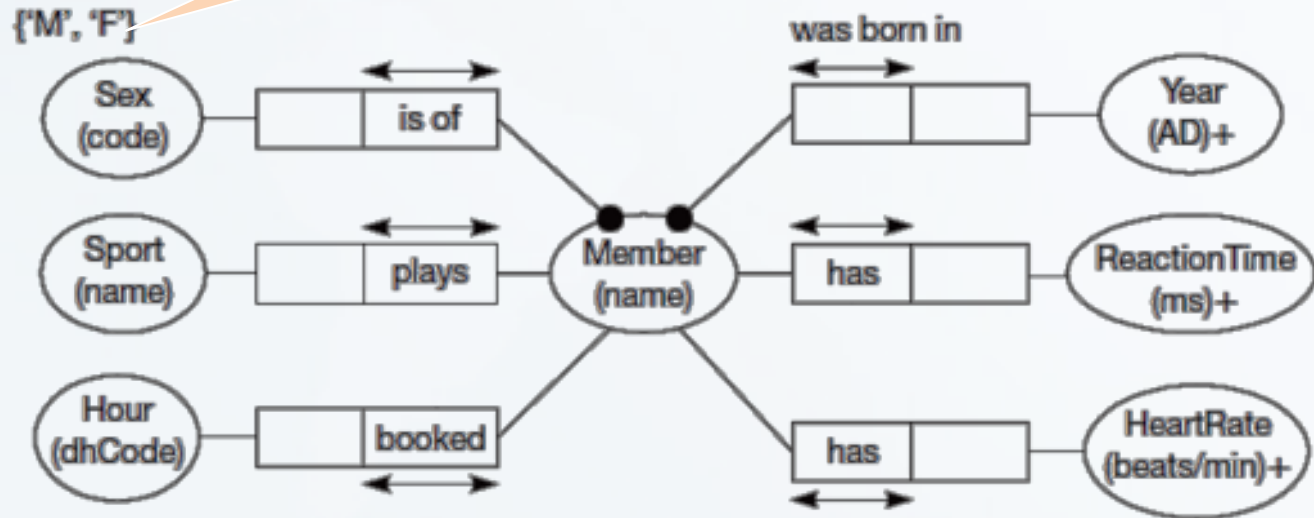
A set of values, from which the value of the MedalKind is limited to



| | | |
|-----------|-----|-----|
| Argentina | S | 1 |
| Argentina | B | 1 |
| Australia | G | 3 |
| Australia | S | 6 |
| Australia | B | 5 |
| ... | ... | ... |

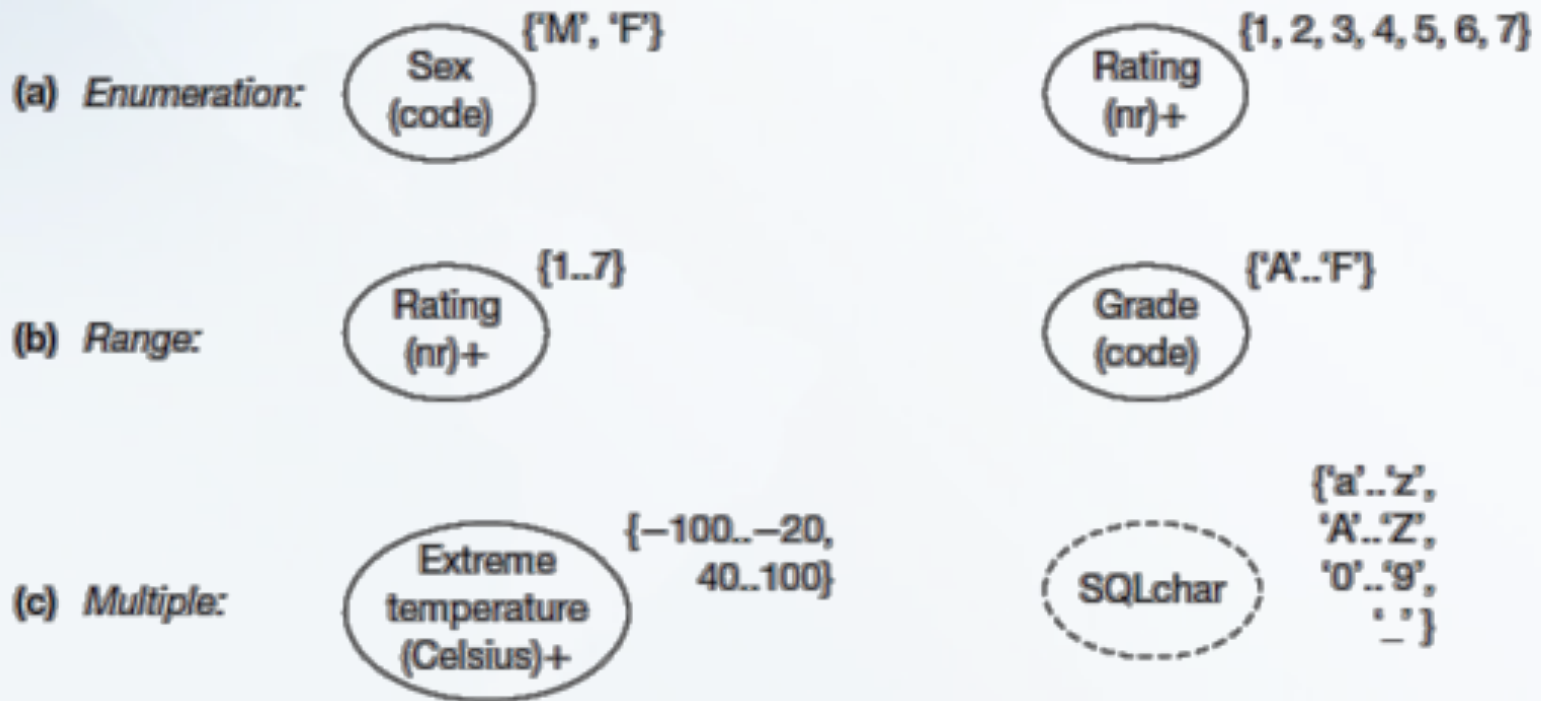
Example of a Value Constraint

The value of sex should be one of {'M', 'F'}



Types of Value Constraint

Value constraints may list the possible values of a value type.



→ Who can give more examples?

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