

Entity Dictionary:

Entity: Account

Description: Every customer creates one account to allow the Game Center to

keep track of them.

Attributes:

Account ID, Integer, PKEY

createAt, Datetime Email, VarChar(80)

Password, VarChar(500)
Note: Password is Hashed

Entity: Appliance

Description: A specific type of Equipment that is used for the upkeep of the

Family Center.
Attributes:

Utility, VarChar(80)

Note: Is a subclass of Equipment

Entity: Beverages

Description: A nice tasty beverage to go with a meal. Subclass to Meal

Attributes:

Caffeinated, BOOL

Entity: Bowling

Description: A type of game where customers roll a large ball to knock down pins at the end of the lane. How many pins are hit overall determines a user's score.

Attributes:

Lane Number, Integer

Entity: Candy

Description: A sweet tasting hard snack. One of the subclasses of prizes.

Attributes:

Flavor, VarChar(80)

Entity: Cashier

Description: A type of employee who admits customers to the center and

handles the monetary transactions.

Attributes:

Section, VarChar(80)

Entity: Customer

Description: A user who comes to the family entertainment center to spend money on its amenities.

Attributes:

Contact compounds Email and Phone Number

Email, VarChar(80)
Phone Number, Integer
Customer ID, Integer, PKEY

Name, VarChar(80)

Entity: Desserts

Description: A delicacy normally after a meal. Sub class to meal.

Attributes:

Dairy Free, BOOL

Entity: Employee

Description: A user who works at the Family Center. They earn pay to provide services to the location.

Attributes:

Hours Worked, Integer

ID, Integer, PKEY Pay Rate, Float

Phone Number, Integer

Entity: Entrees

Description: The main course, a subclass of meal which is purchased by the

customer. Attributes:

Vegetarian, BOOL

Entity: Entry Pass

Description: What a customer buys to access the family entertainment center.

Attributes:

Date Purchase, Datetime Group Discount, Float Party Size, Integer

Pass ID, Integer, PKEY

Price, Float

Note: Price is calculated from Party Size, a predefined rate, and the Group

Discount.

Entity: Equipment

Description: Necessary items for the Family Center to run, used by employees.

Attributes:

Description, VarChar(500)

Inventory ID, Integer, PKEY

Name, VarChar(80)

Entity: Family Center

Description: The location housing all the amenities for the customer.

Employees are in charge.

Attributes:

Address compounds Street Name, Street Number, and Zip code

Street Name, VarChar(80) Street Number, Integer

Zip code, Integer

Center ID, Integer, PKEY

Name, VarChar(80)

Entity: Game

Description: A type of activity at the center. A number of customers play games

costing tickets.
Attributes:

Game Description, VarChar(500)

Game ID, Integer, PKEY

Entity: Game Equipment

Description: A specific type of Equipment that is used for the upkeep of the

games. Attributes:

Game Type, VarChar(500)

Note: Is a subclass of Equipment

Entity: Kitchen

Description: A specific type of Equipment that is used for the upkeep of the

Kitchen. Attributes:

Material Type, VarChar(80)

Washable, Boolean

Note: Is a subclass of Equipment

Entity: Kitchen Staff

Description: Kitchen Staff members are responsible for running the Kitchen.

Attributes:

Primary Duty, VarChar(200) Secondary Duty, VarChar(200)

Entity: Laser Tag

Description: A type of game where customers try to shoot each other with laser guns. How many people are hit determines the user's score.

Attributes:

Arena Number, Integer

Entity: Meal

Description: Type of experience where customers can purchase food and

drinks for consumption.

Attributes: Price, Float

Receipt ID, Integer, PKEY

Note: Superclass of Entrees, Beverages, and Desserts.

Entity: Owner

Description: Type of employee who owns a specific franchise location of the Family Entertainment Center brand. This employee is responsible for running the center and the management of all other employees.

Attributes:

Store Number, Integer

Entity: Prize

Description: A tangible reward for the customer for doing well playing games.

Attributes:

Placement Tier, Integer Prize ID, Integer, PKEY

Entity: Safety Officer

Description: A type of employee who is qualified to administer medical practice

to others at the center.

Attributes:

EMT Experience, VarChar(500)

Entity: Stuffed Animal

Description: A nice, cuddly, bear filled with cotton stuffing. Subclass to Prize

Attributes:

Size, VarChar(80)

Entity: Ticket

Description: An entity customers buy to play games.

Attributes:

Expire Date, Datetime

Ticket CODE, Integer, PKEY

Relation Dictionary

Relationship: Buys

Description: Customer buys tickets for games

Cardinality: M Customer, Partial to N Ticket, Partial

Relationship: Create

Description: Customer creates an Account to keep information stored with

Family Entertainment Center

Cardinality: N Customer, Partial to 1 Account, Partial

Relationship: Costs

Description: Ticket purchased in exchange for games

Cardinality: M Ticket, Partial to 1 Game, Partial

Relationship: Earns

Description: Winning in games earns you prizes Cardinality: M Games, Partial to N Prizes, Total

Relationship: Employs

Description: Family center employs employees to performs various tasks and

duties

Cardinality: M Family center, Partial to N Employees, Partial

Relationship: Has

Description: Family centers contains several types of game Cardinality: 1 Family Center, Partial to N Game, Partial

Relationship: Orders

Description: Customers orders meals with the option of dine-in or take out

Cardinality: N Customer, Partial to 1 Meal, Partial

Relationship: Purchases

Description: Customers buys entry pass for family entertainment center

Cardinality: M Customer, Partial to N Entry Pass, Total

Relationship:Uses

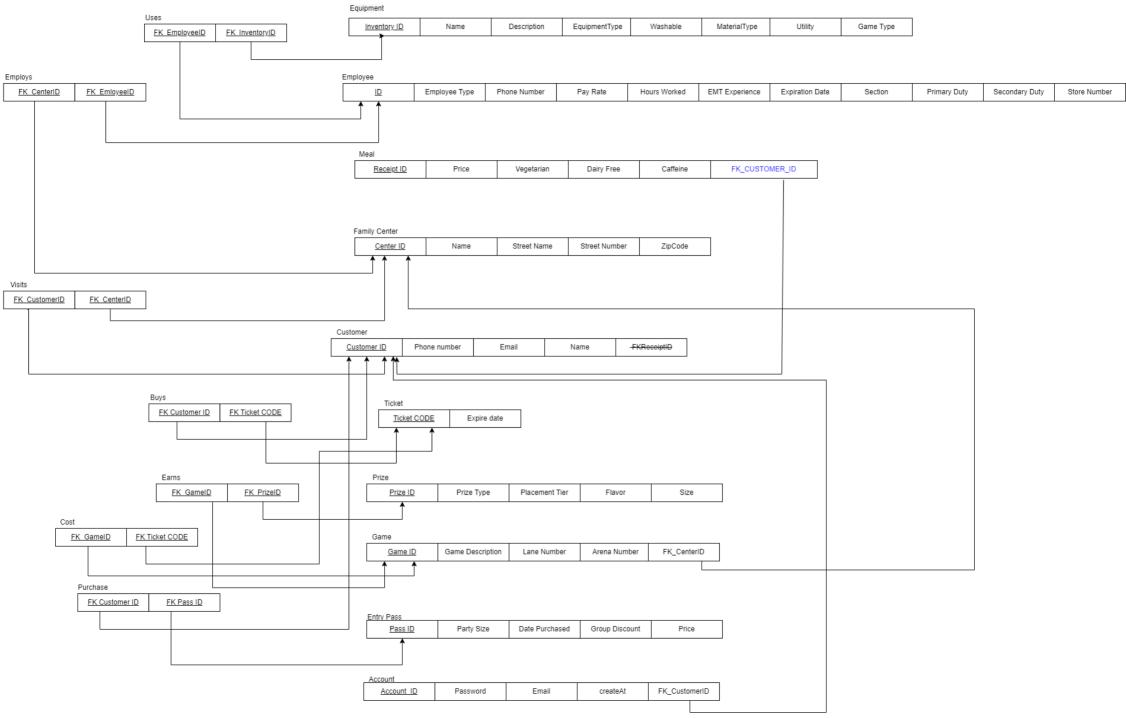
Description: Employee uses equipment throughout the Family Entertainment

Center

Cardinality: M Employee, Partial to N Equipment, Partial

Relationship: Visits

Description: Customer visits family center for entertainment Cardinality: M Customer, Partial to N Family Center, Partial



Schema Dictionary:

Name: Account

Description: Every customer creates one account to allow the Game Center to

keep track of them.

Attributes:

Account ID, Integer, PKEY

createAt, Datetime Email, VarChar(80)

Password, VarChar(500)

FK CustomerID, INT, references Customer

Note: Password is Hashed

Name: Buys

Description: Customer buys tickets for games

Attributes:

<u>FK_Customer_ID</u>, Integer, references Customer, Part of PKEY <u>FK_Ticket_CODE</u>, Integer, references Ticket, Part of PKEY

Note: The combine of FK_Customer_ID and FK_Ticket_Code is the primary of

the Buys table

Name: Costs

Description: Ticket purchased in exchange for games

Attributes:

<u>FK_GameID</u>, Integer, references Game, Part of PKEY

FK Ticket CODE, Integer, Integer, references Ticket, Part of PKEY

Note: The combine of FK GameID and FK Ticket Code is the primary of the

Costs table

Name: Customer

Description: A user who comes to the family entertainment center to spend

money on its amenities.

Attributes:

Contact compounds Email and Phone Number

Customer ID, Integer, PKEY

Name, VarChar(80) Phone Number, Integer

FK RecepitID, INT, references Meal

Name: Earns

Description: Customer will earn the prize if they win the game

Attributes:

FK_GameID, Integer, references Game, Part of PKEY

FK_PrizeID, Integer, references Prize, Part of PKEY

Note: The combination of FK_GameID and FK_PrizeID is the primary key of

the Earns table

Name: Employee

Description: A user who works at the Family Center. They earn pay to provide

services to the location.

Attributes:

Employee Type, VarChar(80) EMT Experience, VarChar(500)

Expiration Date, Datetime

Hours Worked, Integer

<u>ID</u>, Integer, PKEY Pay Rate, Float

Phone Number, Integer

Primary Duty, VarChar(80)

Secondary Duty, VarChar(80)

Section, VarChar(80) Store Number, rInteger

Name: Employs

Description: Family center employs employees to performs various tasks and

duties Attributes:

FK_CenterID, Integer, references Family Center, Part of PKEY

<u>FK_EmloyeeID</u>, Integer, references Employee, Part of PKEY

Note: The combination between FK_CenterID and EmployeeID is the primary key.

Key.

Name: Entry Pass

Description: What a customer buys to access the family entertainment center.

Attributes:

Date Purchase, Datetime Group Discount, Float Party Size, Integer

Pass ID, Integer, PKEY

Price, Float

Note: Price is calculated from Party Size, a predefined rate, and the Group

Discount.

Name: Equipment

Description: Necessary items for the Family Center to run, used by employees.

Attributes:

Description, VarChar(500) EquipmentType, VarChar(80)

Game Type, VarChar(80)
Inventory ID, Integer, PKEY

MaterialType, VarChar(80)

Name, VarChar(80) Utility, VarChar(80)

Washable, BOOL

Name: Family Center

Description: The location housing all the amenities for the customer.

Employees are in charge.

Attributes:

Address compounds Street Name, Street Number, and Zip code

Street Name, VarChar(80) Street Number, Integer

Zip code, Integer

Center ID, Integer, PKEY

Name, VarChar(80)

Name: Game

Description: A type of activity at the center. A number of customers play games

costing tickets.
Attributes:

Arena Number, Integer

FK_CenterID, Integer, references Family Center

Game Description, VarChar(500)

<u>Game ID</u>, Integer, PKEY Lane Number, Integer

Name: Meal

Description: Type of experience where customers can purchase food and

drinks for consumption.

Attributes:
Caffeine, BOOL
Dairy Free, BOOL

Price, Float

Receipt ID, Integer, PKEY

Vegetarian, BOOL

FK_CUSTOMER_ID, Integer, references customer

Note: Superclass of Entrees, Beverages, and Desserts.

Name: Prize

Description: A tangible reward for the customer for doing well playing games.

Attributes:

Flavor, VarChar(80)
Placement Tier, Integer
Prize ID, Integer, PKEY
Prize Type, VarChar(80)

Size, Integer

Name: Purchases

Description: Customers buys entry pass for family entertainment center

Attributes:

FK CustomerID, Integer, references Customer, Part of PKEY FK PassID, Integer, references Entry Pass, Part of PKEY

Note: The combination of the FK_CustomerID and FK_PassID is the primary

key of the Purchases table.

Name: Ticket

Description: An entity customers buy to play games.

Attributes:

Expire Date, Datetime

Ticket CODE, Integer, PKEY

Name: Visits

Description: Customer visits family center for entertainment

Attributes:

<u>FK_CenterID</u>, Integer, references Family Center, Part of PKEY FK_CustomerID, Integer, references Customer, Part of PKEY

Note: The combination of the FK_CenterID and FK_CustomerID is the primary

key of the Visits table.

Name:Uses

Description: Employee uses equipment throughout the Family Entertainment

Center Attributes:

FK EmployeeID, Integer, references Employee, Part of PKEY

FK_InventoryID, Integer, references Inventory, Part of PKEY

Note: The combination of the FK_EmloyeeID and FK_InventoryID is the primary key of the Uses table.