

# **Specialty Coffee Café Database Tools Overview (Progress Report #2)**

## **Introduction**

In modern business environments, real-time data access is essential for operational efficiency and customer satisfaction. Specialized database views, functions, and stored procedures significantly enhance staff capabilities in managing daily tasks.

This document outlines the utility of my specialty coffee cafe database tools in showing how they support various operational aspects, from sales monitoring to reservation management and inventory control.

## **Database Views**

### **VW\_TODAY\_PURCHASES**

VW\_TODAY\_PURCHASES is tailored to provide cashiers and baristas with real-time access to daily sales data. This view is pivotal for enhancing transaction management and customer service, as it allows employees to quickly access sales insights, facilitating prompt responses to customer inquiries and efficient handling of sales data.

### **VW\_ACTIVE\_RESERVATIONS**

VW\_ACTIVE\_RESERVATIONS serves hosts and front-of-house managers by delivering a real-time overview of active reservations, complete with customer names and contact information. This view is indispensable for optimizing service flow and efficiently managing customer interactions during service hours.

### **VW\_PRODUCT\_INVENTORY**

VW\_PRODUCT\_INVENTORY is designed for purchasing managers and inventory clerks, offering detailed insights into product availability and stock levels. This view plays a crucial role in maintaining optimal stock levels, enabling informed decision-making regarding product ordering and replenishment.

## **Functions**

### **GetTotalSalesForDay**

The function GetTotalSalesForDay allows managers and financial analysts to compute the total sales for any given day. It provides critical data for daily financial oversight and strategic planning, aiding in performance tracking and facilitating data-driven decisions based on daily sales figures.

### **GetCustomerEmail**

GetCustomerEmail streamlines the process of retrieving a customer's email based on their customer ID. This function is particularly useful for marketing teams aiming to engage customers with promotional content and service updates efficiently.

### **IsTableAvailable**

IsTableAvailable supports reservation staff by checking the availability of tables on a given date, enhancing reservation management, preventing overbooking, and ensuring accurate booking information is relayed to customers.

## **Stored Procedures**

### **AddNewCustomer**

AddNewCustomer streamlines the addition of new customers to the database, a procedure that proves beneficial for front-desk staff, particularly during first-time customer visits. It reduces wait times and enhances the accuracy of customer data entry.

### **UpdateReservationCancellation**

UpdateReservationCancellation is crucial for reservation managers as it updates the cancellation status of reservations, thus managing table availability effectively and minimizing disruptions from cancellations.

### **RecordProductArrival**

RecordProductArrival keeps inventory records up-to-date when new shipments arrive, a vital process for inventory managers to ensure continuous operation and avoid the pitfalls of under or overstocking.

## **Triggers**

### **SetTableUnavailable**

The SetTableUnavailable trigger ensures that once a reservation is entered into the system, the specific table is marked as unavailable in the database. This automatic update prevents double bookings and maintains an accurate reflection of table status at all times.

### **SetTableAvailable**

The SetTableAvailable trigger works to adjust the availability status of a table when a reservation is canceled. By switching the table's status back to available, this trigger supports efficient table management, allowing for immediate reuse and optimal space utilization within the venue.

### **UpdateLastVisit**

The UpdateLastVisit trigger helps in maintaining up-to-date customer records by updating the last visit date each time a customer makes a reservation. This process not

only ensures that customer data is current but also provides valuable insights into customer behavior and visit patterns.

## **Data Insertion**

For testing purposes, three mock records were introduced in each table of the dataset. Such records will allow us to prove the functionalities of the dataset infrastructure.

## **Conclusion**

Implementing specialized database tools in a café environment not only streamlines operations but also enhances customer service and operational decision-making. By equipping various roles within the café with specific views, functions, and procedures tailored to their needs, the business can operate more efficiently, respond faster to market demands, and maintain high customer satisfaction levels. This comprehensive approach to database management is crucial in a competitive industry where real-time data access and efficient resource management are key to success.