

Reviewed Group number: 214

ER model		
Review criteria	Error Examples	Reviewer comment
Completeness	<ul style="list-style-type: none"> Missing entity sets Missing attributes Missing relationship sets 	Missing: - Level attribute (StarSkaters)
Correct modeling of entity and relationship sets	<ul style="list-style-type: none"> Forcing weak entity sets. This will be characterized by the fact that the weak entity set has an artificial partial key that has no semantics. Modeling the support relationship as a ternary one between StarSkater, Event and trainer. This would allow skater to have more than one supporting trainer for an event. 	All good Correct use of weak entity, aggregate, and relationship set between StarSkater, Event , and trainer
Key attributes	<ul style="list-style-type: none"> Some entity sets don't have key attributes. Having child entity sets in a ISA hierarchy with keys. Having weak entity sets that have no or a full key, etc. Having foreign keys of other entity sets Having keys on relationship set 	All good
Relationship Constraints	<ul style="list-style-type: none"> Missing key constraints on important places (like Starskaters coaches one group and group is coached by one StarSkaters.) Missing participation constraints where needed – (i.e., each Canskater is assigned to a group.) 	Extra bolded arrow: - from aggregate set to Trainer
Redundancy Free	<ul style="list-style-type: none"> Storing duplicate information without justification 	extra SGroup Entity linked to StarSkaters
ER notation	<ul style="list-style-type: none"> Symbols or constructs that do not exist Note that using “Double lines” instead of a thick line for participation constraints, weak entity sets, etc., is fine. 	All Good
Textual information	<ul style="list-style-type: none"> Constraints, assumption and/or notes are not well listed 	
Others		lacks clarity in the ER diag

Most constraints correctly listed. Missing:

- At most 10 skaters per event
- Rank within event disjoint and equal to nb participants

Translation to Relational Schema		
Review criteria	Error Examples	Reviewer comment

Type indicated (ex: int, varchar)

Some missing attributes:

- group id in Can/Star Skaters

*Following his own ER diag

Extra relationships:

- accompanied

- apart of

- belongs to 1

- belongs to 2

- coach

Completeness	<ul style="list-style-type: none">• Missing relations• Missing attributes	
Key and foreign key constraints	<ul style="list-style-type: none">• Incorrect primary keys• Missing foreign key references• Referencing the wrong relation• For example foreign key in Group relation refers to Skaters instead of StarSkaters, or competition name in the Compete relation refers to Competition instead of Events.	<ul style="list-style-type: none">- Mention of artificial keys (cgroup, sgroup, trainer) + no FK ref from groups- "trained" and "participates" relationships missing FK ref- Group id not mentioned as unique
Relationship Constraints	<ul style="list-style-type: none">• Key and participation constraints are not correctly translated:<ul style="list-style-type: none">○ Key constraint with participation constraint: Relationship set is merged with the entity set○ Key constraints without participation constraints, relationship set could be merged into the entity set with the key constraint or keep them separated. It should be kept separated if there are many entities that do not have a relationship. Otherwise, it should be merged.	All good
Textual information	<ul style="list-style-type: none">• Constraints, assumption and/or notes are not well listed	
Others		

Mentioned ISA hierarchy is covering/non-overlapping in ER diagram, but no consideration/discussion of skipping the superclass (skaters) and only have the subclasses (CanSkaters and StarSkaters) with all attributes of Skaters