CRC Diagram

CLASS: Queue Manager	
RESPONSIBILITIES:	COLLABORATIONS:
Note down customer sign up request and send waitlist message to customer.	Customer
Recieves availability information from Table Manager	
Send confirmation message to customer once he reaches top of the queue. If the customer says no then queue manager looks for the next customer who satify the seat criteria	Table Manager

CLASS: Customer	
RESPONSIBILITIES:	COLLABORATIONS:
Sign Up for table with name, mobile number and number of required seats	Queue Manager
Confirm or Leave on seat availability message	

CLASS: Table Manager	
RESPONSIBILITIES:	COLLABORATIONS:
Keep track of all the tables with the number of seats	Queue Mananger
Send information to queue manager when seats at table gets vaccant.	

Problem approach

- I have used chain of responsibility design pattern for the problem.
- The customer signup with the Queue manager with name, mobile and number of seats request.
- The table manager send the information when a table with specified number of seat is available.
- The queue manager acts as the handler who pass on the information to the top most customer satisfying the number of seats criteria. If the customer confirms then the table is allocated otherwise the information is passed to the next customer in queue.
- Thus, the customers are in chain in this problem.