Team 58 Project Proposal and Outline

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Project Name: Databar Events Planner
Project URL: http://flip3.engr.oregonstate.edu:2414/

Summary: Databar is a bar with a large event space that can be rented out by its customers. In 2021, Databar hosted over 200 events. As their venue is becoming increasingly popular they are realizing the need to establish a database to help them organize as they grow. This database will be used to plan upcoming events, including the staffing and inventory needs associated with each event. Databar has the capacity to hold only one event per night. Each event needs to be appropriately staffed, including several employees (up to five) of assorted job titles. While events will have access to the full bar, they will also include a featured drink special, which will be selected from the Drinks list. The drink special is available at a discounted price for the duration of the event. Drinks can have a maximum of five ingredients, but must have at least one (single liquor specials are allowed). Using this database, Databar will have confidence that it will never overbook its event space, events are fully staffed, and the appropriate ingredients for each event's drink special are readily available.
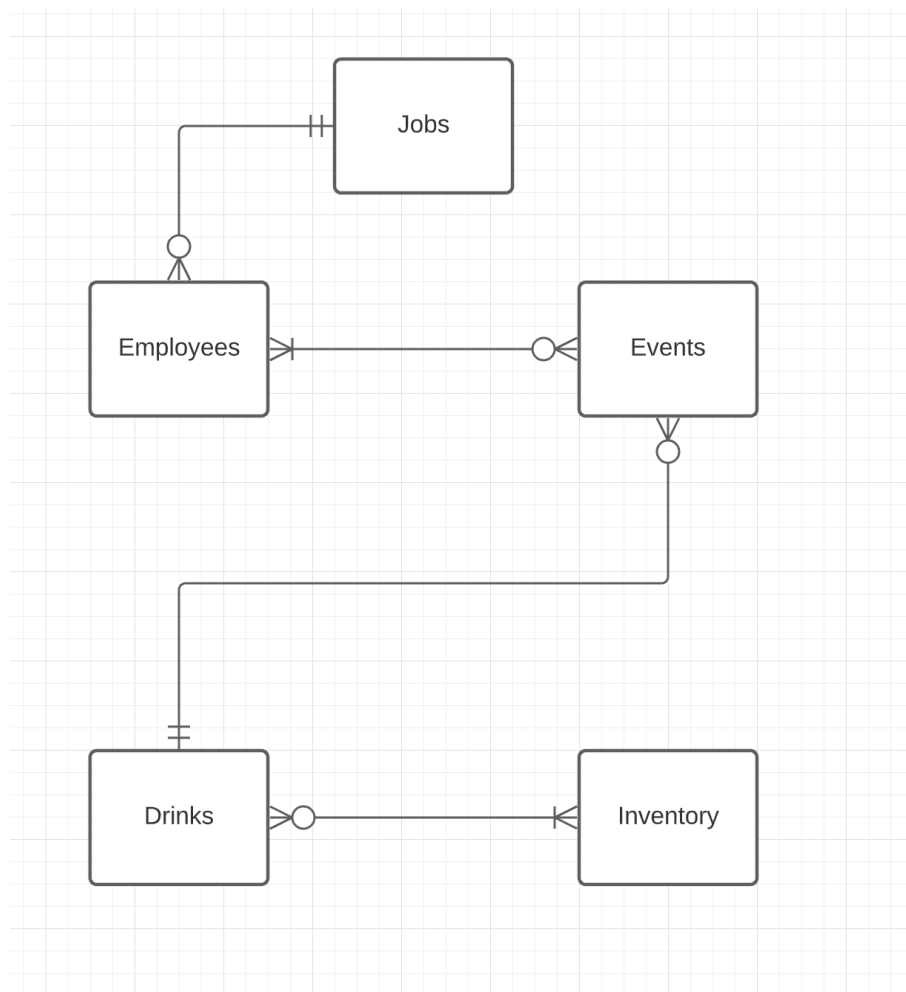
Project Outline:
- **Employees**: The purpose of this entity is to track the employees at Databar. It can (and will) be used by management to staff upcoming events.
    - <u>employee_ID</u>: int, unique, auto_increment, not NULL, PK
    - first_name: varchar, not NULL
    - last_name: varchar, not NULL
    - telephone: varchar, not NULL
    - job_code: int, FK (job_code)
    - start_date: date, not NULL
    - Relationship: Employee entity will have a many to one relationship with events entity. Each event will require employees with different job titles to operate properly. The employee_ID will be the FK inside of the event entity. Employees will also have a one to one relationship with jobs. The job_title will be the FK inside of jobs.
- **Jobs**
    - <u>job_code</u>: int, unique, auto_increment, not NULL, PK
    - job_title: char, unique, not NULL
    - hourly_rate: decimal(18, 2), Not NULL
    - Relationship: The Jobs entity will have a many to one relationship with employees. Each employee will have one job title and there will be multiple employees with the same job title.

- **Events**: The purpose of this entity is to track upcoming events at Databar. It will have attributes such as employee IDs for the staff that will be running the event and the drink special for the night.
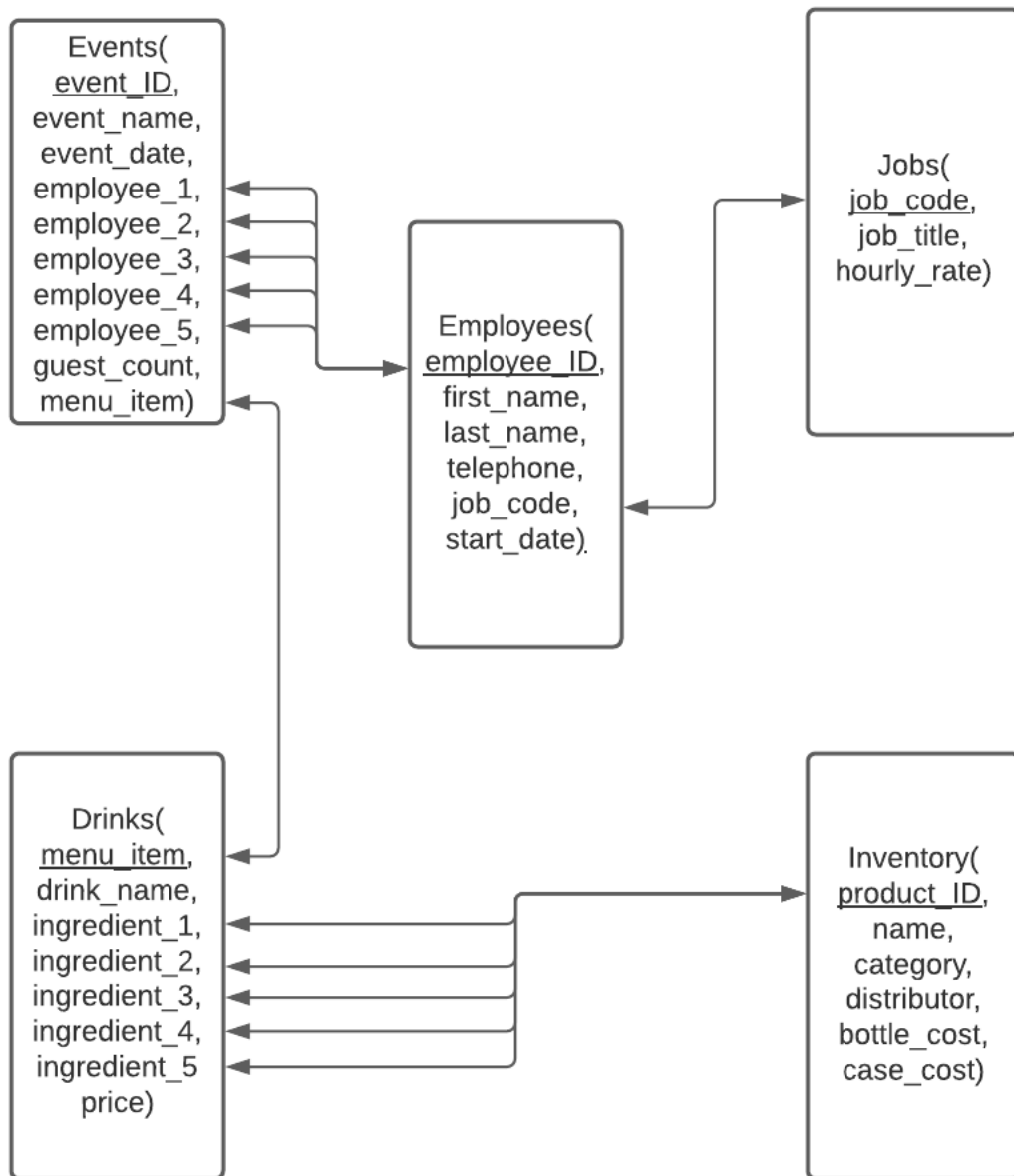
- ○ <u>event_ID</u>: int, unique, auto_increment, not NULL, PK
- ○ event_name: varchar, not NULL
- ○ event_date: date, not NULL
- ○ employee_1: int, FK (employee_ID), can be NULL, exactly one
- ○ employee_2: int, FK (employee_ID), can be NULL, exactly one
- ○ employee_3: int: FK (employee_ID), can be NULL, exactly one
- ○ employee_4: int, FK (employee_ID), can be NULL, exactly one
- ○ employee_5: int, FK (employee_ID), can be NULL, exactly one
- ○ guest_count: int, not NULL, exactly one
- ○ menu_item: int, not NULL, FK (menu_item)
- ○ Relationship: The events entity will have a one to many relationship with the employees entity. The events entity will also have a one to one relationship with the drink entity.

- ● **Drinks** The purpose of this entity is to track event drink special options and their recipes.
  - ○ <u>menu_item</u> : int, unique, auto_increment, not NULL, PK
  - ○ drink_name : varchar, unique, not NULL
  - ○ ingredient_1: int, not NULL, FK (product_ID)
  - ○ ingredient_2: int, can be NULL, FK (product_ID)
  - ○ ingredient_3: int, can be NULL, FK (product_ID)
  - ○ ingredient_4: int, can be NULL, FK (product_ID)
  - ○ ingredient_5: int, can be NULL, FK (product_ID)
  - ○ price: decimal(18,2), not NULL
  - ○ Relationship: a 1:M relationship between Drinks and Events is implemented with drink_name as a FK inside of Events. A M:M relationship also exists between Drinks and Inventory, as implemented by the Inventory product_key utilized as a FK within Drinks.

- ● **Inventory**: The purpose of this entity is to track the ingredients inventory needed for event drink specials.
  - ○ <u>product_ID</u>: int, unique, auto-increment, not NULL, PK
  - ○ name: varchar, not NULL
  - ○ category: char, not NULL (the following category choices will be implemented via dropdown menu when inputting new items)
    - ■ Whiskey/Bourbon
    - ■ Tequila/Mezcal
    - ■ Vodka
    - ■ Gin
    - ■ Rum
    - ■ Beer
    - ■ Wine
    - ■ Mixer
    - ■ Misc.
  - ○ bottle_cost: decimal(18, 2), can be NULL

- ○ case_cost: decimal(18, 2), can be NULL
- ○ distributor: varchar, not NULL
- ○ Relationship: a M:M relationship between Inventory is implemented with product_id as a FK inside of Drinks.

Entity Relationship Diagram

Schema

Events(
_event_ID_,
event_name,
event_date,
employee_1,
employee_2,
employee_3,
employee_4,
employee_5,
guest_count,
menu_item)

Employees(
_employee_ID_,
first_name,
last_name,
telephone,
job_code,
start_date)

Jobs(
_job_code_,
job_title,
hourly_rate)

Drinks(
_menu_item_,
drink_name,
ingredient_1,
ingredient_2,
ingredient_3,
ingredient_4,
ingredient_5
price)

Inventory(
_product_ID_,
name,
category,
distributor,
bottle_cost,
case_cost)

CREATE/READ/UPDATE/DELETE/READ Events Page.

DATABAR EVENTS

Browse existing events or edit/delete an event..

Event ID	Event Name	Event Date	Employee	Employee	Employee	Employee	Employee	Guest Count	Drink Special		
1	Town Hall	June 10, 2022	1	2	3	NULL	NULL	25	Old Fashioned	Delete	Edit
2	Awards Banquet	August 10, 2022	1	2	3	NULL	NULL	200	Manhattan	Delete	Edit
3	Family Reunion	June 15, 2022	1	2	3	NULL	NULL	100	Moscow Mule	Delete	Edit
4	Target Happy Hour	June 17, 2022	1	2	3	NULL	NULL	20	Moscow Mule	Delete	Edit

Add Event
Event Name: [ ]
Event Date: [mm / dd / yyyy]
Employee: [v]
Employee: [v]
Employee: [v]
Employee: [v]
Employee: [v]
Guest Count: [ ]
Drink Speial: [Old Fashioned v]
[Submit]

CREATE/READ/UPDATE/DELETE/READ/FILTER Employees Page.
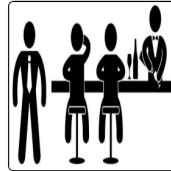
DATABAR EMPLOYEES

Filter By: [Bartender v] [Filter] [Clear Filter]

Browse existing employeees or edit/delete an employees..

Employee ID	First Name	Last Name	Telephone	Start Date	Job Title		
1	Bob	Grand	3312312	December 31, 9999	Bartender	Delete	Edit
2	John	Smith	21241241	November 11, 2008	Bartender	Delete	Edit
3	Sally	Jones	241412412	November 11, 2011	Security	Delete	Edit
4	Bobby	Lincoln	2412451	January 1, 2022	Security	Delete	Edit
5	Sara	Garfield	2754331	December 10, 2010	Barback	Delete	Edit

Add Employee
First Name: [ ]
Last Name: [ ]
Telephone: [ ]
Start Date: [mm / dd / yyyy]
Job: [Bartender v]
[Submit]

CREATE/READ/UPDATE/DELETE/READ Drinks Page.

DATABAR MENU

Browse existing drinks or edit/delete an drinks.

Menu Item	Drink Name	Ingredient 1	Ingredient 2	Ingredient 3	Ingredient 4	Ingredient 5	Price		
1	Old Fashioned	1	6	9	NULL	NULL	12	Delete	Edit
2	Manhattan	2	7	8	6	9	12	Delete	Edit
3	Whiskey Sour	1	10	NULL	NULL	NULL	12	Delete	Edit
4	Moscow Mule	4	11	NULL	NULL	NULL	10	Delete	Edit
5	Cadillac Margarita	5	10	11	12	NULL	12	Delete	Edit

Add Menu Item

Drink Name: [ ]
Ingredient 1: [N/A]
Ingredient 2: [ ]
Ingredient 3: [ ]
Ingredient 4: [ ]
Ingredient 5: [ ]
Price: [ ]
[Submit]

CREATE/READ/UPDATE/DELETE/READ Inventory Page.
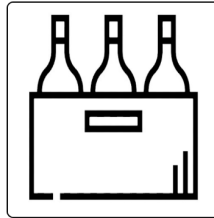
DATABAR INVENTORY

Browse existing inventory or edit/delete an inventory..

Product ID	Name	Category	Cost/Bottle	Cost/Case	Distributor		
1	N/A	N/A	$0	$0	N/A	Delete	Edit
2	Bulleit Bourbon	Whiskey/Bourbon	$28	$275	Youngs Spirits	Delete	Edit
3	Bulleit Rye	Whiskey/Bourbon	$28	$275	Youngs Spirits	Delete	Edit
4	Jamesons Irish Whisky	Whiskey/Bourbon	$26	$260	Seamus & Sons Spirits & More	Delete	Edit
5	Russian Standard	Vodka	$28	$280	Seamus & Sons Spirits & More	Delete	Edit
6	Casamigos Reposado	Tequila/Mezcal	$32	$295	Youngs Spirits	Delete	Edit
7	Angostura Bitters	Misc	$5	NULL	Youngs Spirits	Delete	Edit
8	Sweet Vermouth	Misc	$18	NULL	Youngs Spirits	Delete	Edit
9	Averna Amaro	Misc	$24	NULL	Youngs Spirits	Delete	Edit
10	Luxardo Cherries	Misc	$18	NULL	Seamus & Sons Spirits & More	Delete	Edit
11	Lemon Juice	Mixers	$8	$42	Smart & Final	Delete	Edit
12	Lime Juice	Mixers	$8	$42	Smart & Final	Delete	Edit
13	Gran Marnier	Misc	$36	NULL	Youngs Spirits	Delete	Edit

Add Inventory Item

Name: [ ]
Category: [Whiskey/Bourbon]
Cost/Bottle: [ ]
Cost/Case: [ ]
Distributor: [ ]
[Submit]

CREATE/READ/UPDATE/DELETE/READ Jobs Page.

JOBS AT DATABAR

Browse existing jobs or edit/delete an job..

Job ID	Job Title	Hourly Rate		
1	Bartender	15	Delete	Edit
2	Security	35	Delete	Edit
3	Barback	20	Delete	Edit

Add Job Description
Job Title: [   ]
Hourly Rate: [   ]
[Submit]