The workflow are in the form of jpeg files provided along with this document.

Tables

*1)rooms (roomid, room number, roomtypeid)*

roomid – INT – PRIMARY KEY

room number – INT - UNIQUE

roomtypeid – INT- FOREIGN KEY – references roomtype

*2)roomtype (roomtypeid, roomtype\_desc)*

roomtypeid – INT – PRIMARY KEY

roomtype\_desc - VARCHAR(20)

*3)guestcategory( gcatid, gcat\_desc)*

gcatid –INT - PRIMARY KEY

gcat\_desc – VARCHAR(15)

*4)rates( roomtypeid , gcatid , rate)*

roomtypeid – INT – FOREIGN KEY references roomtype

gcatid – INT – FOREIGN KEY references guestcategory

rate – CHAR(10)

PRIMARY KEY (roomtypeid , gcatid)

*5)bookings (bid, guestid, gcatid, roomtypeid, from, to, roomid, status)*

bid – INT - PRIMARY KEY - AUTOINCREMENT

guestid: FOREIGN KEY references guests

from - date

to: date

roomid: INT – FOREIGN KEY references rooms

status : INT default 0

(0: booking requested; 1: booking confirmed; 2: cancelled; 3: occupied; 4: completed)

*6)guests (guestid, gfirstname, glastname, gbaddress, gcity, gpin, gphone, gemail, gfax)*

guestid : : INT - PRIMARY KEY - AUTOINCREMENT

gfirstname- VARCHAR(20)

glastname- VARCHAR(20)

gbaddress- VARCHAR(100)

gcity- VARCHAR(20)

gpin-INT

gphone-INT

gemail- VARCHAR(20)

gfax-INT

*7)bills ( billid, bid, amount,bill\_ status)*

billid: INT - PRIMARY KEY

bid : INT – FOREIGN KEY references bookings

amount: CHAR(10) default 0

bill\_status: INT (0: bill prepared; 1: bill given; 2: bill paid)

## Description

The table guestcategory(old) has been split into two different tables with fewer columns namely, guestcategory(new) and rates. This was incorporated because in the case of addition of a new room type, the previous table design required altering the table to add new columns. In the proposed design, we only need to add new rows in both tables in such a case.

The table ‘roomtype’ contains the different types of rooms available such as Single w AC, Single w/o AC , etc. ‘Rooms’ contains details of all the rooms available, their types and room numbers.

‘Guestcategory’ describes the different kinds of people booking the rooms to whom different rates will be applicable(Eg. Official, Institute, Private, etc). ‘Rates’ gives the applicable rate to the booking depending on guest and room types.

Whenever a booking is made, a new entry is created in the ‘bookings’ table which contains details of the room allotted, duration of stay, status of booking,etc. Simultaneously, an entry is created in the ‘guests’ table if it doesn’t already exist. ‘guests’ table contains the personal contact details of the guest who made the booking.

During checkout, a bill is generated and an entry is made in the ‘bills’ table appropriately.

Use Cases

There are 4 types of users – Admin, Booker, Reception, Guest. All of these users are first required to login with a valid user id and password. Upon successful login, they are taken to their respective home pages which contain the different functions available to that particular user.

## Admin

* Create other users (including an other admin also).
* Revise room rates (for different guest categories and room types)
* Get reports on occupany rates and bookings.
* Perform all the actions of a booker. (Make a booking, Confirm booking, check current rooms status,etc)

## Booker

* Check current status of all the rooms (Available, booked, confirmed, etc)
* Make a booking.
* Confirm booking

## Reception

* Check the confirmed bookings and Check-in the guest upon arrival.
* Check the present occupants, Check-out and Bill generation.
* Make a booking

## Guest

* Update guest information
* Check booking status
* Request for a booking
* Cancel booking request

In the current situation, anyone who knows a guestID can make a booking, change information of that guest, etc. We need to change this by giving the registered guests a password as well.

Forms

## Admin

* Add users - User type(Admin, Booker, Reception), User Name, Password, Email-ID
* Revise room rates – Category(Institue,Official,Semi-Official,Private,Semi-Private,Employee), Single w AC, Single w/o AC, Double w AC, Double w/o AC, Single Suite, Double Suite
* Occupancy rates – From, To, Threshold
* Booking Summary – From, To
* Present Status of rooms
* Pending bookings
* Check room availability – From, To, Room type, Room Number
  1. Additional Details – First Name, Last Name, Address, City, Pin Code, Phone, Fax, Email, Guest Category

## Booker

* Present Status of rooms
* Pending bookings
* Check room availability – From, To, Room type, Room Number
  1. Additional Details

## Reception

* Confirmed bookings
* Present Occupants
* Check room availability – From, To, Room type, Room Number
  1. Additional Details

## Guest

* Request booking - First Name, Last Name, Address, City, Pin Code, Phone, Fax, Email, Guest Category, From, To, Room type
* Update guest information – Guest ID
* Check booking status – Guest ID

Queries