CIS 250_Mark Coyle - Final Project_3

Background Information

Martha's Mazin Catering was started 3 years ago, it started as a small business venture doing 2 to 3 events a week. At this time the business has grown at such a fast pace that the current system they have in place is not even close to keeping everything organized. They are currently using spreadsheets and they have grown too big to manage and track needed information with. It is become an issue in saving time and money.

A data base system would serve them well, being as they are only concerned about the catering aspect. The recipes and payroll will continue to be managed by outside resources. A database system could refine and manage all of the different aspects such as, Customer information, inventory, event themes, venues and costs. It could be set up in a way that all the information can be easily accessed and used. Getting this database set up as soon as possible is a priority due to the volume of business that is being done.

System Requirements:

 Problem: The main issue is due to growth, the current spreadsheets have grown too big and the information is not organized well and it is affecting the bottom line and time

 People/Stakeholders: The main people affected by this will be, Martha Mazzing the CEO and her event planner Betty Booker. Although they are the two main users, they have a food coordinator named Cherie and 2 part-time employees that will benefit from using a new system. One issue that needs to be solved is to make sure there is only one way to enter or receive information. The customers and those handling the venues will benefit the most from the automated system. The turnaround and the decision time will be much faster. Resulting in getting the venue that is wanted and needed and time can be spent more on preparation than on the details.

 Current Processes:

- Financial activities handled by an accountant and bookkeeper.
- Payroll handled by an outside source.
- A spreadsheet currently holds all company data.
- Betty Booker handles all the details to each catering event.
- First she looks up their name in excel using the find feature, then verifies the information is update and correct. Then she gets the theme for the event. (one theme per event). Finds out where the event will be held or helps them secure a venue, either way she handles getting the venue. After getting this information

she gives the event a name Also needed are date, time, number of guests and menu requests, then the location is researched to see if anything is needed. Sits down with Cherrie and Martha to plan the menu based on the events theme. They create the menu and then discuss it with the customer and gets approval. The menu is then set up into categories, kosher, vegetarian, or vegan, they then calculate price for each menu item, based on the number of guests.
It is all entered on an event detail form.

 Strengths:

- They are familiar with the system
- Also Excel is fairly easy to use.

 Weaknesses:

- The length of time it take to navigate the spreadsheet.
- Different input systems that are not consistent with the information.
- Outdated way to find customer information.
- No room for growth.
- Lacks organization.

 Objectives:

- Design a more compact and automated database.
- Organize system into categories.
- Link all data together.
- Design a more efficient input system.
- Obtain a faster way to gather information.
- Set up calculating system to track costs per event.
- Basically make it easier to use and save time.

 Benefits:

- Will save time and money.
- More accurate data.
- Consistent information input.
- Faster data access.
- Better organized.
- Allows for growth.

Alternative Solution:

- Excel would be useful, it has many more options than they have now. Such as templates, tables, macros and more.

Purpose & Scope:

The Purpose of this project will include designing an automated database system that helps expand and organize all the needed information. Setting up a data base that organizes the information into categories, makes it easily accessible and also make inputting information in a standard system.

The Scope of this project is to review and organize their current spreadsheet into categories, breaking it up into a smaller and more manageable system. The information needed will be, Customer, Themes, Menu, Locations, events, employees and Cost Calculating system. Then making them all interlink as to access the information faster, saving time and money. The payroll and recipes will be out of scope on this project due to the current systems in place satisfy the owner's needs. At this point the employee information will continue being done as it is.

Information Requirements:

- Make system more manageable.
- Customer Information. (Name, address. Phone number, current or new, and id)
- Theme information. (By events, occasion, and season)
- List of venues. (Hall, church, school, gym, and other. Venue rules)
- Menu Information. (Kosher, vegetarian or vegan.)
- Type of event. (Birthday, wedding, anniversary, graduation, holiday, or party)
- A manual for employees and future employees.

Business Rules:

- Get information in timely and efficient manner to, offer customers the best possible level of customer service.
- Allow employee access to various data they will need.
- Formulate a system that allows for accurate and consistent input.
- Group and connect information to speed up the process (Themes & events, events & location, menu items & categories).
- Database focus is catering functions only.
- Recipes will not be included.

Commented [P1]: What about using more advanced features of Excel like templates, macros, tables, lookups, etc.

Commented [P2]: Missing Events and employees - see your ERD.

Commented [MC3R2]:

Commented [MC4R2]:

Commented [P5]: Mark, these are not actual business rules. These are general statements about this business, but not specific to how the data elements (entities) relate to each other of how the various tasks are performed (processes). SEE ME WEDNESDAY.

- Set up a system to pull all the information for each event to present to the customer.
- Event coordinator handles all bookings.
- Food coordinator handles all menu offerings.
- Financial activities & information are handled by an accountant and bookkeeper.
- Recipe keep separately.
- Employee information to stay in current process.

Issues:

None

Assumptions:

- Adding expansion capabilities to the new database**.**
- Also adding employee data that can be used in the future will save Martha's if they chooses to handle it in house later.
- A training period will be necessary.

Final Table List

Name	Type	Description
Customer	Data	Includes all customer information (Name, Address, Phone, etc).
Employee	Data	Information on employees such as, role and customer
Event	Data	All event information, name, dates, theme, menu, pricing and employees.
Event Menu	Linking	Event menu information.
Location	Data	Location information, contact information, rules, notes
Menu Item	Data	Specific item from the menu
Theme	Validation	Information on event theme.

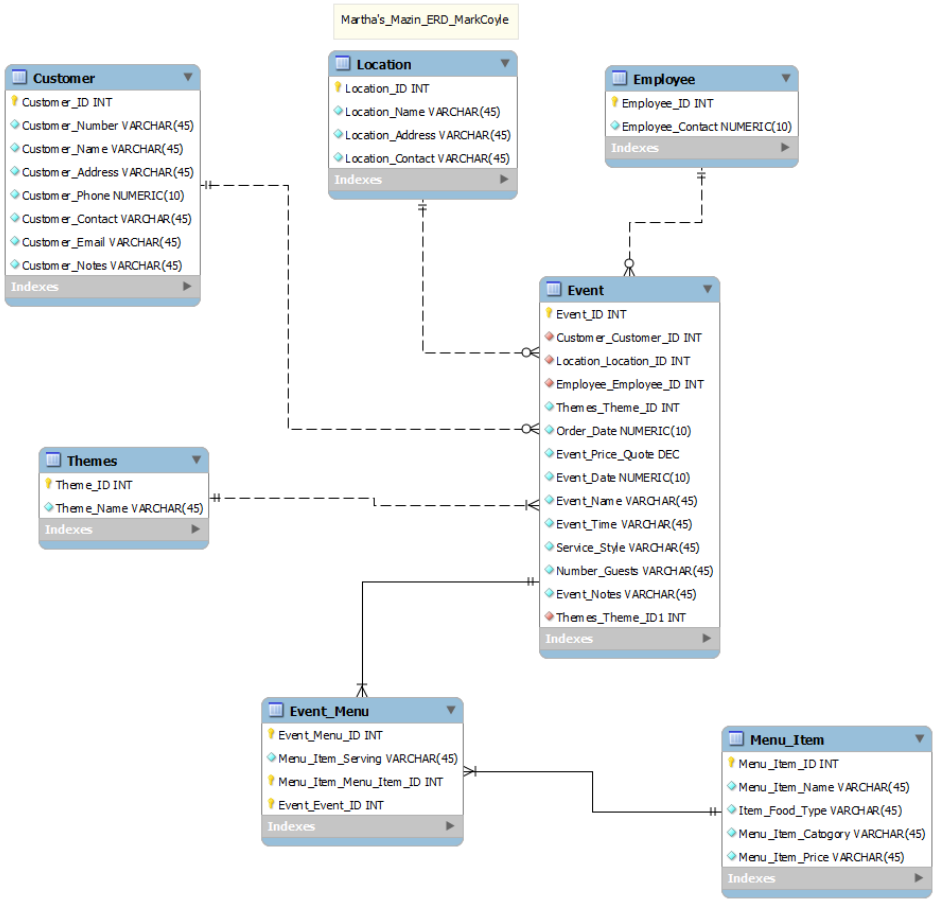
Commented [P6]: Not in alphabetical order.

Model Assertions

- An event is limited to one customer but a customer can have several events.
- An event is limited to one employee but an employee can have many events.
- An event is limited to one theme but one theme can be used for several events.
- An event is limited to one location but a location can be used for many events.
- An event is limited to one event-menu but an event-menu can be used in many events.
- An event-menu is limited to one event but an can have many menu-items

Commented [P7]: No. You need to break this out to 2 separate statements that relate to Event & Event_Menu relationship and Menu_Item and Event_Menu relationship.

Entity Relationship Diagram



Commented [P8]: Relationship between Event_Menu and Menu_Item is drawn backwards. You need to reverse so the crow's foot is on the Event_Menu entity. Same goes for the relationship between Theme and Event. Relationship is backwards. Theme_ID should appear in Event as an FK. Trick to doing this: Click on the "many" entity FIRST, then to the "one" entity. In addition, Event_Menu does not have its own PK. It combines the PK from Event and Menu_Item (CPK) to make its composite PK. See ERD posted in Canvas in the Term Project Documents module.

Metadata Dictionary

Entity Name	Attribute Name	Definition	Domain Constraints	Referential Constraints
Customer	Customer_ID	The unique Identifier for each Customer	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Customer_Number	The number given to previous customers.	Must be used with Customer_ID	
	Customer_Name	Full name of customer	Required. Non-Unique. Char(25)	
	Customer_Address	Customer address and billing address	Required. Non-Unique. Char(25)	
	Customer_Phone	Customers current phone number	Assigned unique. Numeric (10)	
	Customer_Contact	The contact person for the event	Assigned unique. Numeric (10)	
	Customer_Email	Customers email address	Required. Non-Unique. Char(25)	
	Customer_Notes	Notes taken during event planning. (i.e. Reason for event, food type, service style, number of guest, etc..)	Required. Non-Unique. Char(3000)	
Employee	Employee_ID	The unique Identifier for each Employee.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Employee_Contact	Employee handling the event, contact	Assigned unique. Numeric (10)	

		information.		
Event	Event_ID	The unique Identifier for each Event.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Customer_ID	The unique Identifier for each Dog.	**CPK(**Composite Primary Key**)**	Every Event must have a Customer.
	Location_ID	The unique Identifier for each Dog.	**CPK(**Composite Primary Key**)**	Every Event must have a Location.
	Employee_ID	The unique Identifier for each Location.	**CPK(**Composite Primary Key**)**	Every Event must have an Employee.
	Theme_ID	The unique Identifier for each Theme.	**CPK(**Composite Primary Key**)**	Every Event must have a Theme.
	Order_Date	Date order was taken for event.	Assigned unique. Numeric (10)	
	Event_Price	Total cost of the event.	Assigned unique. Numeric (10)	
	Event_Date	Date the event will happen.	Assigned unique. Numeric (10)	
	Event_Name	Name given to the event.	Required. Non-Unique. Char(45)	
	Event_Location	Where the event will be held.	Required. Non-Unique. Char(25)	
	Event_Time	Time the event will be held.	Assigned unique. Numeric (10)	
	Service_Style	Type of service at the event. (i.e. Buffet, wait service, etc.)	Required. Non-Unique. Char(25)	
	Number_Guests	The total number of people	Required non-unique. Numeric	

Commented [P9]: You will have to add the Theme_ID attribute here as an FK once you correct your model.

		attending the event	(Infinite)	
	Event_Notes	Notes about the event to use for future planning.	Non-Unique. Char(3000)	
Event_Menu	Event_Menu_ID	The unique Identifier for each Event_Menu.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Menu_Item_ID	The unique Identifier for each Menu_Item.	**FK(**Foreign Key**)**	Every Event-Menu_Item must have a Menu_Item.
	Menu_Item_Serving	Amount of food to be used at the event.	Assigned unique. Numeric (1000)	
Location	Location_ID	The unique Identifier for each Location.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Location_Name	Name of location to be used or event	Required. Non-Unique. Char(25)	
	Location_Address	Where the event will be held.	Assigned unique. Numeric (10)	
	Location_Contact	Contact information of employee at event location.	Assigned unique. Numeric (10)	
Menu_Item	Menu_Item_ID	The unique Identifier for each Menu_Item.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Event_Menu_ID	The unique Identifier for each Event_Menu.	**FK(**Foreign Key**)**	Every Menu_Item must have an Event_Menu.
	Menu_Item_Name	Name of each food item at the event.(i.e.	Required. Non-Unique. Char(25)	

Commented [P10]: Once you fix your model. You will need to add the Menu_Item_ID as the other FK attribute creating a CPK along with Event_ID.

Commented [P11]: Delete this as this entity doesn't have its own PK. See ERD note.

Commented [P12]: Delete this attribute as it won't appear here once you fix your ERD – see my comment there.

		steak, mashed potatoes, salad, etc..)		
	Item_Food_Type	Type of menu item. (i.e. Main course, desert, drink, appetizer, etc..)	Required. Non-Unique. Char(25)	
	Menu_Item_Category	Category of menu.(i.e. kosher, vegan, vegetarian, etc..)	Required. Non-Unique. Char(25)	
	Menu_Item_Price	Price of each menu item serving.	Assigned unique. Numeric (10)	
Theme	Theme_ID	The unique Identifier for each Theme.	System Assigned unique. Numeric (10)	**PK(**Primary Key**)**
	Theme_Name	Name given to each Theme	Required. Non-Unique. Char(25)	