Jangu Okyekole Bistro is a new Ugandan restaurant quickly gaining popularity in its community so they decided to come up with an advanced system for tracking all of their metrics. The goal of the project is to centralize all of the data that wasn't tracked as meticulously. All aspects of the business will be tracked: customers, sales, employees, meals, ingredients, suppliers, supplier purchases, and discounts. The restaurant has quickly grown to serve 1000 customers a week, so this system will help to manage those customer relations in addition to tracking expenses. Since the restaurant only serves authentic and locally sourced ingredients in their meals, their expenses need to be tracked to ensure they're able to maintain their goal of providing excellent food and service while maintaining profitable margins. They currently make about $30,000 in revenue per week, but their expenses are ranging from $20,000 to $25,000, and they're looking to improve their margins by tracking how often meals are ordered to optimize their menu. Over the next 3 months, Jangu Okyekole will track which meals are ordered the most and aims to increase their menu size by 20%. The system will also allow the owners to track their employees, when they work, and how long they've been there. They hope that by utilizing this new system, they will be able to retain loyal customers as well as raise profit margins.

Database Outline

Customers: Holds details about the customers of the restaurant.

customer_id: int, auto_increment, NOT NULL, PK

first_name: varchar(50), NOT NULL

last_name: varchar(50), NOT NULL

email: varchar(50), NOT NULL, unique

phone_contact: varchar(15), NOT NULL, unique

times_dined: int, NULL, –calculated

vip_customer: tinyint(1), NOT NULL

relationship: A M:M relationship with sales.

Customers_sales (Intersection Table): Facilitates the M:M relationship between customers and sales.

customer_id: int, NOT NULL, FK

sale_id: int, NOT NULL, FK

Employees: Details about the employees of the restaurant

employee_id: int, auto_increment, NOT NULL, PK

first_name: varchar(50), NOT NULL

last_name: varchar(50), NOT NULL

email: varchar(50), NOT NULL, unique

phone_contact: varchar(15), NOT NULL

start_date: date, NOT NULL,

shift_worked: ENUM('morning', 'afternoon','evening'), NOT NULL

Relationship: A 1:M relationship between Employees and sales with the PK of the employee in a customer

Meals: Details of the meals served at the restaurant

meal_ID: int, auto_increment, NOT NULL, PK

meal_name: varchar(50), NOT NULL

meal_price: int, NOT NULL

meal_prep_time: int, NOT NULL

description: varchar(100), NOT NULL

Relationships: A M:M relationship between meals and sales.

Sales: Holds details of the sales made to customers

sale_id: int, auto_increment, NOT NULL, PK

sale_date_time: datetime, NOT NULL

discount_ID: int

total_bill: decimal(10, 2), NOT NULL

Relationships: A M:1 relationship with employees, a M:1 relationship with discounts, a M:M relationship between sales and customers, and a M:M relationship between sales and meals.

Customer_Sales_Meals (Intersection table): Facilitates the M:M relationship between sales and meals.

meal_id: int, NOT NULL, FK

sale_id: int, NOT NULL, FK

quantity_sold: int, NOT NULL

price_per_meal: decimal (10,2), NOT NULL

Discounts: Represents types of discounts available to the customers.

discount_id: int, NOT NULL, PK,

discount_code: varchar(50), NOT NULL

discount_category: enum('Customer Birthday', 'Special Holiday', 'New Parent'), NULL

discount_amount: decimal(5,2), NOT NULL

discount_type: enum('Percentage', 'Fixed)

Relationship: 1:M relationship between Discounts and customer sales, since each sale can only have one discount applied.