FancyHotel.com

FancyHotel.com is an online hotel reservation platform that allows customers to make a reservation in any one of five locations – Atlanta, Charlotte, Savannah, Orlando, or Miami. The customers can use this online system to either make a reservation, update the dates of an existing reservation, cancel a reservation or provide a review about the hotel. The online system can also be accessed by managers for viewing reports of different kinds.
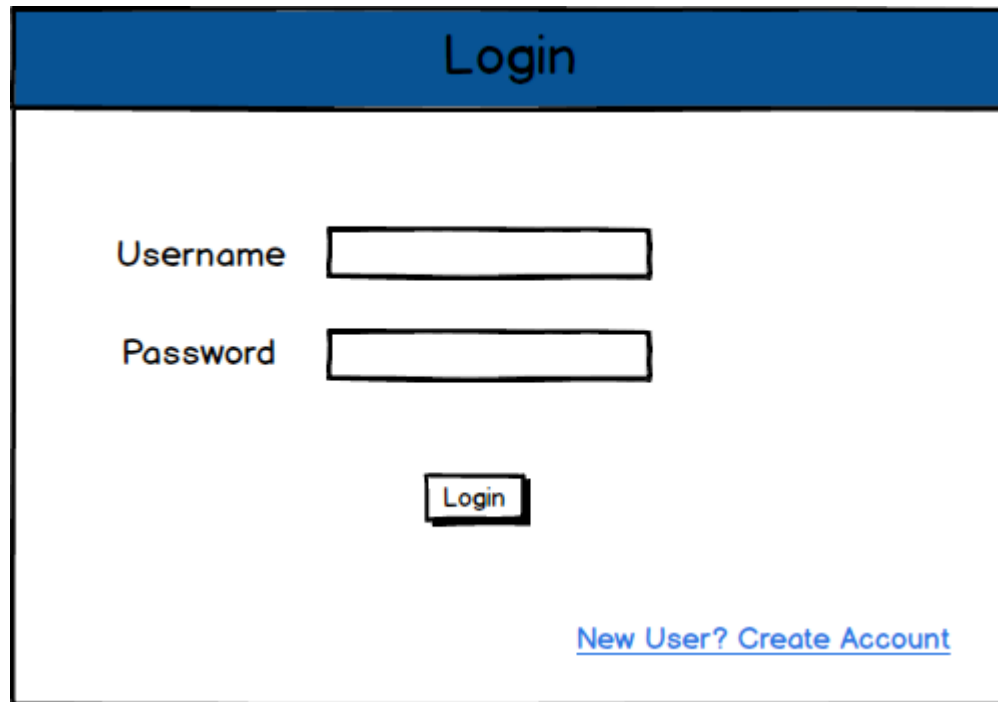
NOTE: This system does not cater to anything that relates to an actual stay at the hotel. It just helps customers' make/update/cancel reservations online. We are also assuming that customers are making reservations for specific room numbers in designated hotels (which is a bit of a departure from normal practice). These things are done to simplify the task you have to perform to implement this application.

The following sections contain a functional description of the system along with some mockup screens. Each section will explain a particular functionality and then present an example screen about it. The sections have been grouped by customer's functionalities and management's functionalities.

CUSTOMER FUNCTIONALITIES

1. Logging In

Figure 1 shows the login screen.

Figure 1: Login

There are two kinds of users of the system – customers and management. All users are identified by their username. A valid Username and Password combination is required to use the system. If the user provides invalid login credentials then the system should throw an error message to the user.

2. Create Account

A new user needs to register before using the system. The management already has credentials created behind the scene. Clicking on 'Create Account' link on the login screen displays the new user registration screen as shown in Figure 2.
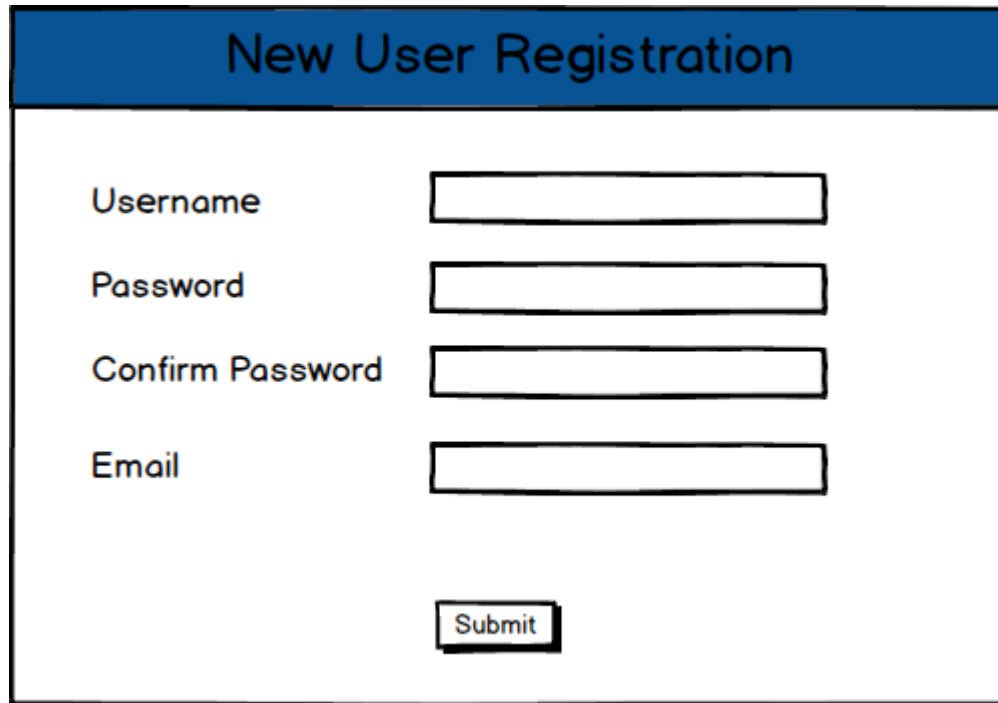
Figure 2: New User Registration

After the user clicks Submit, the system should verify that all fields are filled and that the username is not already registered, that the Password and Confirm Password fields are same, and that the email is valid and unique. In case any of these validations fail, an appropriate error message should be displayed for the user.

3. Choose functionality

The user (existing or new) is then taken to a screen which lists out the different functionalities for him (we will use 'him'/'he' from here onwards to represent the user without any intended bias).
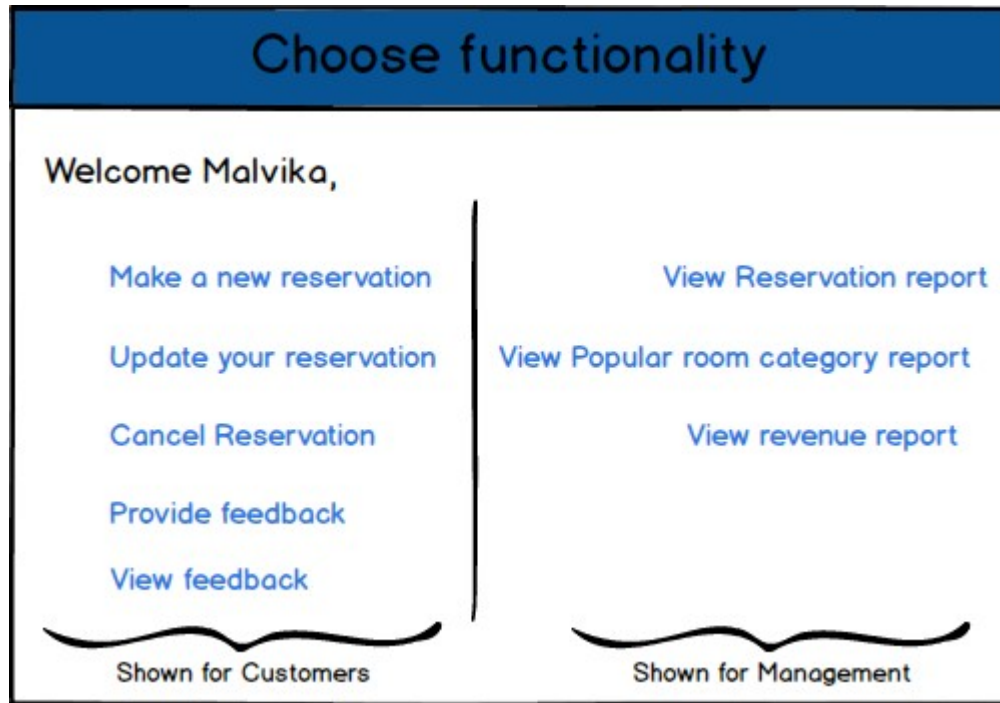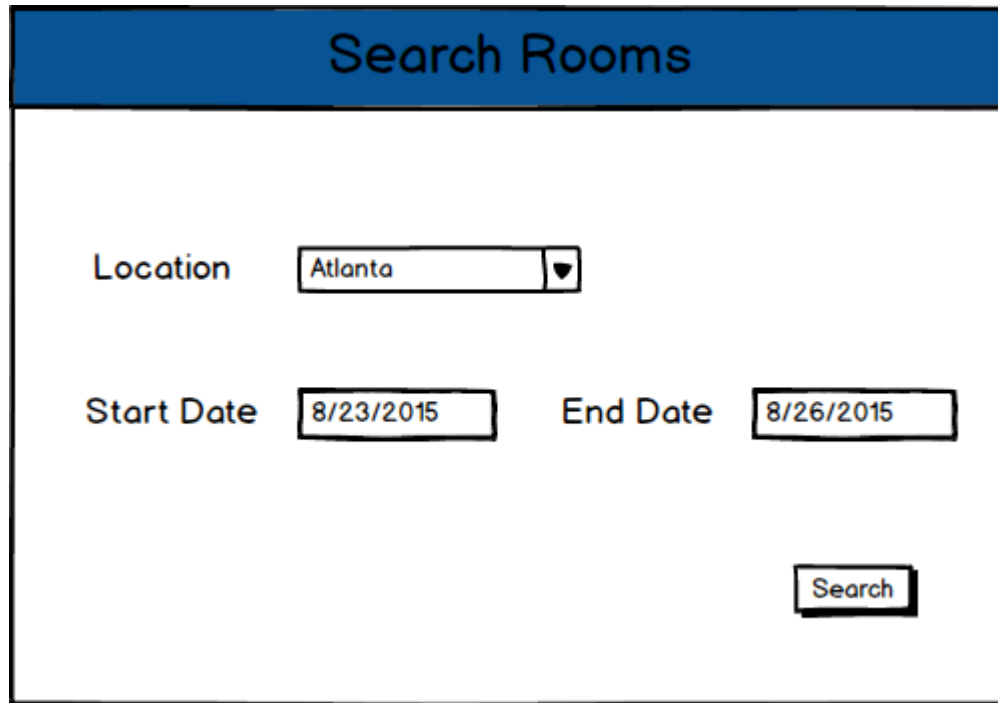
Figure 3 shows a mockup screen.

Figure 3: Select functionality

After the user selects a functionality, he should be taken to the next appropriate screen.

4. Find Rooms

If the user wants to make a reservation, he should be directed to this screen first where he could search for rooms.

Figure 4 shows a mockup.

Figure 4: Search rooms

The location should be a dropdown with 5 locations – Atlanta, Charlotte, Savannah, Orlando and Miami. After he enters his search criteria, he should be shown the list of rooms available and satisfying his search criteria as shown on the next screen. The dates cannot be dates in the past.

5. Make a Reservation

After the search is completed, the list of **available** rooms fitting the customer's search criteria is listed on the screen with all the room details – Room Number, Room Category, Number of people allowed in the room, Cost of the room per day, cost per extra bed per day.

Figure 5 shows a mockup.

Make a Reservation

Room number	Room Category	#persons allowed	cost per day	cost of extra bed per day	Select Room
111	Standard	2	100	70	☐
321	Family	4	170	50	☑
222	Suite	4	250	150	☐
332	Standard	2	100	70	☑

Check Details

CLICK

Room number	Room Category	#persons allowed	Cost per day	cost of extra bed per day	extra bed
321	Family	4	170	50	☐
332	Standard	2	100	70	☑

Start Date [8/23/2015]   End Date [8/26/2015]

Total Cost [1020.00]

Use Card [8219 ▼] Add Card

Submit

Figure 5: Make Reservation

When the customer clicks on 'Check Details' the lower half of the screen becomes   visible to the customer with all details. Depending on if the extra bed is chosen, the total cost is then calculated and displayed on the screen.

Note that any person above the age of 5 years is considered as an adult and is counted towards number of beds required. Check-in time is 12 pm for all

reservations, and check-out time is 11:55 am on the checkout date. No more than reserved beds (in room and extra) are allowed at any cost.

Each room has the following attributes – Room number, location(any of the 5 locations), category (Standard – can accommodate 2, Family – can accommodate 4 people, Suite – can accommodate 4 people), number of maximum people allowed in the room, cost of room per day, cost of each extra bed per day. Each room only allows one extra bed. The cost of the extra bed can be different for different room categories.

6. Payment Information

After 'Submit' from Figure 5 and Figure 6, the customer should be taken to the Payment screen. If he doesn't have Credit Card details already stored then he should be asked to save that information first and then pay using the stored card. A resident can add multiple cards in the system. He can also delete information about cards from the system. Remember he cannot make a reservation unless he has added information about at least one card. And he can use only one card for transactions for a particular reservation. Also, he cannot delete a card if it is being used in a transaction which hasn't ended yet (i.e. the end-date has not passed yet).

Figure 6 shows a mockup.

Figure 6: Payment Information

You can either show the last 4 digits of the card to be deleted or the complete card number.

7. Confirmation Screen

After a reservation is made, a reservation ID is generated for the customer. The confirmation screen should show him the reservation ID.

Figure 7: Confirmation of reservation

8. Update Reservation

Updating a reservation is allowed only in terms of the dates of stay. This system is not capable of updating anything else.

The update is only allowed if the same rooms that were originally reserved are available for the new dates of stay, otherwise an appropriate message is shown to the user asking him to cancel and make a new reservation for the new period of stay. The period of reservation cannot include dates in the past.

Figure 6 shows a mockup.

Update Reservation

Reservation ID 12314   Search

Current Start Date 8/23/2015   Current End Date 8/26/2015

New Start Date 8/23/2015   New End Date 8/27/2015

Search Availability

Rooms are available. Please confirm details below before submitting.

Room number	Room Category	#persons allowed	Cost per day	cost of extra bed per day	Select extra bed
321	Family	4	170	50	☐
332	Standard	2	100	70	☑

Total Cost Updated   1360.00

Submit

Figure 8: Update Reservation

Remember nothing else except the dates of stay can be changed. The total cost is then recalculated for the new days of stay and updated on the screen. The new stay period is checked for availability and the update is accepted only after availability is confirmed.

Note that for 3 days before the start date of the reservation (which is during the penalty period), reservations can only be cancelled - they CANNOT be updated.

9. Cancel Reservation

A customer can use this functionality to cancel a previously made reservation. The cancellation charges are calculated as follows – For any cancellation made one day before the start date - the customer is not refunded anything. For any cancellations made within 3 day window with respect to the start date - 20% of total reservation cost is forfeited and the rest 80% refunded to the customer. If the cancellation is made earlier than 3 days before the start date - full 100% refund is given.

e.g. for the reservation starting 9/23/2015:

If a customer cancels any time on 8/22/2015 or 8/23/2015 – no refund is given.

If he cancels on 8/20/2015 or 8/21/2015 – he gets 80% of the amount refunded.

If he cancels on 8/19/2015 – 100% amount is refunded.

Cancelled reservations are flagged appropriately in the system.

Cancel Reservation

Reservation ID   12314

Start Date   8/23/2015   End Date   8/27/2015

Room number	Room Category	#persons allowed	Cost per day	cost of extra bed per day	Select extra bed
321	Family	4	170	50	☐
332	Standard	2	100	70	☑

Total Cost of Reservation   1360.00

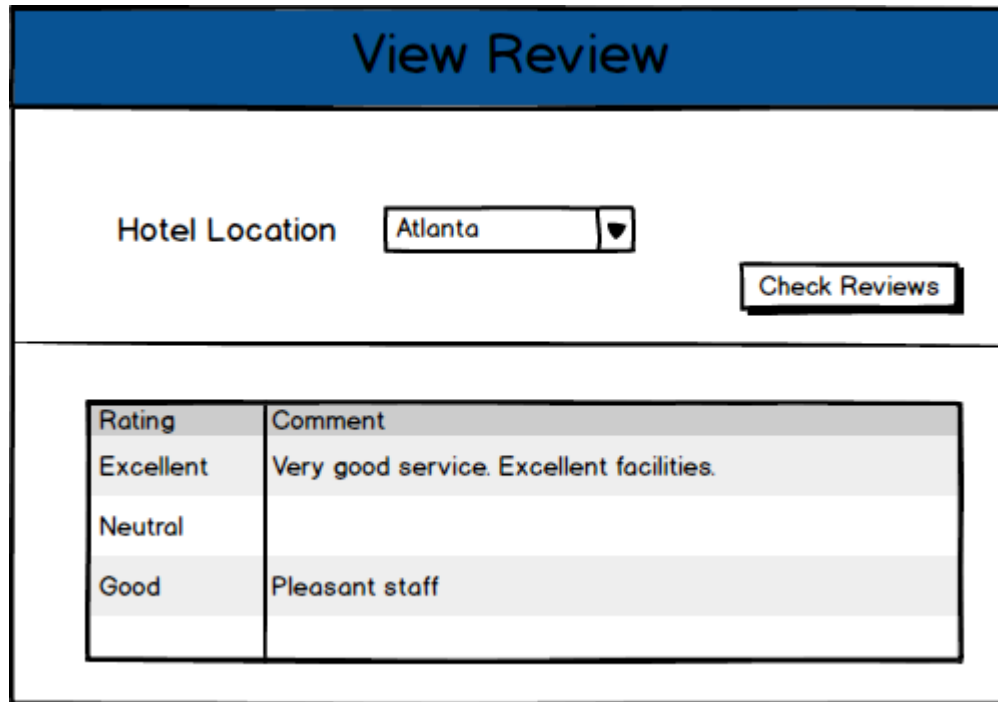Date of Cancellation   8/21/2015

Amount to be refunded   1088.00

Cancel

Figure 9: Cancel Reservation

10. View Hotel Review

A customer can also view reviews given by other customers about their stay in the hotel.
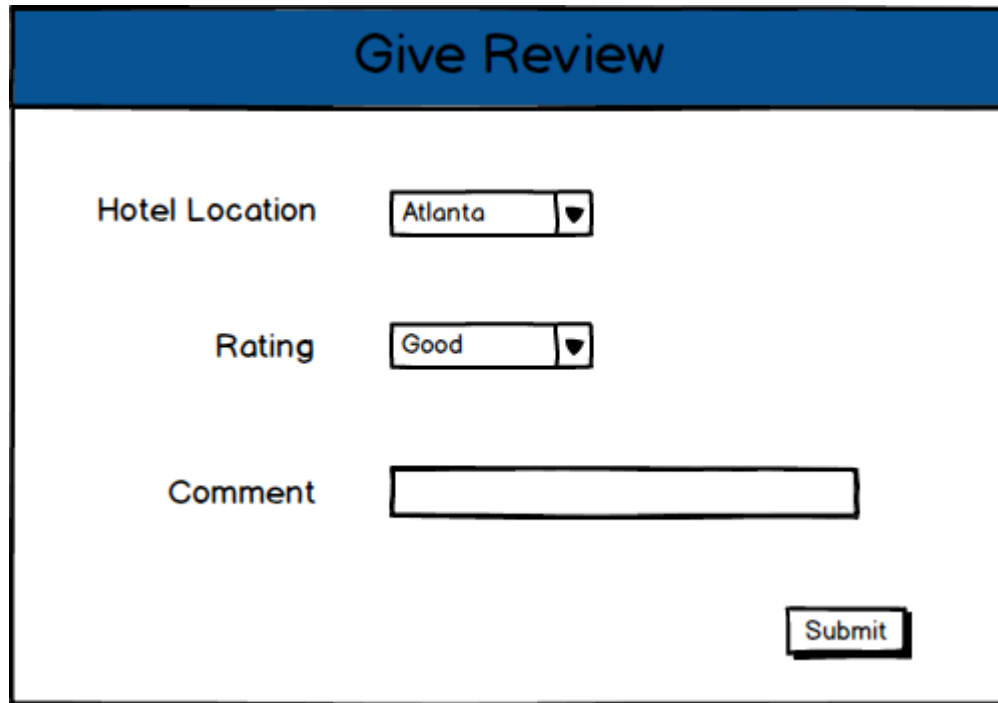
Figure 10: View hotel reviews

A customer can view reviews about any location. Once 'Check Reviews' is clicked, the bottom half of the screen would show the reviews stored in the system.

11. Provide Review

All customers can provide hotel reviews. We will assume here that all customers will only provide review after their stay, there is no check needed for the same.

Figure 11: Give review

The Rating field should be a dropdown with values – Excellent, Good, Bad, Very Bad, and Neutral.

MANAGER FUNCTIONALITIES

Management can only check reports for different aspects. These are just processes performed by management using the data. Hence, they are NOT represented on the EER diagram.

The manager would use the same login screen and then choose from functionalities as shown in Figure 3.

1. View Reservation Report

This report shows the number of reservations made per location for the month of August and September.

Month	Location	Total number of reservations
	Atlanta	10
	Savannah	23
August	Charlotte	12
	Orlando	54
	Miami	21
	Atlanta	17
	Savannah	25
September	Charlotte	9
	Orlando	32
	Miami	21

Reservation Report

Figure 12: Reservation Report

2. View Popular room-category Report

This report shows the top room-category per location for the month of August. Consider the start date of reservation for calculating the month.

Popular Room-Category

Month	top room-category	Location	Total number of reservations for room category
	Family	Atlanta	8
	Standard	Savannah	13
August	Suite	Charlotte	9
	Family	Orlando	45
	Suite	Miami	12

Figure 13: Popular room category Report

3. View Revenue Report

This report shows the total earnings at each location for the months of August and September.

Month	Location	Total revenue
	Atlanta	10000
	Savannah	23000
August	Charlotte	12000
	Orlando	54000
	Miami	21000
	Atlanta	1700
	Savannah	2500
September	Charlotte	900
	Orlando	3200
	Miami	2100

Figure 14: Revenue Report

END OF PROJECT RESCRIPTION (v1)

Version Changes

V1.1 – Pg 16 - Cancelled reservations are flagged appropriately in the system.

V1.2 – Pg 19 - "Managers cannot be customers; they have login privilege and hence their login credentials are already created behind the scene. Each Manager has a username and password - that information has to be stored in the database.

Note that functions such as creating reports etc. by managers will NOT be reflected in the EER diagram. (see P.19)."

V1.2 – Pg 15-16 - Note that for 3 days before the start date of the reservation (which is during the penalty period), reservations can only be cancelled - they CANNOT be updated.