

QUERY WIZARDS

Project Part III

Business Data Management
12/09/2024



Overview, Background, & Requirements

Overview & Background

- **What is El Rincon Cocina:** A popular Mexican cantina in central Boulder, Colorado, renowned for its authentic dishes, boisterous happy hour, and cozy patio seating.
- **Mission:** To provide affordable, high-quality meals while creating a welcoming atmosphere that encourages frequent visits.



Database Objectives

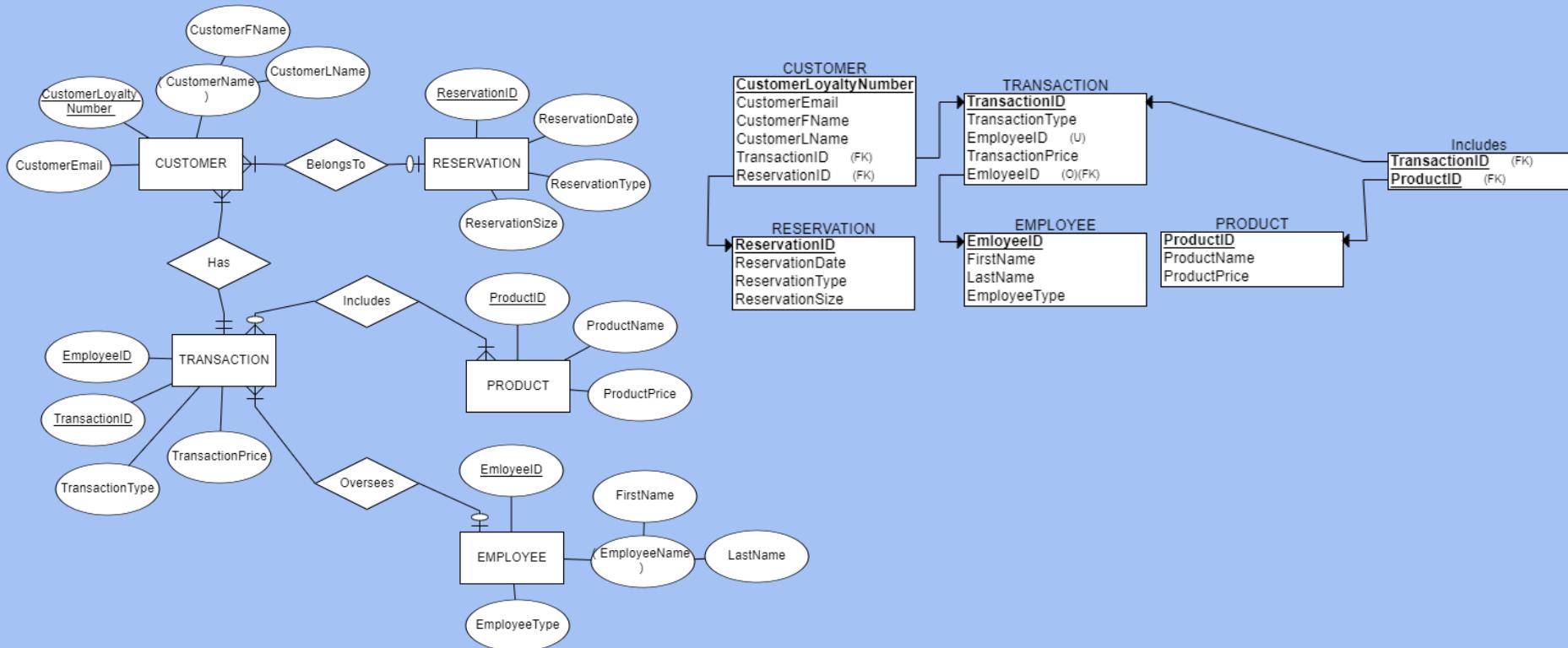


- 1. Manage Customer Information:** track loyalty, reservations, and transactions
- 2. Track Orders and Inventory:** monitor product usage and ensure availability
- 3. Analyze Sales Trends:** identify top-performing items and improve overall restaurant decision-making

Requirements

REQ #1	REQ #2	REQ #3	REQ #4	REQ #5
Customer	Transaction	Employee	Product	Reservation
For each customer: a customer loyalty number (unique), a customer email, a customer name, consisting of first and last name;	For each transaction: a transaction ID (unique), a transaction duration, a transaction total;	For each employee: an employee ID (unique), an employee name, consisting of first and last name, an employee type;	For each product being sold: a product ID (unique), a product name;	For each reservation scheduled: a reservation ID (unique), a reservation date/time, a reservation type, a reservation size;

ER Diagram/Relational Schema





Demo of Working Database via Microsoft Access

CustomerLoyaltyNumber	CustomerEmail	FirstName	LastName	ReservationID
1234	ava.kruebbe@gmail.com	Ava	Kruebbe	RES2222
2345	sophia.brown@gmail.com	Sophia	Brown	RES1111
3456	Olivia.cutter@gmail.com	Olivia	Cutter	RES3333
4567	John.davis@yahoo.com	John	Davis	RES4444
5678	Millie.dsouza@me.com	Millie	Dsouza	RES6666
6789	Hank.green@hotmail.com	Hank	Green	RES5555

Customer Table

EmployeeID	FirstName	LastName	EmployeeType
EMP1001	Max	Janky	Waiter
EMP1002	Jack	Gugta	Waiter
EMP1003	Janie	Wishmeier	Waitress
EMP1004	Zoe	Petree	Bartender
EMP1005	Joe	Polass	Host
EMP1006	Drindle	Williams	Chef
EMP1007	Kindle	Williams	Manager

Employee Table

TransactionID	ProductID
TXN1111	PR202
TXN2222	PR206
TXN3333	PR203
TXN4444	PR209
TXN5555	PR210

Includes Table

	Customer	Employee	Includes	Product	Reservation	Transaction
	TransactionID	TransactionType	TransactionPrice	EmployeeID	CustomerLoyaltyNumber	
+	TXN1111	Cash	\$40.35	EMP1001	2345	
+	TXN2222	Credit/Debit	\$55.45	EMP1003	1234	
+	TXN3333	Credit/Debit	\$25.44	EMP1001	3456	
+	TXN4444	Cash	\$26.89	EMP1004	5678	
+	TXN5555	Check	\$148.70	EMP1002	4567	
*			\$0.00			

Transaction Table

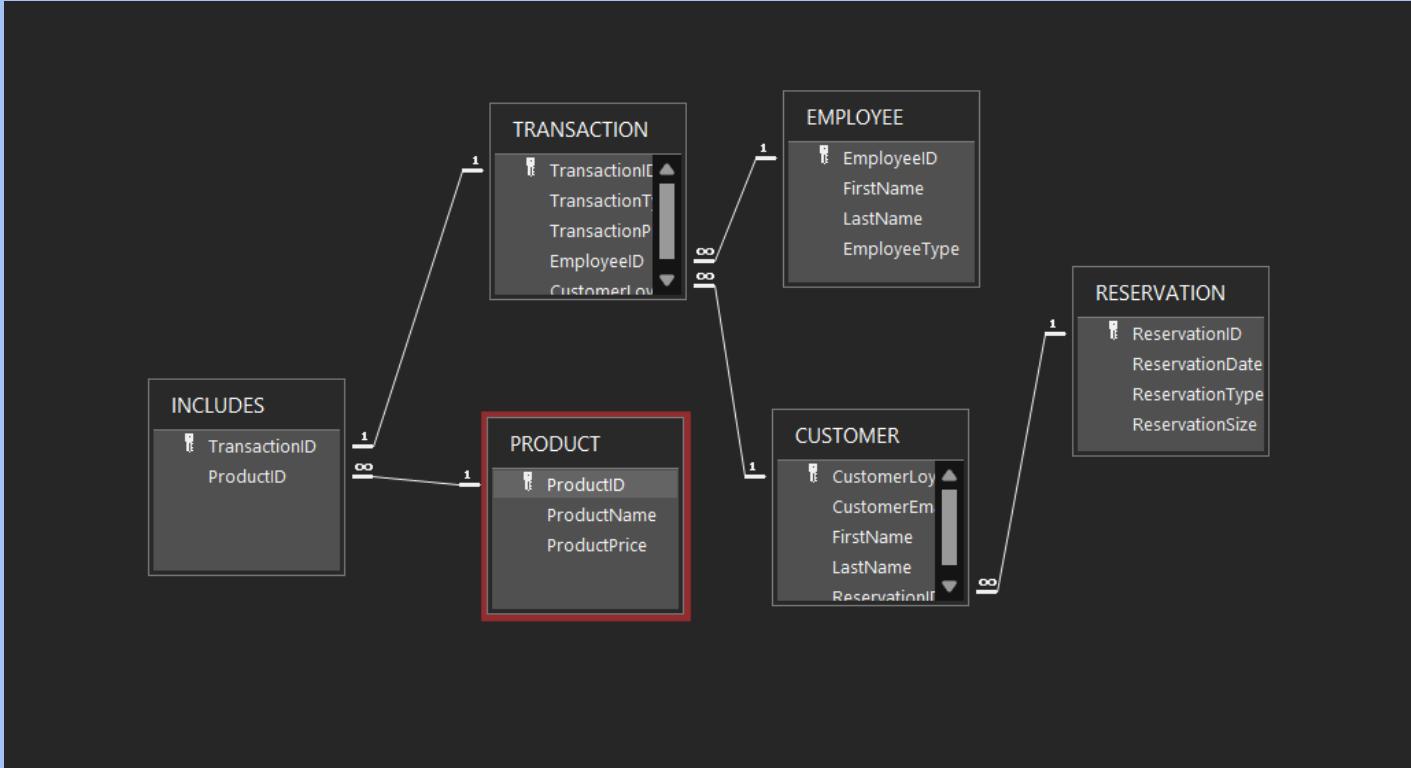
	CUSTOMER	EMPLOYEE	INCLUDES	PRODUCT	RESERVATION	TRANSACTION
	ReservationID	ReservationDate	ReservationType	ReservationSize		
+	RES1111	11/5/2024	Walk-In	2		
+	RES2222	11/5/2024	Online	3		
+	RES3333	11/8/2024	Phone	1		
+	RES4444	11/14/2024	Walk-In	2		
+	RES5555	11/28/2024	Online	5		
+	RES6666	1/2/2025	Phone	5		

Reservation Table

	CUSTOMER	EMPLOYEE	INCLUDES	PRODUCT	RESERVATION	TRANSACTION
	ProductID	ProductName	ProductPrice			
+	PR201	Nachos Rincon	\$12.99			
+	PR202	Macho Burrito Supreme	\$15.99			
+	PR203	Carnitas Burrito	\$18.00			
+	PR204	Enchiladas Verdes	\$19.60			
+	PR205	Steak Fajitas	\$22.35			
+	PR206	Carnitas Con Queso Blanco	\$25.50			
+	PR207	Tacos Al Pastor	\$17.89			
+	PR208	Frozen House Margarita	\$8.99			
+	PR209	El Mar Azul	\$10.20			
+	PR210	Strawberry Mojito	\$11.24			
*			\$0.00			

Product Table

Relationships



Navigation Form X

Navigation Form

Enter Employees

Enter Customers

CURRENT RESERVATIONS

El Rincon Cocina

HELP

MENU

FORMS REPORTS

Enter Employees



EmployeeID	EMP1001
FirstName	Max
LastName	Janky
EmployeeType	Waiter

Add New Save Record Undo Record Delete Record

Record: 1 of 8 Search



New Employees Directory Instructions

Welcome to El Rincon!

We're excited to have you as part of our team. At El Rincon, we value teamwork, excellence, and creating a warm atmosphere for our customers. Below are detailed instructions on how to add your information to the employees' directory. Follow these steps carefully:

Step 1: Open the Employee Entry Form

1. Open the main navigation screen in the database.
2. Locate and click the button labeled "Enter Employees" on the left side of the screen.
 - o This will take you to the Employee Entry Form where you can add or edit employee details.

Step 2: Add Your Name

1. In the Employee Entry Form, click the "Create New" button to start a new entry.
2. Fill in your information in the provided fields:
 - o **Employee ID:** Enter your provided Employee ID (should start with EMP)
 - o **First Name:** Enter your first name.
 - o **Last Name:** Enter your last name.
 - o **Position:** Enter your job title (e.g., Server, Chef, Host).

Step 3: Save Your Entry

1. Once you've filled out the form, click the **Add** button at the bottom of the form.
 - o This saves your details in the database.
 - o You can confirm your name has been added by returning to the Employee Table

Important Notes:

- Ensure all fields are filled out completely to avoid errors.
- If you make a mistake, click "Edit" to update the information.

By following these steps, your name will be successfully added to El Rincon's Employee Directory. Welcome aboard, and let's make great things happen!

NAV

Navigation Form X

El Rincon Cocina

Enter Employees

Forms Reports

EMP1001

Max

Janky

Waiter

Add New Save Record Undo Record Delete Record

Record: 1 of 8 No Filter Search

HELP MENU



The screenshot shows a Microsoft Access application window titled "Navigation Form". The main title bar has a "X" button. Below the title bar, there's a navigation menu with three items: "Enter Employees" (highlighted in orange), "Enter Customers", and "CURRENT RESERVATIONS". On the right side of the screen, there are two large buttons: "HELP" and "MENU". The main content area features a large, stylized title "El Rincon Cocina" in white on a black background. Below the title, there's a sub-header "Enter Employees". To the left of the form, there's a decorative graphic for "El Rincon Cocina Y Tequila" featuring a skull wearing a sombrero. The main form contains four text input fields: EmployeeID (value: EMP1001), FirstName (value: Max), LastName (value: Janky), and EmployeeType (value: Waiter). At the bottom of the form, there are four buttons: "Add New", "Save Record", "Undo Record", and "Delete Record". A status bar at the bottom shows the record number "1 of 8" and filter options "No Filter" and "Search".

**MENU X****Appetizers**

- **Nachos Rincon (GF)** — \$15.00

Tortilla chips with refried beans, melted cheese, onions, tomatoes, jalapeños, and sour cream.

Add Meat: Chicken, Ground Beef, Shredded Beef (\$2.00), Steak, Grilled Chicken (\$4.00).

Customizations: No Beans, No Cheese, No Pico de Gallo, No Sour Cream, No Meat.

Extras: Guacamole (\$1.50), Jalapeños (\$0.50), Sour Cream (\$1.00), Green Chili (\$1.00), Pico de Gallo (\$1.75).

- **Queso Dip (GF)** — \$12.00

Your choice of Queso Blanco or Yellow Cheese Dip.

- **Queso Fundido (GF)** — \$10.00

Oaxaca cheese with Mexican chorizo, served with 3 flour tortillas.

- **Quesadilla** — \$12.00

Cheese, tomato, onions, with sour cream and guacamole on the side.

Add Meat: Shredded Beef (\$1.75), Grilled Chicken (\$3.00), Steak (\$4.00).

Customizations: No Cheese, Tomato, Onions, Sour Cream, Guacamole, Pico de Gallo, Lettuce, Salsa.

Extras: Guacamole (\$1.50), Pico de Gallo (\$1.75), Jalapeños (\$0.75), Avocado (\$1.75), Green Chili (\$1.00), Tomatoes (\$0.50).

- **Sopes (GF)** — \$14.00

Four thick handmade corn tortillas with refried beans, chorizo, lettuce, pico de gallo, sour cream, and salsa on the side.

Price — \$14.00

Navigation Form X

El Rincon Cocina

Enter Employees

Enter Customers

CURRENT RESERVATIONS

HELP

MENU

FORMS REPORTS

EL RINCON COCINA Y TEQUILA

Enter Employees

EmployeeID	EMP1001
FirstName	Max
LastName	Janky
EmployeeType	Waiter

Add New Save Record Undo Record Delete Record

Record: 1 of 8 No Filter Search

Enter Customers

CustomerLoyaltyNumber	CustomerEmail	FirstName	LastName
4567	John.davis@yahoo.com	John	Davis
5678	Millie.dsouza@me.com	Millie	Dsouza
6789	Hank.green@hotmail.com	Hank	Green
7890	Leeroy.jenkins	Leeroy	Jenkins
*			

[Add New](#) [Save Record](#) [Undo Record](#) [Delete Record](#)

Record: 14 1 of 7 No Filter [Search](#)



Report

Form



CUSTOMERS

CustomerLoyaltyNumber	CustomerEmail	FirstName	LastName
1234	ava.kruebbe@gmail.com	Ava	Kruebbe
2345	sophia.brown@gmail.com	Sophia	Brown
3456	Olivia.cutter@gmail.com	Olivia	Cutter
4567	John.davis@yahoo.com	John	Davis
5678	Millie.dsouza@me.com	Millie	Dsouza
6789	Hank.green@hotmail.com	Hank	Green
7890	Leeroy.jenkins	Leeroy	Jenkins

Another Report Example

REPORT 3 - Transactions and Products

ProductID	ProductName	UnitPrice	TransactionID	TransactionType	UnitPrice	EmployeeID	CustomerLoy
PR202	Macho Burrito Supreme	\$15.99	TXN1111	Cash	\$40.35	EMP1001	2345
PR206	Carnitas Con Queso	\$25.50	TXN2222	Credit/Debit	\$55.45	EMP1003	1234
PR203	Carnitas Burrito	\$18.00	TXN3333	Credit/Debit	\$25.44	EMP1001	3456
PR209	El Mar Azul	\$10.20	TXN4444	Cash	\$26.89	EMP1004	5678
PR210	Strawberry Mojito	\$11.24	TXN5555	Check	\$148.70	EMP1002	4567

Monday, December 9, 2024

Page 1 of 1



FORMS REPORTS



El Rincon Cocina

HELP

MENU

REPORT 1 - Customers and Reservations

CustomerLoyaltyNumber	CustomerEmail	FirstName	LastName	ReservationID	ReservationDate	ReservationType	ReservationSize
1234	ava.kruebbe@g	Ava	Kruebbe	RES2222	11/5/2024	Online	3
2345	sophia.brown@	Sophia	Brown	RES1111	11/5/2024	Walk-In	2
3456	Olivia.cutter@g	Olivia	Cutter	RES3333	11/8/2024	Phone	1
4567	John.davis@ya	John	Davis	RES4444	11/14/2024	Walk-In	2
5678	Millie.dsouza@	Millie	Dsouza	RES6666	1/2/2025	Phone	5
6789	Hank.green@hc	Hank	Green	RES5555	11/28/2024	Online	5

Lessons Learned

Simplicity in Databases

Overly complex designs can be less effective. Simplifying schemas, such as removing the "Order" entity, created a database that better aligns with Rincon's operations and is easier to manage.

Agile Mindset

This group project required ongoing adaptability as we worked to align its many dynamic components. We collaborated across multiple platforms, continuously revisiting and revising different sections to ensure a cohesive and consistent final product.

Effective Communication

Microsoft Access posed collaboration challenges, being Windows-only and editable by a single person at a time. Clear communication, careful planning and scheduling was necessary to coordinate effectively.

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