

Martha's Mazin' Catering

Final Database Project—CIS250

Project Scope Statement

By

Doug Vickers

Project Scope Statement

Background Information

Martha's Mazin' Catering is a private catering business. The company started part time and small, just Martha. She was able to keep all her records in a notebook, as she only catered a couple times per month. However, her business has grown through fine food and word of mouth, she has hired several employees and the paperwork and data storage organization has become unmanageable. She cannot easily get to information she needs, which has become time consuming. She needs a database program that would keep track of customers, recipes, ingredients, supplies, events and locations, and employees, so she can quickly get to the information and dedicate her time to her business.

System Requirements

- ❖ **Problem** – due to growth, it is difficult and time consuming to get to information she needs to properly cater an event.
- ❖ **People** – Martha Mazing, CEO and President; Betty Booker, Event Coordinator; Cherrie Cook, Food Coordinator; other employees, customers, suppliers, database developer, Martha's bank, various places to hold events
- ❖ **Current Processes** –An excel spreadsheet for customers, events and recipes is currently used. Employees have access to the files for information and to add as needed. Each employee has their own way of doing this, which makes things even more difficult. Betty handles all booking details and Cherrie handles the food details. They use the customer name as the main identifier to find them in their worksheet, and then gather need information to be entered into the spreadsheet. Researching previous events is done to gain information to determine number of employees needed, items needed, etc., which is time consuming. Menu planning is done from reviewing the large menu of recipes on file that are sorted by season and holiday. Researching this can also be time consuming.
- ❖ **Information Requirements** – The current system consists of an Excel file with separate spreadsheets for customer information, event planning, and recipe information including supplies. There are also history files for reference. Going into the customer spreadsheet is all pertinent information including name, address, phone, and any relevant personal information. Into the event spreadsheet goes the customer name, event theme, location with rules for that location, date, time, number of guests, special menu requests, and employees needed to work the event. Into the menu spreadsheet goes all supplies

needed, recipe information including ingredient information, amounts, time to cook, adjustments for number of guests, prep time, recipe sorting by event theme or holiday, and number of cooks needed.

- ❖ **Strengths of current system** – It is simple and familiar.
- ❖ **Weaknesses of current system** – time consuming, overwhelming, inconsistent information from different employees, difficult to find needed information.
- ❖ **Objectives** – create a database system that would allow quick access to all information, provide various reports as needed, allow for consistent input and output to any user, room for future expansion if necessary.
- ❖ **Benefits** – speed up information gathering and history retrieval which allows more time for event details, more efficiency which translates to better event handling, thus happier employees, satisfied customers, smoother transactions with suppliers, and overall company profitability.
- ❖ **Alternative Solutions** – The problem could be solved by enhancing and expanding the current system, but at some point it would still become too much. An outside management company could be hired, but that can be costly.

Purpose & Scope

The purpose of this project is to design a database application that will keep track of customers, employees, recipes, supplies and ingredients, and event information including locations and location rules. It will be designed to be efficient and easy to use, thus freeing up time for event planning.

The scope of this project will include employee role and contact information; customer information including name, address, phone number, and history; event information including location and location specific requirements, location address, contact information, date, time, theme, number of guests, and number of employees needed for event; menu information including recipes sorted by season and holiday with step by step instructions, number of guests, supplies, ingredients, ingredient amounts, number of servings, time to create, prep time, costs per serving, and number of cooks. It will allow appropriate access to all employees. The scope will not include other financial activities, accounting or payroll.

Information Requirements

Database will include the following tables:

1. Employees
 - a. Employee ID
 - b. First Name
 - c. Last Name
 - d. Address
 - e. Phone
 - f. Position

2. Customers
 - a. Customer ID
 - b. First name
 - c. Last name
 - d. Address
 - e. Phone
 - f. Additional info (birthday, theme requests, ect.)

3. Menu
 - a. Menu ID
 - b. Recipe
 - c. Theme
 - d. Ingredients

4. Event
 - a. Event ID
 - b. employee
 - c. Customer name
 - d. Date
 - e. Time
 - f. location
 - g. Number of guests
 - h. Theme
 - i. Number of employees needed
 - j. Menu requests

5. Location
 - a. Address
 - b. Specific rules
 - c. Phone
 - d. Contact

Business Rules

process

- Any employee may work at any location
- Employees need access to the database and ability to add information
- Betty handles event details
- Cherrie handles menu details
- All financial details handled outside
- Customer information filed under their name, accessed by customer ID

data

- Recipes include list of ingredients, amounts for each ingredient, number of servings, the time needed to create it – including prep time, and the cost per serving, and a list of step-by-step instructions on how to create and prepare them
- Recipes sorted by season and holiday
- Special menu requests ok

Issues

- What are the hours of operation?
- What are the security issues?
- What is your deadline for completing the database?
- What restrictions regarding access are necessary?
- Is there anything specific you will not cater to?

Assumptions

- Customers have only one address
- An event has only one theme
- A menu can go to any theme, but only one menu at a time
- Any recipe can go on a menu, but only one at a time

Final Table List

Name	Type	Description
Employees	Subset	Necessary information regarding people employed by Martha's Mazin' Catering to keep track of qualified work skills, as well as contact and wage information.
Event_Empl	Data	Table tying the employee table to the Event table
Customers	Data	Customer information is necessary for any contact as well as proper billing, marketing, and history.
Event	Data	Maintaining pertinent information regarding event location, times, dates, themes, menus, and guests assures successful event planning, professional catering, and reference for future events.
Location	Data	Information specific to where the event is held. Contact information, logistics, and history is of importance.
Menu	Subset	The menu is the backbone of the company. Accurate recipes, ingredient amounts, cook times, tools, and supplies keep Martha's name top in the field. Guest information and cost control is vital.
Recipe	Subset	Includes all ingredients and cooking instructions for the items on the menu
Ingredients	Subset	Individual ingredients that go into the recipes
Theme	Data	Information regarding various types of themes and menus relating to those themes.

List of Attributes

Employees (emplID, emplFirst, emplLast, emplStreet, emplCity, emplState, emplZip, emplPhone, emplPosition)

Event_Empl (eventide, emplID)

Customers (custID, custFirst, custLast, custStreet, custCity, custState, custZip, custPhone, custAddInfo)

Event (eventID, emplID, custID, date, time, locID, numGuests, theme, numEmpl, menuReq, themeType(FK-theme))
Theme (themeType, eventID, menuID)

Menu (menuID, recipeID, themeType)

Recipe (recipeID, ingredientID, amount, prepTime, cookTime, instruction, serves, menuID(FK-menu), season, holiday, cost)

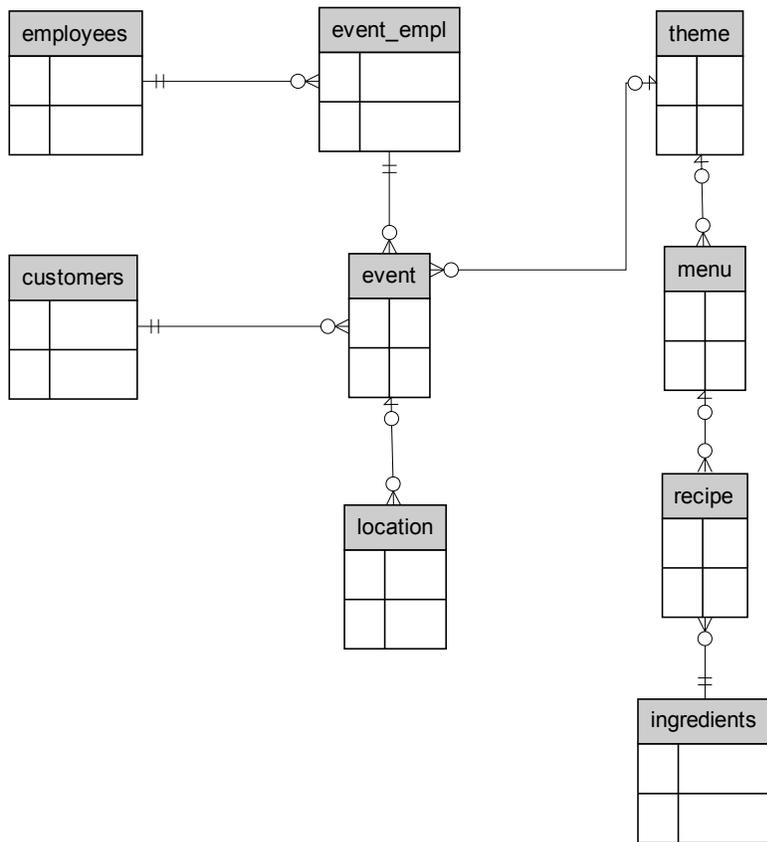
Ingredient (ingredientID, ingredientName)

Location (locID, locName, locStreet, locCity, locState, locZip, locPhone, locContactName, locAddInfo, eventID(FK-event), emplID(FK-employees))

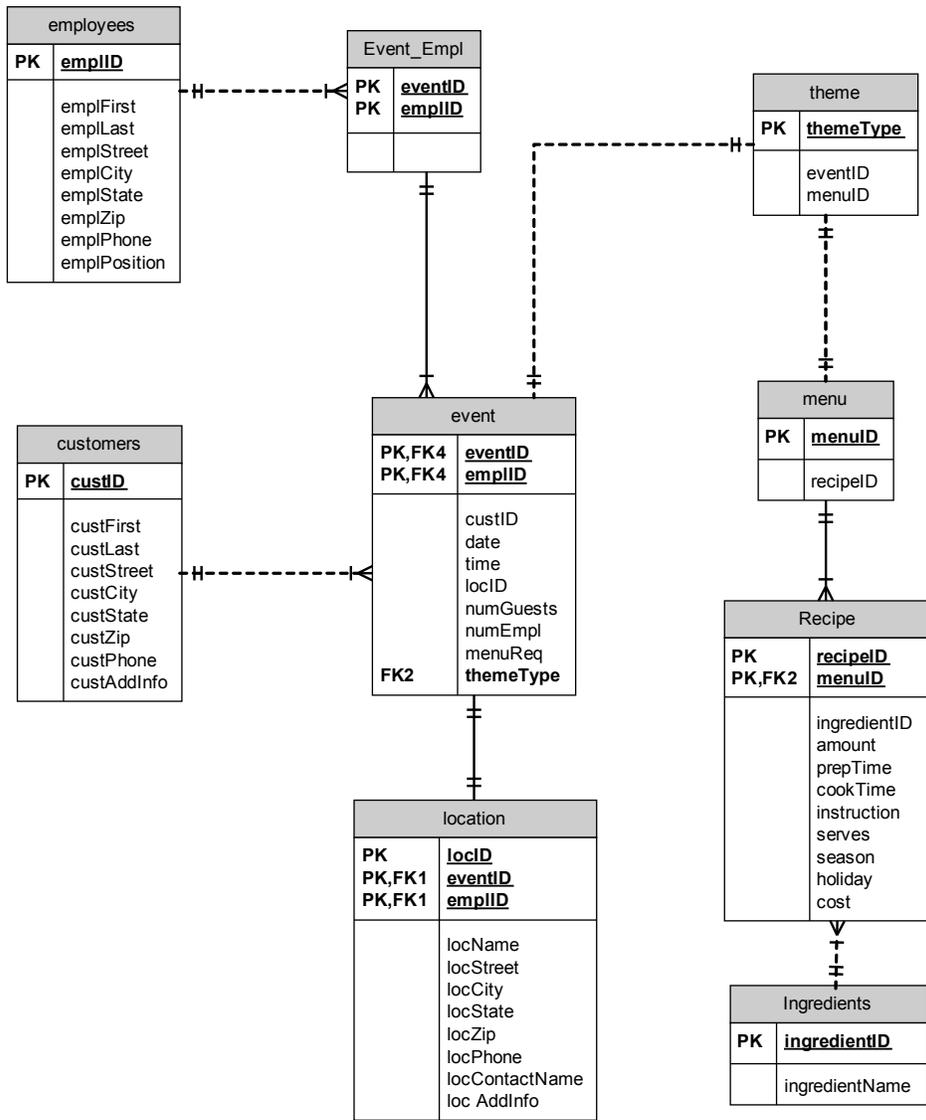
Data Relationships

An event must have one theme.
A theme may apply to many events.
A theme must have one specific menu.
A menu must have one or more recipes.
A recipe must have one or more ingredients.
An event must be at one location.
A location must have an event.
An event must have one customer.
A customer may have one or more events.
An event must have one or more employees.
An employee may work at one or more events.

Entity relationship Diagram



Logical-Level Entity Relationship Diagram



Meta Data Dictionary

Entity Type: EMPLOYEES				
Definition:	An employee is hired by Martha's Mazin' Catering to perform services including cooking, preparing, management, and other duties.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
employeeID	Unique identifier for the employee	Numeric	unique	PK
emplFirst	First name of employee	Char		
emplLast	Last name of employee	Char		
emplStreet	Employee street address	Char		
emplCity	Employee city	Char		
emplState	Employee state	Char		
emplZip	Employee zip code	Numeric	Lookup list provided by post office	
emplPhone	Employee phone number	Numeric (###) ###-####		
emplPosition	Employee position in company	Char		

Entity Type: CUSTOMERS				
Definition:	A customer is the individual who is hiring the services of Martha's Mazin' Catering.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
customerID	Unique identifier for the customer	Numeric	unique	PK
custFirst	First name of customer	Char		
custLast	Last name of customer	Char		
custStreet	customer street address	Char		
custCity	customer city	Char		
custState	customer state	Char		
custZip	customer zip code	Numeric	Lookup list provided by post office	
custPhone	customer phone number	Numeric (###) ###-####		
custAddInfo	Pertinent notes about customer	Char		

Entity Type: EVENT				
Definition:	An event is the actual request from the customer for specific services			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
eventID	Unique identifier for the event	Numeric	unique	PK, FK (event)
emplID	Unique identifier for the employee	Numeric	Unique	PK, FK (employees)
custID	Unique identifier for the customer	Numeric		
date	Date of the event	Numeric ## / ## / #####	Mo / day / year	
time	Time of the event	Numeric ## : ##	24 hour notation	
locID	Unique identifier for the location of the event	Numeric		
numGuests	Number of guests attending the event	Numeric		
<u>themeType</u>	Specialized theme for the event	Char		FK (theme)
numEmpl	Number of employees need to serve the event	Numeric		
menuReq	Special menu requests from the customer	Char		

Entity Type:

LOCATION				
Definition:	Specific place and address where the event is to take place			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
locID	Unique identifier for the location	Numeric	unique	PK
<u>eventID</u>	Unique identifier for the event	Numeric	unique	PK, FK (event)
<u>emplID</u>	Unique identifier for the employee	Numeric	unique	PK, FK (employees)
locName	Business name of place for event	Char		
locStreet	Location street address	Char		
locCity	Location city	Char		
locState	Location state	Char		
locZip	Loc zip code	Numeric	Lookup list provided by post office	
locPhone	Location phone number	Numeric (###) ### ####		
locContactName	Contact person at location	Char		
locAddInfo	Pertinent notes about location	Char		

Entity Type:

THEME				
Definition:	The specific theme that is requested by the customer, if they desire.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
themeType	Unique identifier for the theme	Char	unique	PK
eventID	Unique identifier for the event	Numeric	unique	
menuID	Unique identifier for the menu	Numeric	Unique	

Entity Type: MENU				
Definition:	The specific menu that is requested by the customer, as desired.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
menuID	Unique identifier for the menu	Numeric	Unique	PK
recipeID	Unique identifier for the recipe	Numeric	unique	

Entity Type:

RECIPE				
Definition:	The list of all items to be prepared and served at a given event as chosen by the customer.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
recipeID	Unique identifier for the recipe	Numeric	unique	PK
<u>menuID</u>	Unique identifier for the menu	Numeric	Unique	PK, FK (menu)
ingredientID	information regarding an ingredient	Numeric		
amount	Quantity of an ingredient	Numeric	Measurement values	
prepTime	Time allotted for preparing ingredients	Numeric	Minutes	
cookTime	Time allotted for the item to cook	Numeric	Minutes	
instructions	Cooking and preparing instructions	Char		
serves	Number of people the menu serves	Char		
cost	Cost for all ingredients	Numeric		
season	Specific season to help identify a theme	Char		
holiday	Specific holiday to help identify a theme	Char		

Entity Type:

INGREDIENTS				
Definition:	Each ingredient that could be used in any given recipe.			
Attribute	Definition	Data Type Constraints	Data Value Constraints	Referential Constraints
ingredientID	Unique identifier for the ingredient	Numeric	Unique	PK
ingredientName	Name of the ingredient	Char		

Revision History (Note: This will be a "living" document, so please keep a log of modifications here for both you and all of those who are reviewing it.).

Date	Revision Notes
10/7/2010	Created Draft 1
10/14/2010	Created Draft 2, updates per teacher comments and added table and attribute lists, relationship diagram
10/22/2010	Created Draft 3, included Logical-Level Entity Relationship Diagram and Meta Data Dictionary
11/1-4/2010	Final project deliverable updated
11/5/2010	Final project deliverable complete