Sephora Database

Deliverables:

- [Revised] Description of the organization
- [Revised] ER diagram with min/max specifications
- [Revised] Constraints not in ER diagram
- [Revised] Relational Schema with Referential Integrity
- Queries with brief description
- DML + DDL + SQL statements
- Completed PostgreSQL Implementation (Attached Team SQL script)

Group Assessment

- Group Status Report

We have each reviewed the contents of this deliverable.

Phase Leader	Victoria Olejarz	_____
Phase Recorder	Olivia Pardo	_____
Phase Checker	Laura Gerardo	_____
Technical Advisor	Olivia Roeger	_____

1. Introduction

We are looking at the entity relationships within Sephora. Sephora is a retail store that sells products from various cosmetic brands. Their inventory includes items such as makeup, hair care, and skincare. Sephora has various locations across the United States. The entity relationship diagram visualizes the relationship between sephora locations, brands, employees, categories, and products.

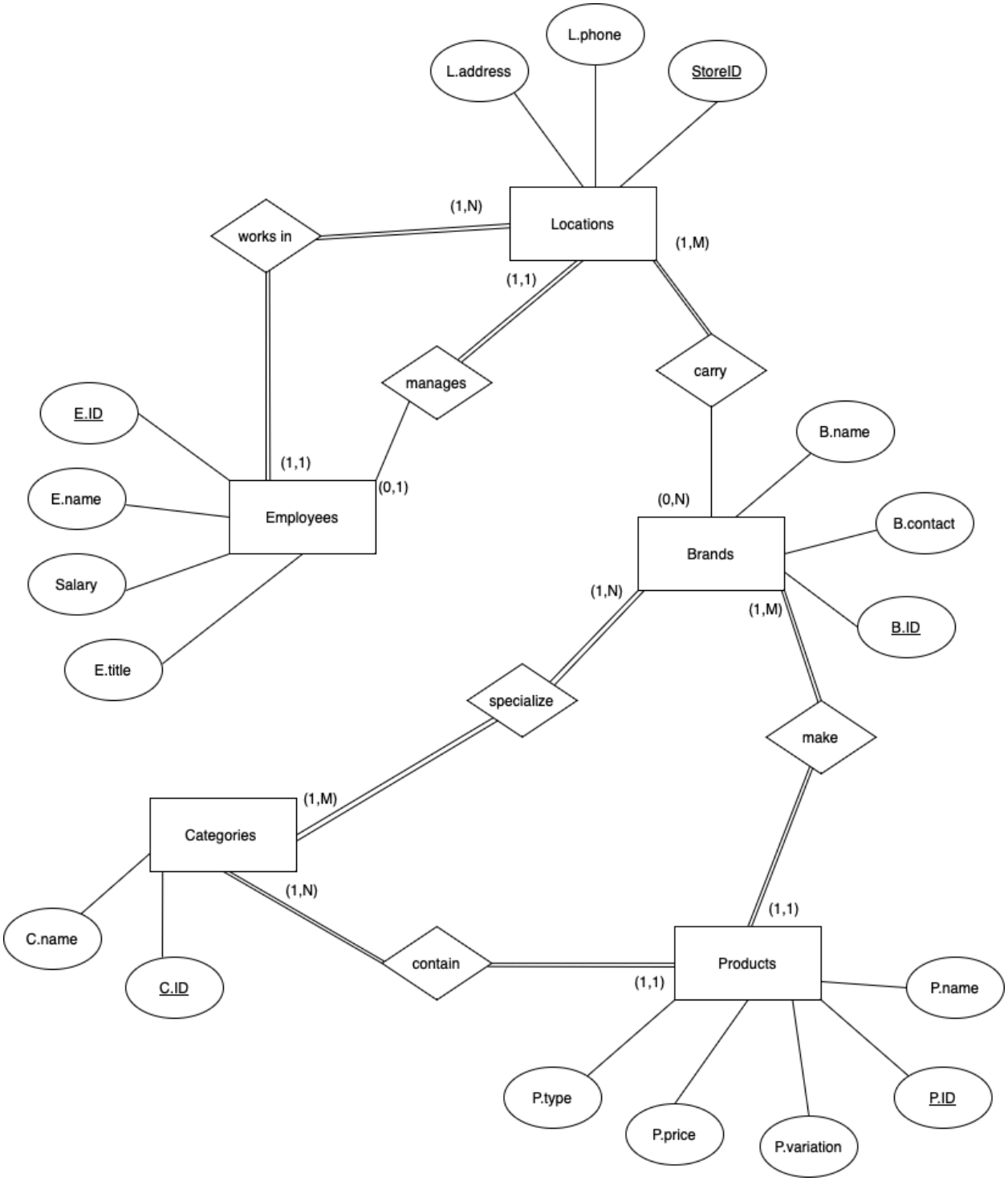
2. Description of the Organization

The SEPHORA Database (SEPHORA) stores relevant information regarding a company's employees within categories and different products and brands sold within those categories. The SEPHORA Database contains data about the various locations of the store, the employees within those locations, which employees work in which category in the location, the brands and products available at a specific location, the products that belong to a certain brand, the brands that belong to certain products, and the categories that contain certain brands and products.

- Sephora has many store locations. Each location contains a unique address, unique phone number, and a unique store identification number. Each location carries many brands. Brands make many products.
- Many employees work in specific locations. Each employee has a unique employee identification number as well as their name, salary,and job title. Each employee works in one store location. Each location has one manager.
- Sephora's categories are distinguished by classifying similar shared characteristics. For example: haircare, skincare, makeup, etc. Categories contain many products, and categories specialize in many brands.
- Sephora's products are attributed to one product type such as: moisturizers, blush, serums, etc. A specific product belongs to only one category, one product type, and only one brand.
- Brands make many products. Each brand has a unique brand identification number, a reliable contact, and a unique name. Brands specialize in one category.

3. ER Diagram

The figure below shows the ER diagram of the SEPHORA Database (SEPHORA).



4. ER Diagram Uncaptured Constraints

The following is a list of constraints that are not captured by the ER diagram of SEPHORA:

- An employee's salary must be a positive integer.
- Product price must be a positive integer.
- A brand's contact must be an active phone number.
- A category's name must be less than 15 characters.
- A variation will be a description of the product.

5. Relational Schema

This section provides the relational schema with referential integrity and the relational table details.

5.1 Relational Schema with Referential Integrity

locations(storeId, Laddress, Lphone, mgrID)
    foreign key (mgrID) referencing Employees(eID)
employees(eID, eName. eSalary, eTitle, storeID)
    foreign key (storeID) referencing locations(storeID)
brands(bID, bName, bContact)
categories(cID, cName)
products(pID, pName, pType, pPrice, pVariation, bID, cID)
    foreign key (bID) referencing brands(bID)
    foreign key (catID referencing categories(cID)
carry(bID, storeID)
    foreign key (bID) referencing brands(bID)
    foreign key (storeID referencing locations(storeID)
specialize(bID, catID)
    foreign key (bID) referencing brands(bID)
    foreign key (catID referencing categories(cID)

5.2 Relational Table Details

The relational schema given in Section 5.1 was mapped into the following tables in the SEPHORA database. Primary keys have been underlined. Tables that have multiple attributes underlined represent composite keys.

Table Name	Attribute	Description
Location	LID	the ID number of the location
	Laddress	the address of the location
	Lphone	the phone number of the specific location
Employees	eID	the ID number of the employee
	eName	the name of the employee
	eSalary	the employee's salary
	eTitle	the employee's job title
Categories	cID	the category's ID number
	cName	the name of the category
Brands	BID	the ID number of the brand
	Bname	the name of the brand
	Bcontact	the contact information of the brand
Products	PID	the ID number of the product
	Pvariation	the product's variety (different shades, scents….)
	Ptype	the type of product it is (haircare, skincare….)
	Pprice	the price of the product
	Pname	the name of the product