Class Customer

The basic responsibility of a Customer object is to provide information about a party, as well as confirm/leave from the waitlist

Responsibilities	Collaborators
Know and provide the party's: name, cell phone number, and party size to the	LineHandler
LineHandler	LineHandler
Confirm or Leave the line when prompted to respond when they reach the front of the line	

Class LineHandler

The basic responsibility of a LineHandler object is to take in customer wait list requests, and manage the waitlist line. It must also communicate with the TableManager to know when a free table is available.

Responsibilities	Collaborators
Take in each of the party's: name, cell phone number, and party size from applicants. Know the customers in the waitlist line, prompting users to Confirm or Leave when they reach the top of the line. Receive the output, and: A: if "confirm," match customer with table and send reservation notice to TableManager. B: if "leave," remove customer from line, assess if next customer in line is suitable for then send a prompt again if so. If not, move to next person in line. (repeat until success) Receive notifications from the TableManager when a free table is available, specifically receiving the size of the free table	Customer, TableManager TableManager

Class TableManager

The basic responsibility of a TableManager object is to notify the LineHandler whenever a free table is available. It oversees all tables in the restaurant.

Responsibilities	Collaborators
Provide the LineHandler with free tables, specifically the size of a given free table when said table becomes ready.	LineHandler
	LineHandler, Table
Receive responses from LineHandler to confirm reservations, if accepted from the provided table size. Notify the respective Table to make sure it changes state to Occupied.	Table
Know all tables and notifies the LineHandler each time a free table becomes ready	

Class Table		
The basic responsibility of a Table object is to maintain information about a single table.		
Responsibilities	Collaborators	
Know and store information about a table's size as well as state attribute: Ready or Occupied state	TableManager	

Pattern 1; Observer:

The TableManager acts as an observer, and is notified in changes in state of a given Table's state. This allows it to trigger sending a message to the LineHandler, alerting it that there is a new ready table. When the state of a Table is changed, it notifies its dependent class, which is the LineHandler.

Pattern 2; State:

The class Table utilizes state, and each Table has a state of either "Ready" or "Occupied." This allows a given Table object to notify the TableManager that it is Ready, and provides the size of the table as well. This behavior can only be performed when a Table is in "Ready" state, not in "Occupied" state.