EECS 341 Project Proposal: Bar Database

Dominique Owens, Daniel Grigsby, Lee Kelvin, Dina Benayad-Cherif

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1 Application Background

Our project describes and implements a functioning bar. Through this database, the profits, employees, regular customers and menus of a bar could be managed. Cash registers would be able to insert purchases of food into the database, and managers could add and remove employees, change wages and run the restaurant.

2 Data Description

We will keep track of the following statistics for each entity in the database.

1. Employees
   (a) Name
   (b) Salary
   (c) Date hired
   (d) Bills served
   (e) Customers served
   (f) Other Employees Managed
2. Customers
   (a) Name
   (b) Items purchased
   (c) Money spent
   (d) Age
3. Drinks
   (a) Name

(b) price
(c) quantity sold
(d) Is alcoholic or not

4. Food
   (a) Name
   (b) price
   (c) quantity sold
   (d) Gluten free, vegan or neither
5. Bills / Receipts
   (a) Total price
   (b) Items on bill
   (c) Customer that made the purchase
   (d) Employee that waited on the customer
   (e) Tip given by customer

3 Schema

Customer(<u>cid</u>, name, age)
FoodPurchase(<u>cid</u>, <u>fid</u>, qty)

1. cid in FoodPurchase is a foreign key referencing cid in Customer
2. fid in FoodPurchase is a foreign key referencing fid in FoodItem

DrinkPurchase(<u>cid</u>, <u>did</u>, qty)

1. cid in DrinkPurchase is a foreign key referencing cid in Customer
2. did in DrinkPurchase is a foreign key referencing did in Drink

FoodItem(<u>fid</u>, name, pid, vegan, gluten-free)

1. pid is a foreign key referencing pid in Pricetable

Drink(<u>did</u>, name, pid, alcoholic)

1. pid is a foreign key referencing pid in Pricetable

Pricetable(pid, price)

Bill(billNo, cid, eid, totalprice, tip)

1. cid is a foreign key referencing cid in Customer
2. eid is a foreign key referencing eid in Employee

Employee(eid, salary, name, date-hired)

Manager(mid, name, eid)

1. eid is a foreign key referencing eid in Employee

4 ER Diagram

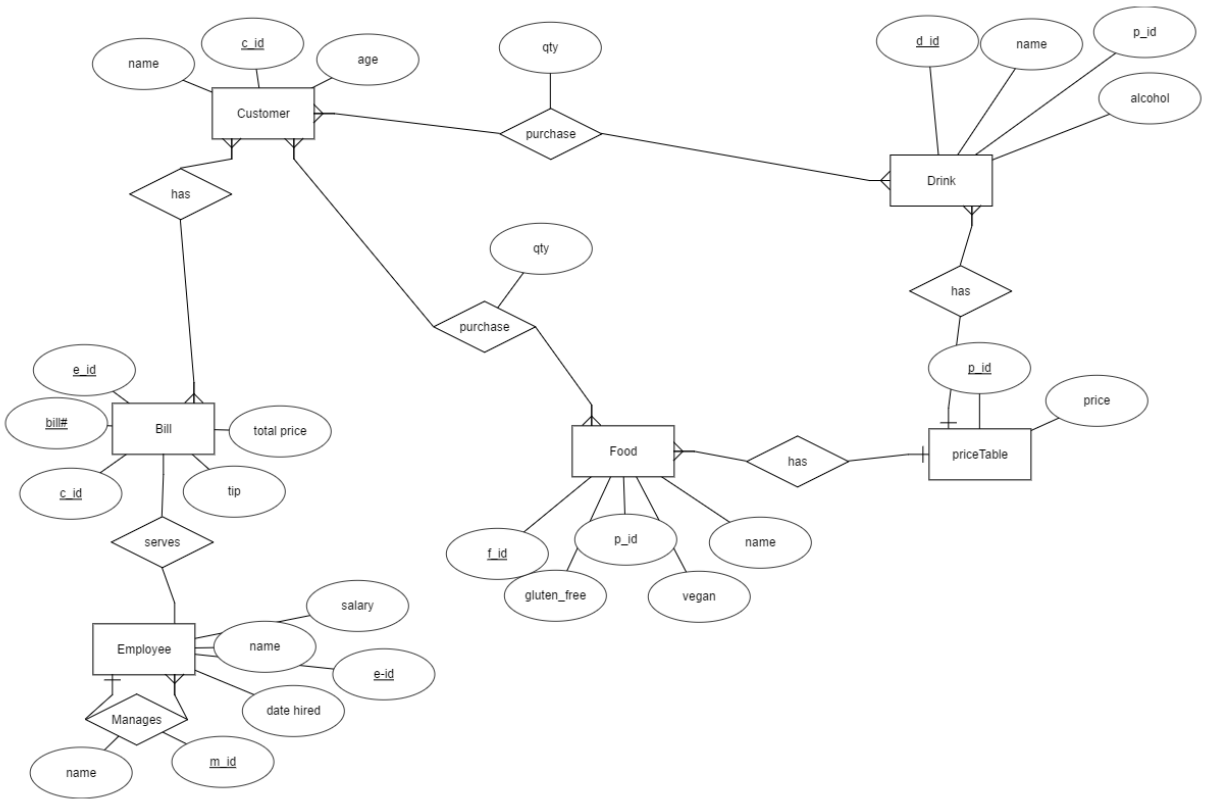

Figure 1: ER Diagram.