Database Design
9-3: Relationship Mapping
Practice Solutions
Vocabulary

Directions: Identify the vocabulary word for each definition below.

Nontransferable relationship	A relationship in a database where the foreign key column in the database table cannot be up-dated
Cascade barred relationship	A series of relationships implying that the unique identifier of each entity in the chain is carried down to the entity on the next level
Intersection entity	The product of the resolution of a many to many relationship.

Try It / Solve It

The following entities were mapped to tables in a previous lesson: SHIFT, REGULAR MENU, PROMOTIONAL MENU, FREQUENT DINER CARD.

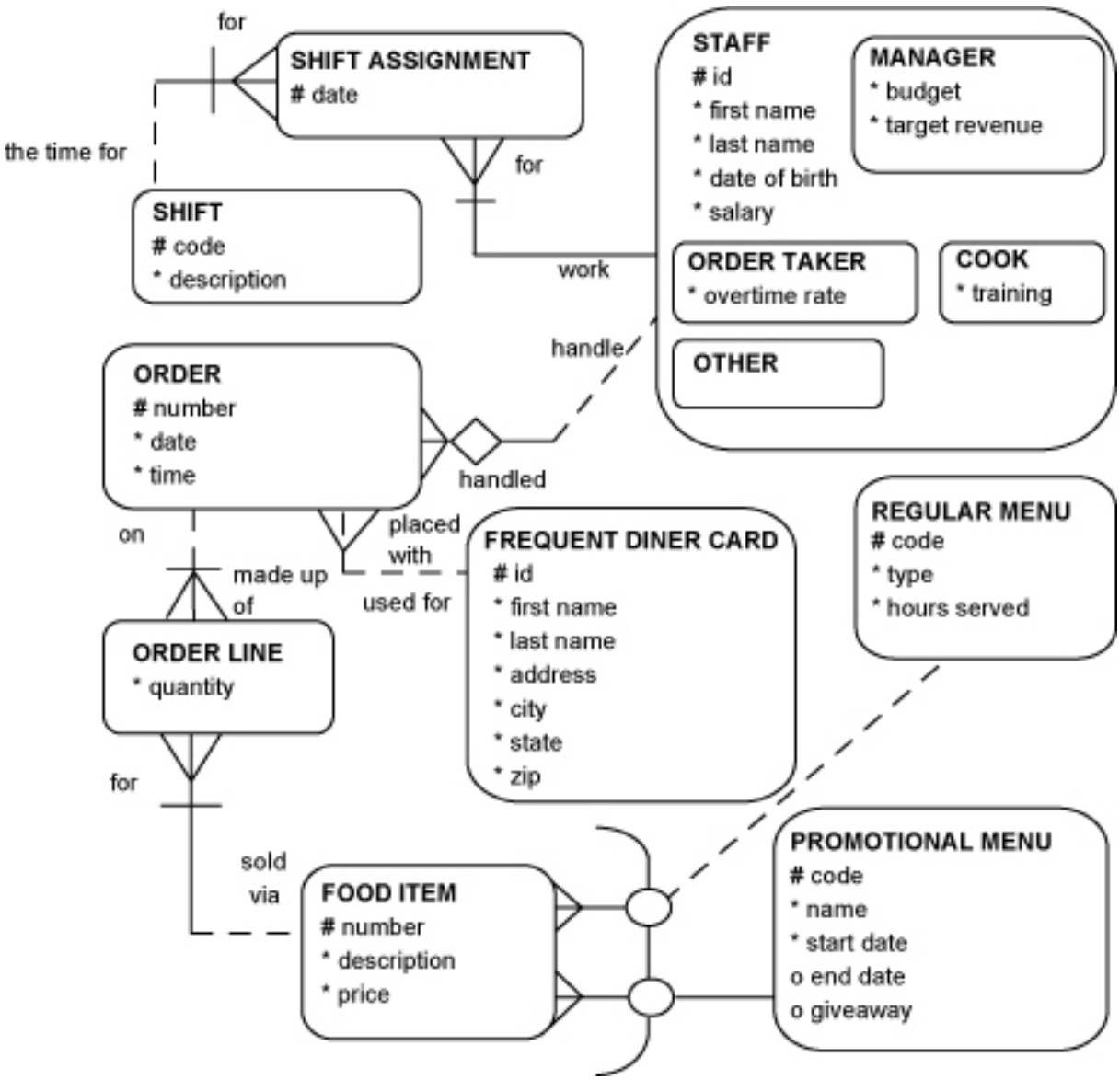
Refer to the completed Global Fast Foods model and map the following entities:

FOOD ITEM
ORDER
ORDER LINE

1. Transform relationships into foreign-key columns.

   Use as many rows as necessary in a table similar to the one in the diagram.

Key Type (pk, uk, fk)	Optionality (“*” or “o”)	Column Name



Solutions will vary

2. Indicate if a check constraint or additional programming is needed to enforce the relationship in the database. Under each table diagram, write the conditions that the check constraint or program has to ensure.

   For example:

   > "To enforce exclusive relationships, a check constraint is needed to make sure that (column A is not null and column B is null) OR (column A is null and column B is not null)."
   >
   > "To enforce a nontransferable relationship, additional programming is needed to make sure that the <foreign key column> cannot be updated."

   Solution:
   A check constraint is needed to enforce: either (rmu_code is null and pmu_code is not null) OR (rmu_code is null and pmu_code is not null).
   Additional programming is needed to ensure that stf_id is not updateable. This will enforce the non-transferability of the relationship between ORDER and STAFF.