Homework 1: ERDs

CIS 330

For this class we will be making a database for a gourmet burger restaurant called *Burgers by Design*. The restaurant owner, Bob, has been running his business with pen-and-paper, but has decided to switch to an IPoS (Internet Point of Sales) System. This system will allow users to make an account and order their burgers either online (for pick up) or in store using a tablet.

Burgers by Design allows users to build their burgers by paying for each part of the burger separately. Bob wants all of his menu information to be included in the database: items, descriptions (not shown on the menu), prices, and allergen information. He also wants full user information for advertising: name, phone, email, address, etc. He also wants to keep track of what each user has ordered in the past, so that they can easily order it again.

For this assignment, I want you to create an ERD with entities, relationships, attributes, keys, and constraints (80 pts) and identify the participation constraints (20 pts). You will turn in a computer generated ERD via Schoology.

Extra Credit: (10 pts) determine a weak entity that can be added to the ERD and add it.

Note: If in doubt, feel free to give justification to your choices.

Ex: "I think that the relationship XXXX is one-to-one because …"

Rubric:

Category	Points	Description	Earned
Format	20	No use of standard ERD format	0
		Used most of the formatting rules, but not all or inconsistent	10
		ERD format clearly used	20
Attributes	20	Attributes are not present	0
		Attributes are not correct, but present	10
		Attributes are correct and useful	20
Keys	20	No keys identified	0
		Keys properly identified, but not appropriate for the entity	10
		Appropriate keys used	20
Constraints	20	No key constraints identified	0
		Some constraints are correct	10
		All constraints are correct	20
Participation Constraints	20	No constraints identified	0
		Some constraints are correct	10
		All constraints are correct	20

This is a guideline. It is possible to get, for example, 12 points in one section.