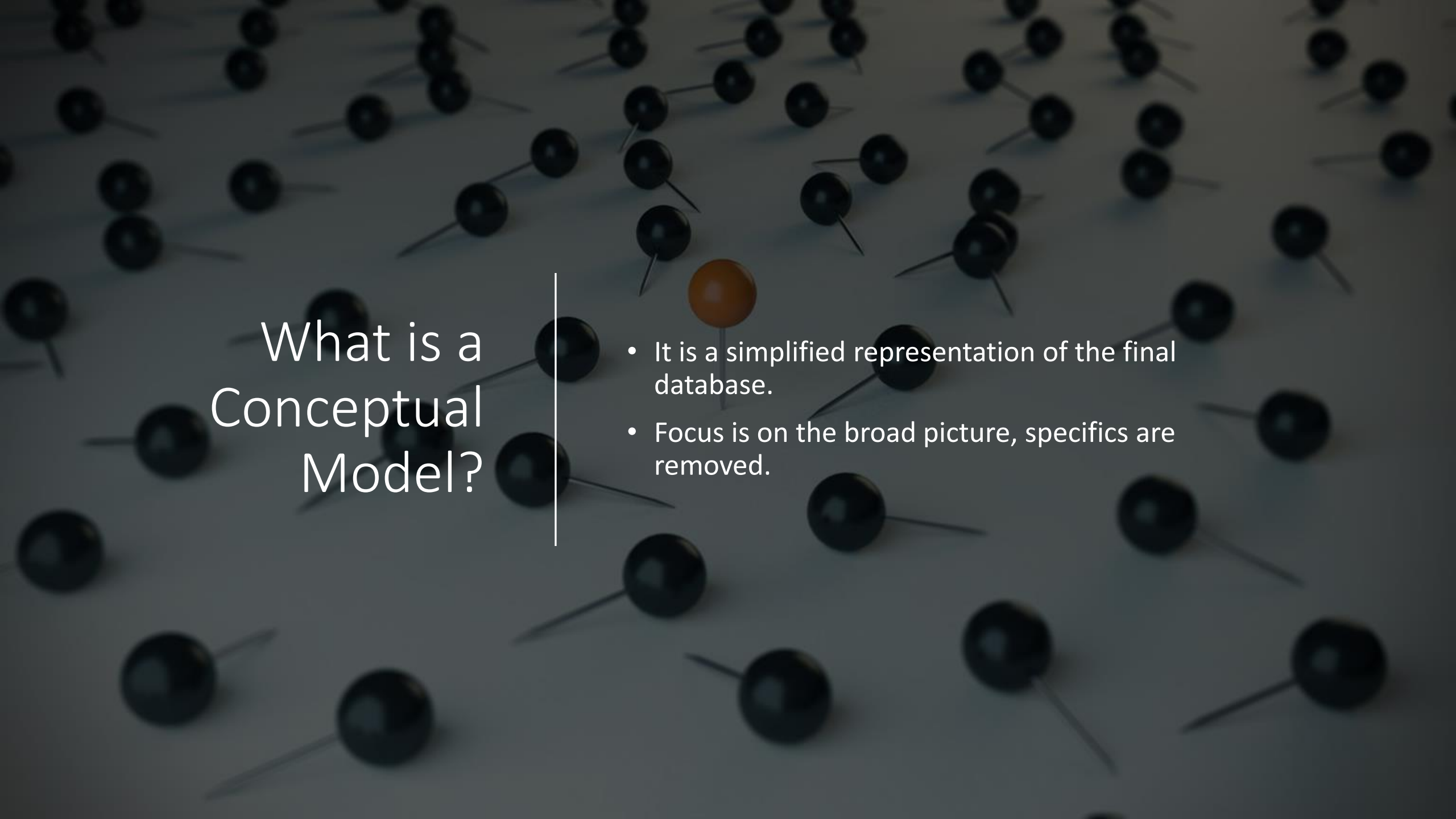




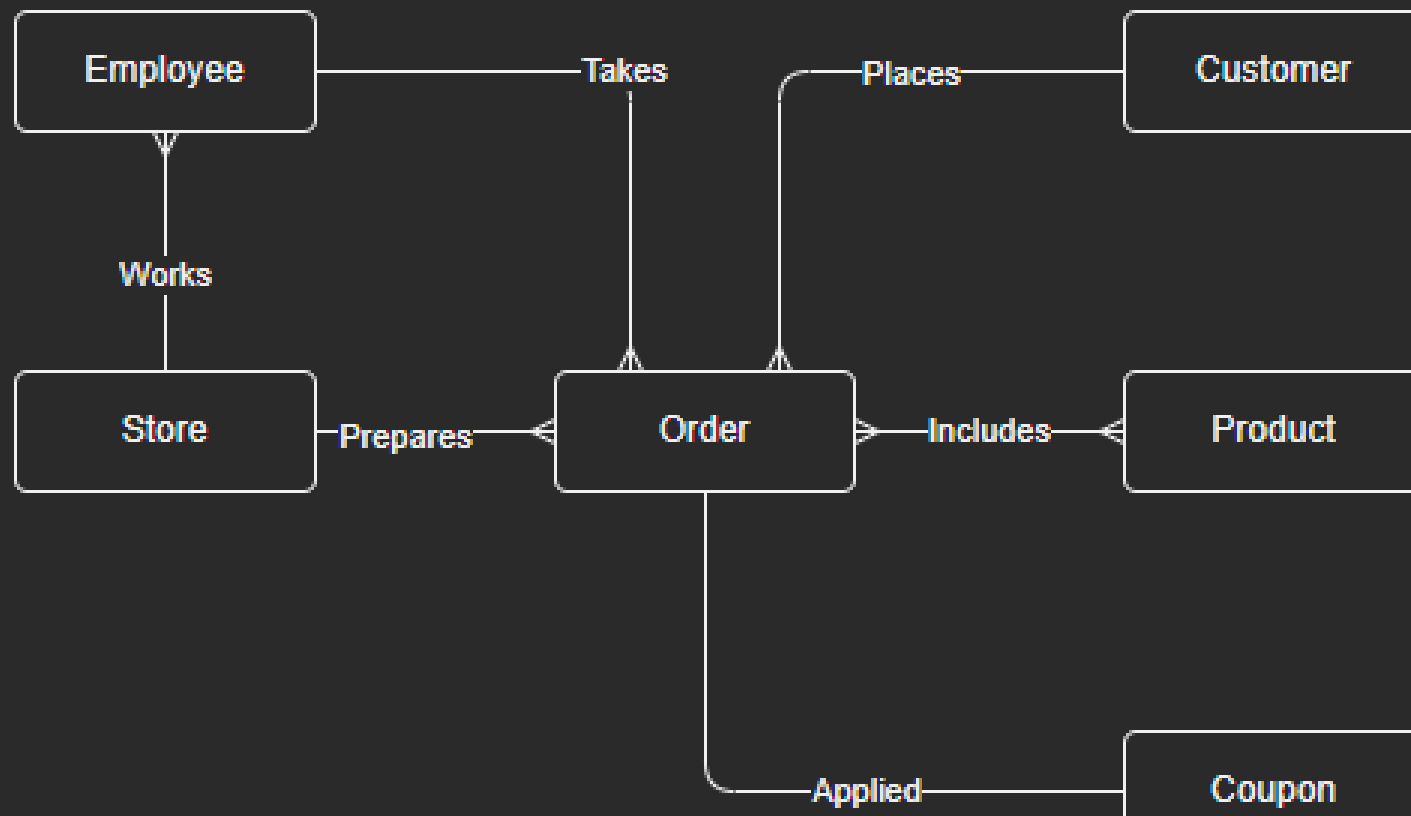
# Conceptual Models



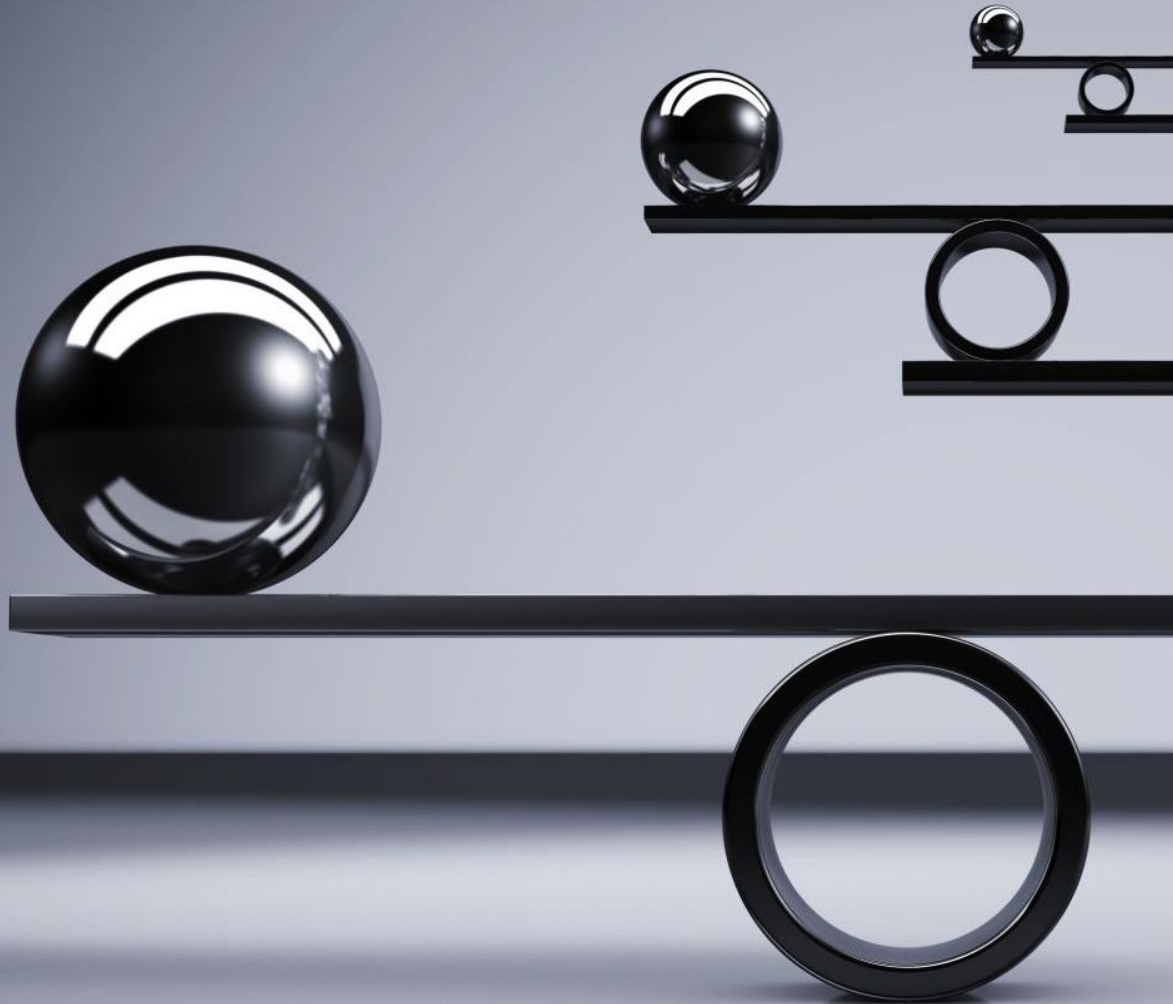
# What is a Conceptual Model?

- It is a simplified representation of the final database.
- Focus is on the broad picture, specifics are removed.

## Overall Model



Example



# Key Features of a Conceptual Model

- Define Business Needs
- Establish Vocabulary
- Foster Communication
- Build Plan for Favorable Outcomes

A decorative graphic on the right side of the slide features a staircase-like structure. It is composed of several wooden blocks of different shapes, including rectangular prisms and triangular prisms, stacked to form steps. A vibrant red ribbon is draped over the blocks, winding upwards from the bottom left towards the top right, following the path of the staircase. The background is a solid dark gray.

# Steps To Building a Conceptual Model

---

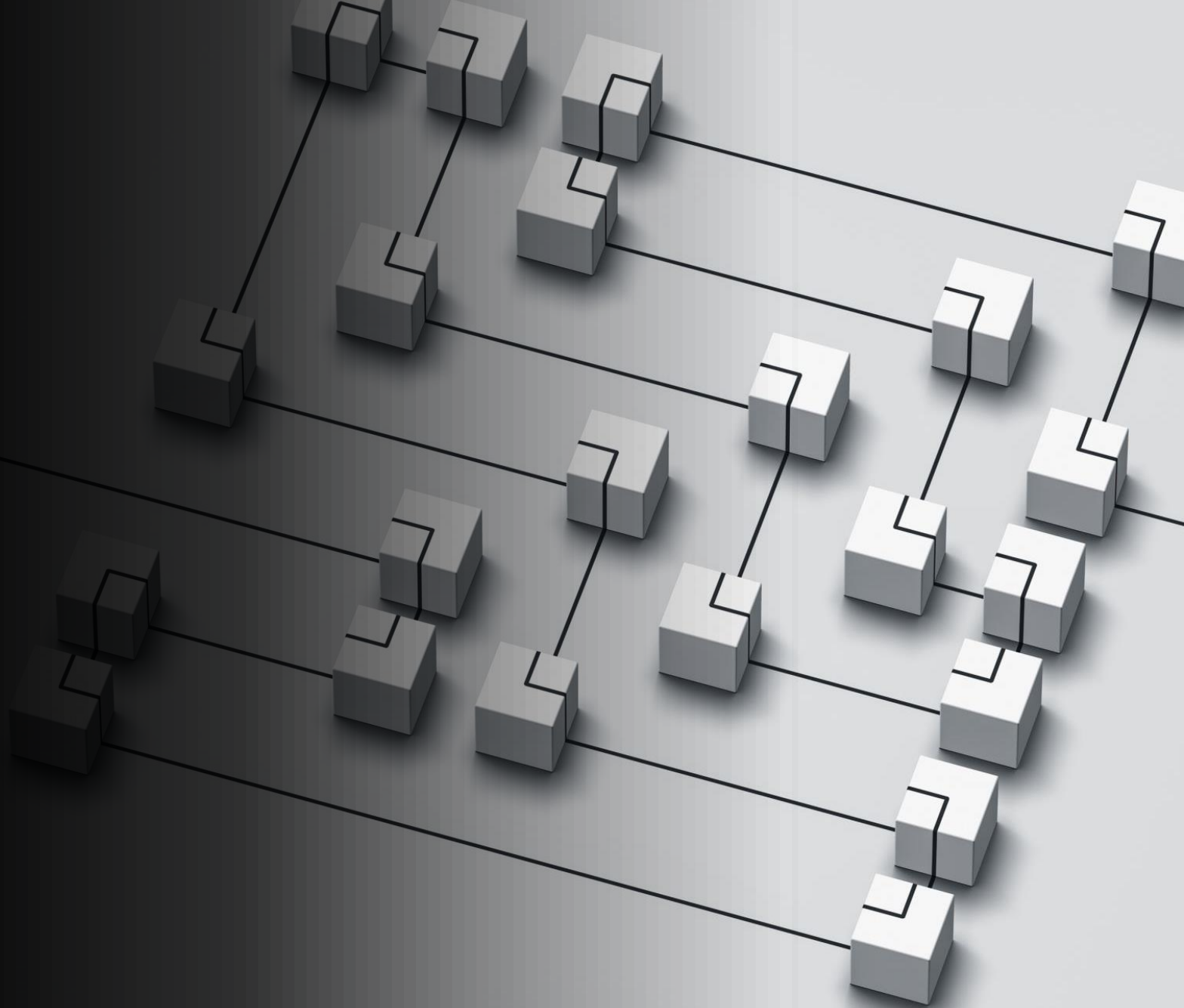
- Identify Business Objects
- Establish Relationship between Objects
- Determine Cardinality
- Name Relationship
- Repeat as Necessary

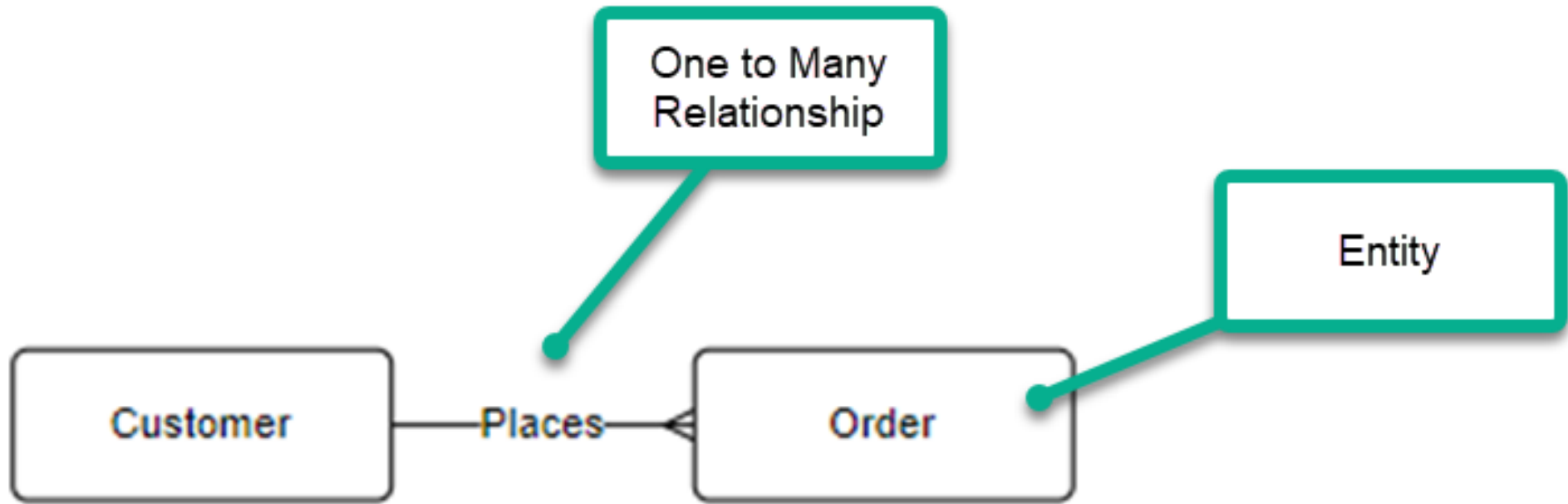


# What is Conceptual Model Entity?

---

- Loosely speaking you can think of model's entities as database tables
- Think of them as “nouns”
- They are the starting point for our Database table design.





A Customer can Place one or more Order

Conceptual Model  
Relationships

Entity  
Relationship  
Cardinality

# Cardinality and Crow's Feet Notation

---

One

Many

Zero

One



Many



One or Many



One and Only One



Zero or One





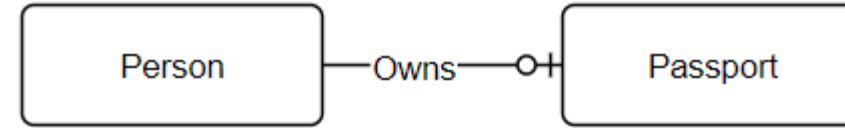
# Cardinality Examples

One to One Relationship

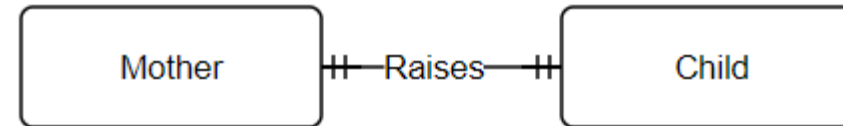
One to Many Relationship

Many to Many Relationship

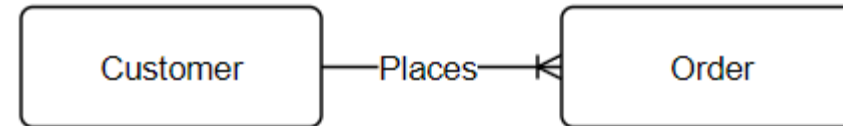
One to One



One to One (Mandatory)



One to Many



Many to Many

