ER Diagrams Intro

Entity - An object we want to model & store information about

Student

ER = Entity Relationship
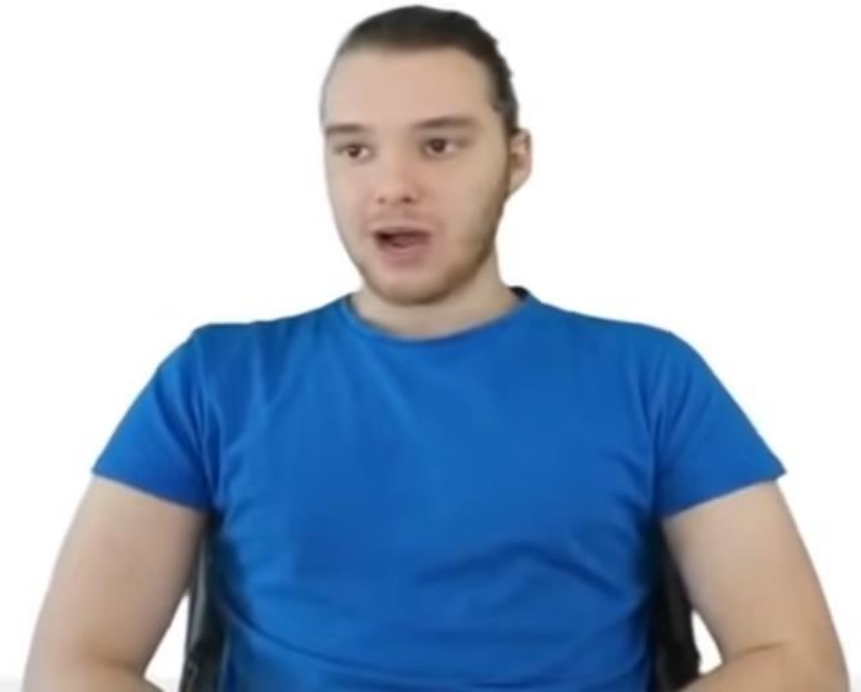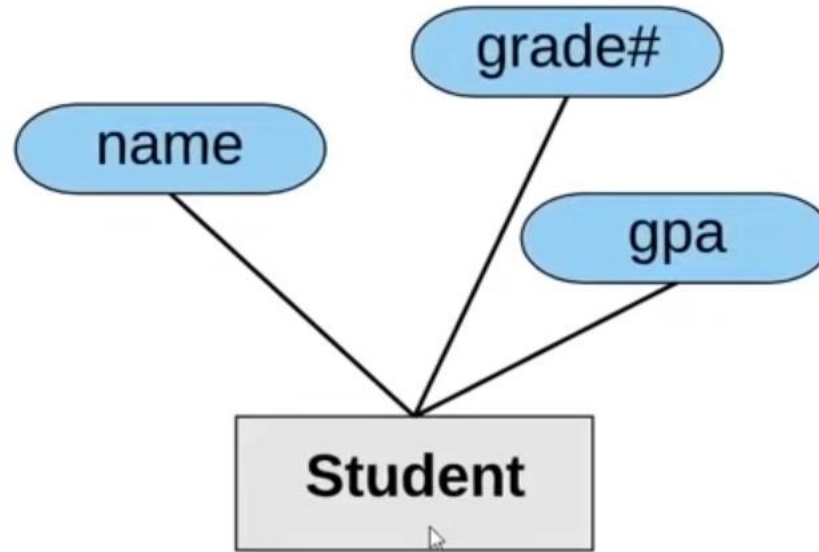
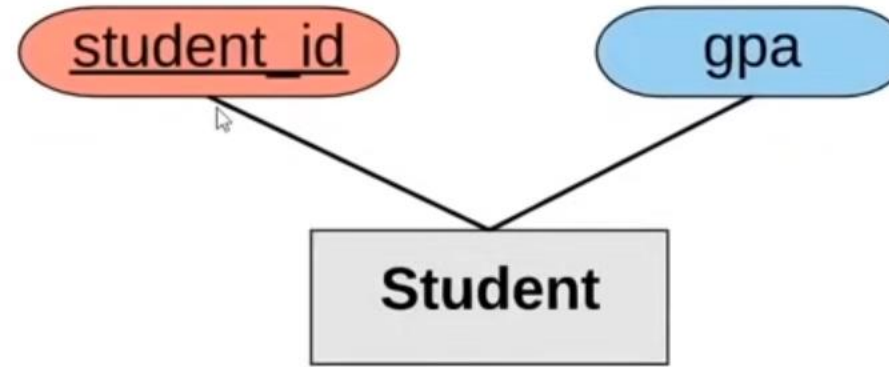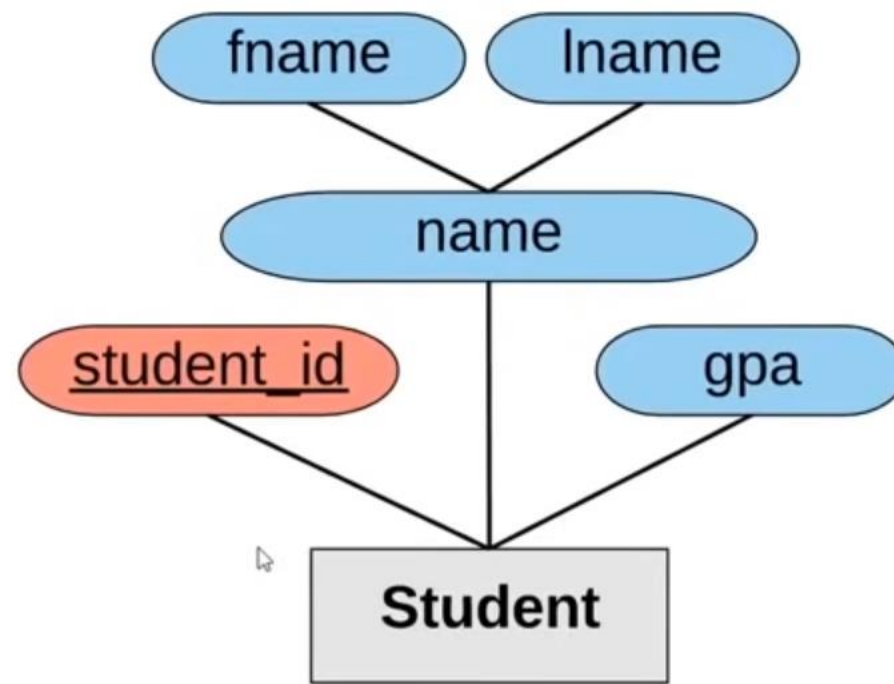**Entity** - An object we want to model & store information about

Student

Attributes - Specific pieces of information about an entity

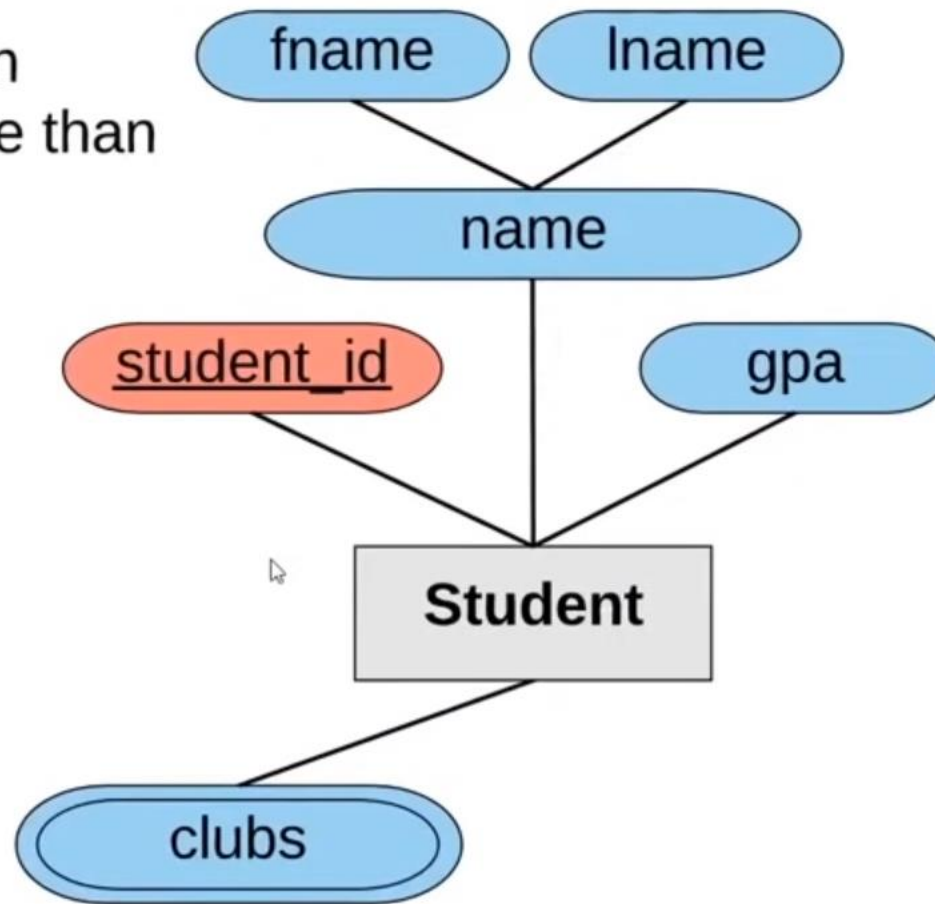**Primary Key** - An attribute(s) that uniquely identify an entry in the database table
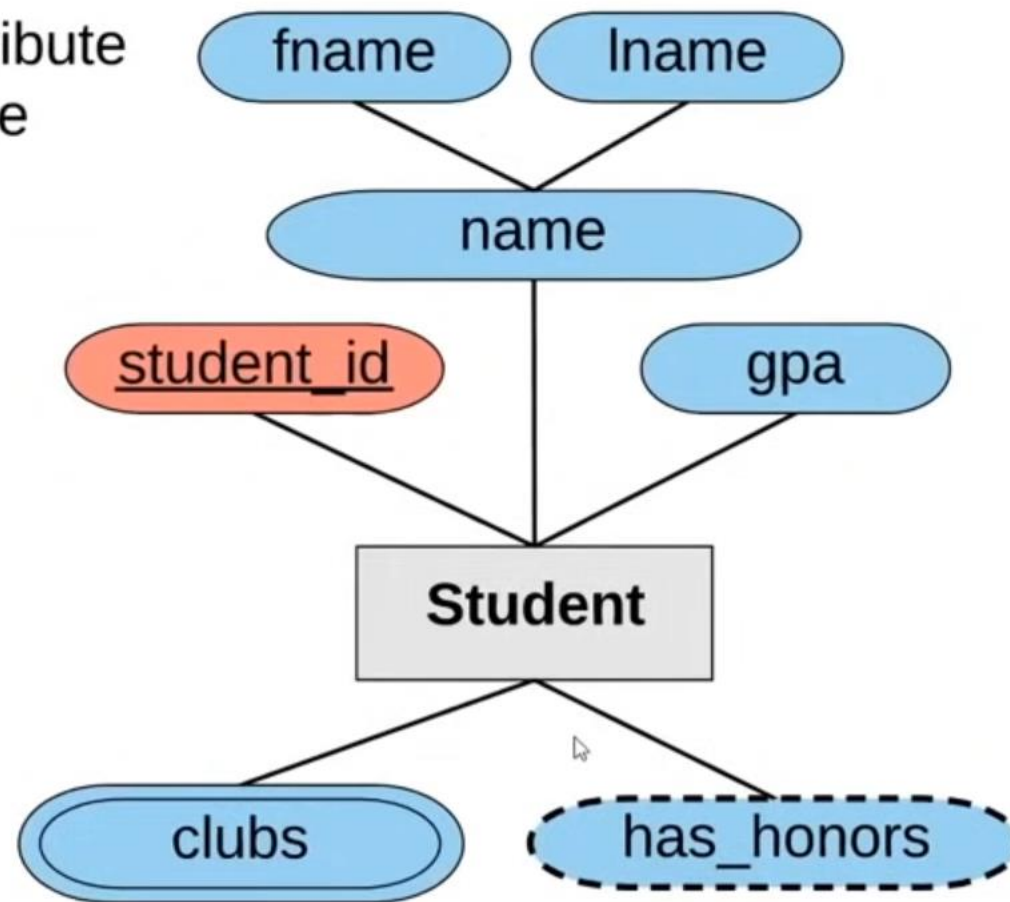

Marked with underline

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Composite Attribute - An attribute that can be broken up into sub-attributes
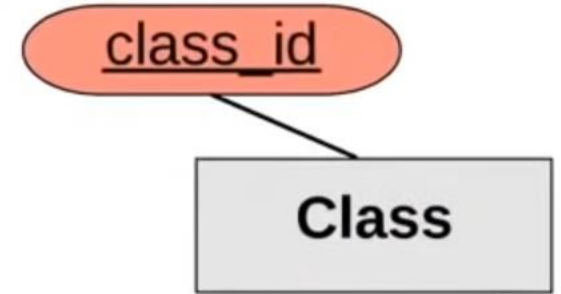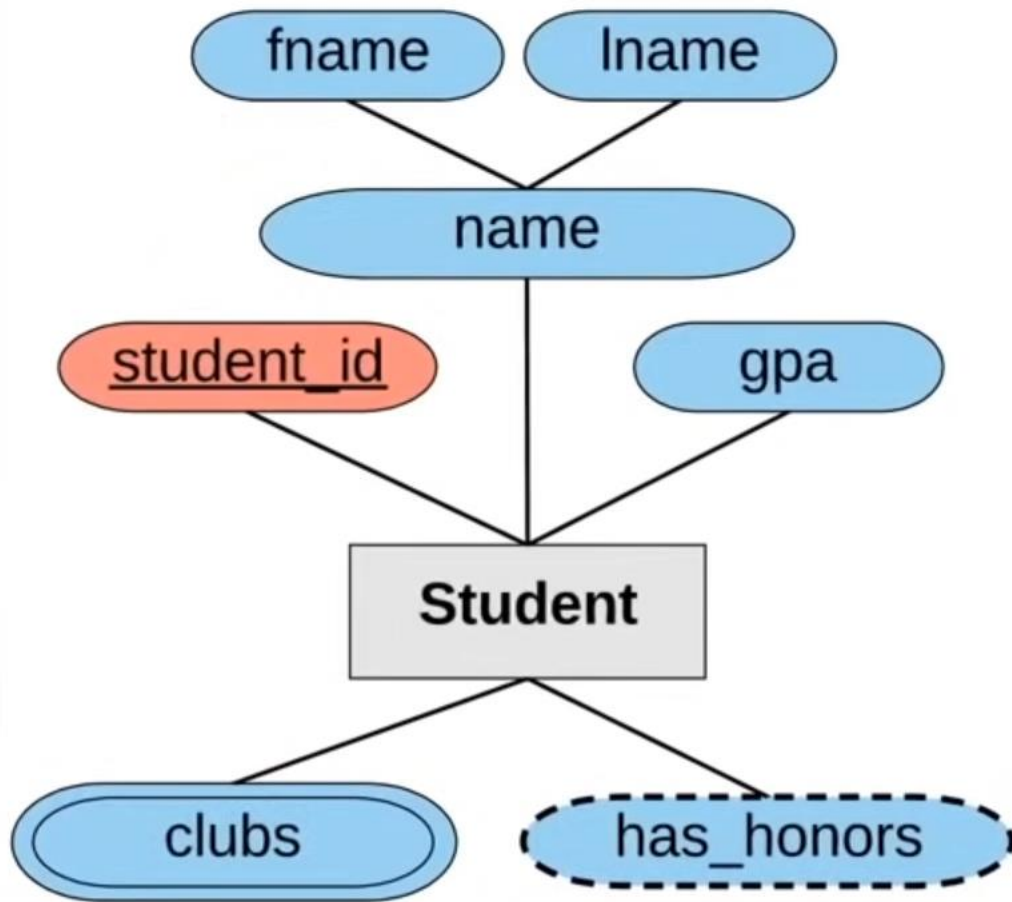
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Multi-valued Attribute - An attribute that can have more than one value
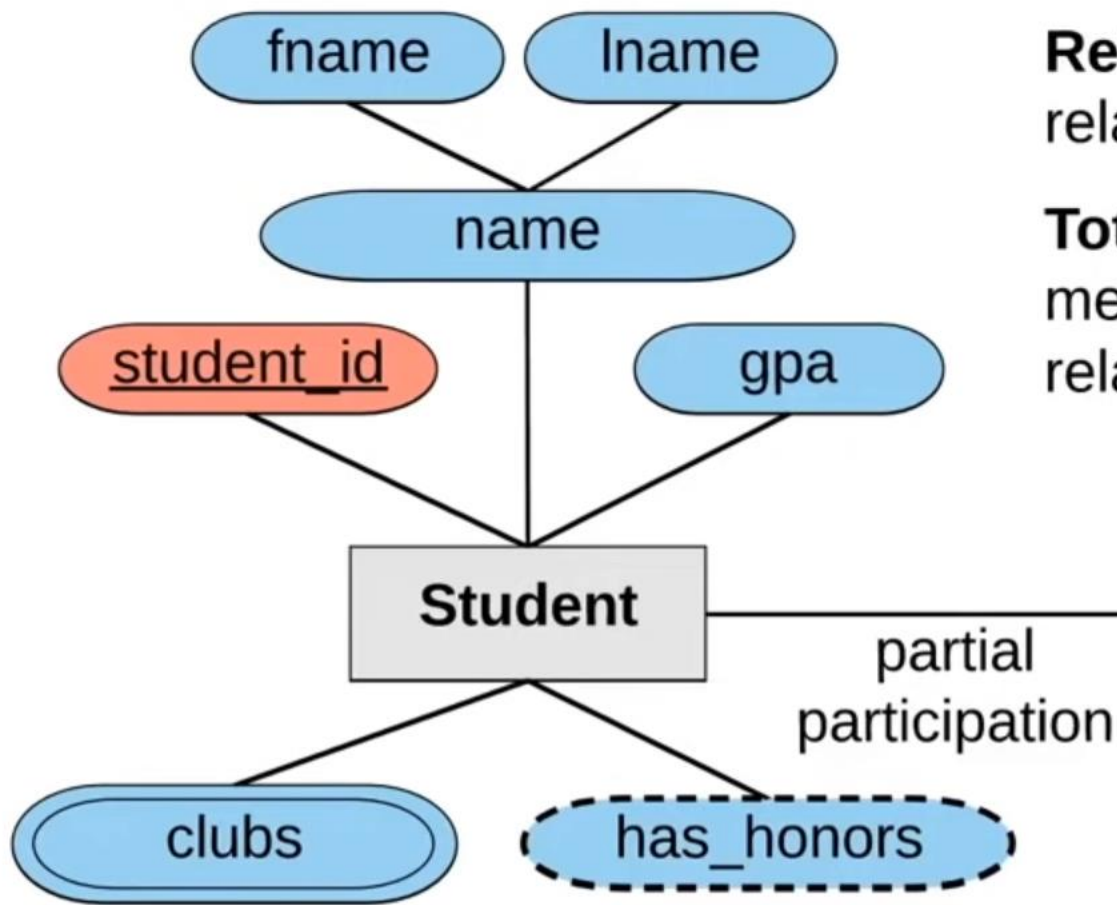
Derived Attribute - An attribute that can be derived from the other attributes
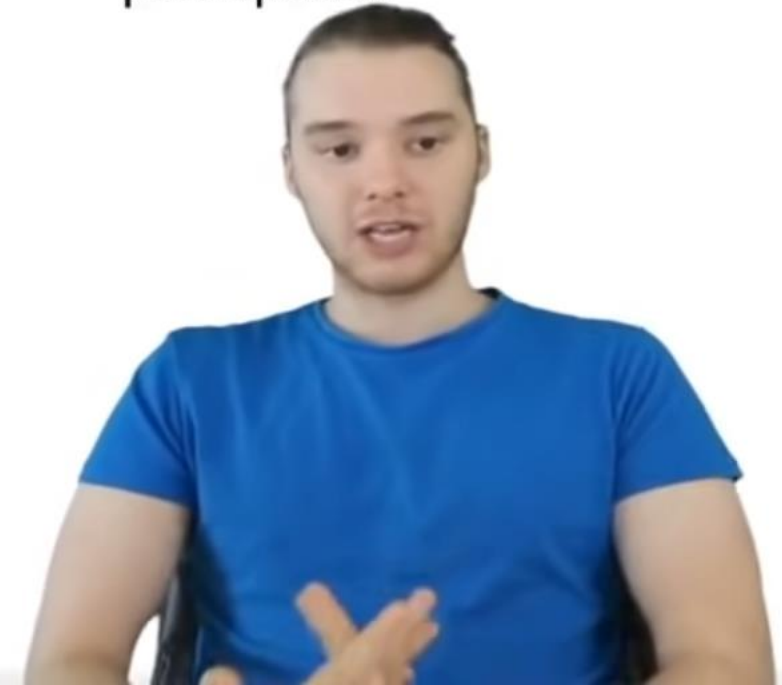

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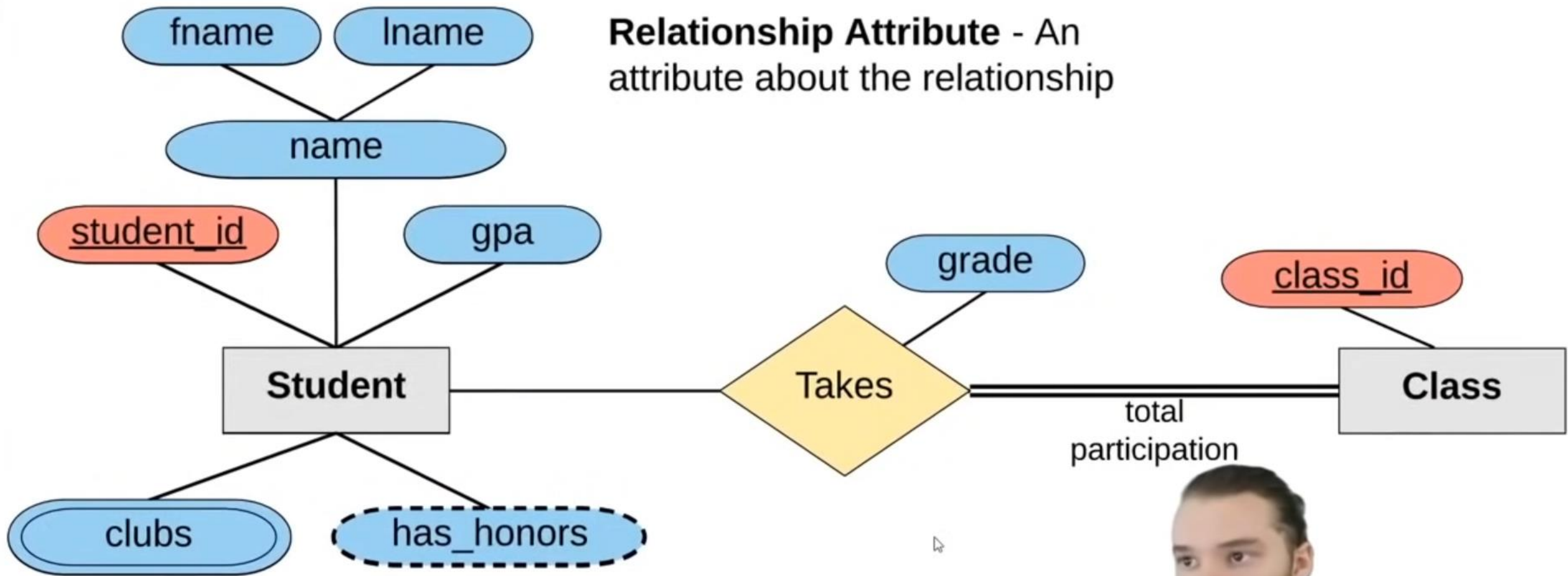**Multiple Entities** - You can define more than one entity in the diagram

Relationships - defines a relationship between two entities

Total Participation - All members must participate in the relationship

Relationship Attribute - An
attribute about the relationship

Relationship Cardinality - the number of instances of an entity from a relation that can be associated with the relation

fname · lname · name · student_id · gpa · Student · grade · class_id · Class · Takes · N · M · total participation · clubs · has_honors

1 : 1
1 : N
N : M

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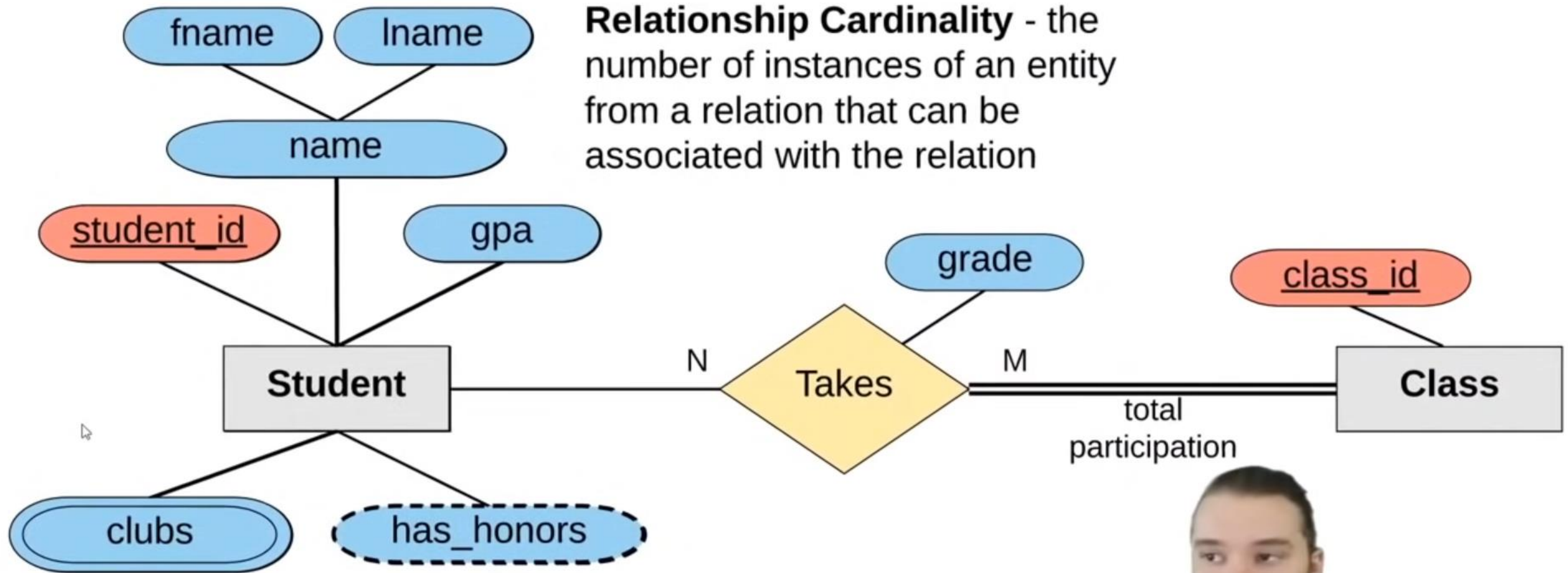
Weak Entity - An entity that cannot be uniquely identified by its attributes alone

Identifying relationship - A relationship that serves to uniquly identify the weak entity

exam_id

Exam

fname

lname

name

Has

student_id

gpa

grade

class_id

Student

N

Takes

M

Class

total participation

clubs

has_honors

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