

Kathryn Justus

CIS 310-01

Kitrina Justus

TTh (11:00-12:15)

Brandon Berney

Professor Karimi

Jimi Porter

September 24, 2019

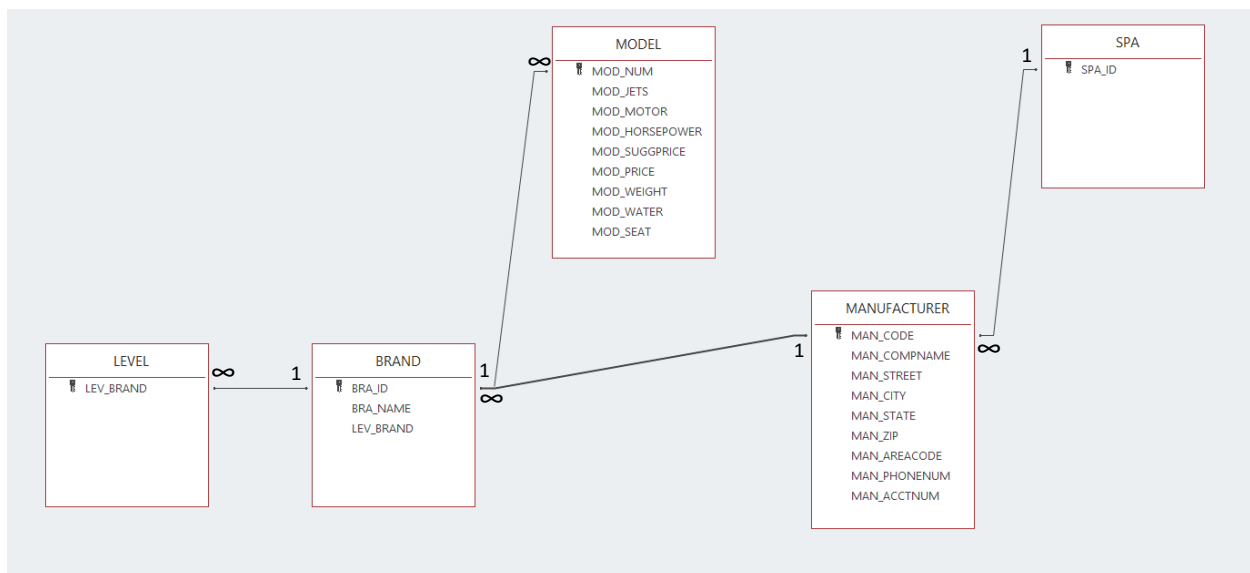
Zach Johnson

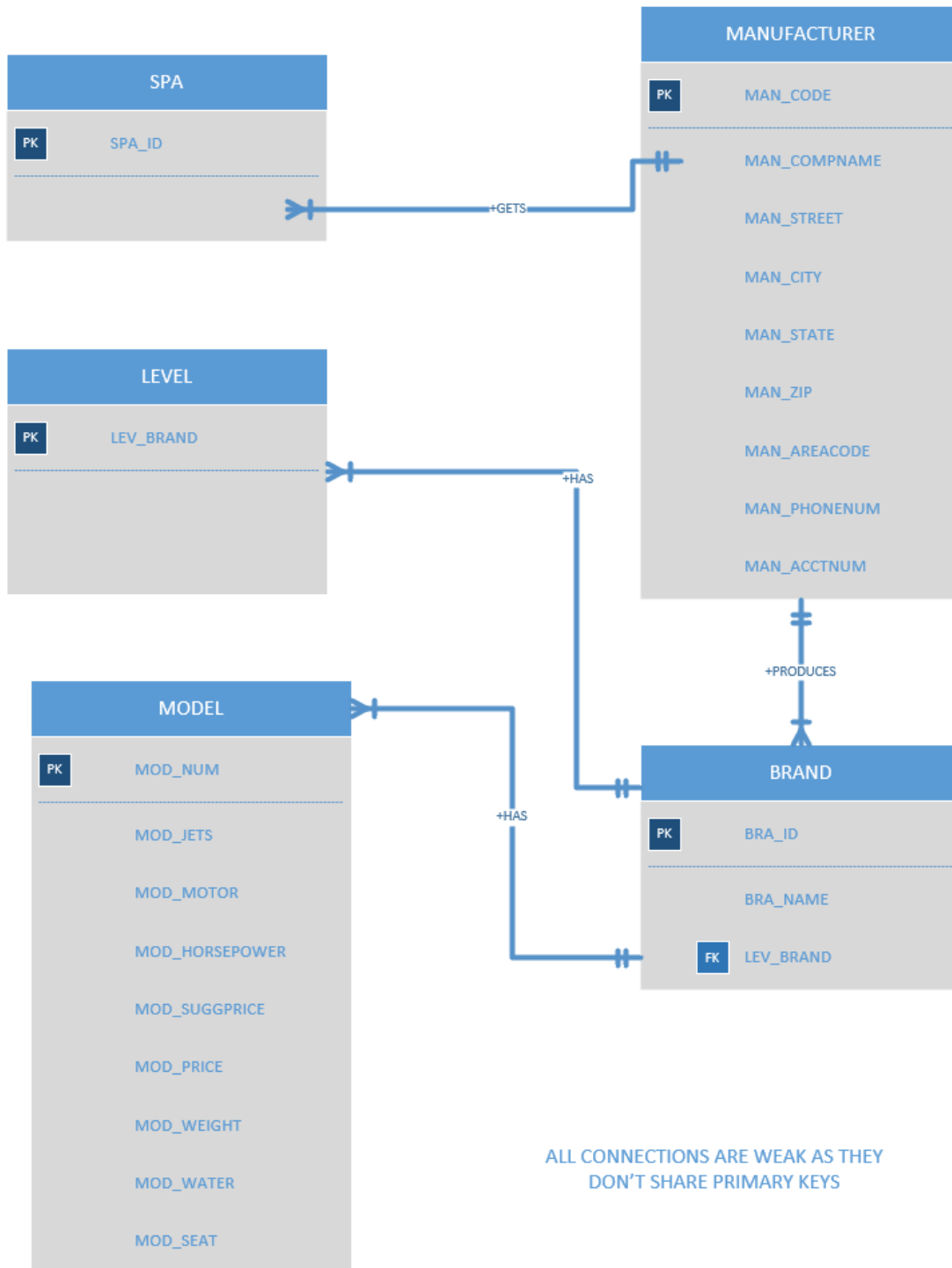
## Chapter 5 Group Project

2.)

Entity	Relationship	Connectivity	Entity
Spa	Gets	1:M	Manufacturer
Manufacturer	Produces	1:M	Brand
Brand	Has	1:M	Model
Model	Part of	1:1	Brand
Brand	Has	1:M	Level*

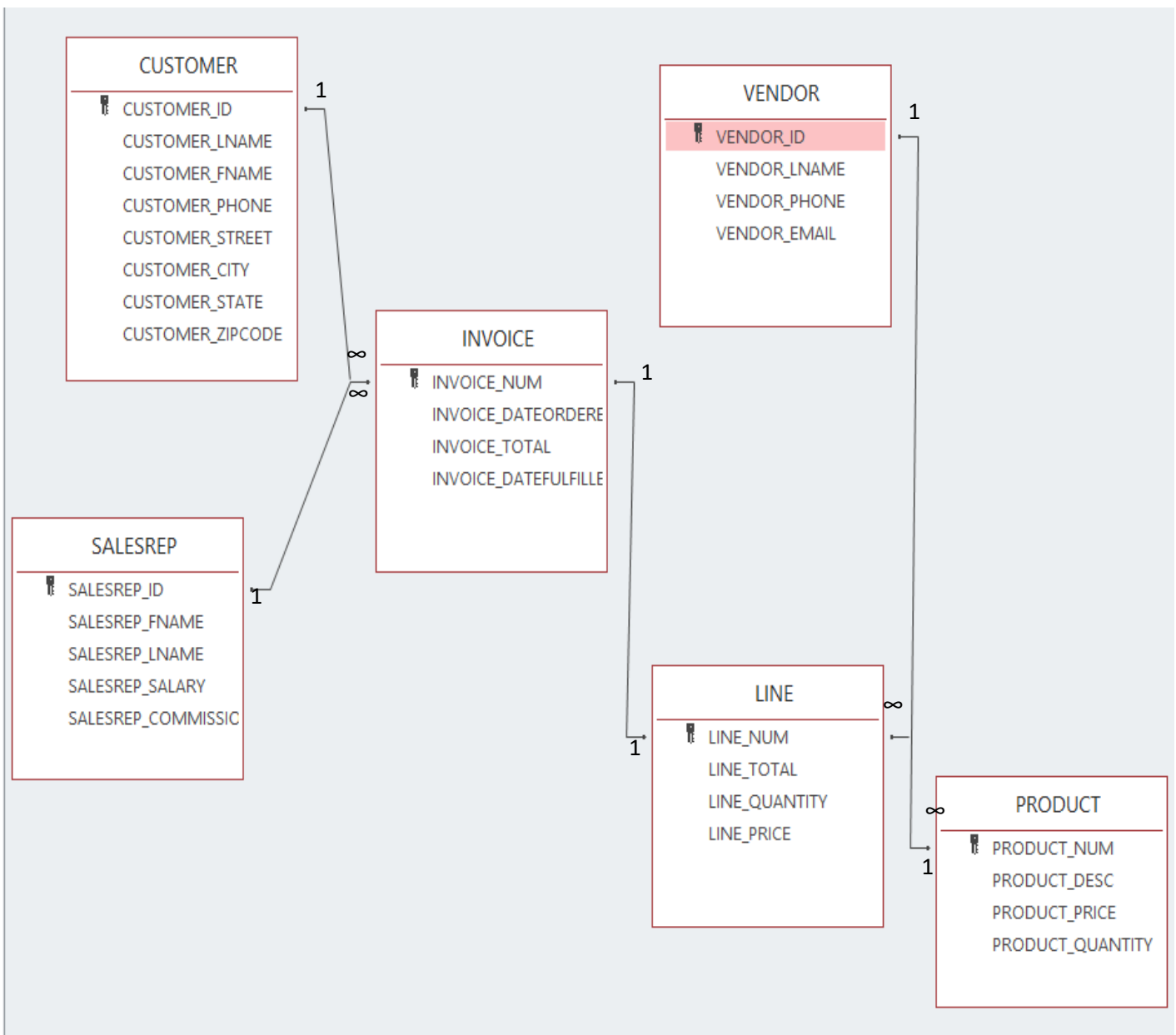
\*Level is created because brand has several levels that need to be separated like the Team Colors example from HW 4

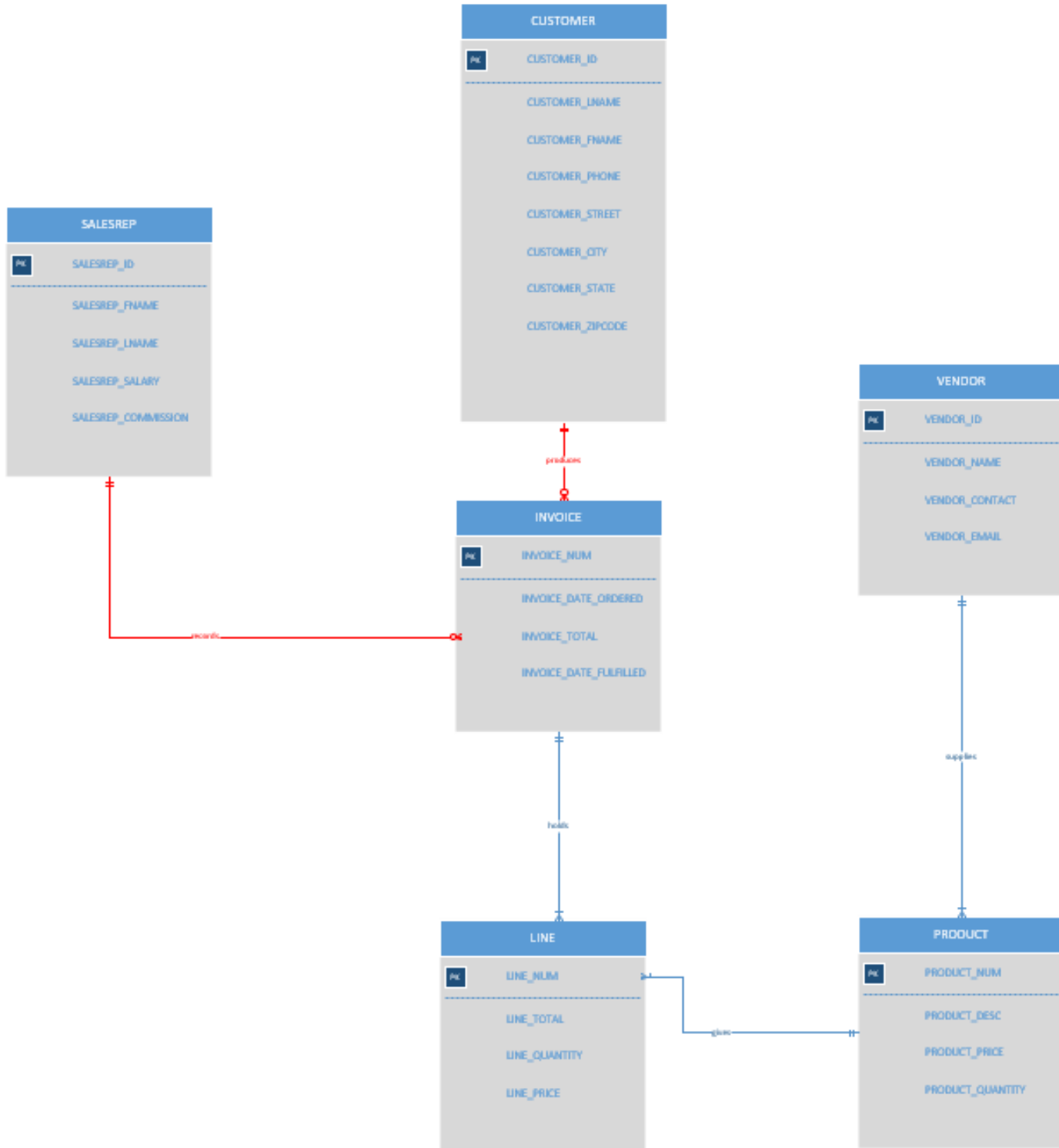




4.)

Entity	Relationship	Connectivity	Second Entity
CUSTOMER	given	1:M	INVOICE
SALESREP	writes	1:M	INVOICE
INVOICE	details	1:M	LINE
PRODUCT	describes	1:M	LINE
VENDOR	owns	1:M	PRODUCT





== WEAK RELATIONSHIP



== STRONG RELATIONSHIP

5)

a.

Entity	Relationship	Connectivity	Entity
HEG	has	1:M	INSTRUCTOR
INSTRUCTOR	handles	1:M	TRAINEE
HEG	offers	1:M	COURSE
COURSE	generate	1:M	CLASS
INSTRUCTOR	teaches	1:M	CLASS
TRAINEE	takes	1:M	CLASS

b. The business rules for INSTRUCTOR to CLASS state: “Each class is taught by one instructor. Each instructor may teach up to 2 classes or may be assigned to do research only.”

Connectivity: The relationship classification between INSTRUCTOR and CLASS is 1:M.

Cardinality: The cardinality for INSTRUCTOR is (1..1) because each class is taught by one and only one instructor. The cardinality for CLASS is (0..2) because an instructor can teach zero classes (be assigned to research only) or up to 2 classes.

Existence dependence: The CLASS entity is existence dependent on the INSTRUCTOR entity because a CLASS must be taught by one and only one INSTRUCTOR.