Specialization Generalization Aggregation

Prepared For: CS527

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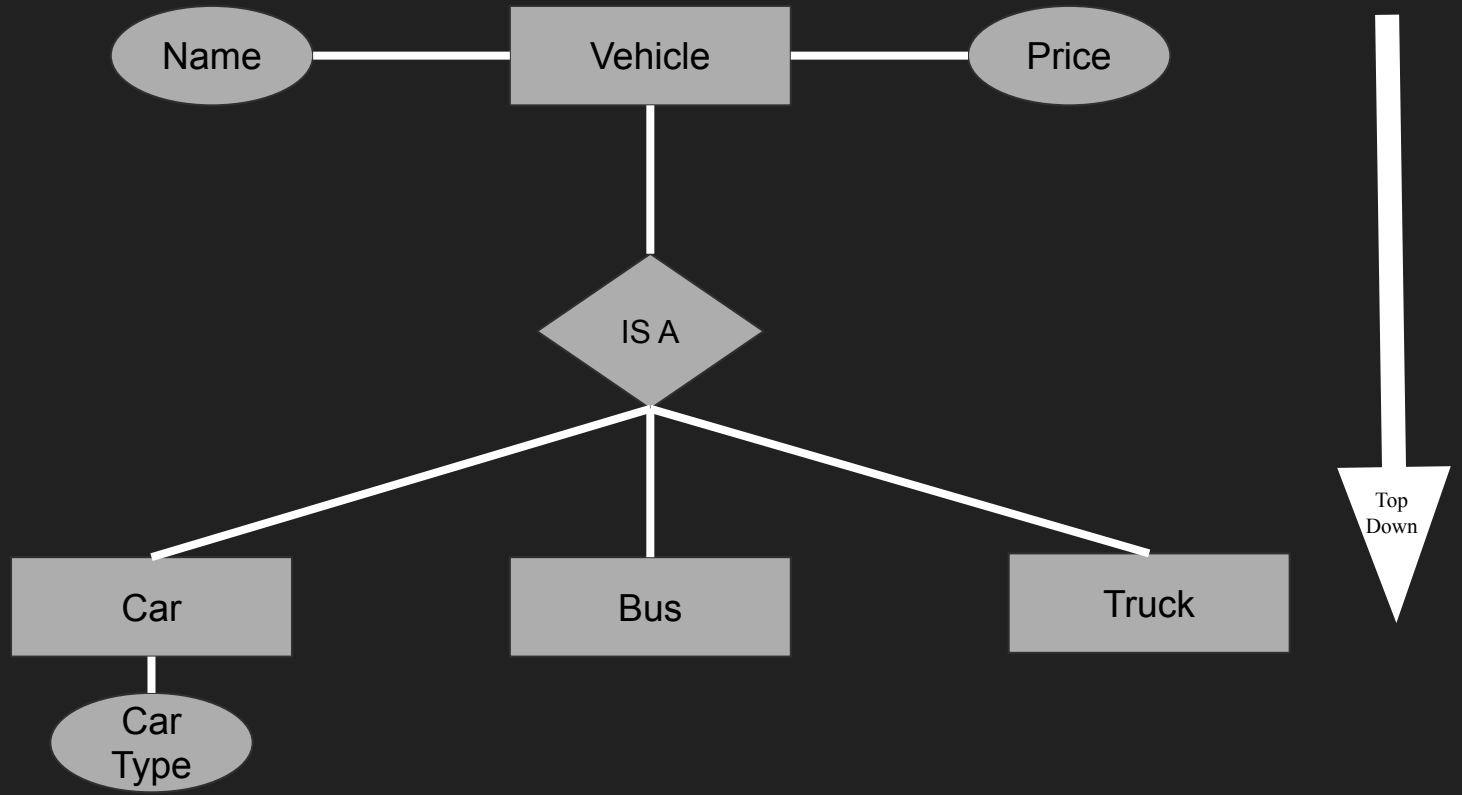
Specialization

- A process of identifying subsets of an entity that shares different characteristics.

- Top down approach - where one higher level entity can be broken down into lower level entities.

- Usually, the top level (superclass) is defined first. Then the lower level (subclasses) are defined next.

Specialization: Example



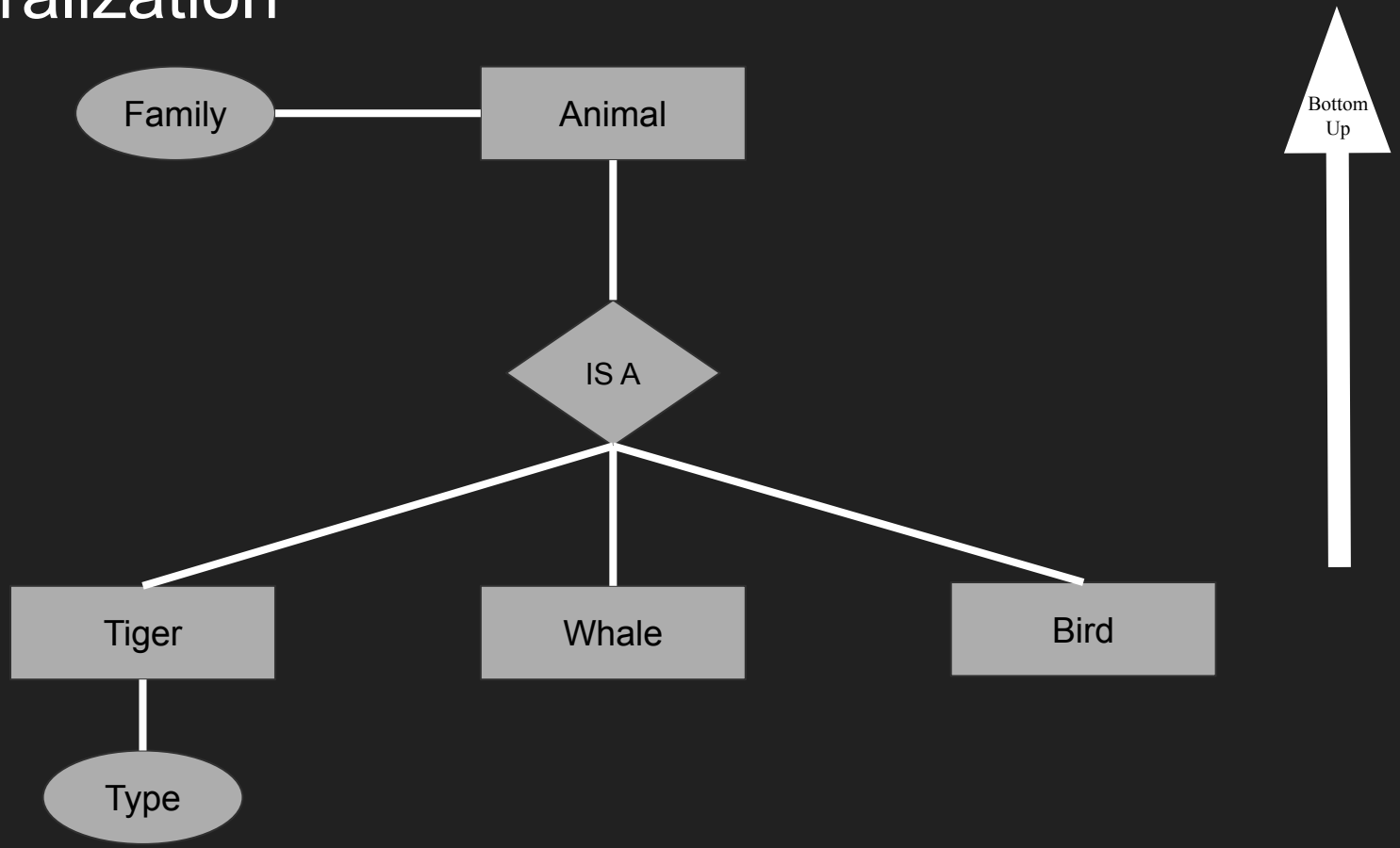
Generalization

- It's a process of generalizing an entity which contains common properties from a set of entities.

- The opposite of Specialization - Bottom Up Approach.

- Lower level entities (subclasses) are defined first and are combined to define the higher level entity (superclass).

Generalization



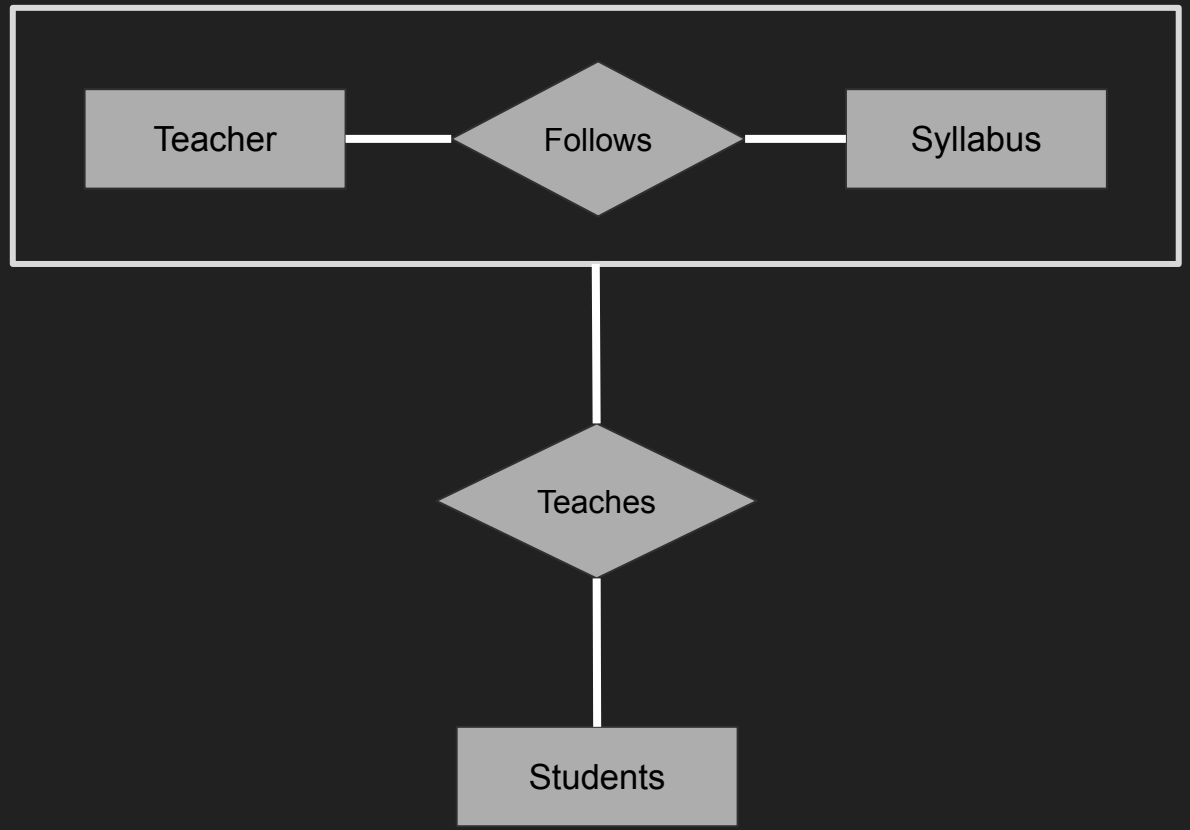
Aggregation

- Aggregation is a process when a relationship between two entities is treated as a single entity.

- We do this because this relationship between entities is required for another entity.

- A relationship with its corresponding entities is aggregated into a higher level entity

Aggregation



Thank You