

UT IT Manual Testing

Socket Connection between server and client

```
manisha@BGHLPG02VYHA:/mnt/c/hotel$ make
make: *** No rule to make target 'client.c', needed by 'client'.
Stop.
manisha@BGHLPG02VYHA:/mnt/c/hotel$ make
make: 'client' is up to date.
manisha@BGHLPG02VYHA:/mnt/c/hotel$ make server
gcc -o server src/server.c -lpthread
manisha@BGHLPG02VYHA:/mnt/c/hotel$ ./server
TCP Server Socket is created.
Listening...

cl_count = 0 fd = 4 clfd = 4
A new thread is created for client on fd: 4
Total clients connected : 1

client_handler():648 Client Fd = 4
client_handler():653 Waiting on recv for fd = 4
^

manisha@BGHLPG02VYHA:/mnt/c/hotel$ make
make: *** No rule to make target 'client.c', needed by 'client'.
Stop.
manisha@BGHLPG02VYHA:/mnt/c/hotel$ make
make: 'client' is up to date.
manisha@BGHLPG02VYHA:/mnt/c/hotel$ make client
make: 'client' is up to date.
manisha@BGHLPG02VYHA:/mnt/c/hotel$ ./client

The Client Socket is created.

Client is connected to Server.

=====
HOTEL RESERVATION SYSTEM
=====

MENU

1. Sign up
2. Log in
3. Exit from the System

Enter option : ^
```

User Sign up with valid inputs

```
Enter option : 1

Enter User Name : Sushmita
Enter User Passwd (Max 6 chars) : 1234
User Authentication Success

=====
WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : ^
```

User sign up with invalid inputs

```
1. Sign up
2. Log in
3. Exit from the System

Enter option : 1

Enter User Name : manishaaa
Enter User Passwd (Max 6 chars) : 1234567890
Invalid password, length must be between 4 and 6
Invalid input format

=====
HOTEL RESERVATION SYSTEM
=====

MENU

1. Sign up
```

User log in with valid credentials

```
MENU

1. Sign up
2. Log in
3. Exit from the System

Enter option : 2

Enter User Name : Sushmita
Enter User Passwd (Max 6 chars) : 1234
User Authentication Success

=====
WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
```

User log in with invalid credentials

```
Enter option : 2

Enter User Name : abc
Enter User Passwd (Max 6 chars) : 1234
Invalid username, length must be between 4 and 32
Invalid input format

=====
HOTEL RESERVATION SYSTEM
=====

MENU

1. Sign up
2. Log in
3. Exit from the System

Enter option : _
```

Display Hotel menu

```
Enter option : 2

Enter User Name : Sushmita
Enter User Passwd (Max 6 chars) : 1234
User Authentication Success

=====
WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option :
```

View Rooms Module

```
Enter option : 1
Sent bytes = 520

          HOTEL SAPPHIRE
-----
ROOM TYPE      FARE PER DAY
SINGLE ROOM     Rs.3000
DOUBLE ROOM     Rs.5000
DELUXE ROOM    Rs.10000
SUITE ROOM     Rs.15000

=====

WELCOME TO HOTEL RESERVATION SYSTEM

=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT
```

Book Room Module

User enters valid credentials to book room

```
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : 2
Enter the username to continue booking : Sushmita

Enter your password : 1234

Enter the room type you wish to book(single/double/deluxe/suite)? : single
Enter your check in date in the format dd-mm: 12-01
Enter your check out date in the format dd-mm: 15-01

The Room is available
Enter name : _
```

Generates Bill

```
Name      : Sushmita
Age       : 22
Phone Number : 7892731028
Room Number : 101
Room Type  : single room
Check In Date : 12-01
Check Out Date : 15-01
Total cost : Rs.9000

=====
=====

WELCOME TO HOTEL RESERVATION SYSTEM

=====

1. VIEW ROOM TYPES
2. BOOK ROOM
```

User enters invalid check in check out date, month and format to book the room

```
1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : 2
Enter the username to continue booking : Sushmita
Enter your password : 1234
Enter the room type you wish to book(single/double/deluxe/suite)? : double
Enter your check in date in the format dd-mm: 12-13
Invalid month
Enter your check in date in the format dd-mm: 32-01
Invalid date
Enter your check in date in the format dd-mm: 12/01
Invalid date format
Enter your check in date in the format dd-mm:
```

User enters check out date greater than check in date

```
=====
Enter option : 2
Enter the username to continue booking : Sushmita
Enter your password : 1234
Enter the room type you wish to book(single/double/deluxe/suite)? : deluxe
Enter your check in date in the format dd-mm: 15-01
Enter your check out date in the format dd-mm: 12-01
Check in date is greater than check out date

=====
WELCOME TO HOTEL RESERVATION SYSTEM

=====
1. VIEW ROOM TYPES
2. BOOK ROOM
```

User enters invalid phone number to book the room

```
3. CANCEL BOOKING
4. LOGOUT

=====
Enter option : 2
Enter the username to continue booking : Sushmita
Enter your password : 1234
Enter the room type you wish to book(single/double/deluxe/suite)? : single
Enter your check in date in the format dd-mm: 12-01
Enter your check out date in the format dd-mm: 13-01
The Room is available
Enter name : Sushmita
Enter age : 22
Enter phone number :90600222907
Invalid phone number.
Please enter a valid phone number: 9060022907
```

User enters invalid room type to book the room

```
=====
                        WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : 2
Enter the username to continue booking : Sushmita

Enter your password : 1234

Enter the room type you wish to book(single/double/deluxe/suite)? : hut
Invalid room type

Enter the room type you wish to book(single/double/deluxe/suite)? :
```

Room Availability Statistics displayed in server

```
User Sushmita password matched
Auth Success : 1234
Sent 8 bytes reply ..
client_handler():653 Waiting on recv for fd = 4
Received msg type 7 socket = 4 ...
Handling message: 7
Requested Room type : single
Check in date : 12-01
Check out date : 15-01
User name : Sushmita
-----+-----+
Room Type | Occupied | Available |
Single Room 1      3
Double Room 0      4
Deluxe Room 0      4
Suite Room 0      4
-----+-----+
Sent 8 bytes reply ..
client_handler():653 Waiting on recv for fd = 4
Received msg type 14 socket = 4 ...
Sent 8 bytes reply ..
client_handler():653 Waiting on recv for fd = 4
Received msg type 4 socket = 4 ...
Handling message: 4
Username : Sushmita
Password : 1234
User Sushmita found
User Sushmita password matched
Auth Success : 1234
Sent 8 bytes reply ..
client_handler():653 Waiting on recv for fd = 4
■
```

Cancel Room Module

User enters valid credentials to cancel room

```
=====
                        WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : 3

To Cancel your booking enter your username : Sushmita

To Cancel your booking enter your password : 1234

User Authentication Success

Enter your room_no: _
```

User enters valid room number to cancel booking

```
To Cancel your booking enter your username : Sushmita

To Cancel your booking enter your password : 1234

User Authentication Success

Enter your room_no: 101

Your Reservation is cancelled

=====
                        WELCOME TO HOTEL RESERVATION SYSTEM
=====

1. VIEW ROOM TYPES
2. BOOK ROOM
3. CANCEL BOOKING
4. LOGOUT

=====

Enter option : _
```


User enters invalid room number to cancel booking

```
4. LOGOUT

=====

Enter option : 3

To Cancel your booking enter your username : Sushmita

To Cancel your booking enter your password : 1234

User Authentication Success

Enter your room_no: 101

The Cancellation request is invalid

=====

WELCOME TO HOTEL RESERVATION SYSTEM

=====

1. VIEW ROOM TYPES
2. BOOK ROOM
```