

CSD2206 Term Project F19

HINALI TEJANI

C0939251

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Company Overview

Company Name

GridleGrills

Company Description

GridleGrills sells variety of griddles & grill pans from various top-rated companies. They offer many sizes and shapes in pans, for all indoor grilling needs at everyday low prices. Along with best nonstick material, they also offer cast iron, square, round, double burner and reversible.

Type of Company

GridleGrills is a retailer, selling individual griddles & grill pans of a variety of styles.

Product

Griddles & Grill pans

Website Resources

- www.walmart.ca
- www.canadiantire.com
- www.homedepot.ca

Product Attributes

Attributes

- Product id (UID)
- Model
- Brand
- Type
- Serial Number
- Description
- Rating
- Colour
- Diameter
- Handle Material
- Shape
- Price
- Material
- Dimensions

GridleGrills

Invoice

INVOICE # 28915
DATE May 29, 2019
CUSTOMER ID # 720
ASSOCIATE ID # 22 ASSOCIATE
NAME J. Folger

1060 Yonge Street
Toronto, ON M4W 2L4
416-325-2739

Billing Details:

Dominick Mcdonnell
1080 Oxford Street E
London, ON N5Y 3L4
(519) 684-6631

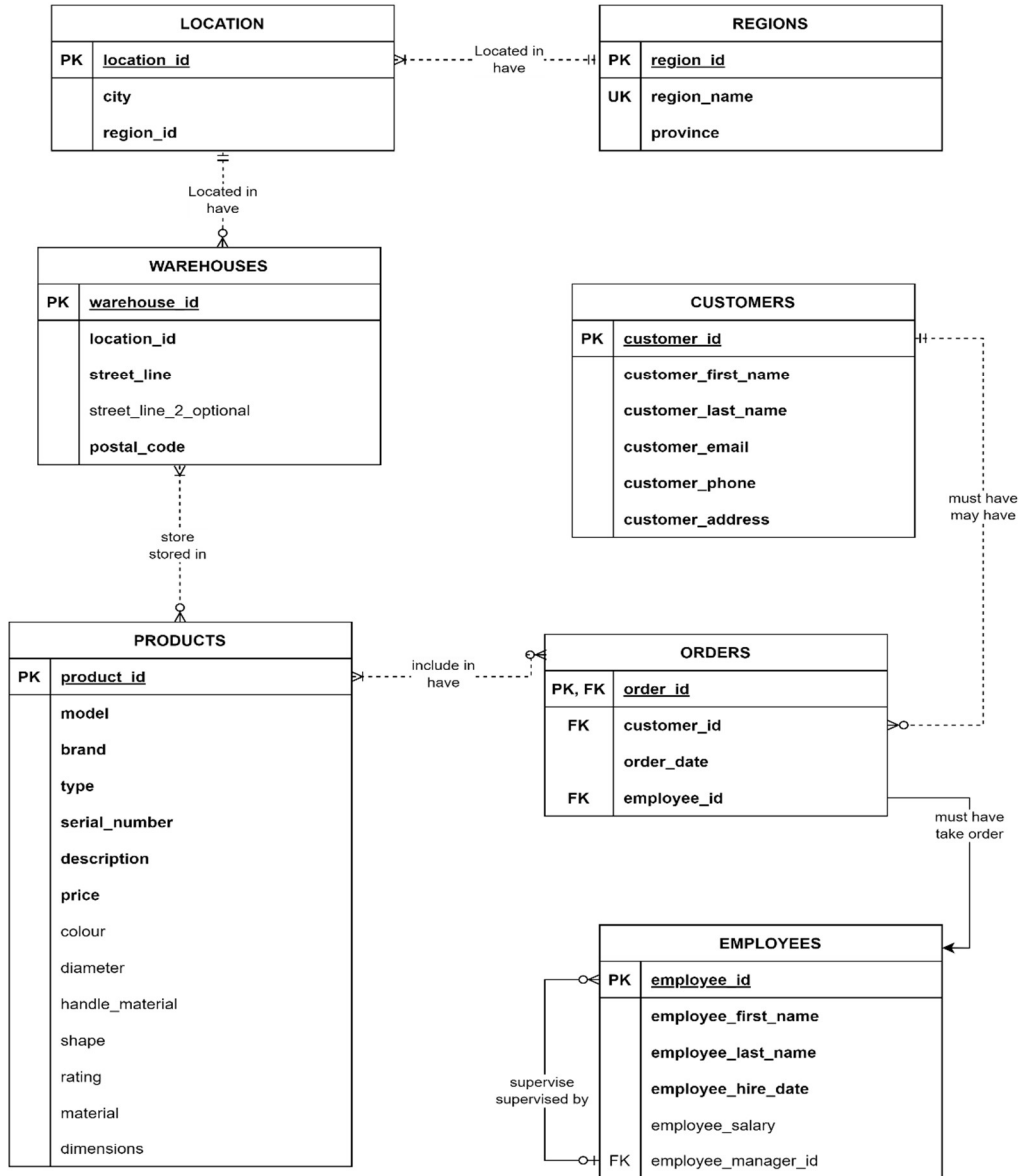
PRODUCT ID	MODEL	BRAND	DESCRIPTION	QTY	UNIT PRICE	TOTAL
9001022	CE201	Ninja	BBQ Griddle	1	250.00	250.00
9001046	KF7150BK	Braun	3 Burner Gas Griddle	1	199.99	199.99
9001033	611247373590	Keurig	Cast Iron Griddle	1	68.00	68.00
9001014	KU5055746	Keurig	Electrical Grill	1	149.99	149.99
SUBTOTAL						667.98
SALES TAX						86.83
SHIPPING & HANDLING						0.00
TOTAL DUE						754.81

Thank you for shopping with us!

Hinali Tejani
C0939251

ER Diagrams

1. Many-to-many



Each REGIONS must consist of one or many LOCATIONS
Each LOCATIONS must be located in one and only one REGIONS

Each LOCATIONS may consist of zero, one or many WAREHOUSES Each WAREHOUSES must be located in one and only one LOCATIONS

Each WAREHOUSES may store zero, one or many PRODUCTS Each PRODUCTS may be stored in one or many WAREHOUSES

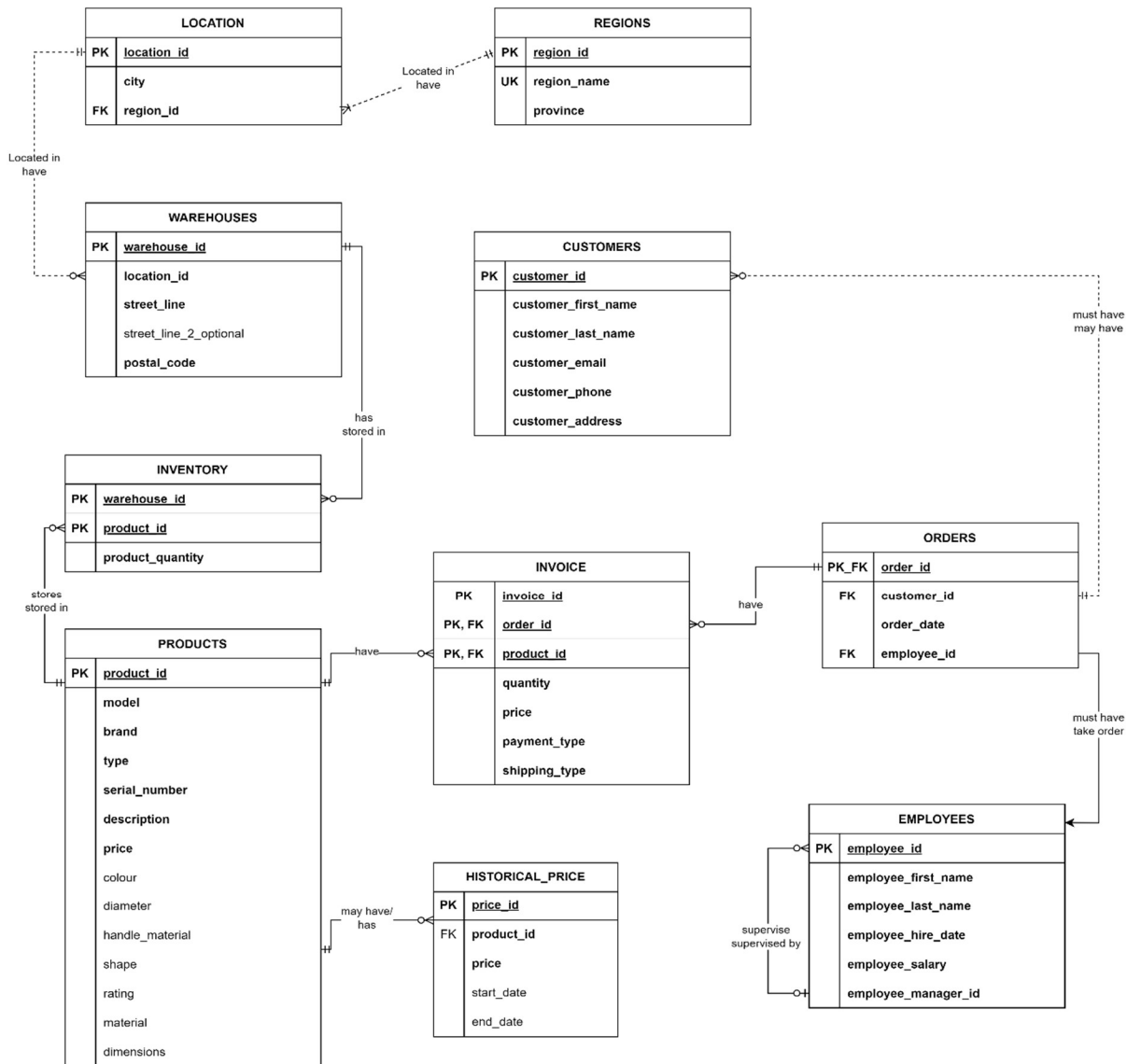
Each PRODUCTS may be included in zero, one or many ORDERS
Each ORDERS must consist of one or many PRODUCTS

Each ORDERS must have one and only one CUSTOMER
Each CUSTOMER may have zero, one or many ORDERS

Each ORDERS must have one and only one EMPLOYEES
Each EMPLOYEES may have zero, one or many ORDERS

Each EMPLOYEES may work under one and only one MANAGER
Each MANAGER may supervise zero, one or many EMPLOYEES

2. Many-to-many resolved



Each REGIONS must consist of one or many LOCATIONS
 Each LOCATIONS must be located in one and only one REGIONS

Each LOCATIONS may consist of zero, one or many WAREHOUSES
 Each WAREHOUSES must be located in one and only one LOCATIONS

Each WAREHOUSES may have zero, one or many INVENTORYs
 Each INVENTORY must be stored in one and only one WAREHOUSES

Each INVENTORY must have one and only one PRODUCTS
 Each PRODUCTS may be stored in one and only one INVENTORY

Each PRODUCTS may be included in zero, one or more ORDER_LINES
 Each ORDER_LINES must include one and only one PRODUCTS

Each ORDER_LINES must be included in one and only one ORDERS
 Each ORDERS must include one or many ORDER_LINES

Each ORDERS must have one and only one CUSTOMER
 Each CUSTOMER may have zero, one or many ORDERS

Each ORDERS must have one and only one EMPLOYEES
 Each EMPLOYEES may have zero, one or many ORDERS

EACH EMPLOYEES may work under one and only one MANAGERS
 Each MANAGER may supervise zero, one or many EMPLOYEES

Each PRODUCT may have one or many HISTORICAL_PRICES
 Each HISTORICAL_PRICES must be has one and only one PRODUCT

Relational Model

PRODUCTS				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	product_id	integer	
UK	*	model	varchar	20
	*	brand	varchar	20
	*	type	varchar	20
UK	*	serial_number	varchar	30
	*	description	varchar	60
	*	price	decimal	6,2
	O	colour	varchar	20
	O	diameter	decimal	3,2
	O	handle_material	varchar	30
	O	shape	varchar	20
	O	rating	decimal	3,2
	O	material	varchar	30
	O	dimensions	decimal	4,2

WAREHOUSES				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	warehouse_id	integer	
FK	*	location_id	integer	
	*	street_address_line_1	varchar	30
UK	*	postal_code	varchar	7
	O	Street_address_line_2	varchar	30

INVENTORY				
Key Type	Optionality	Column Name	Data Type	Length
PK/FK	*	product_id	integer	
PK/FK	*	warehouse_id	integer	
	O	quantity	integer	

REGIONS				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	region_id	integer	
UK	*	region_name	varchar	30
	*	province	varchar	30

LOCATIONS				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	location_id	integer	
	*	city	varchar	30
FK	*	region_id	integer	

INVOICE				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	Invoice_id	integer	
PK/FK	*	order_id	integer	
PK/FK	*	product_id	integer	
	*	quantity	integer	
	*	price	decimal	6,2
	*	payment_type	varchar	20
	*	shipping_type	varchar	20

ORDERS				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	order_id	integer	
FK	*	customer_id	integer	
	*	order_date	date	
FK	*	employee_id	integer	

CUSTOMERS				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	customer_id	integer	
	*	customer_first_name	varchar	20
	*	customer_last_name	varchar	20
UK	*	customer_email	varchar	30
	*	customer_phone	varchar	20
	*	customer_address	varchar	60

EMPLOYEES				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	employee_id	integer	
	*	employee_first_name	varchar	20
	*	employee_last_name	varchar	20
	*	employee_hire_date	date	
	*	employee_salary	decimal	9,2
FK	*	employee_manager_id	integer	

HISTORICAL_PRICE				
Key Type	Optionality	Column Name	Data Type	Length
PK	*	price_id	integer	
FK	*	product_id	integer	
	*	price	decimal	6,2
	*	start_date	date	
	*	end_date	date	

PRODUCTS (**product_id**, model, brand, type, serial_number, description, price, colour, diameter, handle_material, shape, rating, material, dimensions)

WAREHOUSES (**warehouse_id**, *location_id*, street_address_line_1, postal_code, street_address_line_2)
FK location_id → LOCATIONS

INVENTORY (**product_id**, **warehouse_id**, quantity)
FK product_id → PRODUCTS
FK warehouse_id → WAREHOUSES

REGIONS (**region_id**, region_name, province)

LOCATIONS (**location_id**, city, *region_id*)
FK region_id → REGIONS

INVOICE(**invoice_id**, **order_id**, **product_id**, quantity, price, payment_type, shipping_type)
FK order_id → ORDERS
FK product_id → PRODUCTS

ORDERS (**order_id**, *customer_id*, order_date, *employee_id*)
FK customer_id → CUSTOMERS
FK employee_id → EMPLOYEES

CUSTOMERS (**customer_id**, customer_first_name, customer_last_name, customer_email, customer_phone, customer_address)

EMPLOYEES (**employee_id**, employee_first_name, employee_last_name, employee_hire_date, employee_salary, employee_manager_id)
FK manager_id → EMPLOYEES

HISTORICAL_PRICE(**price_id**, **product_id**, price, start_date, end_date)

FK product_id → PRODUCTS