ORACLE
Academy

Database Design
4-2: Documenting Business Rules
Practice Activities

Objectives

- Define and compose a structural business rule

- Define and compose a procedural business rule

- Recognize that some business rules will require programming

- Diagram business rules when they can be represented in an ER model

Vocabulary

Identify the vocabulary word for each definition below.

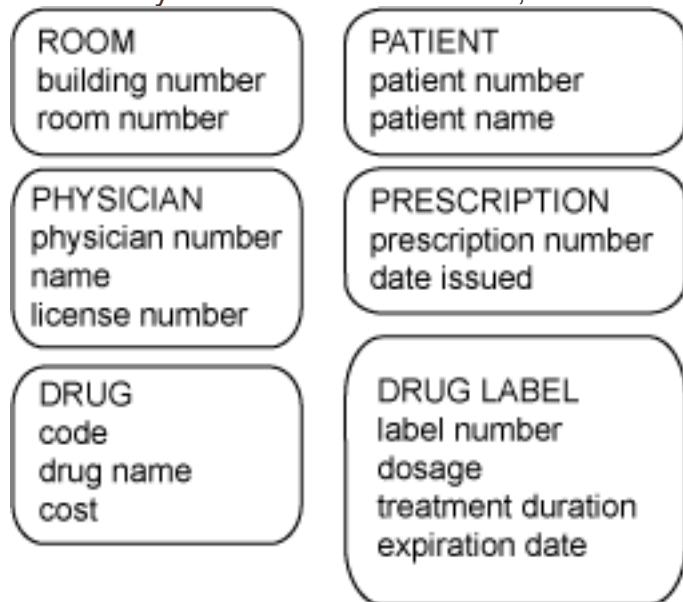|	A type of business rule that indicates the types of information to be stored and how the information elements interrelate.
	A formalized statement of the usual, customary, or generalized course of action or behavior for a business.
	A type of business rule that is workflow or business process related. (e.g., A has to happen before B, and then C has to happen at the same time as D.) This is also called a process business rule.

Try It / Solve It

1. Members of your design team have been working with the local hospital to develop a data model for their need to store information about patients, the patient's room number, the patient's doctor, drug prescriptions given, and specific drug information.

   However, they all went on vacation and left you to figure out the model. They also failed to give you any of their documentation other than the entities and attributes illustrated here. Instead of going back to the hospital, which could reflect poorly on your company, you're going to have to think about everything you know about hospitals!

   Your task is to generate a list of business rules you think were used to arrive at the information shown here. Use your imagination. List 10 structural rules, 5 procedural rules, and 2 programmatic rules (rules to be addressed by computer applications in the future). State each rule as a single sentence.

   Based on your set of business rules, draw the ERD.

   ROOM
   building number
   room number

   PATIENT
   patient number
   patient name

   PHYSICIAN
   physician number
   name
   license number

   PRESCRIPTION
   prescription number
   date issued

   DRUG
   code
   drug name
   cost

   DRUG LABEL
   label number
   dosage
   treatment duration
   expiration date

2. Identify the business rules contained in the following scenario.

   "We are frequently asked for movies starring specific actors. John Wayne and Julia Roberts are always popular. So we'd like to keep track of the star actors appearing in each movie. Not all of our movies have star actors. Customers like to know each actor's "real" birth name and date of birth. We track only actors who appear in the movies in our inventory."

3. Identify the business rules contained in the following scenario.

   "We have lots of customers. We rent videos only to people who have joined our 'video club.' To belong to our club, they must have good credit. For each club member, we'd like to keep their first and last name, current phone number, and current address. And, of course, each club member has a membership number.

   Then we need to keep track of what movie each customer currently has checked out. A customer may check out multiple video tapes at any given time. We just track current rentals. We don't keep track of any rental histories."