

Customer Table Booking – Requirement 5

In this requirement, build a feature in which user can book tables. If the table is not available suggest alternate tables in ascending order of table number.

1. Create a **Booking Class** with the following private attributes:

Member Field Name	Type
id	Long
customerName	String
table	Table
membersPresent	Integer
billamount	Double
bookingTime	java.util.Date

2. Mark all the attributes as private, Create / Generate appropriate Getters & Setters, Add a default constructor and a parameterized constructor to take in all attributes in the given order:**Booking(Long id, String customerName, Table table, Integer membersPresent, Double billamount, Date bookingTime)**
3. Create a Table Class with the following private attributes:

Member Field Name	Type
id	Long
number	Integer
capacity	Integer

4. Mark all the attributes as private, Create / Generate appropriate Getters & Setters, Add a default constructor and a parameterized constructor to take in all attributes in the given order:**Table(Long id, Integer number, Integer capacity)**
5. The Table class should implement the **Comparable** interface which sorts the table list based on table number.
6. Create the following static methods in the **Table** class,

Method Name	Description
static Table createTable(String line)	This method accepts a String and returns a table object. The csv String is passed as value. Split the value, then create a table object and return it.

7. Create the following static methods in the **Booking** class,

Method Name	Description
static void createBooking(List<Table> tableList,List<Booking>	This method accepts a list of table, booking list, and a booking detail from the user as arguments. Check if the table is already booked or not from bookinglist. If the table is not booked create a Booking

bookingList,String line)	object and add it to the booking list and display "Table successfully booked", if it is already booked display "Sorry the table is not available" followed by the available table details.
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Note: The list of available tables and status of booking are displayed within the function.

The input format of Table details are separated by comma in the below order,
(id, number, capacity)

The input format of Booking details are separated by comma in the below order,
(id, customerName, tableNumber, membersPresent, billamount, bookingTime)

When the "table" object is printed, it should display the following format

Print format:

System.out.format("%-5s %-10s %s\n","ID","Number","Capacity");

Sample INPUT & OUTPUT 1:

Enter the number of tables:

2

101,10,10

102,20,15

Enter the booking details:

10,John,10,8,1200,12-01-2018

Table successfully booked

Do you want to continue(yes/no)

yes

Enter the booking details:

20,Peter,2,9,1300,12-01-2018

Sorry the table is not available

The available tables are:

ID Number Capacity

102 20 15

Do you want to continue(yes/no)

yes

Enter the booking details:

20,Peter,10,8,1300,12-01-2018

Sorry the table is not available

The available tables are:

ID Number Capacity

102 20 15

Do you want to continue(yes/no)

yes

Enter the booking details:

20,Peter,20,8,1300,12-01-2018

Table successfully booked

Do you want to continue(yes/no)

no