

ERD Entity Types

class: information modelling

Entities

course: Information Modelling

WHAT IS AN...

ENTITY

*An **entity** is a “thing” which can be distinctly identified.*

Peter Pin-Shan Chen. 1976.

WHAT IS AN...

ENTITY



An **entity** is a “thing” which can be distinctly identified.

A specific person, company, or event is an example of an entity.

Peter Pin-Shan Chen. 1976.

FINDING...

ENTITIES

Rob, Ann and Astrid are members of VGC. Rob wants to borrow Mastermind and Stratego. Astrid is interested in Mastermind and Monopoly.

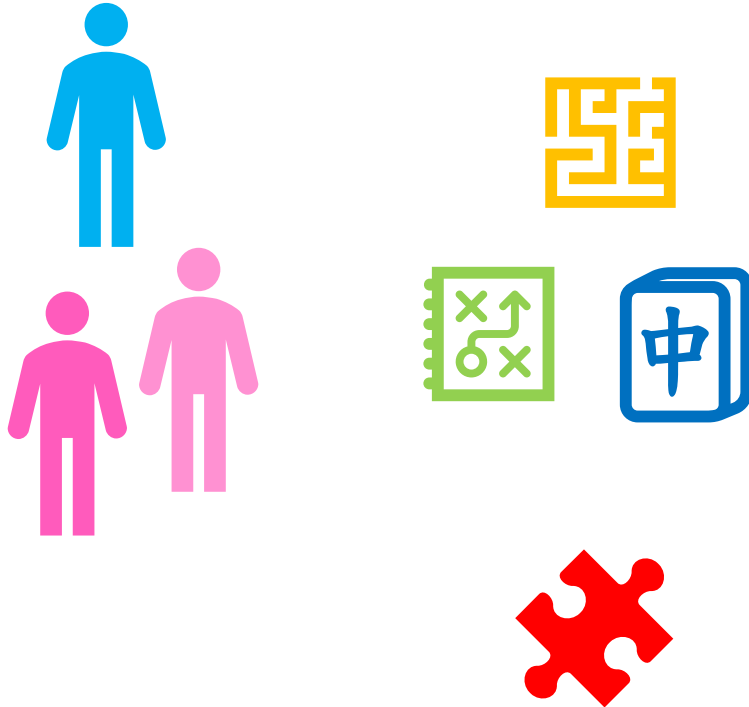


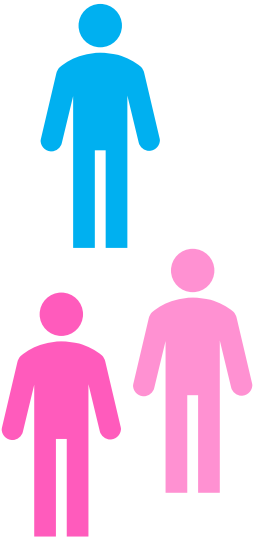
FINDING...

ENTITIES

Rob, Ann and Astrid are members of VGC. Rob wants to borrow Mastermind and Stratego. Astrid is interested in Mastermind and Monopoly. Ann wants the Cute Cats Puzzle.

An **entity** is always represented as a **noun** in a spoken language





FINDING...

ENTITIES

Rob, Ann and Astrid are members of VGC. Rob wants to borrow Mastermind and Stratego. Astrid is interested in Mastermind and Monopoly. Ann wants the Cute Cats Puzzle.

A noun is a word that names a person, place, thing, or animal in a sentence.

An **entity** is always represented as a **noun** in a spoken language

WHAT IS AN...

ENTITY SET



It is a **set (or collection) of entities** or **instances of an entity type** which share the similar properties or attributes.

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ENTITY SET

It is a **set (or collection) of entities** or **instances of an entity type** which share the similar properties or attributes.

For example, if we know an entity is in the entity set MEMBER, then we know that it has the properties common to the other entities in the entity set MEMBER.

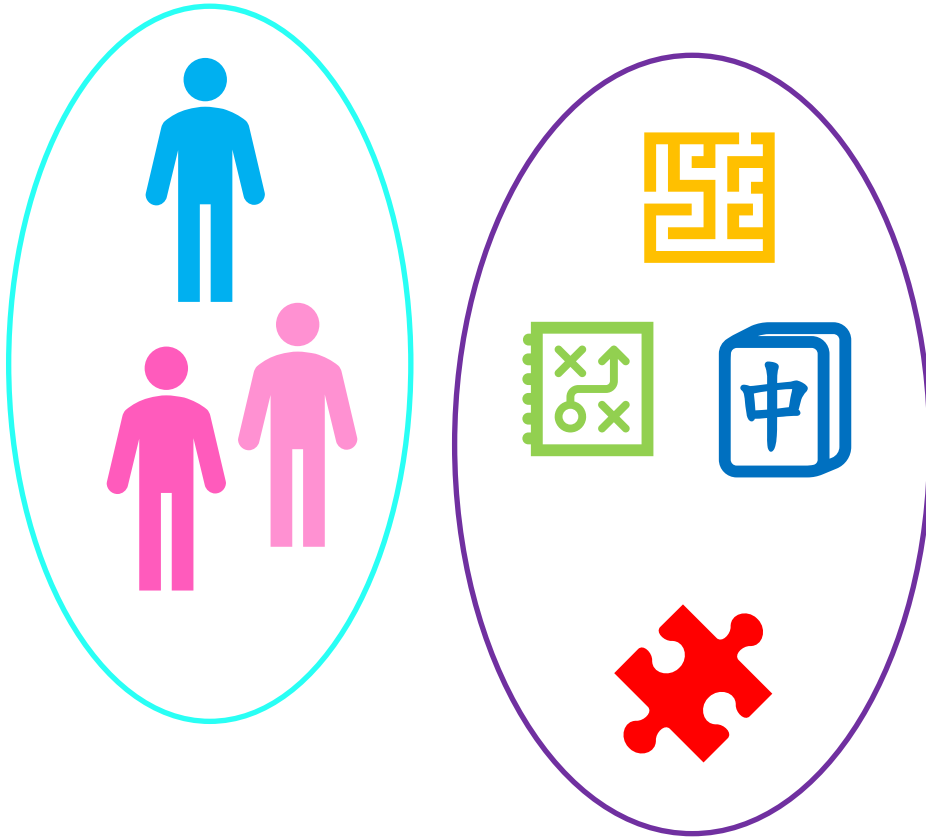
Peter Pin-Shan Chen. 1976.

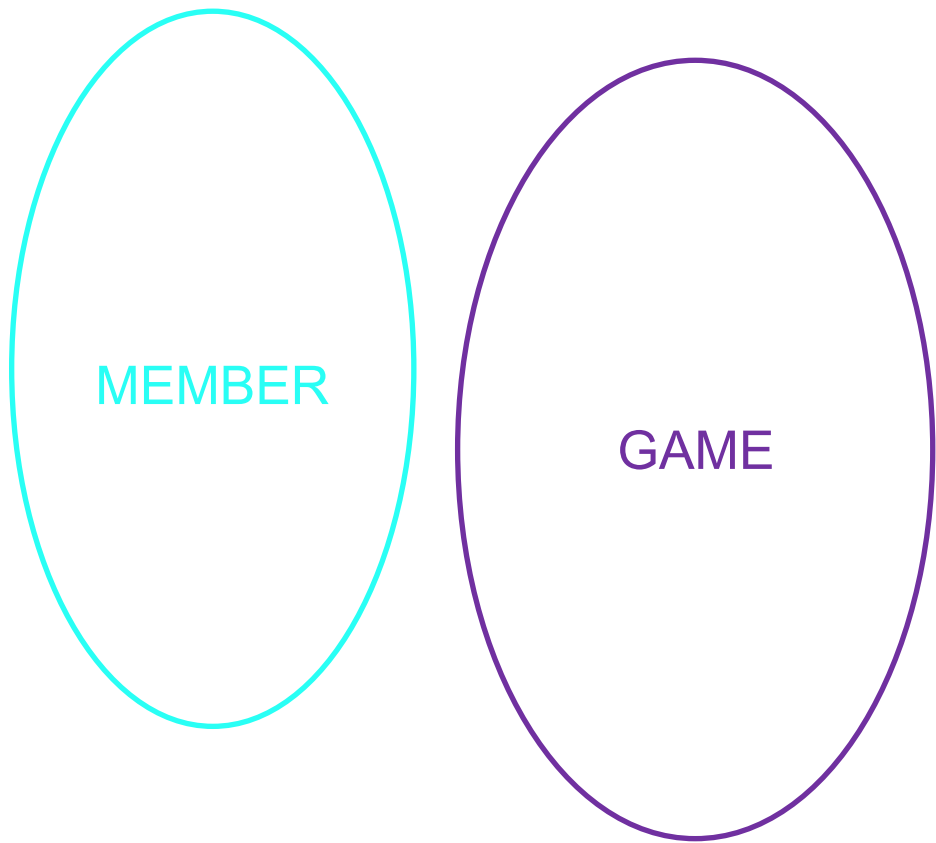
FINDING...

ENTITY SETS

Rob, Ann and Astrid are members of VGC. Rob wants to borrow Mastermind and Stratego. Astrid is interested in Mastermind and Monopoly. Ann wants the Cute Cats Puzzle.

Entity sets are related sets in set theory. In set theory, a set is written as an ellipse



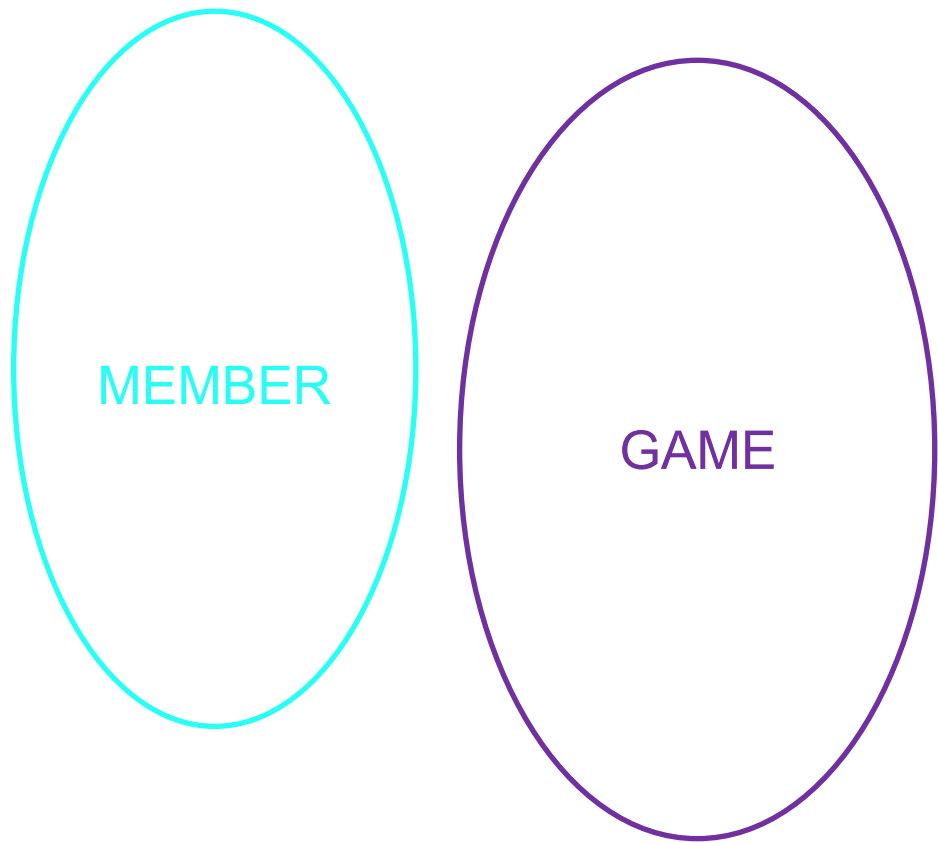


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ENTITY SETS

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We define **two** entity sets: Member and Game

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WHAT IS AN...

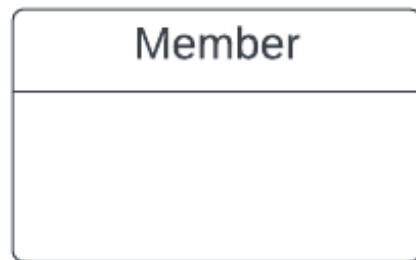
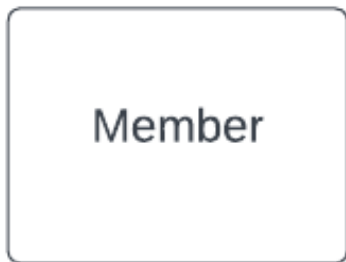
ENTITY TYPE



It is a **concept** for defining the entities which share the similar properties or attributes.

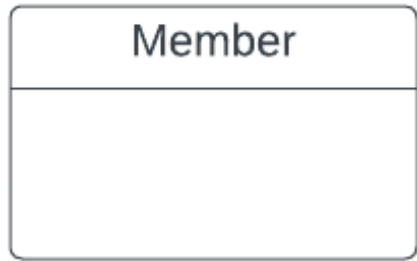
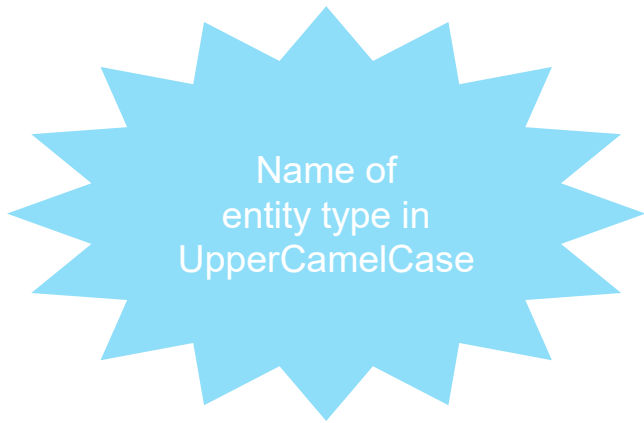
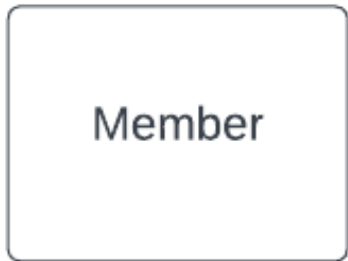
HOW TO DRAW AN...

ENTITY TYPE



HOW TO DRAW AN...

ENTITY TYPE

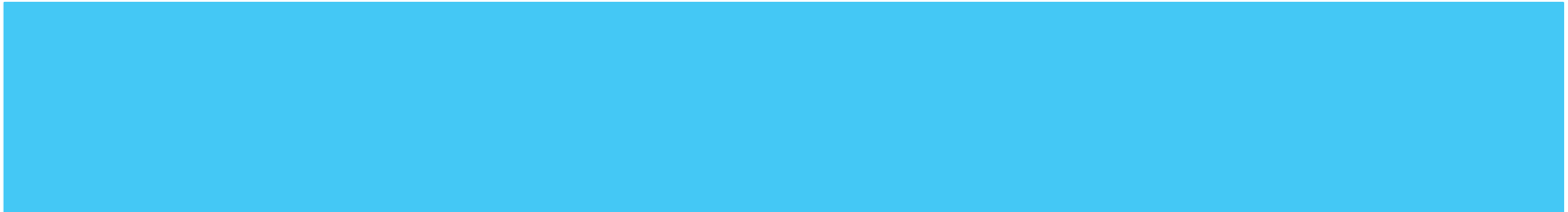


TERMINOLOGY

Entity versus Entity Type

Rob, Ann and Astrid are entities or instances of the entity type **Member**.
Mastermind, Stratego, Monopoly and Cute Cats Puzzle are instances of the entity type **Game**.

A Member and a Game can be described and mostly have several attributes. Give some attributes of a Member? Game?



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