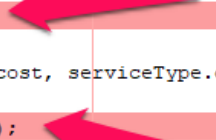


All Service charges are reported as 0.00 when checking out

The first file to be checked is the RecordServiceCTL which is responsible for the service charge process.

Adding the break points:

```
hotel.addServiceCharge(roomNumber, serviceType, cost);  
  
recordServiceUI.displayServiceChargeMessage(roomNumber, cost, serviceType.getDescription());  
state = State.COMPLETED;  
recordServiceUI.setState(RecordServiceUI.State.COMPLETED);
```




The break point was added here, since this step is responsible for the service charge and change the state.

The second break point that we want to be looking at is at:

Booking class

```
public void addServiceCharge(ServiceType serviceType, double cost) {  
    charges.add(new ServiceCharge(serviceType, cost));  
}
```



This code is responsible for adding the charges to the booking so that the person can be charge later when he checks out.

Checking the hypothesis;

Value entered:

Booking Room

Enter phone number: 11111111

Enter guest name: sam

Enter guest address: king st

Name: sam, Address: king st, Phone: 11111111

S: Single room, 1

D: Double room, 2

T: Twin share, 3

Enter room type selection: S

Enter number of occupants: 1

Enter arrival date

Enter day (dd): 1

Enter month (mm): 1

Enter year (y): 2019

Arrival Date: 01-01-2019

Enter length of stay: 5

The cost of booking a Single room from 01-01-2019 for 5 nights is \$500.00

Enter credit card details

V: Visa

M: MasterCard

Enter credit card type selection: M

Enter credit card number: 1

Enter CCV: 2

Single room 101 is booked from 01-01-2019 for 5 nights by sam.

MasterCard Credit card number 1 has been debited \$500.00

Confirmation Number : 102019101

Hit <enter> to continue

Booking completed

Hotel Management System

Please select:

B: Book a Room
C: Check In
R: Record Service
D: Check Out

Q: Quit

Selection : C

Checking in

Enter confirmation number: 102019101

Single room 101 is booked from 01-01-2019 for 1 nights by sam.

MasterCard Credit card number: 1

Confirm checkin? (Y/N) : y
Check in confirmed
Hit <enter> to continue
Checking in completed

Hotel Management System

Please select:

B: Book a Room
C: Check In
R: Record Service
D: Check Out

Q: Quit

Selection : R

Recording service

Enter Room Id: 101
B: Bar Fridge
R: Restaurant
S: Room Service
Enter service typeB
Enter cost: 60

Breaking points:

Before the break point:

Name	Type	Value
cost	double	60.0
serviceType	ServiceType	"BAR_FRIDGE"
identifier	String	"B"
description	String	"Bar Fridge"
Static		
Inherited		
this	RecordServiceCTL	#340
roomNumber	int	101
recordServiceUI	RecordServiceUI	#354
state	RecordServiceCTL\$State	"SERVICE"
hotel	Hotel	#353
booking	Booking	#356
confirmationNumber	long	102019101
stayLength	int	1
numberOfOccupants	int	1
cost	int	0
room	Room	#364
guest	Guest	#363
bookedArrival	Date	Jan 1, 2019 12:00:00 AM
creditCard	CreditCard	#367
state	Booking\$State	"PENDING"
charges	ArrayList	"size = 0"
<Enter new watch>		

After the break point:

Name	Type	Value
cosst	double	60.0
serviceType	ServiceType	"BAR_FRIDGE"
identifier	String	"B"
description	String	"Bar Fridge"
Static		
Inherited		
this	Booking	#356
confirmationNumber	long	102019101
stayLength	int	1
numberOfOccupants	int	1
cost	int	0
room	Room	#364
guest	Guest	#363
bookedArrival	Date	Jan 1, 2019 12:00:00 AM
creditCard	CreditCard	#367
state	Booking\$State	"PENDING"
charges	ArrayList	"size = 0"
<Enter new watch>		

This proves the hypothesis that the total cost value is stored in the cosst variable but not added to the actual cost. Thus, the total is always zero.

