



COFFEE SHOP MANAGEMENT APP

*“The Database is made with the aim of managing the process and work
at a Coffee Shop, much easier and efficiently”*

GROUP 3

SONI DEV ALPESHBHAI (DASONI4) – 130759210

MOHAMMAD MAHDI MOHAGHEGH (MOHAGHEGH) –
148711211

LE CHANH TIN LUONG (LLUONG7) - 154574214

Introduction

Coffee shops are a type of business that come in all sizes, yet their system structure is largely the same. Furthermore, most people have been to coffee shops at least once in their lives. So, this makes it easy to identify entities with details from our memory. As a coffee shop management system contains a variety of business functions, it is a good starting point to learn how to build larger and more advanced business databases.

Problem Statement

Just like any other business in the modern world, coffee shops also need as much data as they can get to evaluate their performance and advance their sales. Creating a simple database storing sales data of coffee shops facilitates analyzing the data to generate business insight for business growth. Such a database can keep their sales data regarding what they sell, the quantity of products they sell, store, or order for sustainable management of resources. This can help the managers with their inventory decision-making and business strategies.

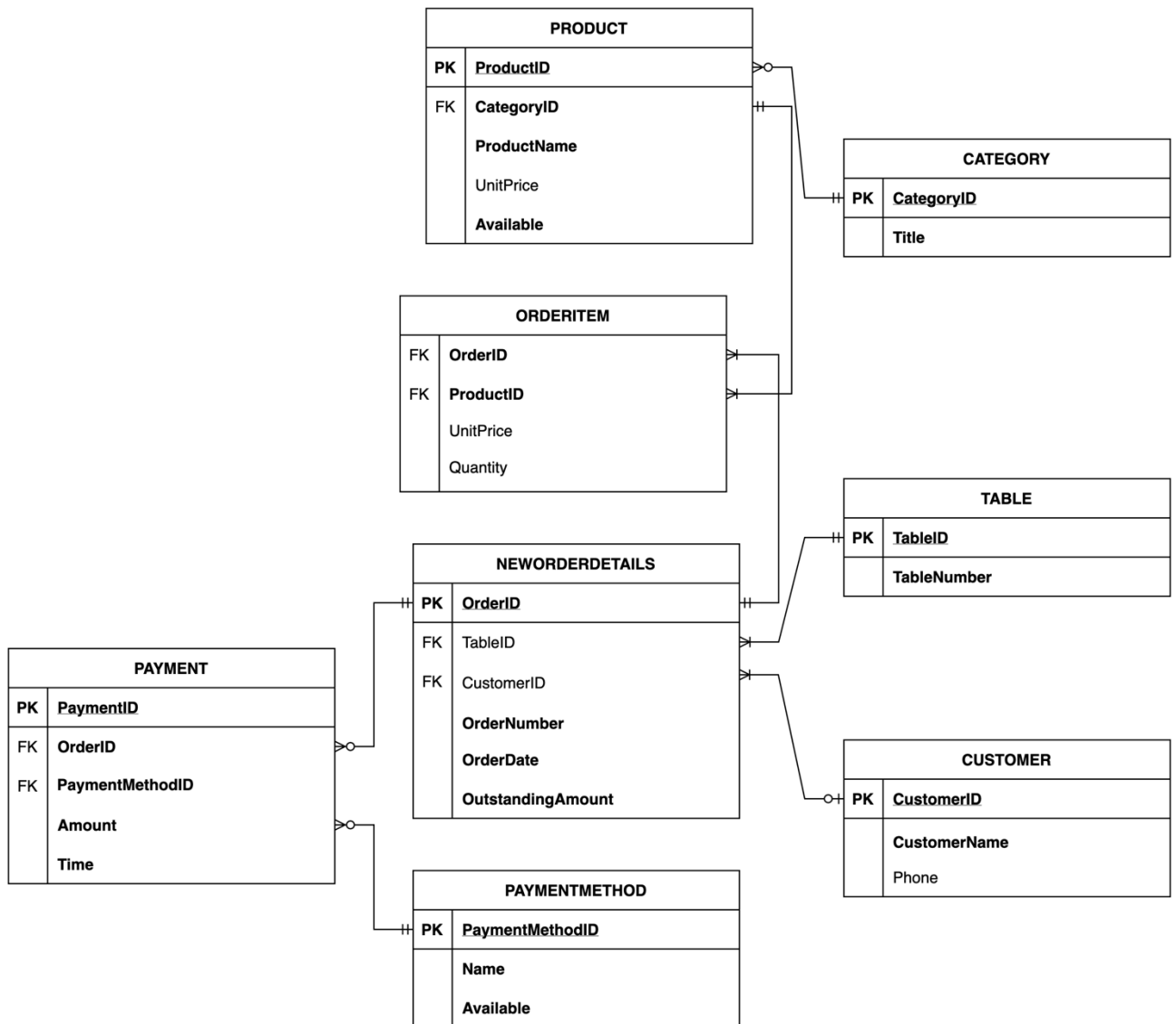
Solution

Our database is advanced enough to facilitate with processing order and payment data as well as the products. That includes details like prices, products, categories, orders and the relationship between all of the related entities so more precise data can be derived from the database. The database focuses on helping to manage orders and sales activity by collecting relevant data.

Requirements

- Order Management.
- Table Management.
- Customer Information (Collect information for reservation purposes).
- Product and Inventory Management/ Tracking.
- Categorization of Product.
- Payment Management (made by the customer).
- Revenue Management (How much money did the store/ cafe made ? - Profit/ revenue generated).

ERD – Entity Relationship Diagram (*All members*)



Data Dictionary (*All members*)

CATEGORY								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
CategoryID	int	5		PK	Y			1 It indicates the unique ID for each product category.
Title	varchar(100)	100			Y		Beverages	It represents the product title under each category.

PRODUCT								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
ProductID	int	5		PK	Y		567	It indicates the unique ID for each product within category.
CategoryID	int	5		FK	Y			1 It indicates the unique ID for each product category.
ProductName	varchar(50)	50			Y		Cappuccino	It represents the product name.
UnitPrice	decimal(12,2)	(12,2)			N		3.49	It gives the unit price for the products.
Available	varchar(50)	50			Y		YES	It gives the idea about, if a product is available or not at the store?

NEWORDERDETAILS								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
OrderID	int	5		PK	Y		810	It represents a unique ID for each order [used to categorize each orders].
CustomerID	int	5		FK	N		79358	It stores the unique ID for each customer at the store.
TableID	int	5		FK	N		10990	It indicates the unique ID or number for each booked table at the store.
OrderNumber	int	5			Y		100	It gives the unique order number associated for each order made by the customer.
OrderDate	datetime				Y		20/01/01	It stores the order date for each order made on a specific day.
OutstandingAmount	decimal(12,2)	(12,2)			Y		10.99	The outstanding or the total amount spent by the customer.

ORDERITEM								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
OrderID	int	5		FK	Y		810	It represents a unique ID for each order. (used to categorize each orders)
ProductID	int	5		FK	Y		567	It indicates the unique ID for each product within category.
UnitPrice	decimal(12,2)	(12,2)			N	1 - 5000	10.99	It gives the unit price for the products.
Quantity	int	5	1		N		10	The net quantity of a specific product, ordered by each customer.

CUSTOMER								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
CustomerID	int	5		PK	Y		79358	It stores the unique ID for each customer at the store.
CustomerName	varchar(50)	50			Y		"Henry"	It stores the customer name for each product.
Phone	varchar(50)	50			N		+1 (437) 267-3011	It stores the contact info for each customer.

TABLEDETAILS								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
TableID	int	5		PK	Y		10990	It represents the table ID associated to each table, for booking purposes, beforehand.
TableNumber	int	5			Y	1 - 999	50	It represents the table number within each tableID, which is given to customer at the store.

Payment								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
PaymentID	int	5		PK	Y		301	It gives the unique ID associated with each payment made by the customer.
OrderID	int	5		FK	Y		810	It represents a unique ID for each order. (used to categorize each orders)
PaymentMethodID	int	5		FK	Y		3012	It stores the unique PaymentID, given to each payment made by the customer.
Amount	decimal(12,2)	(12,2)			Y		10.99	It shows the net amount, at the end of each order made by the customer.
PaymentTime	datetime				Y		22/07/29	It shows the PaymentTime, of each payment made by the customer.

PaymentMethod								
Column	Data Type	Size, Precision	Default	PK/FK	Required	Range	Sample Data	Notes
PaymentMethodID	int	5		PK	Y		3012	It stores the unique PaymentID, given to each payment made by the customer.
Name	varchar(50)	50			Y		American Express	It gives the name of each bank, from which the payment has been made.
Available	varchar(50)	50			Y		YES	It gives the customer, an idea if a particular card for the payment is accepted or not ?