Tent House Rental

> **Please go through the document carefully to understand the requirement along with our expectations.**

Scope of work

Consider a tent house giving different items for individual rentals. Suppose it has X number of items and at any time Y number of items may be given in rent to different customers. Application will be run from command line based on the menu options as below. Note, the number stands for menu option and text is the description of the option.

Option Code: 0

Initiate - Initiate / re-initiate the item data based on the table below.

Item ID	Item Name	Total Quantity	Booked Quantity
1	Plastic Chairs	10000	0
2	Tiffany Chairs	5000	0
3	Bridal Chair	10	0
4	Plastic Round Tables	100	0
5	Plastic Rectangular Table	90	0
6	Steel Folding Table	80	0
7	Gas Stoves	25	0
8	Chair Covers	6000	0
9	Table Cloths	500	0

Option Code: 1

Show list of all items with available quantity - Shows the below table as output with the actual quantity available (Total Quantity - Booked Quantity). In case quantity available is 0, omit the product from the report

```
Choose Your Option:
> 1
Item ID    Item Name                 Available Quantity
1          Plastic Chairs            10000
2          Tiffany Chairs            5000
3          Bridal Chair              10
4          Plastic Round Tables      100
5          Plastic Rectangular Table 90
6          Steel Folding Table       80
7          Gas Stoves                25
8          Chair Covers              6000
9          Table Cloths              500
```

Option Code: 2

Book one or more item for rent - Takes Item ID and Quantity as input, then creates transaction and adds to the quantity booked. Make sure to validate it against the actual quantity available. Create a new transaction having Transaction Type as 'OUT' and capture the date/time of transaction.

```
Choose Your Option:
> 2
Enter Item ID:
> 6
Enter Quantity [Plastic Chairs]:
> 100
Error: Goes beyond quantity available for this item
Book Another Item [y/n]:
> n

Choose Your Option:
> 2
Enter Item ID:
> 6
Enter Quantity [Plastic Chairs]:
> 15
Success: Booking request accepted – Transaction ID: 123456
Book Another Item [y/n]:
> y
Enter Item ID:
> 3
Enter Quantity [Bridal Chair]:
> 1
Success: Booking request accepted – Transaction ID: 123457
Book Another Item [y/n]:
> y
Enter Item ID:
> 7
```

```
Enter Quantity [Gas Stoves]:
> 2
Success: Booking request accepted - Transaction ID: 123458
Book Another Item [y/n]:
> n
```

Option Code: 3

Return one or more item - Takes Transaction ID as input, then ask for a confirmation to record item return and adds quantity back to item inventory. Make sure to validate Transaction ID is in the record and no return is accepted. Create a new transaction having Transaction Type as 'IN' and capture the date/time of transaction.

```
Choose Your Option:
> 3
Enter Transaction ID:
> 123455
Failure: Invalid Transaction ID / Already Returned

Choose Your Option:
> 3
Enter Transaction ID:
> 123456
Confirm Return (y/n):
> y
Success: Return request accepted - Transaction ID: 123459
Return Another Item [y/n]:
> y
Enter Transaction ID:
> 123457
Confirm Return (y/n):
> y
Success: Return request accepted - Transaction ID: 123460
```

Option Code: 4

Show Tent House Transaction for All Items - Show a report as per the below format, based on the above examples. Feel free to use any date/time format as you like.

```
Choose Your Option:
> 4
Item Name: Plastic Chairs
Available Quantity: 10000
---
Item Name: Tiffany Chairs
Available Quantity: 5000
---
Item Name: Bridal Chair
```

```
Available Quantity: 10

Transaction ID    Date/time              Type     Quantity
123456            2019-08-01 14:20:32    OUT      1
123460            2019-08-04 10:30:16    IN       1
---
Item Name: Plastic Round Tables
Available Quantity: 100
---
Item Name: Plastic Rectangular Table
Available Quantity: 90
---
Item Name: Steel Folding Table
Available Quantity: 80

Transaction ID    Date/time              Type     Quantity
123456            2019-08-01 14:20:30    OUT      15
123459            2019-08-04 10:30:15    IN       15
---
Item Name: Gas Stoves
Available Quantity: 23

Transaction ID    Date/time              Type     Quantity
123458            2019-08-01 14:20:34    OUT      2
---
Item Name: Plastic Rectangular Table
Available Quantity: 6000
---
Item Name: Plastic Rectangular Table
Available Quantity: 500
```

Option Code: 9

Exit - Exit from the program.

Technologies / Tools:

Ruby, Git

Deliverables expectations:

- All features are expected to be working
- Share github project URL
- You may use any Ruby version to implement the solution.
- You may use any Ruby gems that you think is appropriate.
- Use object oriented approach for the solution with reasonable classes and attributes. Keep it as modular and clean as possible and follow common software practices to include reusability, portability, encapsulation, etc
- A README describing how to run the program.

Review Process:

Submitted code will be reviewed internally to assess the quality of the implementation / code. Based on review, we may schedule a follow up meeting to do code/design walk through.

Contact:

In case of any questions contact: Kiran @ +91 9937087460