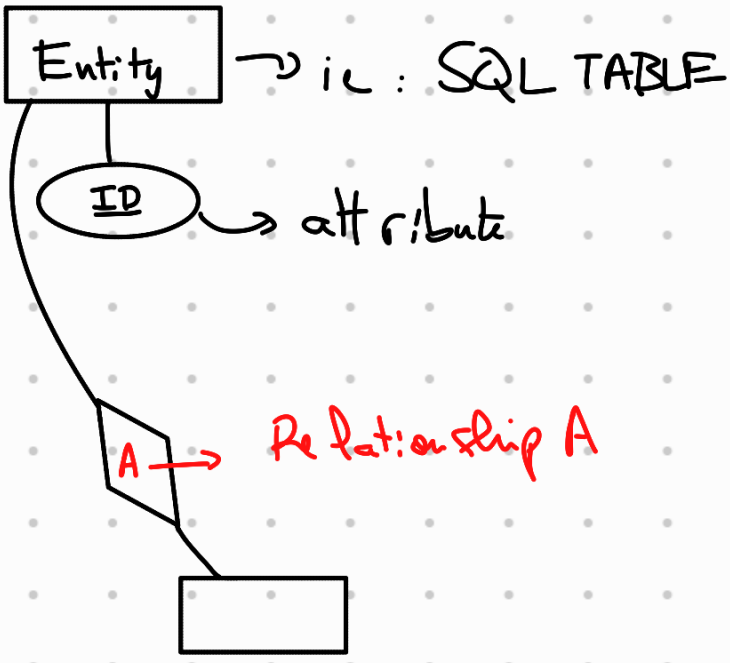
→ Conceptual Design Cheat Sheet:



This is called an E R Model : Entity - Relationship model.

→ Key constrains

→ Set of rules that a key needs to follow

this is a many to many relationship

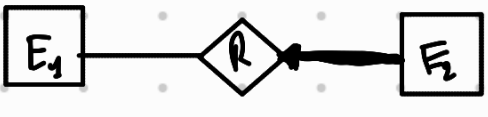
(partial participation)

E_2 can participate in atmost 1 relationship with E_1

(partial participation)

E_2 can have at least one relationship with E_1

(total participation)



E_2 has exactly one relation ship with E_1

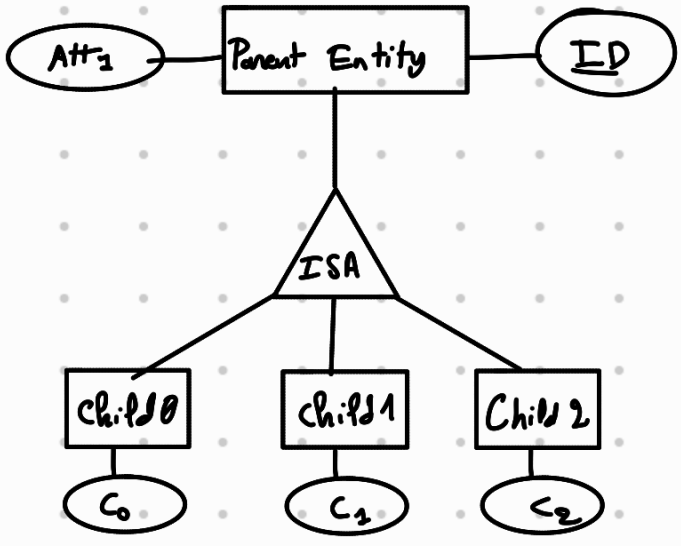
(total participation)

→ Weak entity :

Why is E_2 called a weak entity?

* Because it cannot be identified by its own attributes.
* it has to be in a total participation
* it lacks a primary key it has a partial key.
* it has a composite key $CK = \underline{PK}_{owner} + \underline{\underline{PK}}_{weak}$

→ ISA Hierarcy.
(inheritance of attributes)



* ISA Constrains

→ overlap constrains: allows / disallows two subclasses to contain the same entity

→ Covering constrain: Determines if a subclass inherits all parent's attributes.

→ Ternary relationships: R.S. between three Entities.

→ Aggregation:

used to aggregate a set of entities and relations.