**Team BRAMS**

**Members:** Bryan Vu, Rachel Pai, Autumn Nguyen,   
Marjorie Balaoro and Saurav Chhapawala  
CECS 323 Term Project

**Note**: Associations, Classes

**Term Project: Phase 3 - Classes and Associations**

**A La Carte:** A type of Menu that is not a Buffet and only consists of individual items that the customer picks to eat.

* An A La Carte can have one or many MenuItems on it.

**Buffet**: A type of Menu that has a fixed price for any amount of food that is considered Buffet and is between the times of.

**Card:** This type of Payment is one that involves using a valid credit or debit card that is linked to a bank account with money in order to use to pay in exchange for food and services at the restaurant.

**Cash:** This type of Payment is one that involves giving physical currency in exchange for food and services at the restaurant.

**Chef:** a staff who is responsible for making the food that is served to the customers. The chef roll has three sub roles including head chef, sous chef, and line chef.

**ContactInfoType:** An enum table that holds the type of contact info that the CorporationCustomer has.

**CorporationContactInfo:** This holds the contact information for the CorporationCustomer.

* A CorporationContactInfo has zero or more CorporationCustomers.

**CorporationCustomer**: a Customer who represents an organization or a department inside of a corporation and not a regular customer. In addition to the information we need for a private customer, we also need to know the corporation name, department name, and contact info for the corporation.

* Each CorporationCustomer has **CorporationContactInfo** to hold contact information (like email, mobilePhoneNumber, and workPhoneNumber).
* A CorporationCustomer is a type of CustomerAccount.
* A CorporationCustomer has one and only one CorporationContactInfo.

**Customer:** a person or representative of an organization who has done business with and who may do business with us again in the future.

* Customers can make many Orders and an Order has one Customer.
* A Customer can pay for one or more Parties.

**CustomerAccount:** The record of a Customer.

* A customerAccount has one or more MimingsMoneyTransactionLog.

**DiningTable:** A dining table is a table on which meals are served to customers in the dining room of Miming’s restaurant.

* Many DiningTables can be assigned to many different assignments, creating an association class: TableAssignment
* Each DiningTable has one to many seats within the table.

**Dishwasher**: a PartTimeStaff who washes dishes.

* Each GeneralShift can have one or more Dishwashers.
* Each DishWasher can work one GeneralShift at a time.

**EatInOrder:** an Order eaten while still in the restaurant.

* Each eatInOrder can have one or more TableAssignments.

**Expertise:** This association class is in between SousChef and MenuItem as a SousChef can master many MenuItems and many MenuItems can have SousChefs that have mastered it.

**GeneralShift:** a period of time where an employee will provide labor in exchange for monetary compensation. There is a morning shift and an evening shift; each employee is required to work a full shift. The shifts will have each position that is available and the employee scheduled to work that station during that shift.

* A GeneralShift can have one or more LineChefs.
* A GeneralShift can have many WaitingStaff. There can be many WaitingStaff in one GeneralShift.
* A GeneralShift can have one or more SousChefs.
* A GeneralShift can have many Staff working at the same time.

**HeadChef:** the Chef who is in charge of the other chef roles. The head chef is responsible for creating the items on the menu and for creating new menu items. The head chef is also responsible for teaching new recipes to the sous chef.

* There can only be one HeadChef per GeneralShift. (They’re in charge)
* A given HeadChef can work many GeneralShifts.

**ItemSpecification**: An association class that contains information like the pricing and portion size of that specific item on the menu.

* An ItemSpecification has one more many Orders.

**LineChef:** a Chef who is responsible for preparing the kitchen so the other chefs can work. This can include dishwashing, butchering, soups, etc. They are the lowest in the chef hierarchy.

* A LineChef can work at most one GeneralShift at once.
* LineChefs have StationAssignments during a GeneralShift.

**Maitre d’**: A PartTimeStaff who oversees the front house of a restaurant. They are responsible for making sure that the customers are comfortable and resolve disputes or grievances.

* Each GeneralShift can have one or more Maitre d’s.
* Each Maitre d’ can work one GeneralShift at a time.

**Manager:** A SalaryStaff that will supervise those who are working GeneralShifts.

* A GeneralShift has one and only one Manager.

**MeatEntree:**  is a food item that contains meat.

**Mentorship**: a lookup table between SousChef and MenuItem that holds information about when the sous chef started learning a recipe and finished learning it.

* A Mentorship has a SousChef that teaches one or more MenuItems at once to another SousChef.
* A MenuItem can have one or more Mentorships that it is involved in.

**Menu:** a collection of food items that are related to each other in some way.

* Menus can have many MenuItems and a MenuItem can be on many Menus.

**MenuItems:** a line in the menu that represents a food item. It is something that a customer can order and we can provide it to them. A menu item has a spicy level, a category, and the ID of the chef who cooked it. Each menu item is on at least one menu, but does not need to be in all menus.

* There can be many MenuItems in many Orders.
* There can be one or many MenuItems in an A La Carte menu.

**mimingsMoney:** A type of payment that is used by those who have eaten at Miming’s Restaurant before. This can also help indicate whether a customer is a frequent goer or not.

**MimingsMoneyTransactionLog**: A record holder for which customers made which orders. This will act like a receipt and logging system.

* A MimingsMoneyTransactionLog has one and only one CustomerAccount.

**orderDetail**: This will indicate how many of each item is ordered.

**orderReceipt:** an association class between Customer and Order that holds all of the detailed information about the order made.

* An orderReceipt (association class) holds detailed information about the Order made by the Customer.

**Order:** a request to the restaurant to make food and provide service. An order can be created by an individual or an organization. We will collect some information about the order such as the seat(s) it applies to, the customer name, number of customers, and payment method.

* An Order has one or many ItemSpecifications.
* An Order has one and only one Payment.
* An Order has one and only one Party.

**PartTimeStaff:** A staff who will receive hourly compensation in exchange for their labor.

**Party:** A party consists of a Customer that makes an Order.

* A Party makes zero or more Orders.

**Payment**: This is the amount of money that would be given in exchange for food and services at the restaurant.

* A Payment has one and only one Order.

**PrivateCustomer**: a customer who does not represent a corporation; they are there for a personal meal. We need to know this person's name, email address, home address.

* A PrivateCustomer is a type of Customer.

**SalaryStaff:** a staff who will receive a weekly rate compensation in exchange for their labor. They will also qualify for health benefits.

**Seat:** A seat is an individual chair that is placed at a dining table at the restaurant.

* A DiningTable has one to many seats in the table.
* A seat is seated in zero to many eatInOrders.

**SousChef:** the Chef who is second in command in terms of chef roles. This person is responsible for helping the head chef and learning new recipes from a mentorship by the head chef.

* A SousChef is mentored by one or more SousChefs.
* A SousChef can mentor one or more SousChefs.
* A SousChef can work at most one GeneralShift at once.
* A SousChef can master many MenuItems.

**Staff:** an individual who will provide labor in exchange for compensation. A staff person will have a job title that will carry its own set of responsibilities. Staff will gain compensation either through hourly wages or salary based on their job title. Staff who are eligible for tips will also get tips. Some staff roles are essential, so there will always be one person assigned to those roles.

* Many Staff can work a GeneralShift.

**StaffAssignment:** An association class between GeneralShift and Staff. This will hold the specific assignments that Staff will have given a GeneralShift.

* A GeneralShift can have many Staff working at the same time.
* Many Staff can be working during a GeneralShift.
* There is one and only one Assignment per StationAssignment that a Staff has.
* Many Assignments can be assigned to many different Tables, creating an association class: TableAssignment

**StationAssignment**: A line chef works on one of the 8 different stations. This is an enum class to hold the details of the different stations.

* A StationAssignment has one and only one LineChef at any given time.

**TableAssignment:** an enum association class which holds all of the detailed information about which tables are the responsibility of which employee. They will also hold the given tableCapacity and the amount of gratuityGiven.

* Each TableAssignment has one and only one WaitingStaff serving it.
* Each Table Assignment seats zero or at most one eatInOrder.

**To-GoOrder**: an Order that requests food which the customer will then take to eat elsewhere. We will collect the same information as a normal order, but the seats will not apply. A time ready will be indicated which will contain when the customer can come to claim the food.

**WaitingStaff:** A PartTimeStaff who provides services focused on the front house of the restaurant. This includes all of the duties that do not involve the kitchen. The waiting staff will be the majority of the employees who collect tips and have a table assignment.

* Each GeneralShift can have one or more WaitingStaff.
* A WaitingStaff can only work one GeneralShift at a time.
* Each WaitingStaff serves one or many TableAssignments.