HotelFilter

MaxPrice
MinRating
List<string> amenities

Enum
SortField

Price
Rating

ENum
SortOrder

Asc
Desc

UserSortPreferences

SortField field
SortOrder order

SearchManager

LocationStrategy
HotelManagerInstance

GetHotels()
FindHotelsBasedOnLocation()
FindHotelsBasedOnDateFilter()

FIlterHotels(List<Hotel> hotels,HotelFIlter filter)
SortHotels(List<Hotel> hotels,List<UserSortPreferences> sortList))

CalculatePrice(HotelId, StartDate, EndDate)

ILocationStrategy

FindHotels(Hotels,Location)

Nearest

Default

Proxy

HotelManagerInstance
SearchManagerInstance
BookingManagerInstance

Search(Location,Startdate,enddate,Numberofpeople)
Filter(HotelFilter filter, List<UserSortPreferences>
sortList)

GetHotel(HotelId)
CalculatePrice()

GeRooms(HotelId)
GetRoom(HotelId,RoomId)

CreateBooking(Startdate,EndDate,HotelId, RoomId,
List<string> SelectedAddOn)

Requiements

Hotel Booking

User selects date,number of person and
place and search for hotels

User Views List of hotels
User filters/sort based on Star/Has
Swimming pool

User Selects one and sees details
and variety of options/rooms for the hotel

User Selects hotel room and creates
booking

User Makes payment

Hotel

Id
Map<Id,Room> Rooms
DIctionary<string,decimal> AddOnPricePerNight
Star
Rating
HashSet<Amenity> amenities
Location
Rules
NearByAttractions
NearbyTransportDetails
Images
CheckIN
Checkout

AddRoom()
RemoveRoom()
GetRooms()
GetRoom(Id)
UpdateRoom()

Room

Id
Images
WithBFPrice
WithoutBFPrice
MaxOccupancy
//Anyother customiszation of room

HotelManager

Map<Id,Hotel> hotels

AddHotel()
RemoveHotel()
UpdateHotel()
GetHotels()
GetHotel(Id)
GetHotelRoom(HotelId,RoomId)

BookingManager

Map<Id,Booking> Booking
HotelManagerInstance
IPaymentStrategy paymentStrategy

CreateBooking()
MakePayment(BookingId, PaymentType)

UpdateBookingStatus

Booking

Id
CheckInDate
CheckOutDate
Price
BookingStatusType

BookingStatusType Enum

Booked
Pending
Cancelled

<<IPaymentStrategy>>

Pay(BookingId, decimal amount)

UPI

Card

Default