

Arcs

Objectives

- Define the term “constraint” as it applies to data modeling
- Identify an exclusive OR relationship in a business scenario
- Diagram an arc constraint to represent an exclusive OR relationship
- Distinguish between the use of an arc and a subtype in the data model

Vocabulary

Directions: Identify the vocabulary word for each definition below.

1. _____ A curved line used to represent an exclusive relationship in an entity-relationship diagram
2. _____ A logical operator that returns a true value if one, but not both, of its operands is true.
3. _____ A relationship that has choices that are unable to be true at the same time.
4. _____ A restriction that applies to data, which is often dictated by the business rules.

Try It / Solve It

1. A show ticket is purchased from an agent, the box office, or the Internet. A ticket has a description, an event, a date and a price. An agent has a name and a phone number. The box office has an address and a phone number. The Internet has a URL address.

Draw the entities and represent the exclusive relationship.

2. Redraw the REGULAR and PROMOTIONAL MENU entities as a supertype, and include the relationship to FOOD ITEM, based on the previously given scenario.

3. (Optional Practice: Global Fast Foods)

This practice is step 7 in the Global Fast Foods project.