**HOTEL BOOKING MANAGEMENT SYSTEM**

CLASSES:

1. User

Attributes

Private userId : String ,8 characters

Private userName : String

Private emailID : String

Private Dob: Date

Private Address: String

Private isAdmin: Boolean

Methods:

**public** String getUserId()

**public** **void** setUserId(String userId)

**public** String getUserName()

**public** **void** setUserName(String userName)

**public** String getUserEmailId()

**public** **void** setUserEmailId(String userEmailId)

**public** Date getUserDob()

**public** **void** setUserDob(Date userDob)

**public** String getUserNumber()

**public** **void** setUserNumber(String userNumber)

**public** String getUserAddress()

**public** **void** setUserAddress(String userAddress)

**public** Boolean getIsAdmin()

**public** **void** setIsAdmin(Boolean isAdmin)

1. Customer (After booking,contains Invoice, history of bookings and refunds)

Attributes

Private paymentStatus: enum

Public user: User

1. Booking Class

Attributes

Private bookingId: String

Private bookingStatus: String

Private bookingDate: Date

Private checkIn: DateTime  
 Private checkout: DateTime

Methods:

**public** String getBookingId()

**public** **void** setBookingId(String bookingId)

**public** String getBookingStatus()

**public** **void** setBookingStatus(String bookingStatus)

**public** Date getBookingDate()

**public** **void** setBookingDate(Date bookingDate)

**public** Date getCheachIn()

**public** **void** setCheachIn(Date cheachIn)

**public** Date getCheachOut()

**public** **void** setCheachOut(Date cheachOut)

**public** **void** setCheachOut(Date cheachOut)

**private Boolean getAdminApproval()**

1. Hotels

Attributes

Private hotelId: String

Private hotelName: String

Private hotelAddress: String

Private hotelDescription: String

Private roomList: Hashmap

Methods

1. Rooms

Attributes

Private roomId: String

Private roomType: String

Private roomRent: Double

Private roomNumber: String

Private roomDescription: String

Methods

1. Admin

Attributes

Methods:

Public Boolean addHotel()

Public Boolean removeHotel()

Public Boolean updateHotel()

Public Boolean updateRoom()

Public Boolean removeRoom()

Public Boolean addRoom()

1. Payment

Attributes

Private paymentId: String

Private paymentMode: String

Flow:

1. User has an attribute Boolean isAdmin to determine permissions to modify hotels or rooms.
2. Booking class has list of hotels. Hotels has a list of rooms(hashmap).
3. User selects room and after admin Permission, Customer object created.
4. Customer object has list of previous transactions, pending transactions, future booking, cancelled transactions.
5. After Admin authorization, status of pending transaction changed to Current booking and Payment object created having all details.
6. Initiate Refund(

Validations

* The checkout date should be greater than the checkin date.
* The checkin date should be greater thang the booking date.
* The userId and userName should not be null.
* The user must be atleat 18 year old.
* The address must contain a pincode.
* The booking date must be greater than the current date.