IDEF1X

"Cheat Sheet"

IDEF1X Components

Entities

Independant
Key-Attributes
Non-Key-Attrib

Dependant
Key-Attributes
Non-Key-Attrib

Category Discriminators

Complete   In-Complete

Relationships

	Identifying	Non-Identifying
Many-to-Many	●──●	
Zero, One or Many	──●	----●
Zero or One	Z ──●	Z ----●
One or More	P ──●	P ----●
One to Exactly n	n ──●	n ----●
Optional Relationship	◇----●	
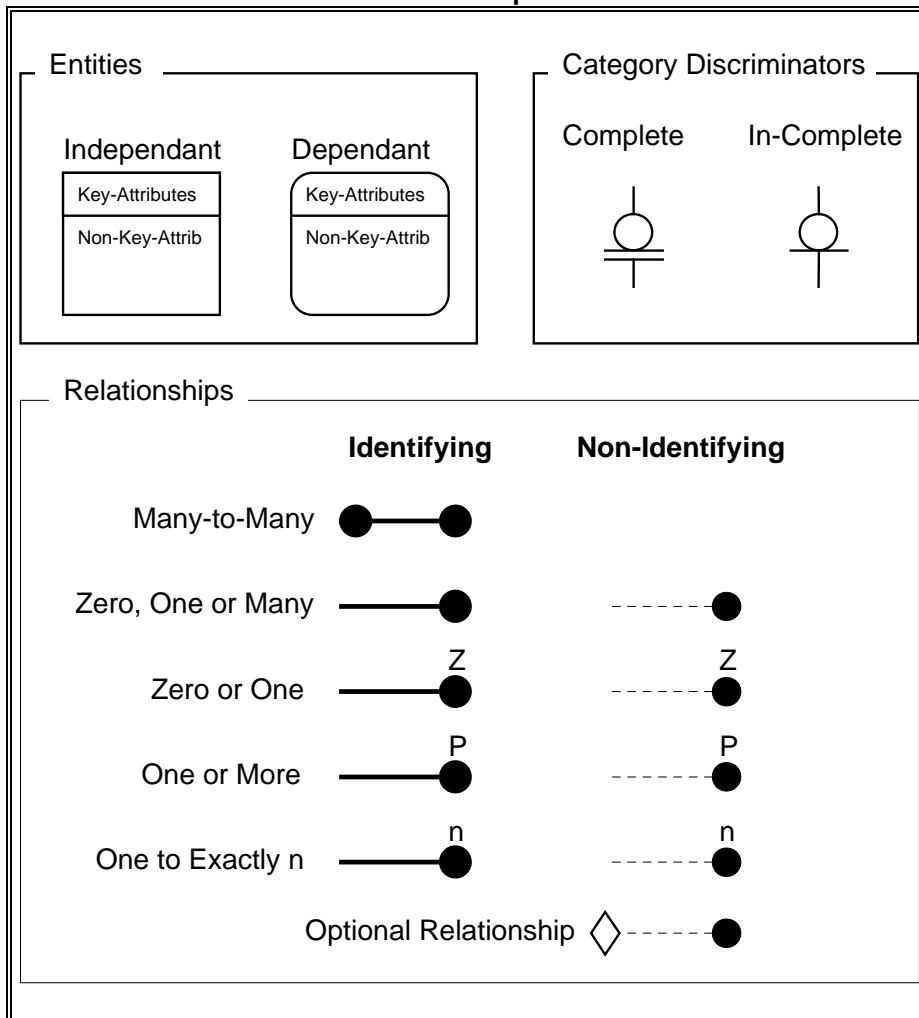
Entity: any person, place, thing, event or concept about which information is kept.

Attributes: Information about a certain property of an entity.

Key-Attributes: Information which is used to uniquely identify an instance of an entity.

Non-Key-Attributes: Other information about an entity.

Independent Entities: An entity which does not depend upon any other entity in a model for its identification.

Dependent Entities: Depend both for their existence and their identification upon other entities in the model.

Category Entity: A special type of entity which is the "*subtype*" of a parent entity.

Category Discriminators: Are attributes which indicate how we can tell one *Category Entity* from another.

Complete SubCategory: Indicate that the current subcategory entities form the complete range of values for the Category Discriminator.

In-Complete SubCategory: Indicate that the current subcategory entities are only a partial list of the values the Category Discriminator can have.

Relationships: Represent connections, links, or associations between entities.

Parent Entities: Entities that originate (side without the dot) a relationship.

Child Entities: Entities that are the target of the relationship (Side with the dot).

Cardinality: The number of instances of a child entity that are described as participating in the relationship.

Identifying Relationship: The keys from the parent form part of the key for the child entity.

Non-Identifying Relationship: The keys of the parent entity become Foreign Keys in the child entity.

IDEF1X Example Diagram