MVC Architecture
MVC Architecture: View Classes

- **Class:** create_customer
  - Includes cust_id -> unique identifier for each customer, cust_name, and cust_password to store info about each customer for login validation

- **Class:** create_reservation
  - cust_id to be able to identify who made the reservation
  - made_before boolean value stores whether or not customer made the reservation in advance
  - contains an array of customer id’s, used to display the current queue so customers may see their position in line
MVC Architecture: View Classes

- **Class**: login
  - Used for validation when customers login. Contains cust_name and password which customers will be using when logging in

- **Class**: activate_table
  - Contains table_id which is unique identifier for each table. Also, ready boolean value to determine if table is ready for a party to be seated
MVC Architecture: Controller Classes

- **Class**: `add_queue()` - contains code to add a new reservation to the queue
- **Class**: `add_cust()` - contains code for when a new customer registers and creates a profile.
- **Class**: `update_queue()` - contains code to update queue when a new reservation has been made, as well as when a party gets seated and is removed from the queue.
- **Class**: `update_tables()` - contains code to update available tables when the host determines a table is ready
MVC Architecture: Model Classes

- **Class: table**
  - Objects of the different tables that the restaurant has, including variables about whether or not the table is ready.

- **Class: customer**
  - Objects of all the current accounts registered with id, name, and passwords.

- **Class: reservation**
  - Objects that notifies host and/or customer what reservation is ready to be seated with whosNext()
UML Sequence Diagram: Activate Table
Entity Relationship Diagram

- **Customer**: Customer ID, Name, Party Size
- **Reservation**: Reservation ID, Assigns
- **Register**:
- **Table**: Table ID, Availability, Number of Seats
Entity Relationship Explanation

- **Customer**
  - Contains four attributes (Customer ID, Name, Party Size, Reservation ID). Customer ID is the primary key and Reservation ID is a foreign key obtained from the Reservation entity.

- **Reservation**
  - Contains the Reservation ID and Customer ID attributes. The Reservation ID is the primary key and Customer ID is the foreign key obtained from the Customer entity.

- **Table**
  - Contains Table ID, Number of Seats, Availability, and Customer ID as its attributes. The Table ID is the primary key and Customer ID is the foreign key obtained from the Customer entity.
Relational Schema Diagram