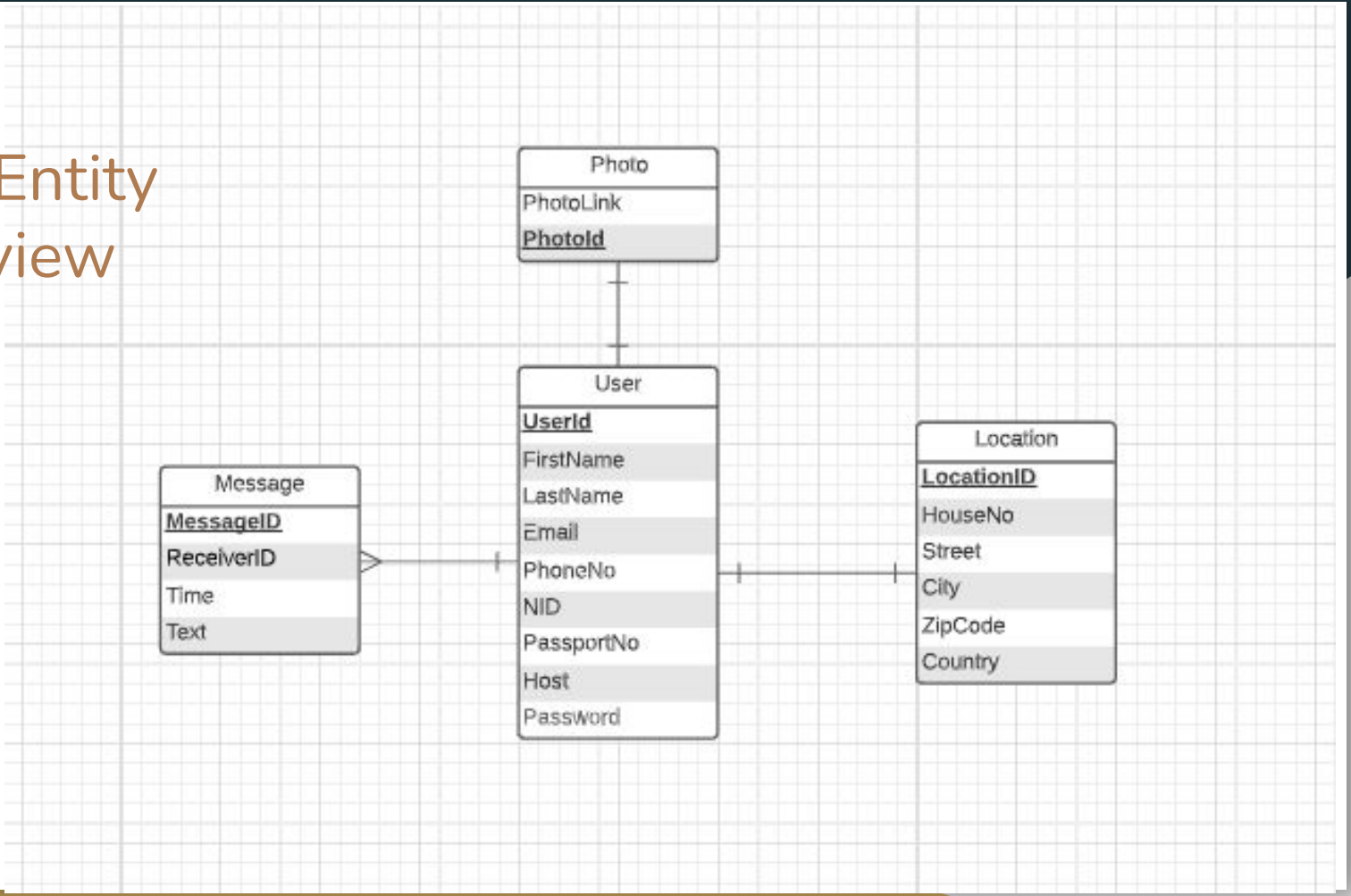
Sunset Vacation

ERD and Class Diagram

A2 Group 2
1605051
1705040
1705042
1705043
1705048
1705060

User Entity Overview



User

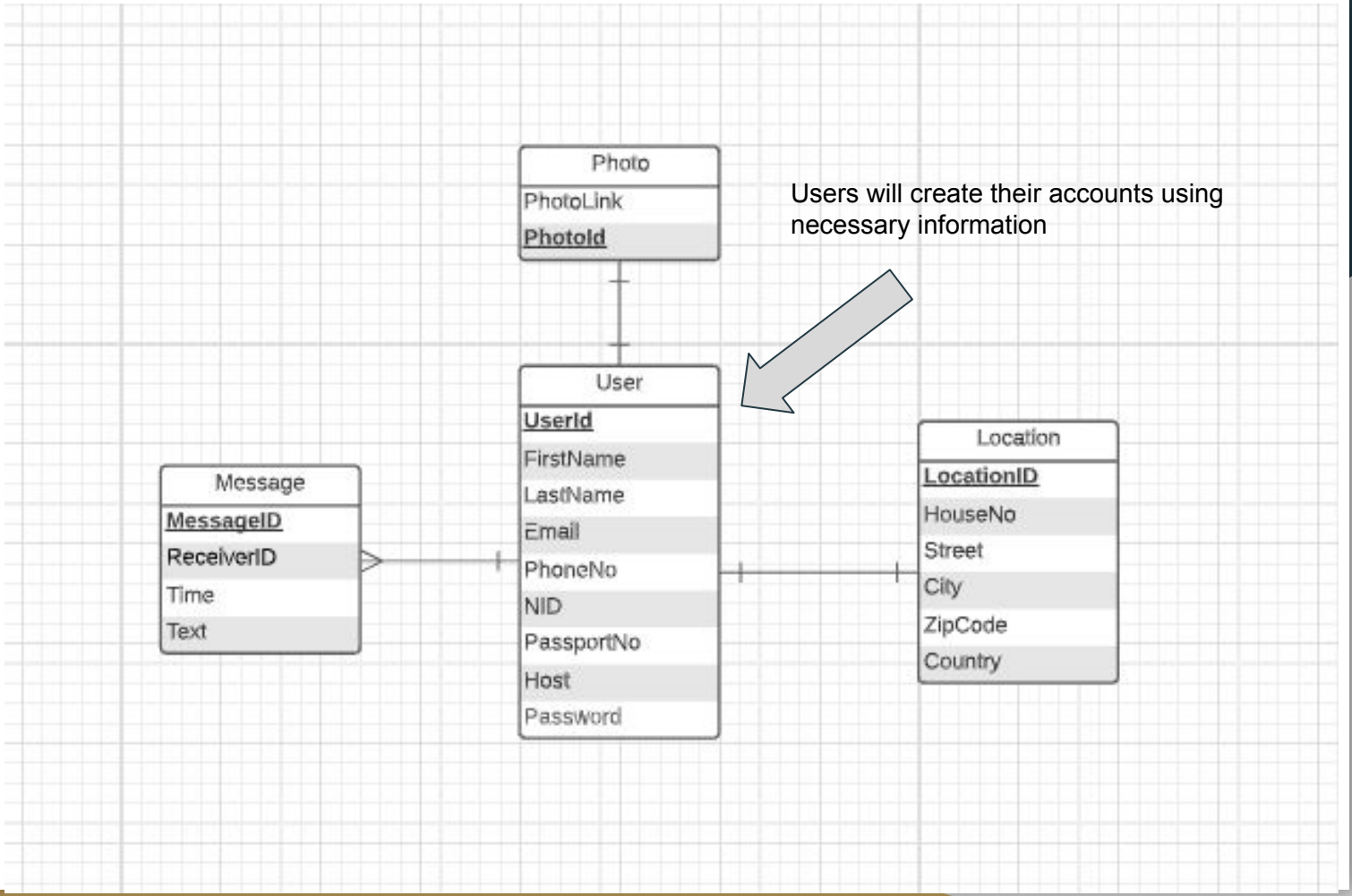


Photo
PhotoLink
PhotoId
Users will create their accounts using necessary information
User
UserId
FirstName
LastName
Email
PhoneNo
NID
PassportNo
Host
Password
Message
MessageID
ReceiverID
Time
Text
Location
LocationID
HouseNo
Street
City
ZipCode
Country

User

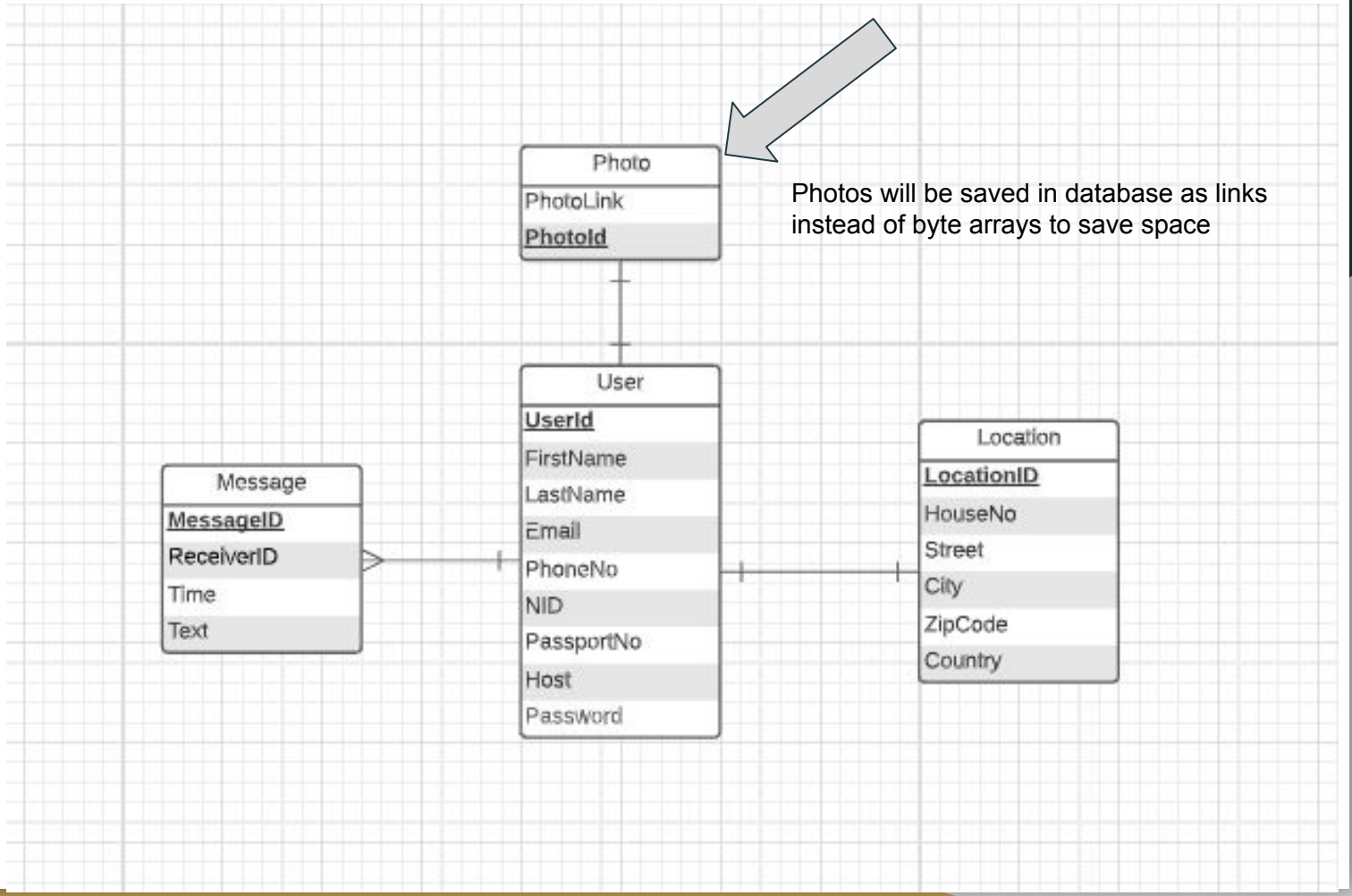


Photo
PhotoLink
PhotoId
Photos will be saved in database as links instead of byte arrays to save space
User
UserId
FirstName
LastName
Email
PhoneNo
NID
PassportNo
Host
Password
Message
MessageID
ReceiverID
Time
Text
Location
LocationID
HouseNo
Street
City
ZipCode
Country

User

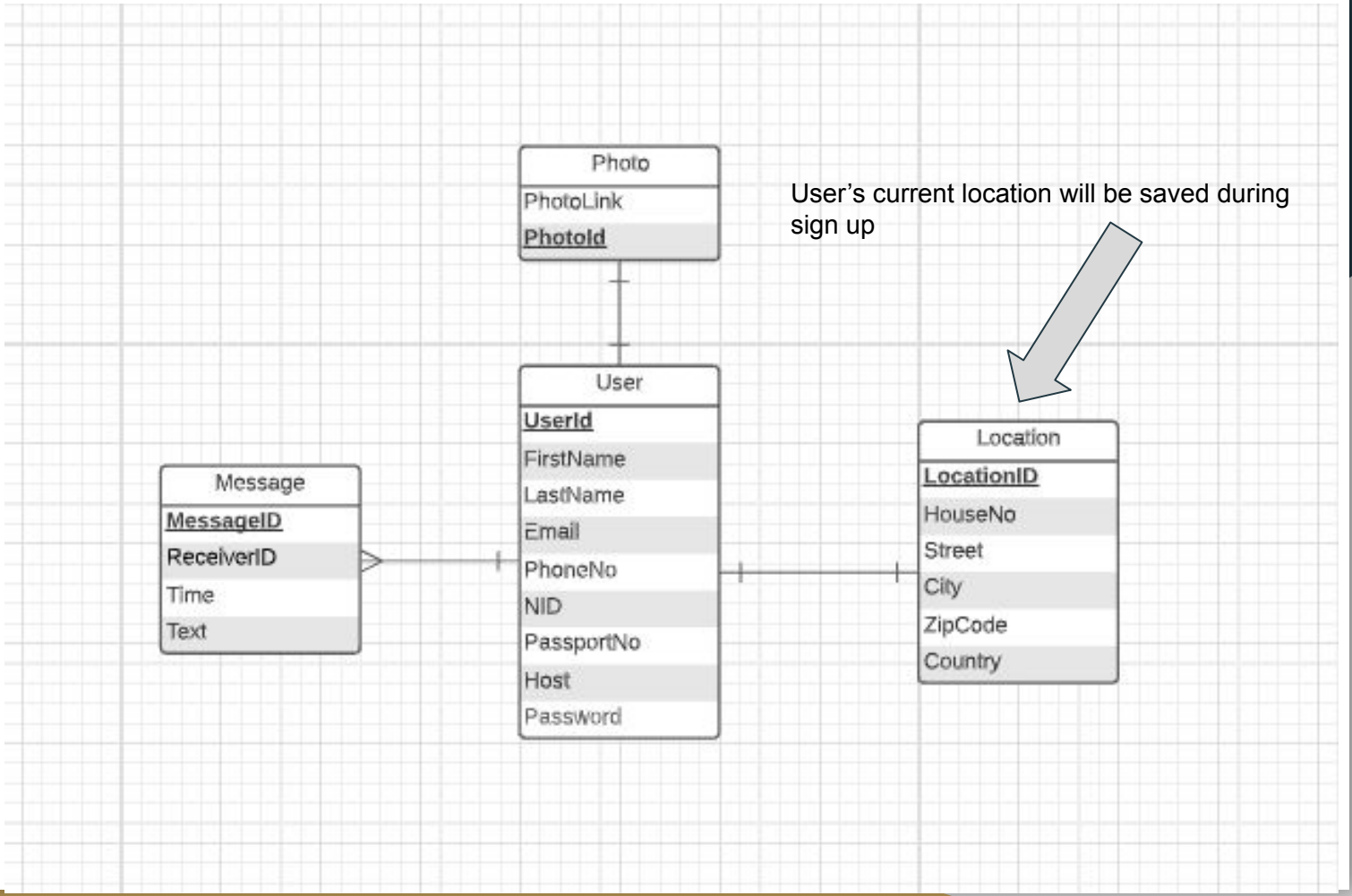
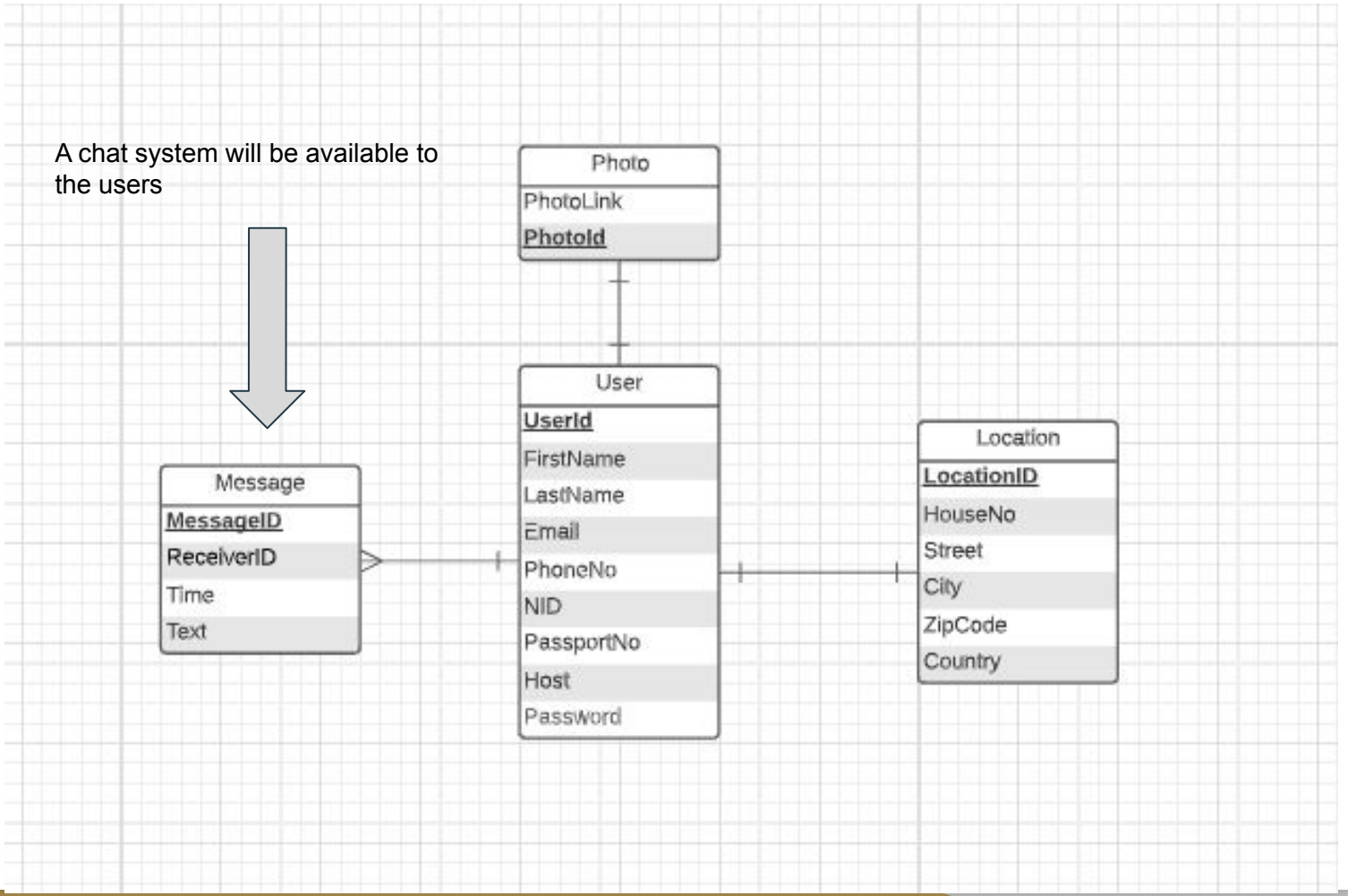


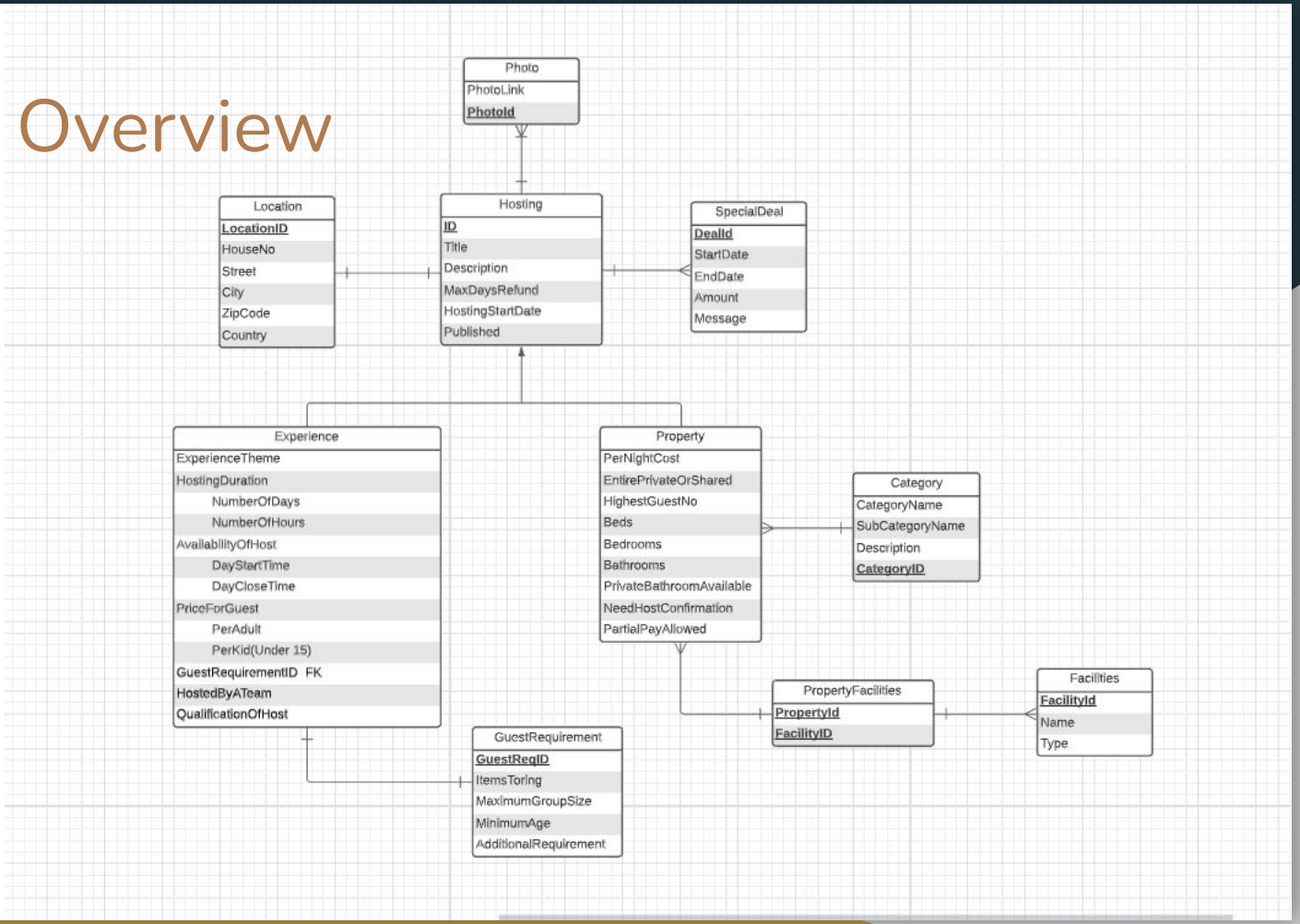
Photo
PhotoLink
PhotoId
User's current location will be saved during sign up
User
UserId
FirstName
LastName
Email
PhoneNo
NID
PassportNo
Host
Password
Message
MessageID
ReceiverID
Time
Text
Location
LocationID
HouseNo
Street
City
ZipCode
Country

User

A chat system will be available to the users

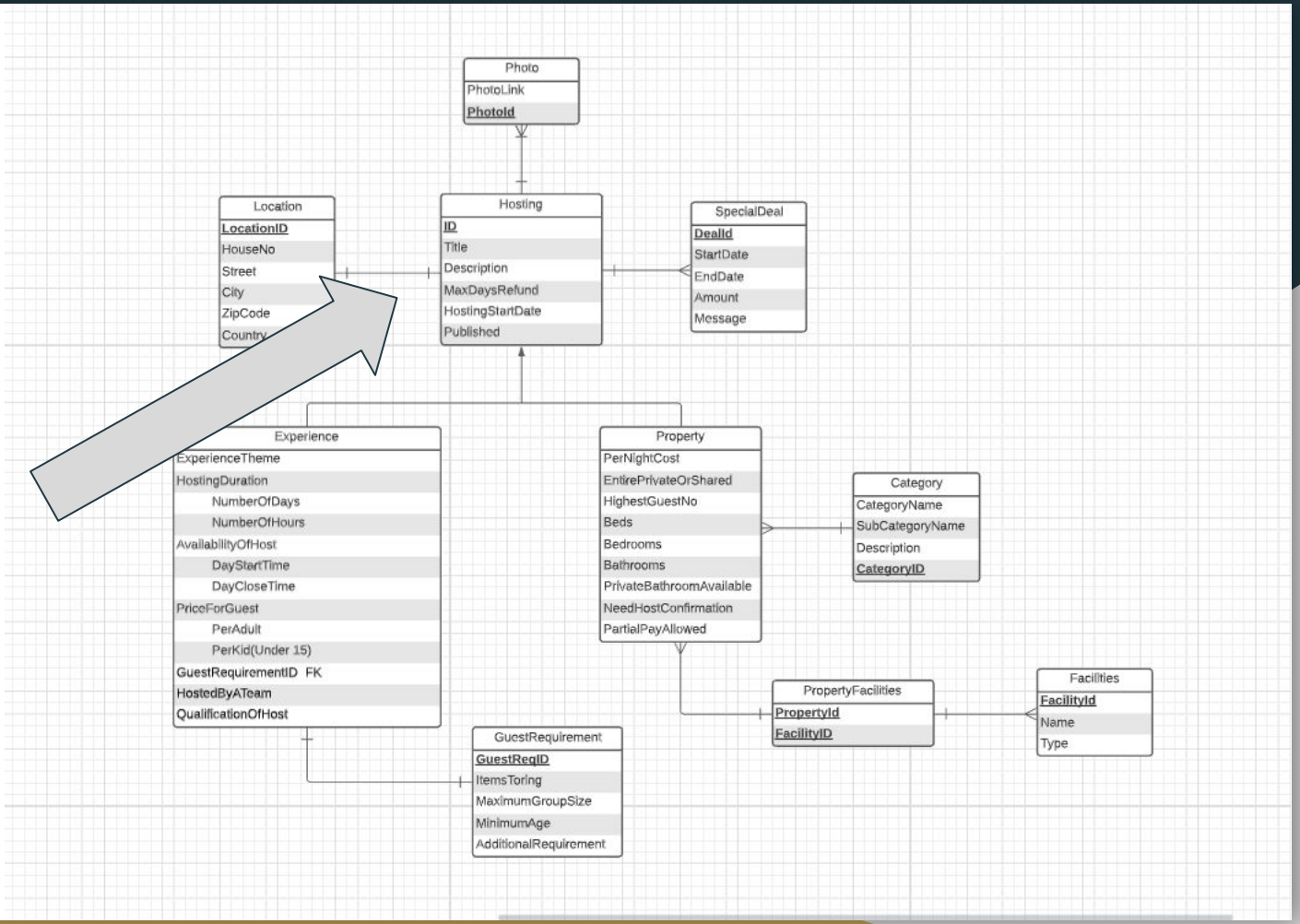


Hosting Overview



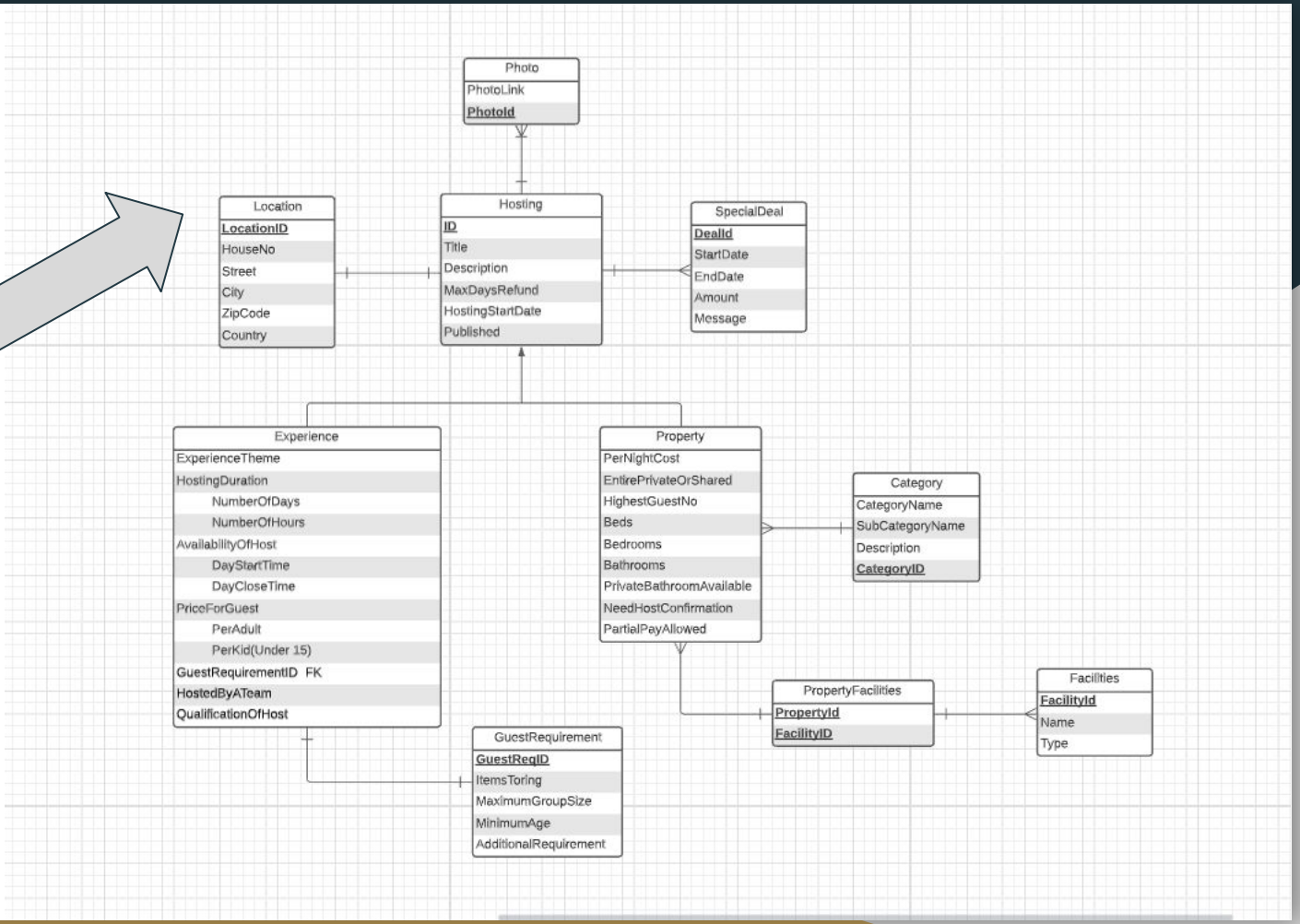
Hosting

Hosting entity consists of the information that are common to the two entities that inherited it, ‘Experience’ and ‘Property’



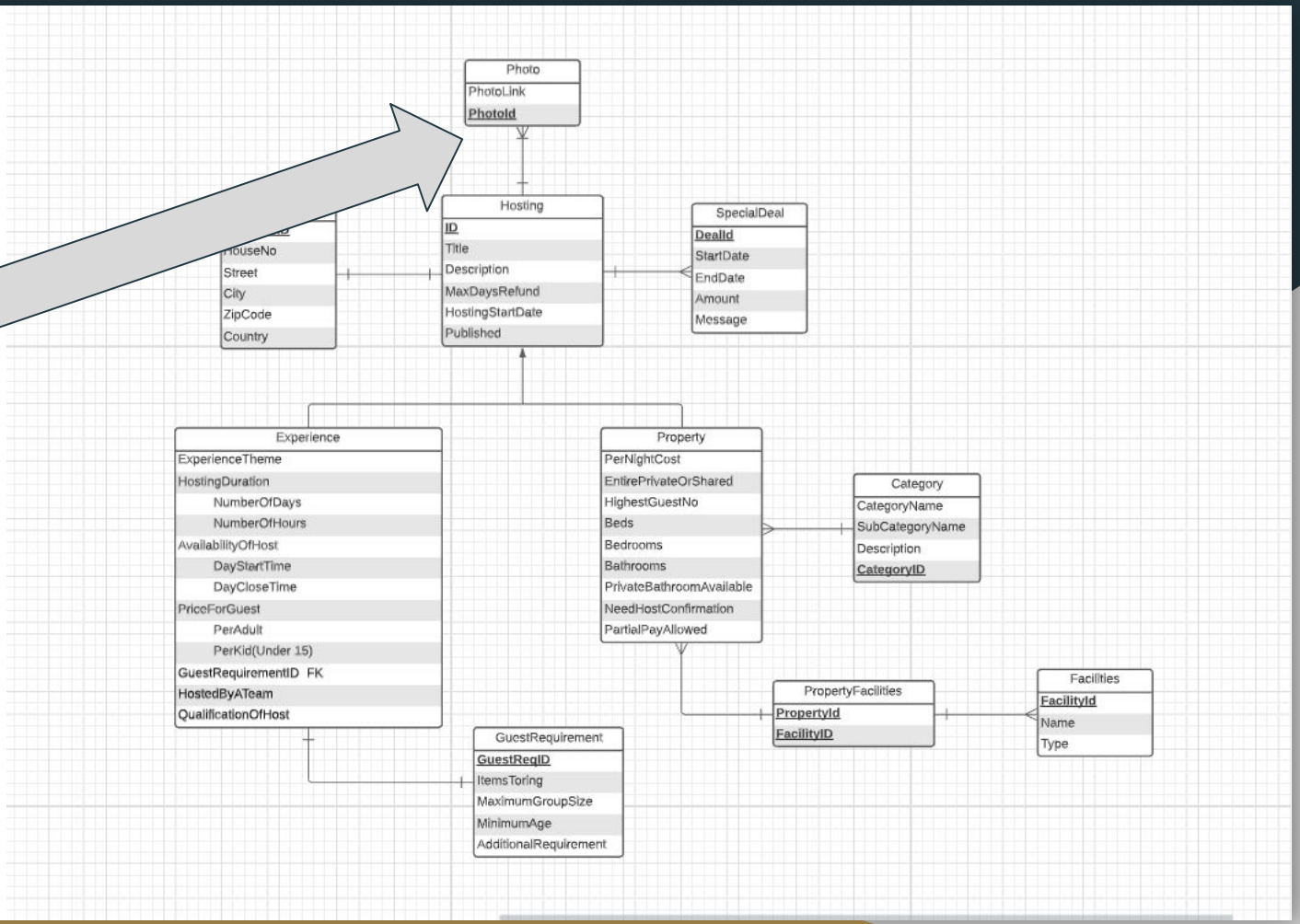
Hosting

Location table consists of the attributes where the hosting is being done



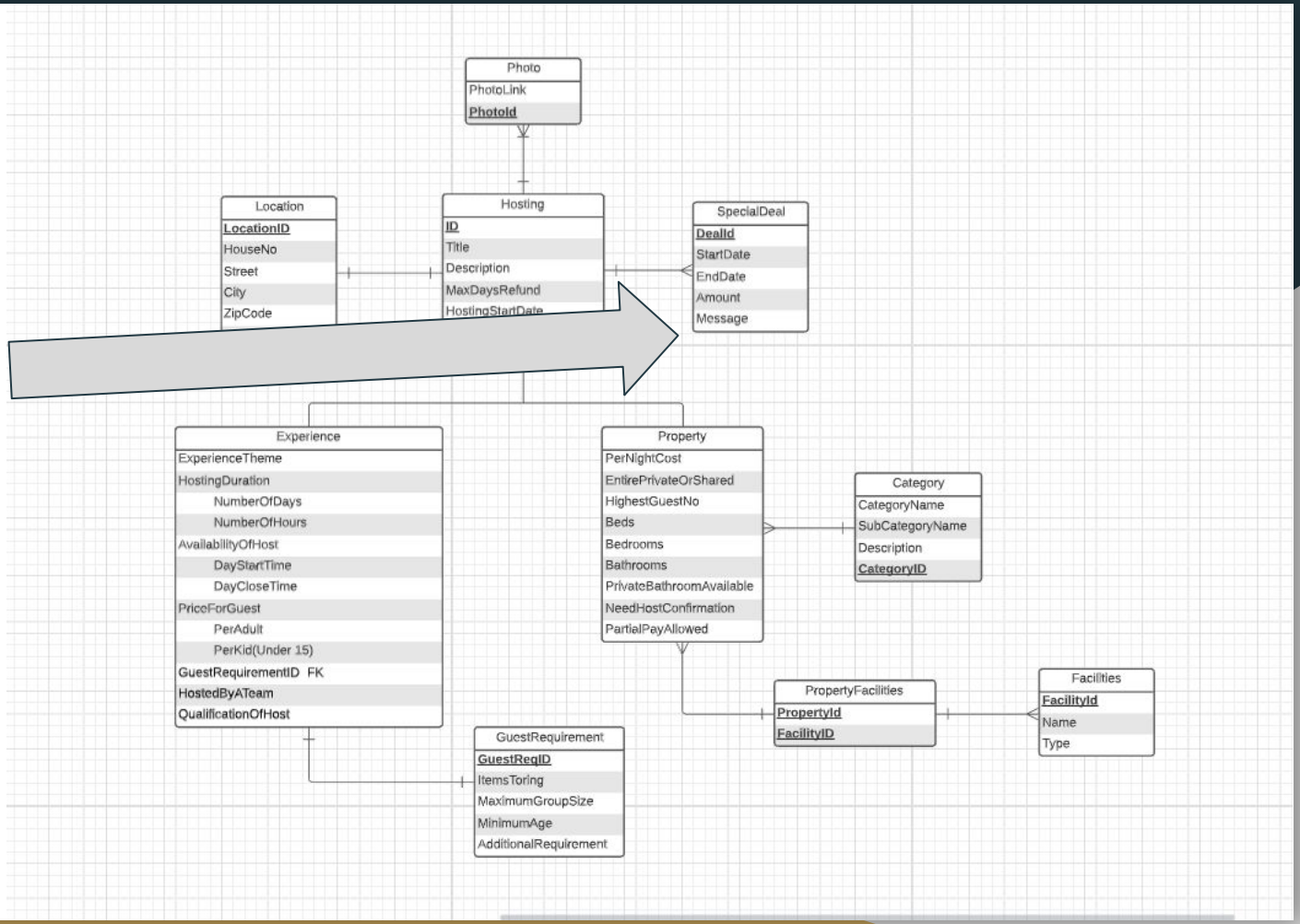
Hosting

As usual, any photos associated with the advertisements of a hosting plan will be saved as links in database.



Hosting

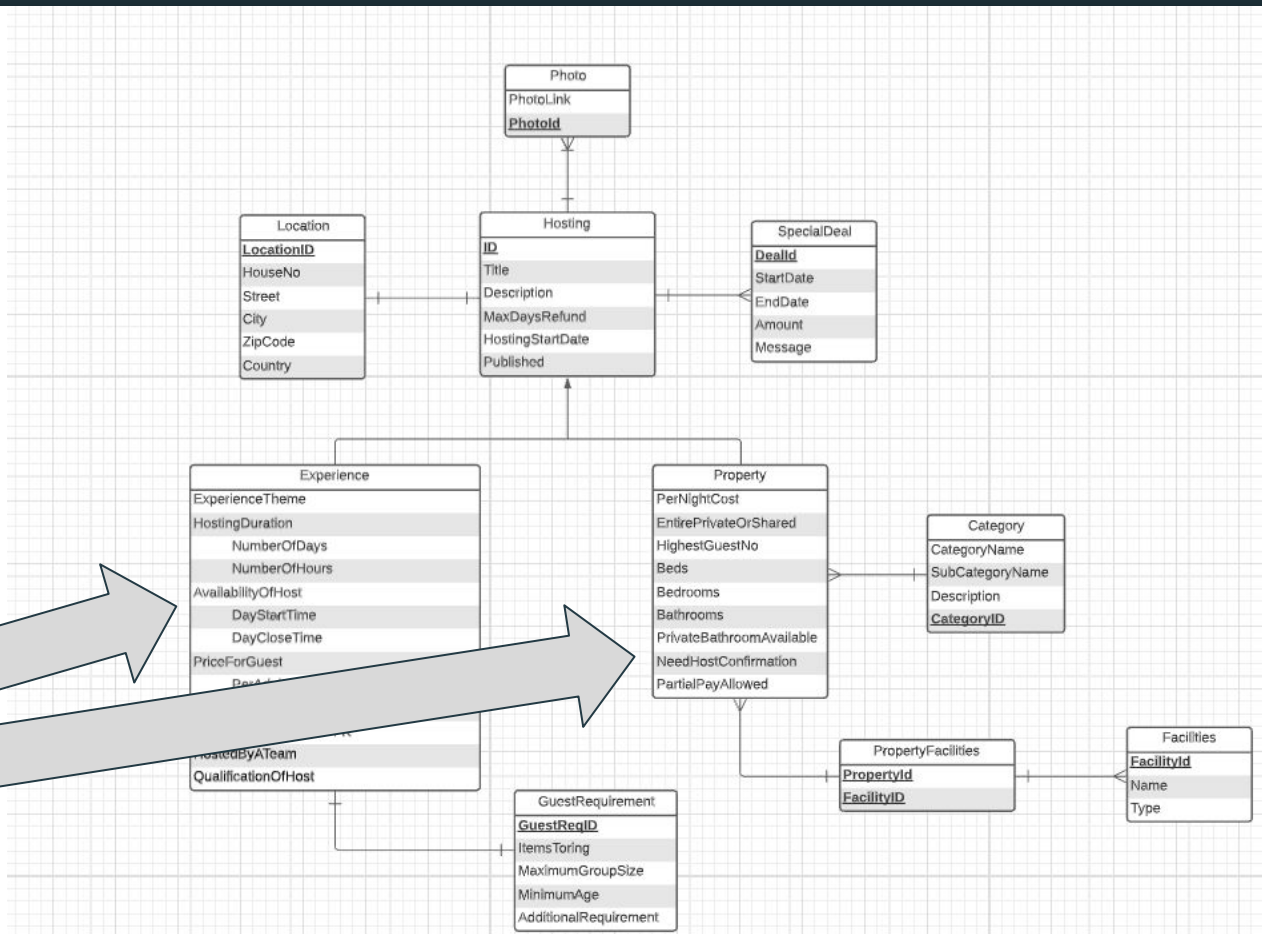
Host can offer discounts based on bookings on specific time intervals



Hosting

There are two types of hosting:

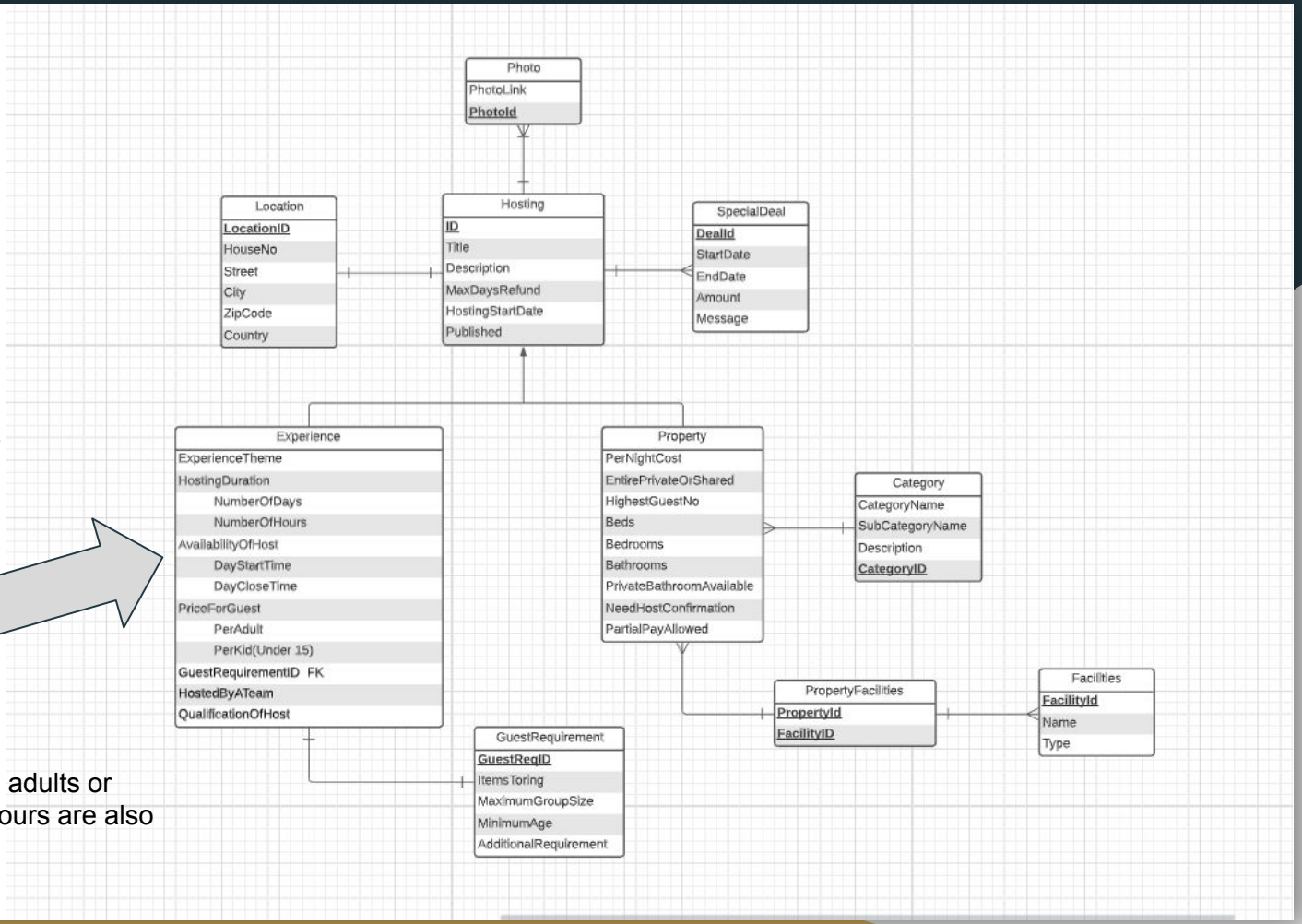
1) Experience
2) Property



Hosting

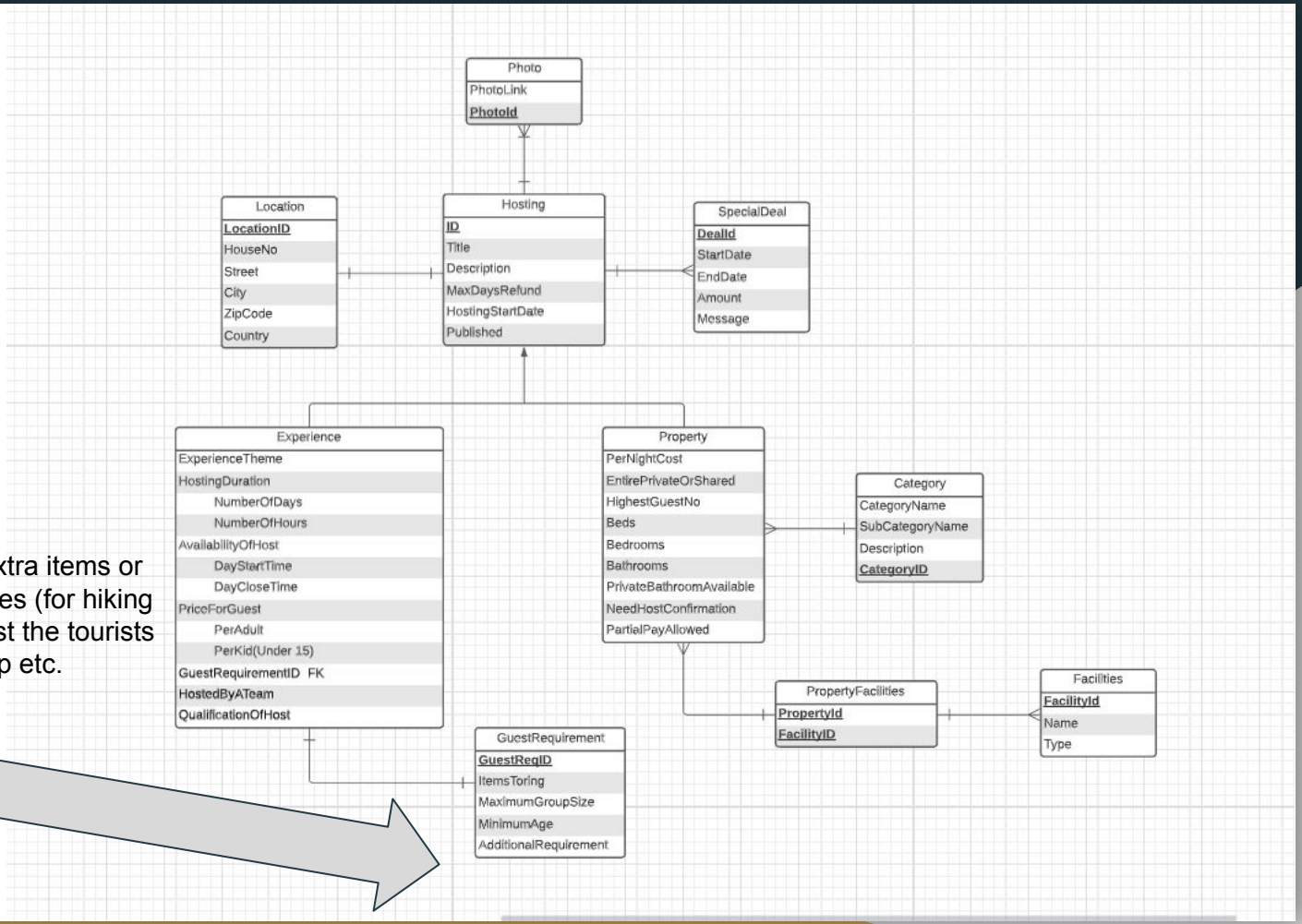
Experience hosting includes providing tour guides for a specific amount of time to tour any type of place like zoos, music theatres, museums etc.

Information like pricing to guide adults or children, start and end time of tours are also included



Hosting

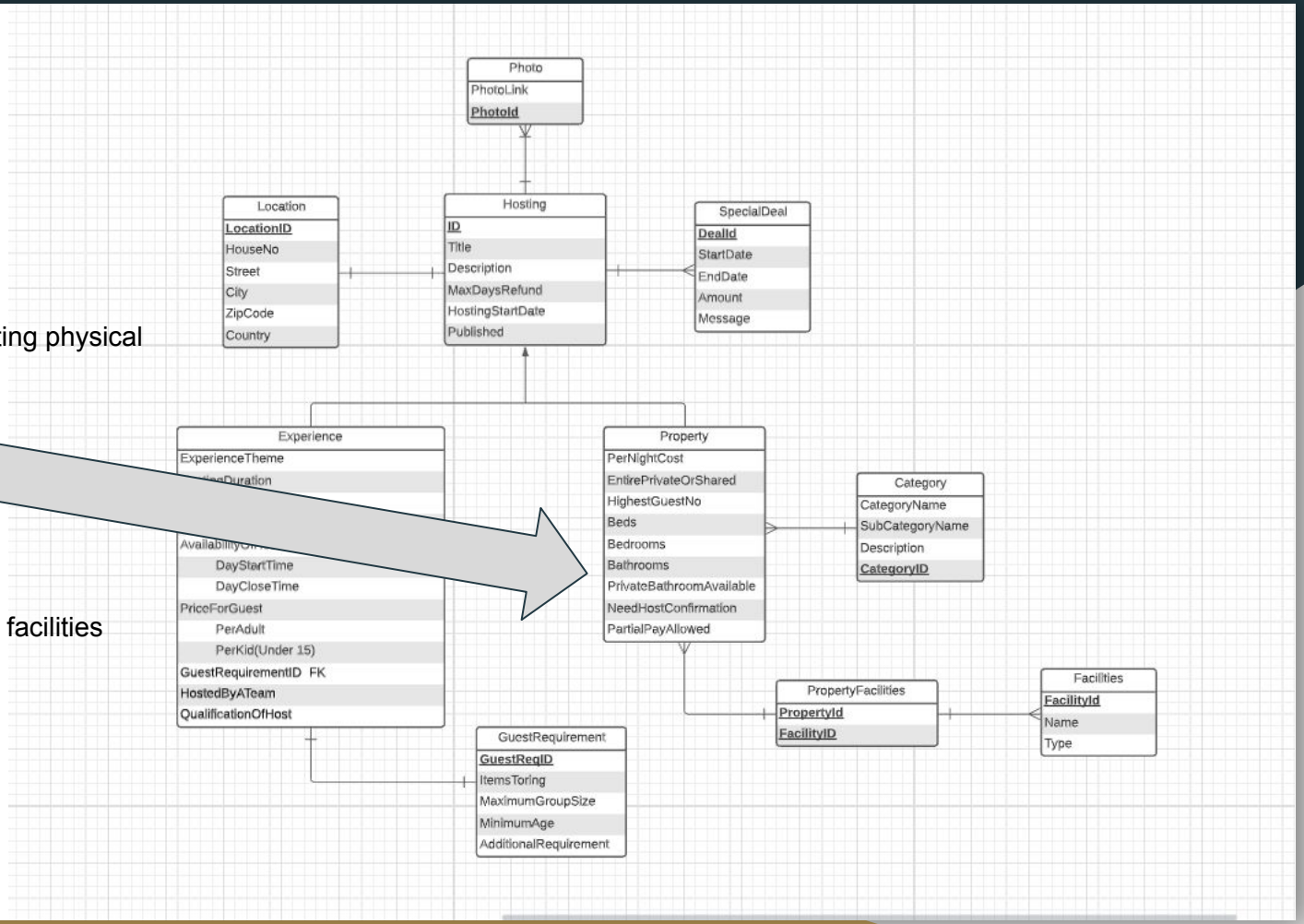
Some tours might also require extra items or information such as trekking shoes (for hiking mountains), extra people to assist the tourists and count of total people in group etc.



Hosting

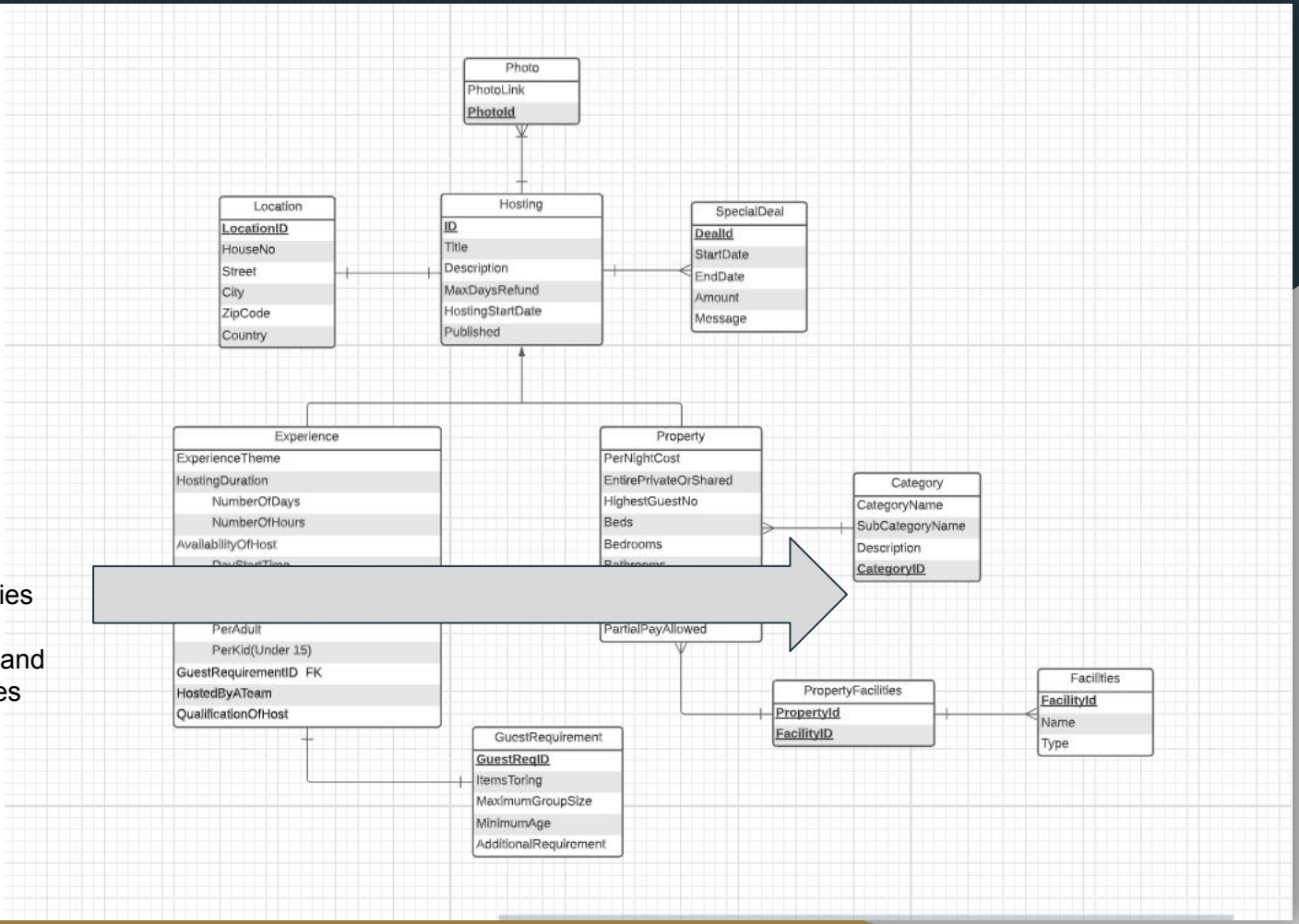
Property hosting includes hosting physical properties.

All necessary information and specifications of the rooms and facilities are stored in this table

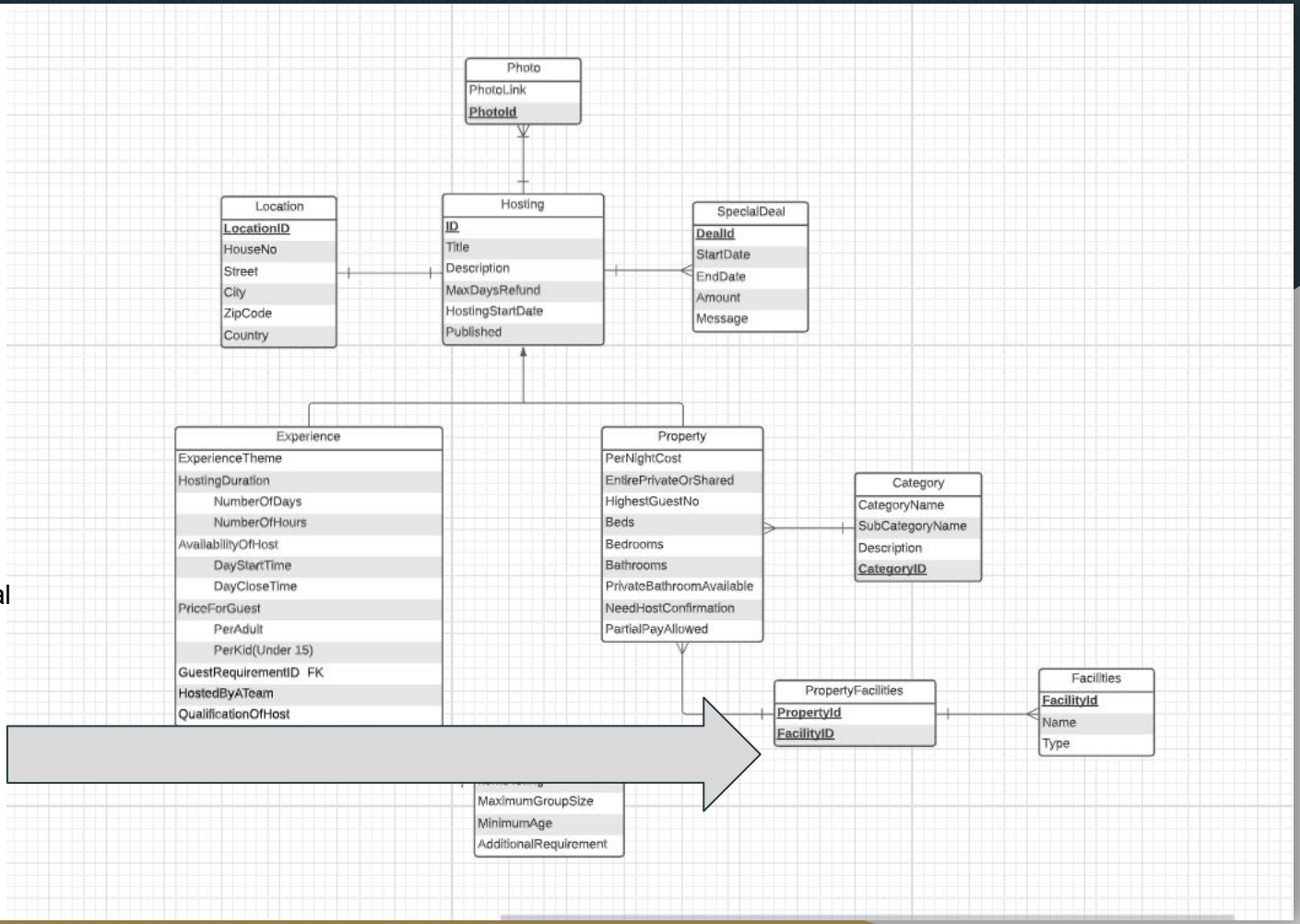


Hosting

These types of physical properties are categorized (such as apartments, cottages, flats etc) and the categories and subcategories are stored in this table



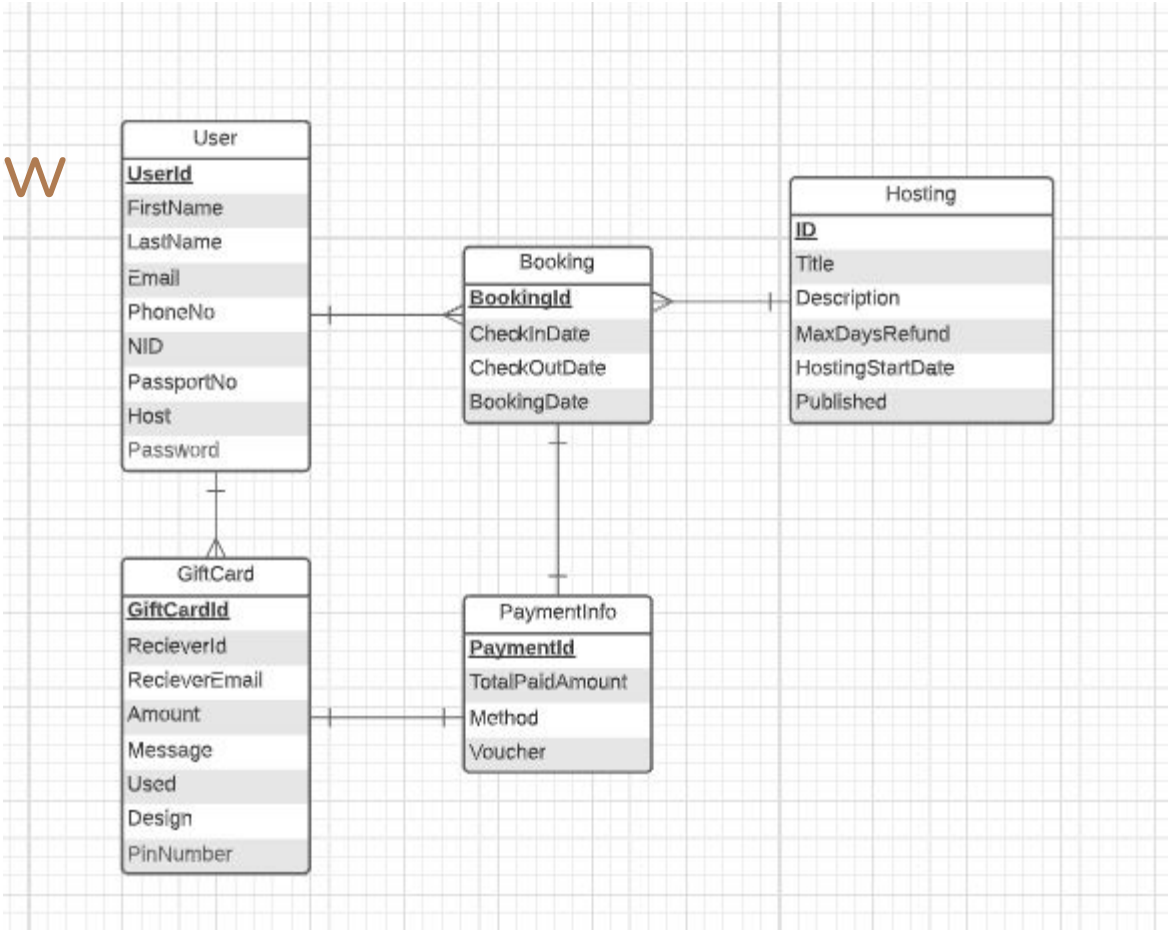
Hosting



Some properties provide special facilities like

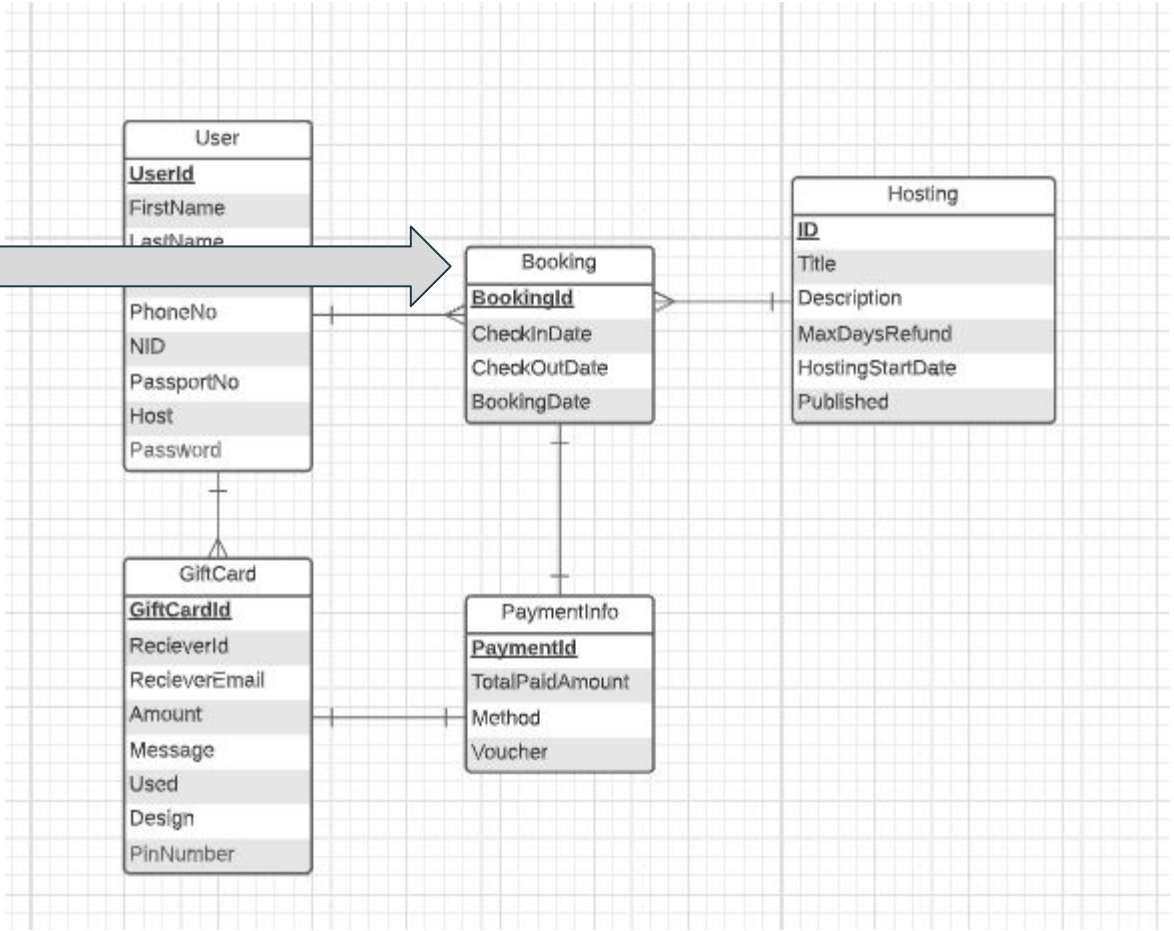
- Safety attributes
  - Fire alarms
  - First aid kits
- Guest favorites
  - Wifi
  - Mountain view
  - Pools
  - Balconies

Booking Overview



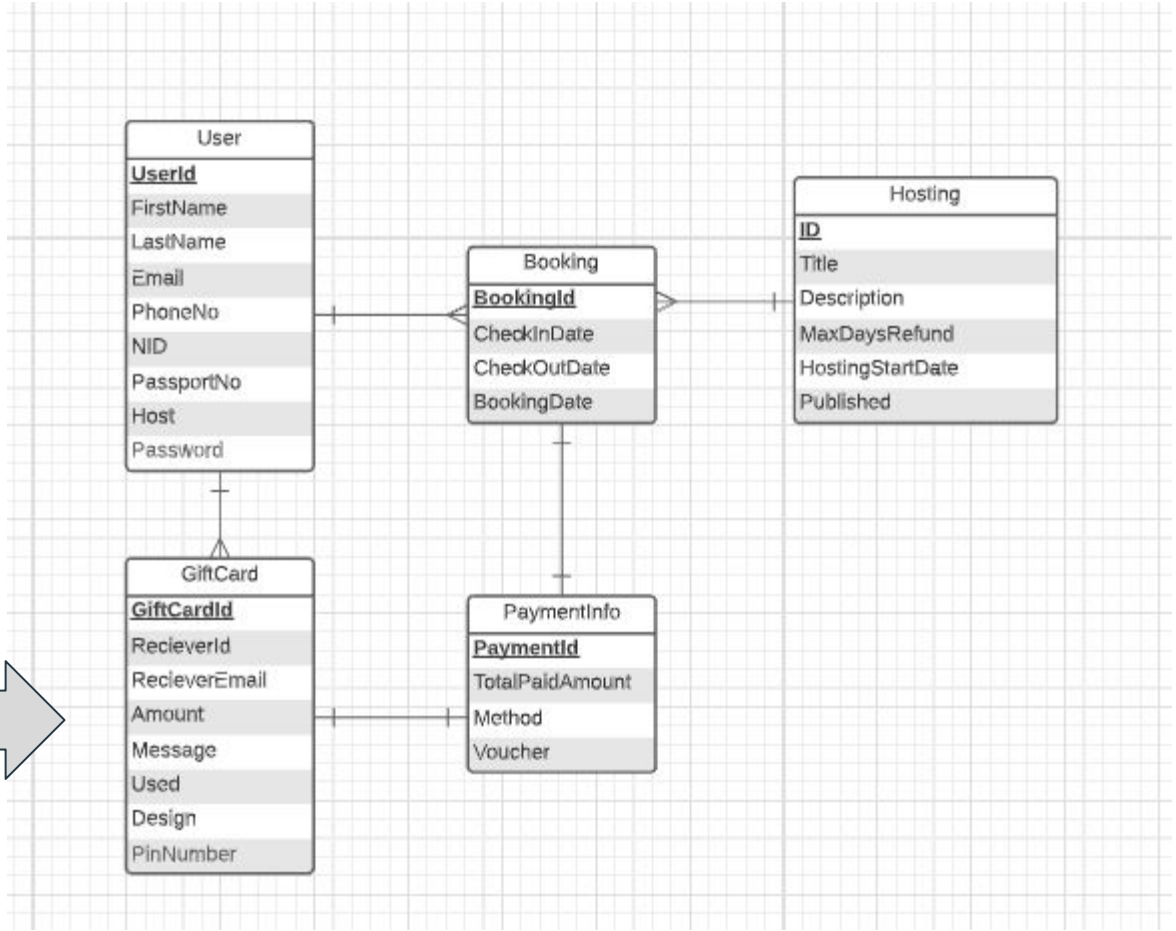
Booking

A booking of a user will contain the associated checkin and checkout dates



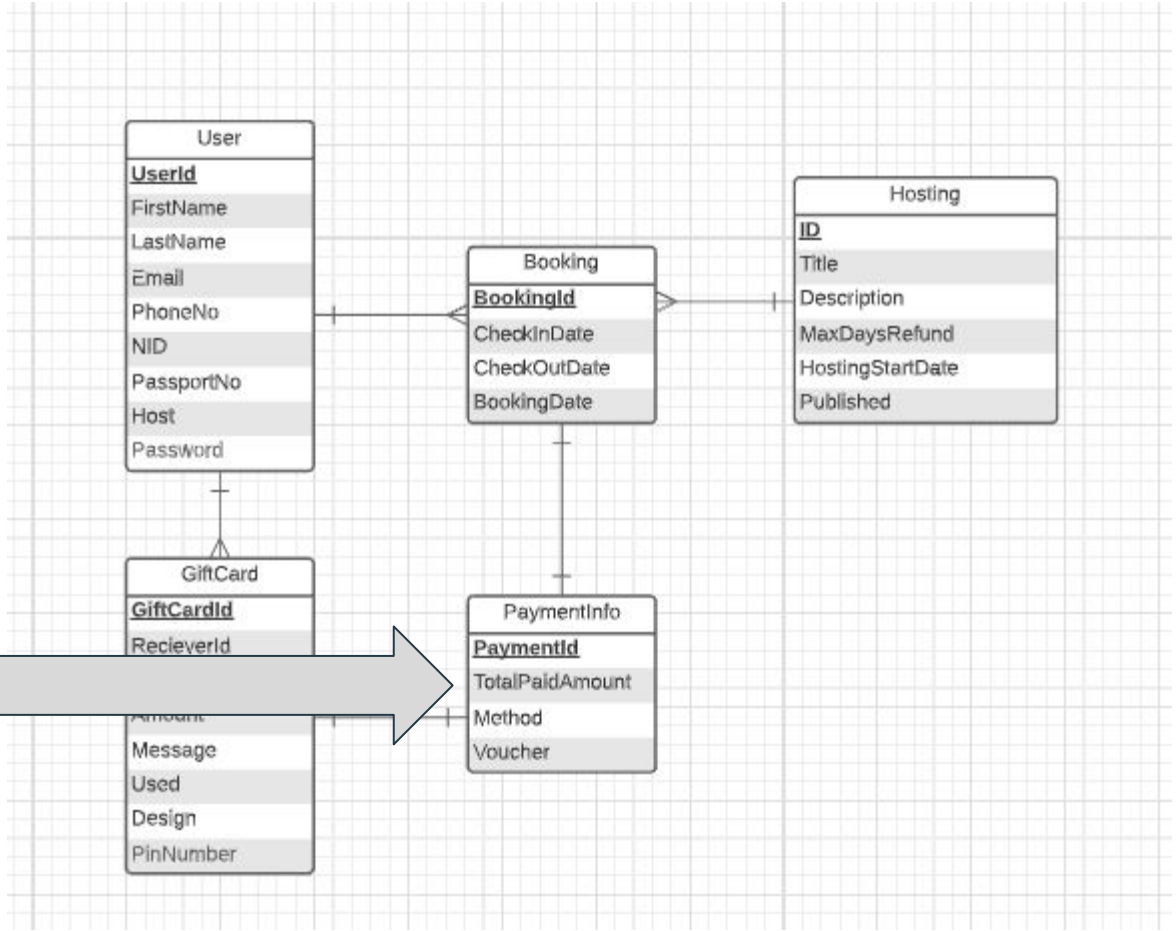
Booking

Gift cards can reduce the amount payable for a customer

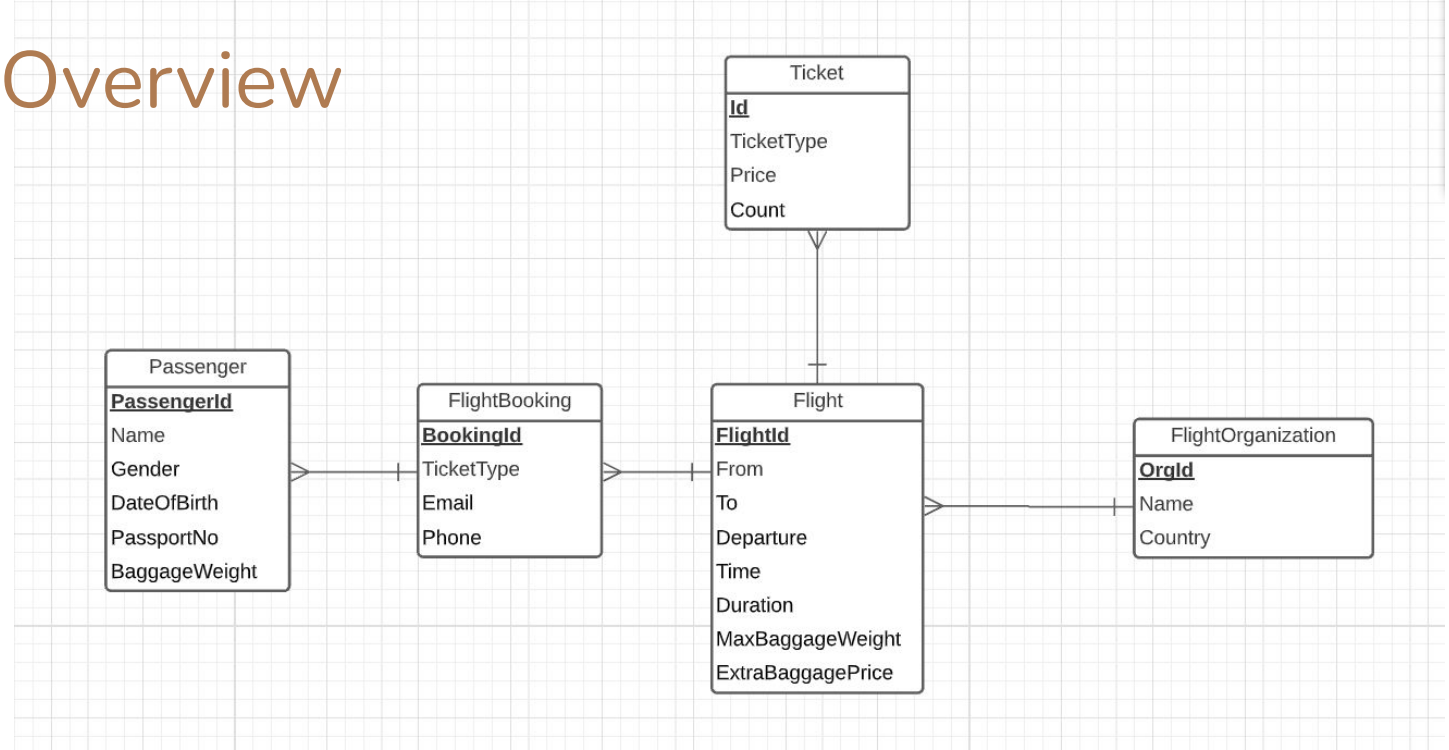


Booking

Users can pay through cash/ card/ fintech facilities like paypal

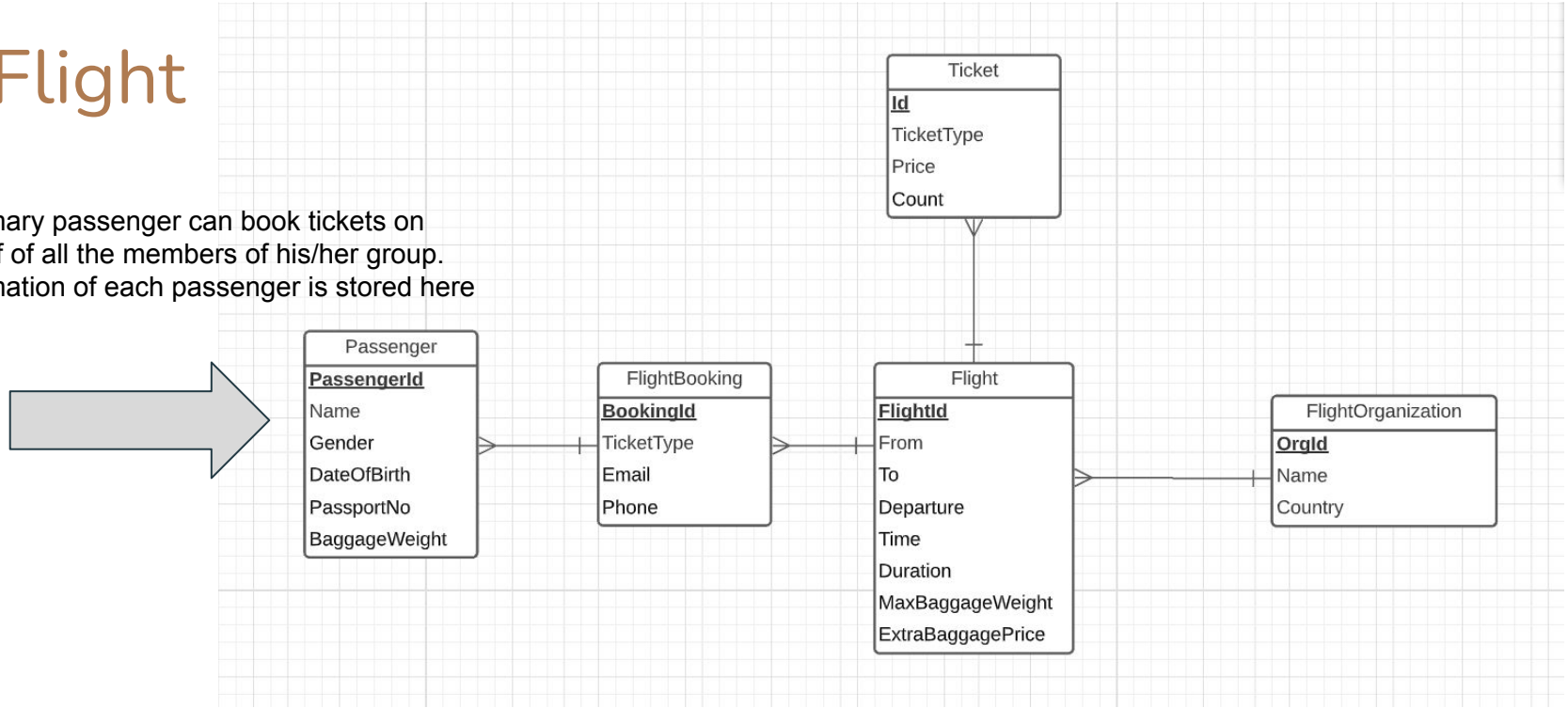


Flight Overview

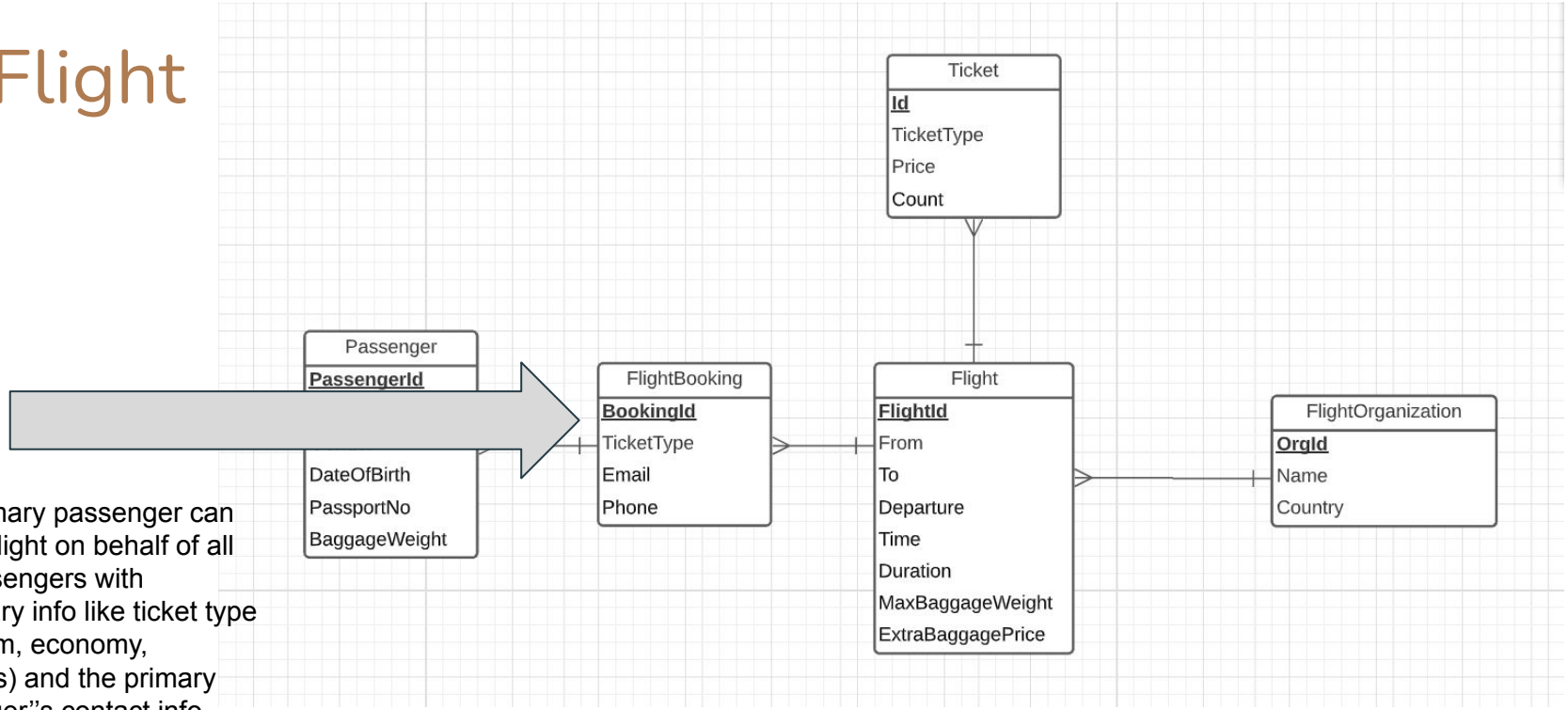


Flight

A primary passenger can book tickets on behalf of all the members of his/her group. Information of each passenger is stored here

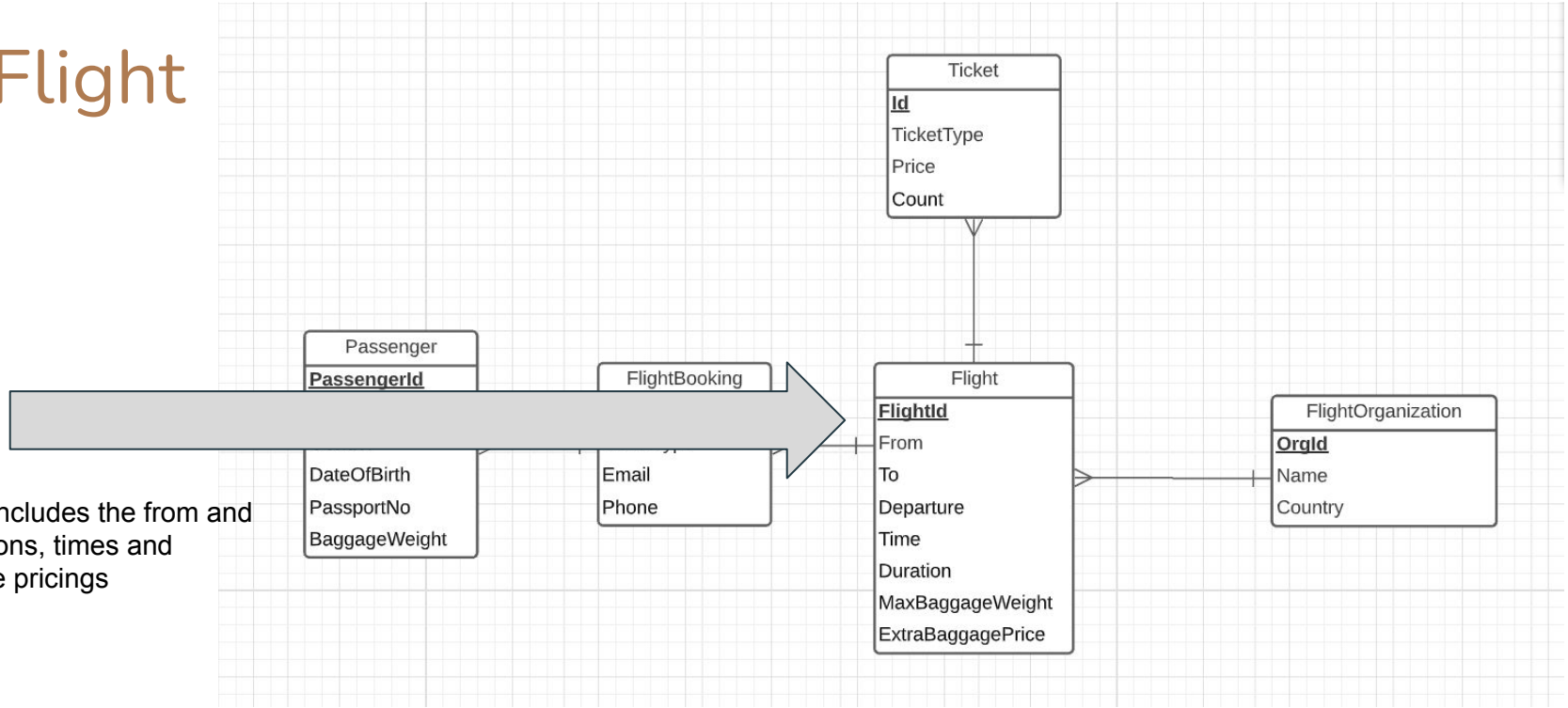


Flight



The primary passenger can book a flight on behalf of all the passengers with necessary info like ticket type (premium, economy, business) and the primary passenger''s contact info

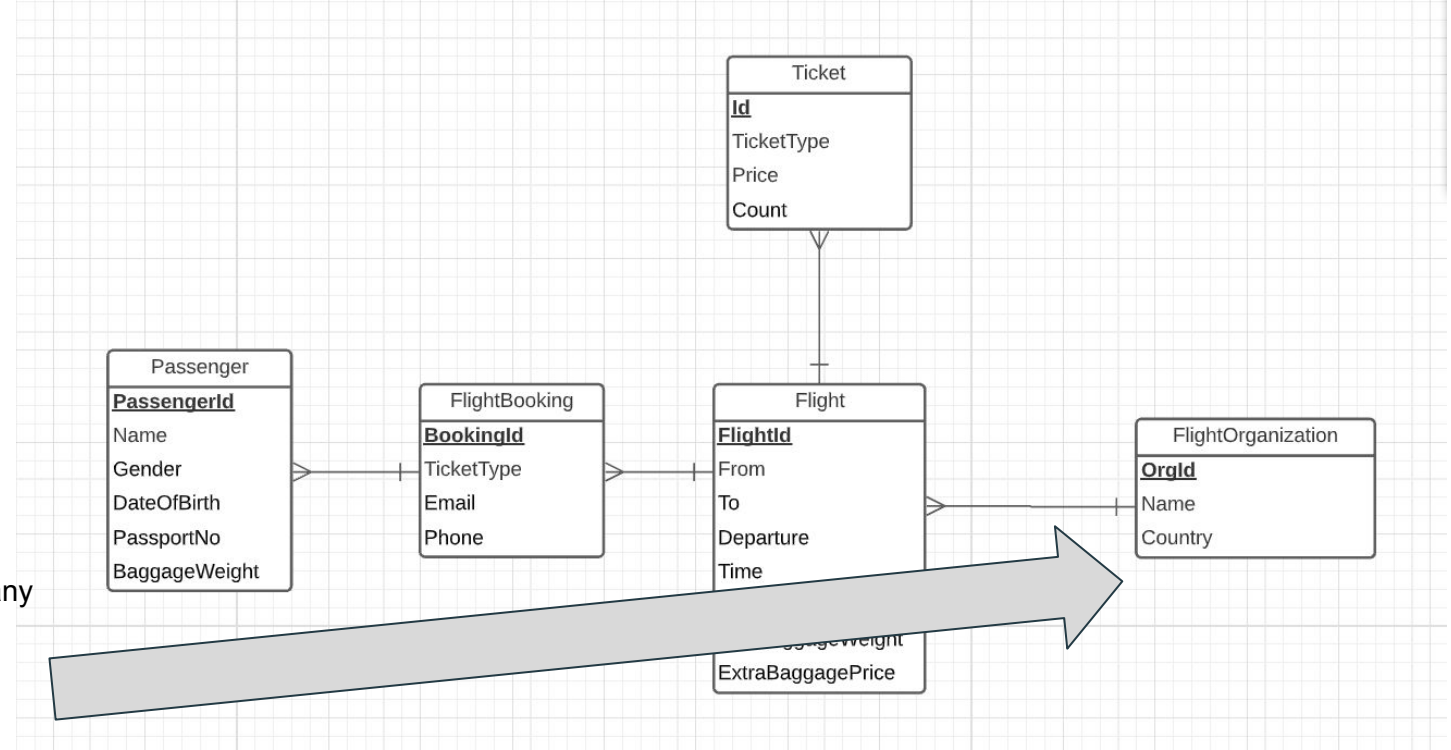
Flight



A flight includes the from and to locations, times and baggage pricings

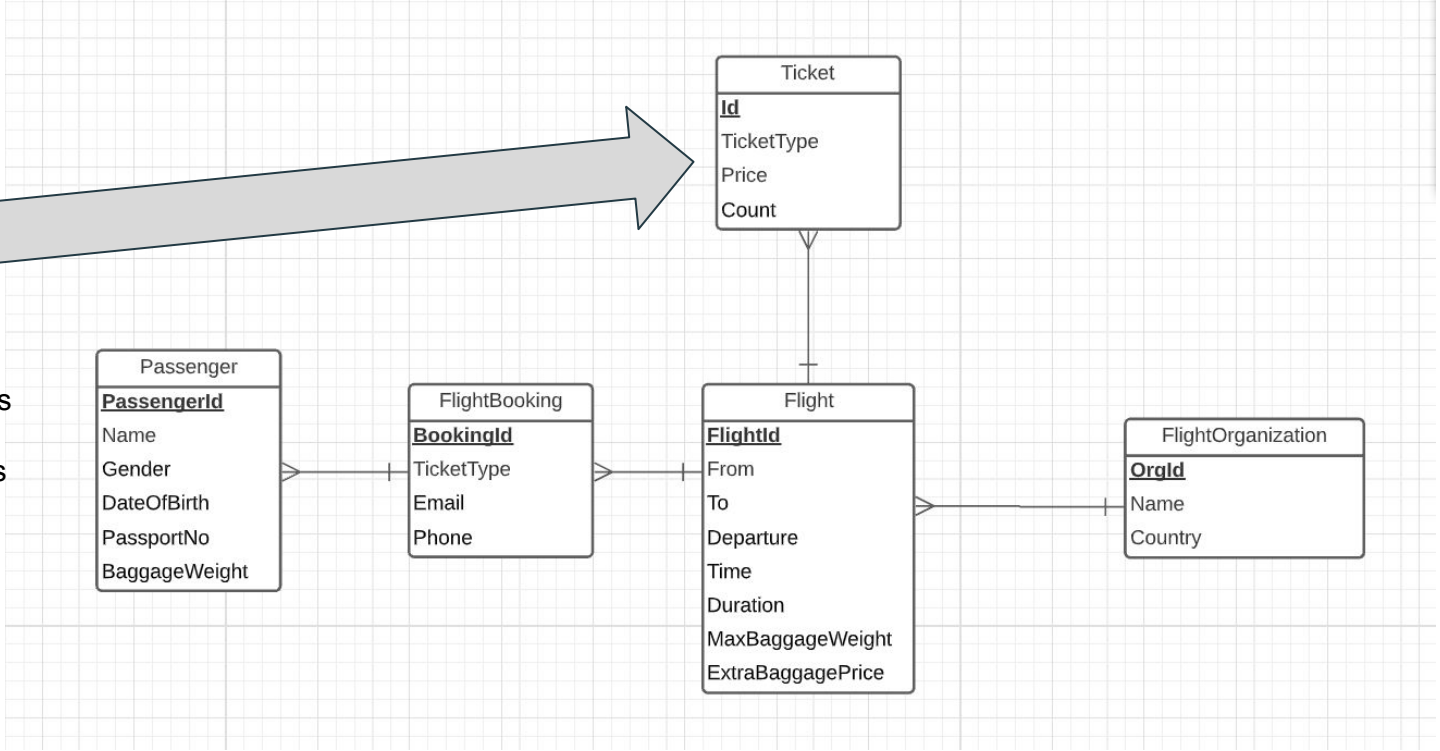
Flight

A flight is conducted by a flight organization company (e.g. Bangladesh Biman)

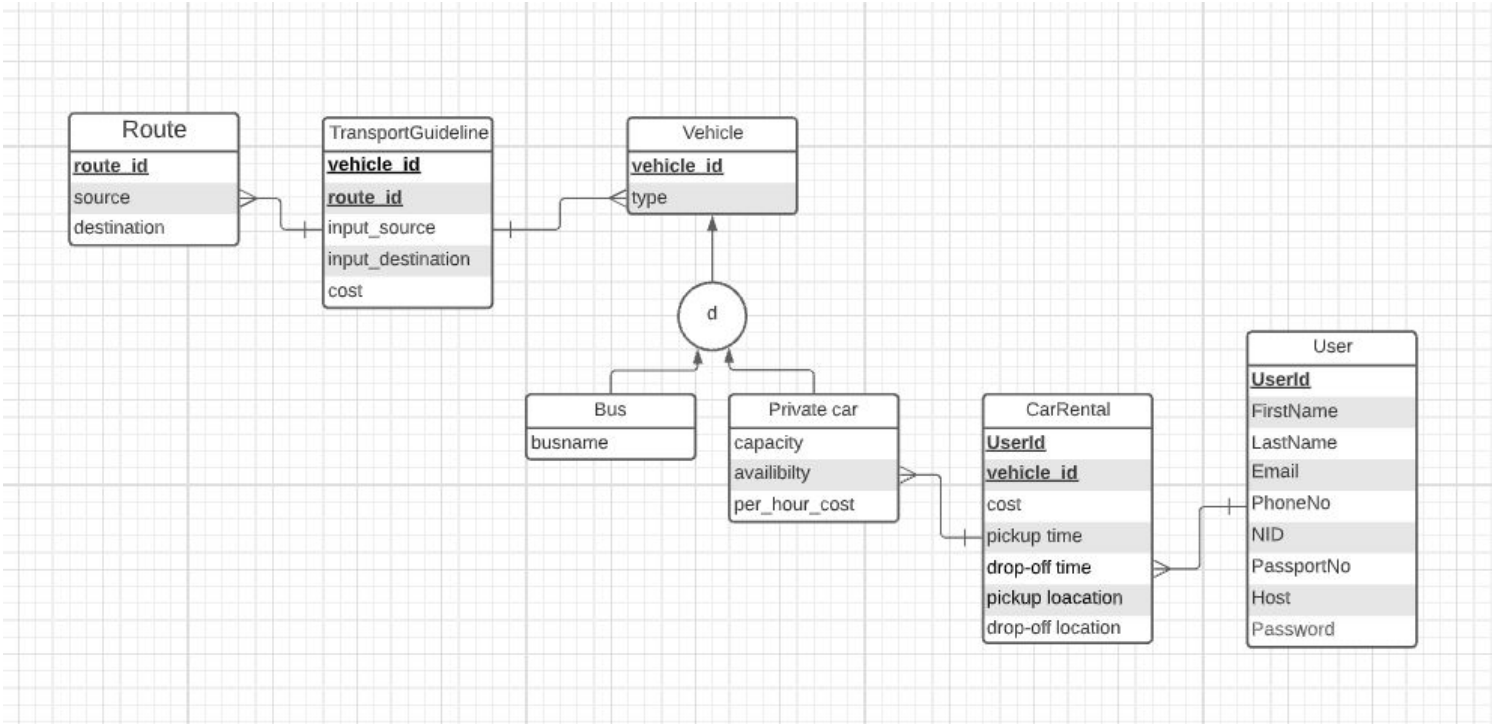


Flight

The available types of tickets and their pricings for a specific flight is stored in this entity

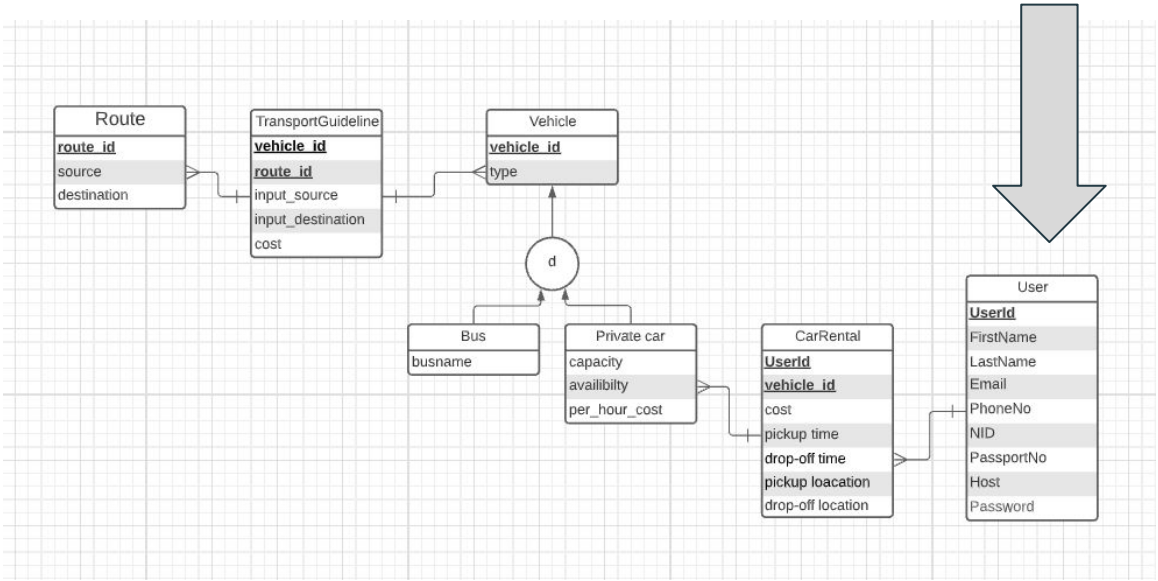


Transport Overview



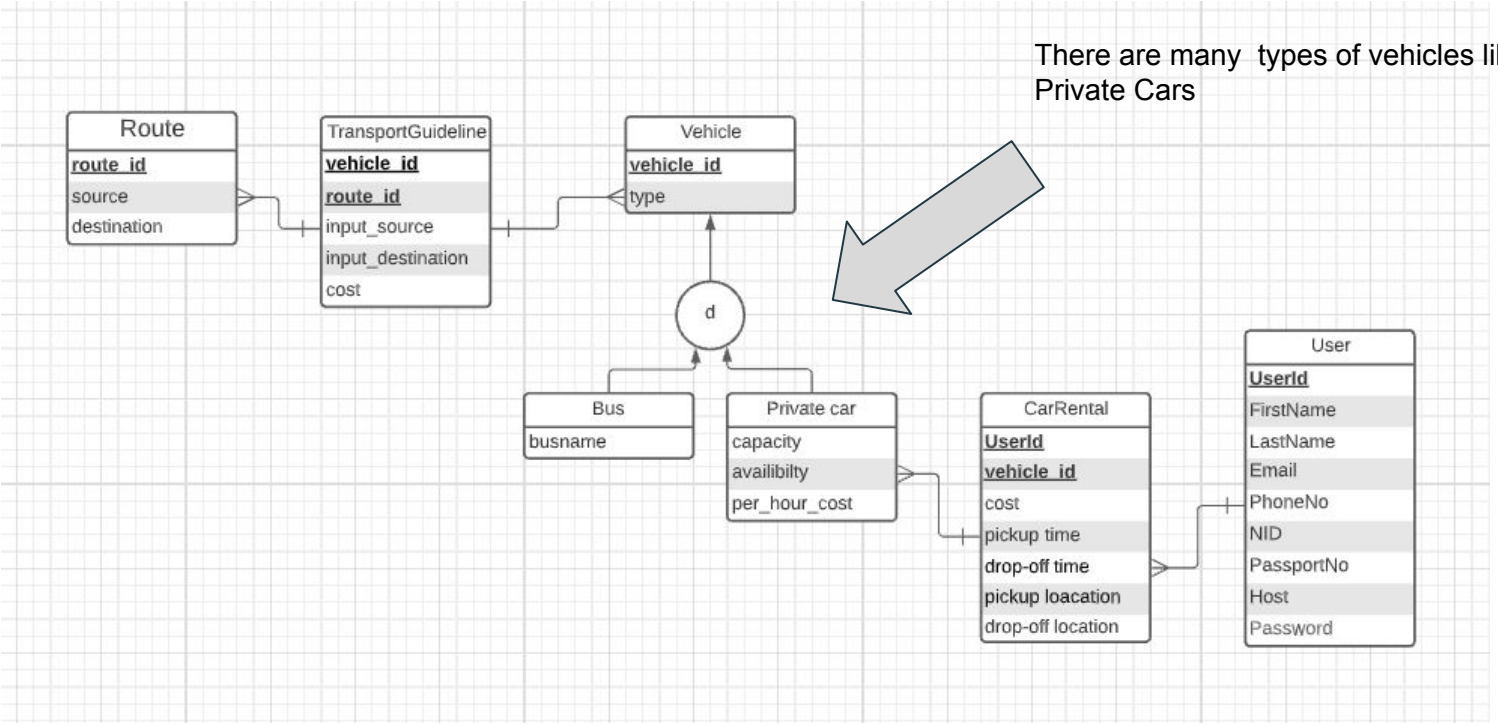
Transport

A user can rent a car by specifying times, locations and cost

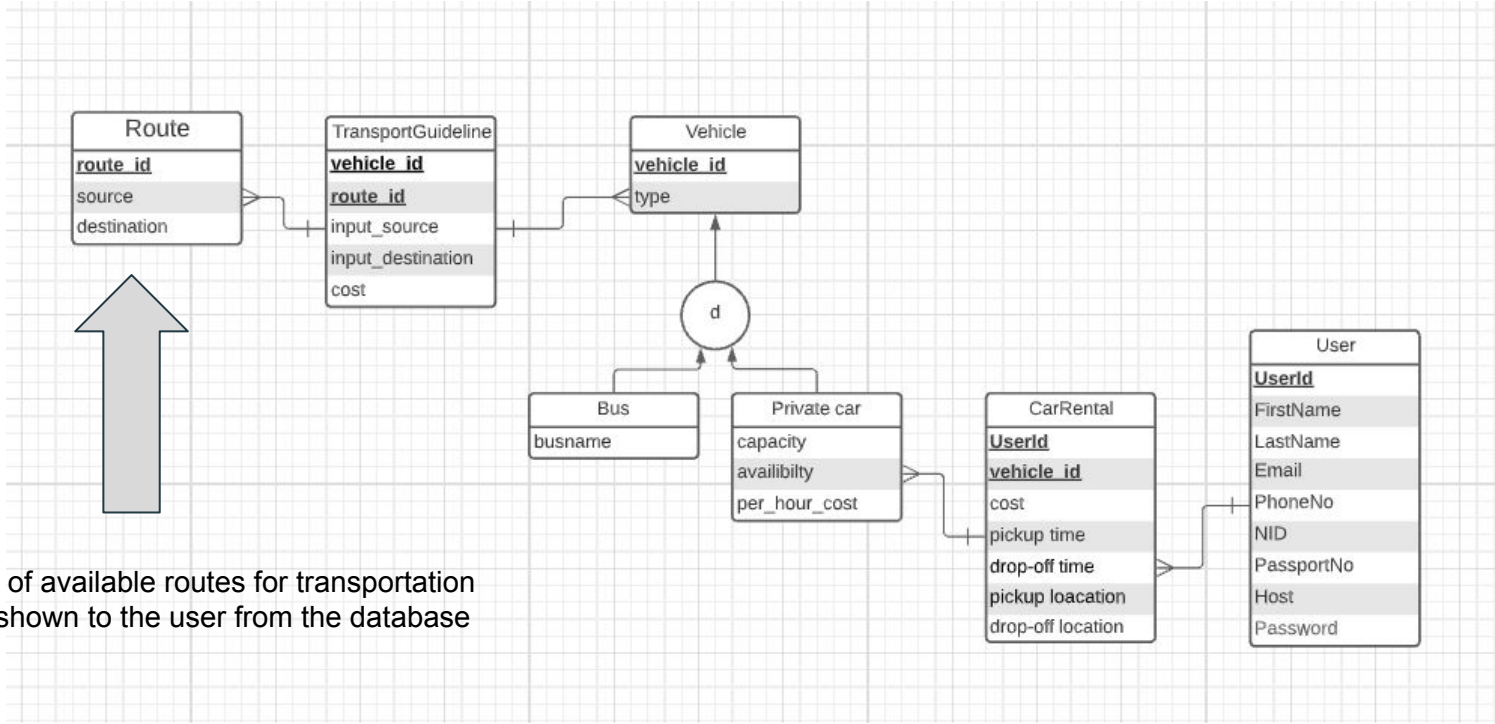


Transport

There are many types of vehicles like Bus, Private Cars

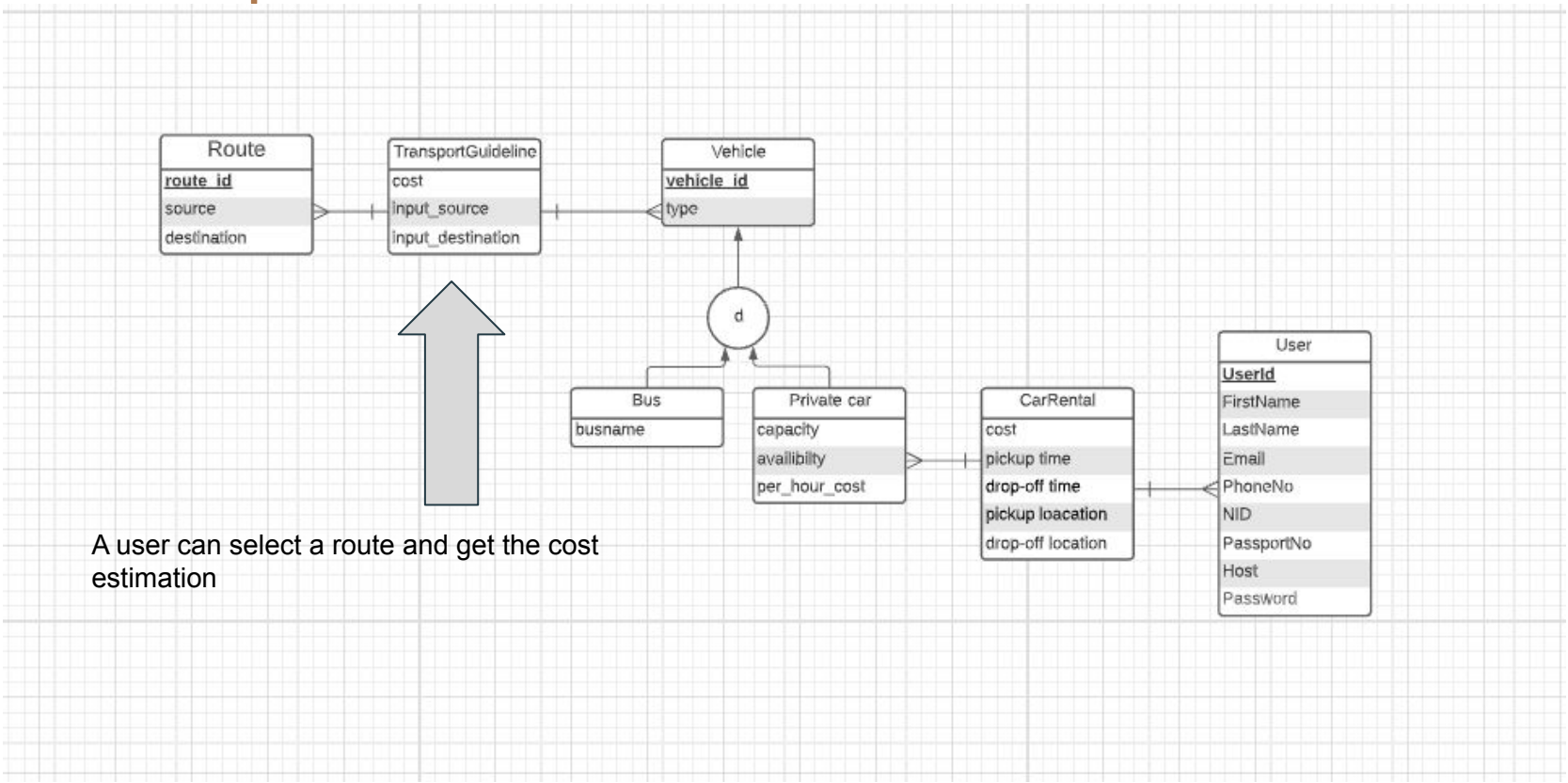


Transport



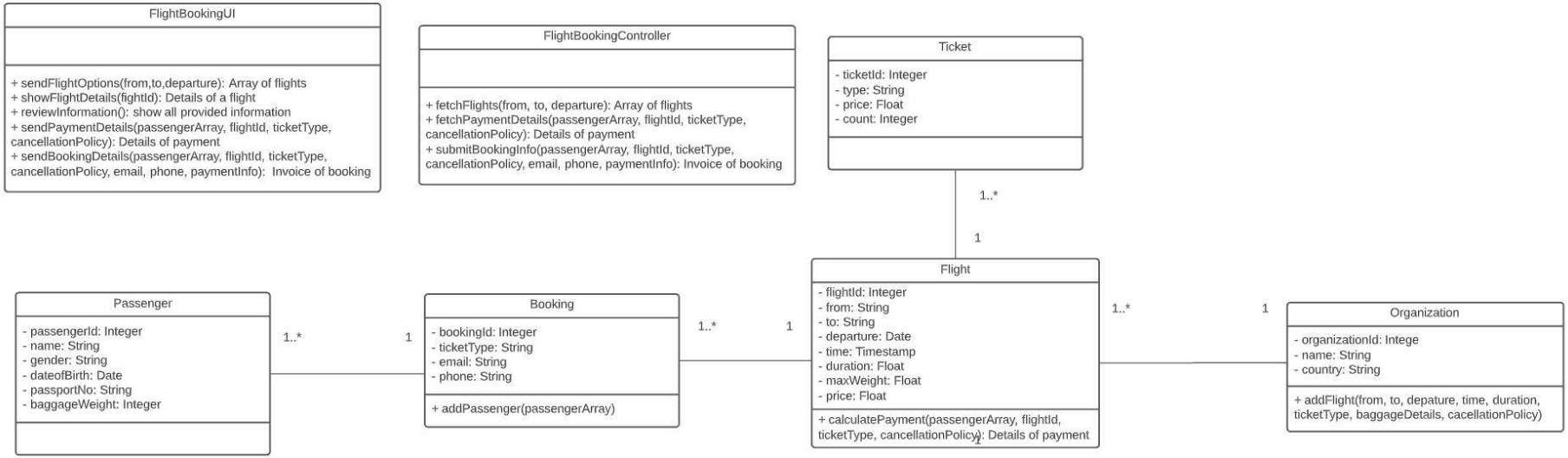
The list of available routes for transportation will be shown to the user from the database

Transport

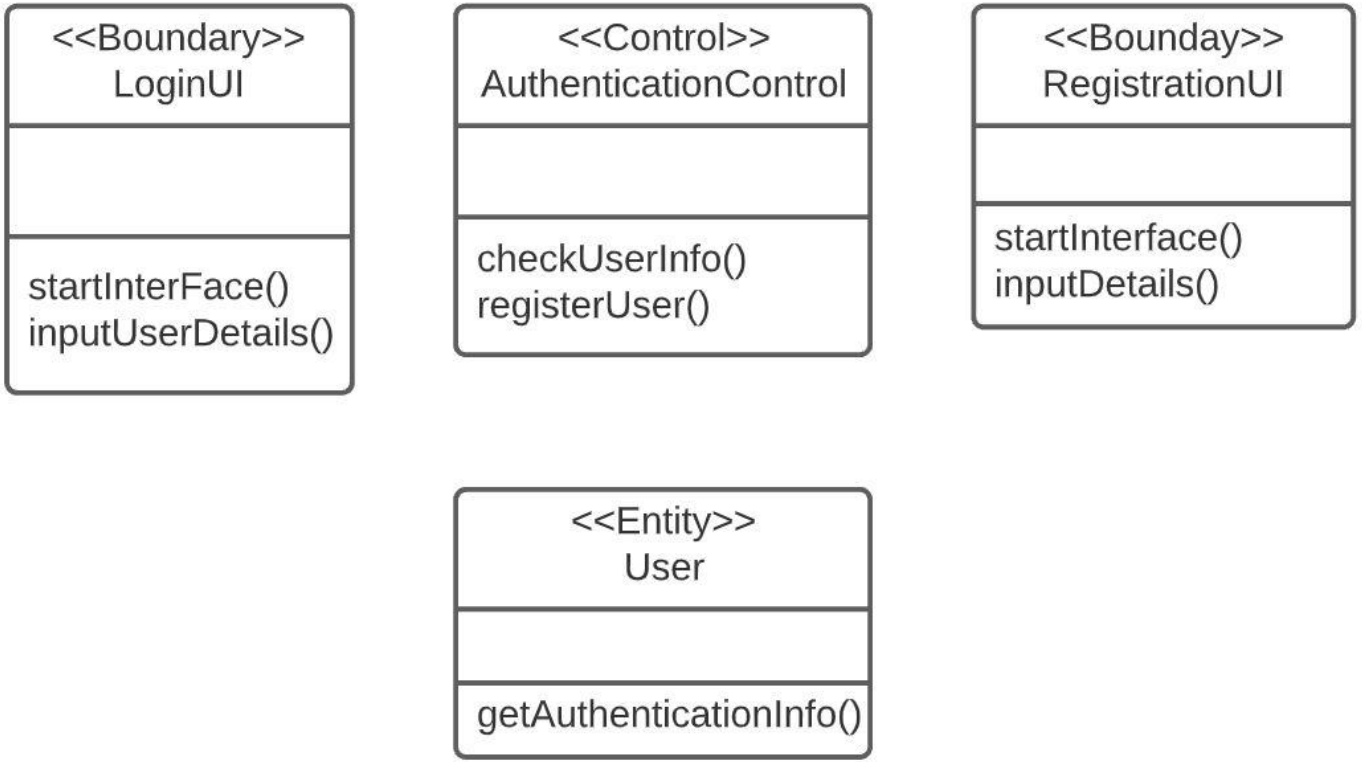


A user can select a route and get the cost estimation

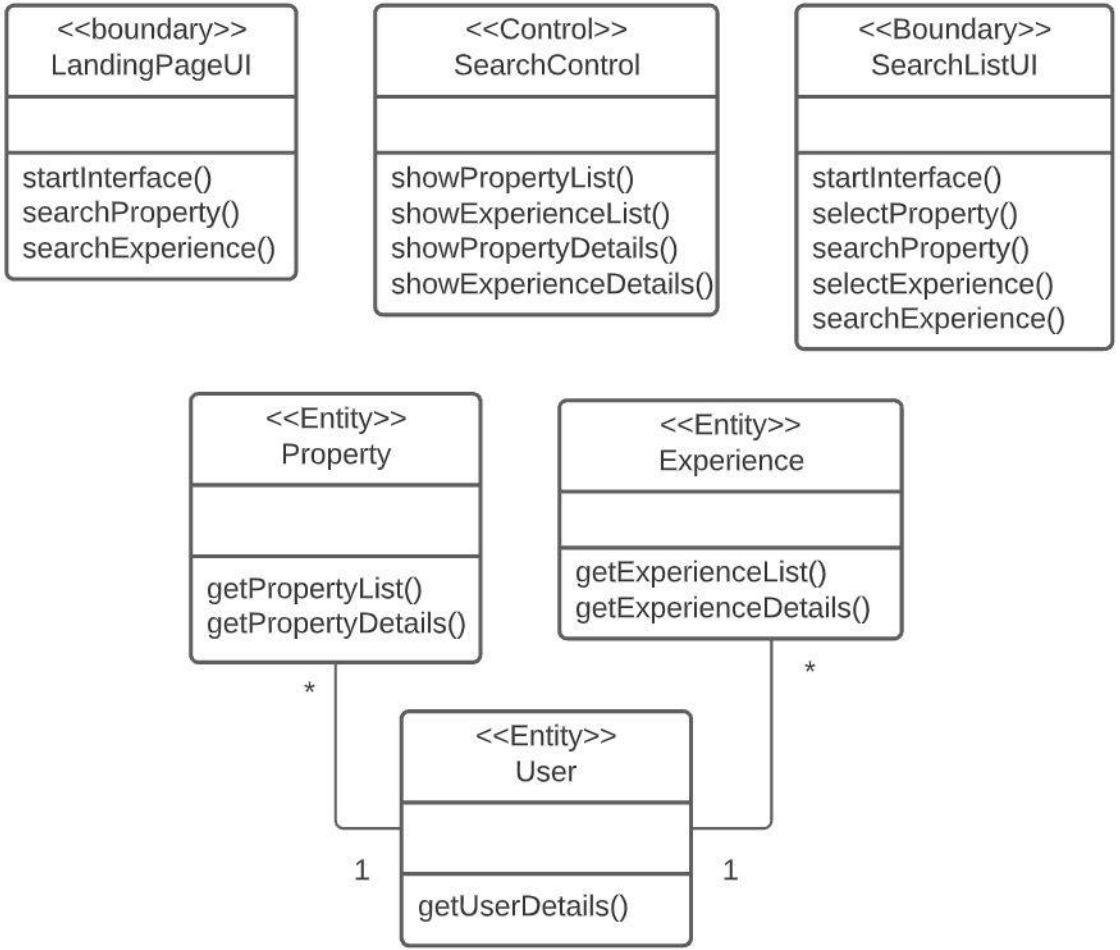
Flight Booking



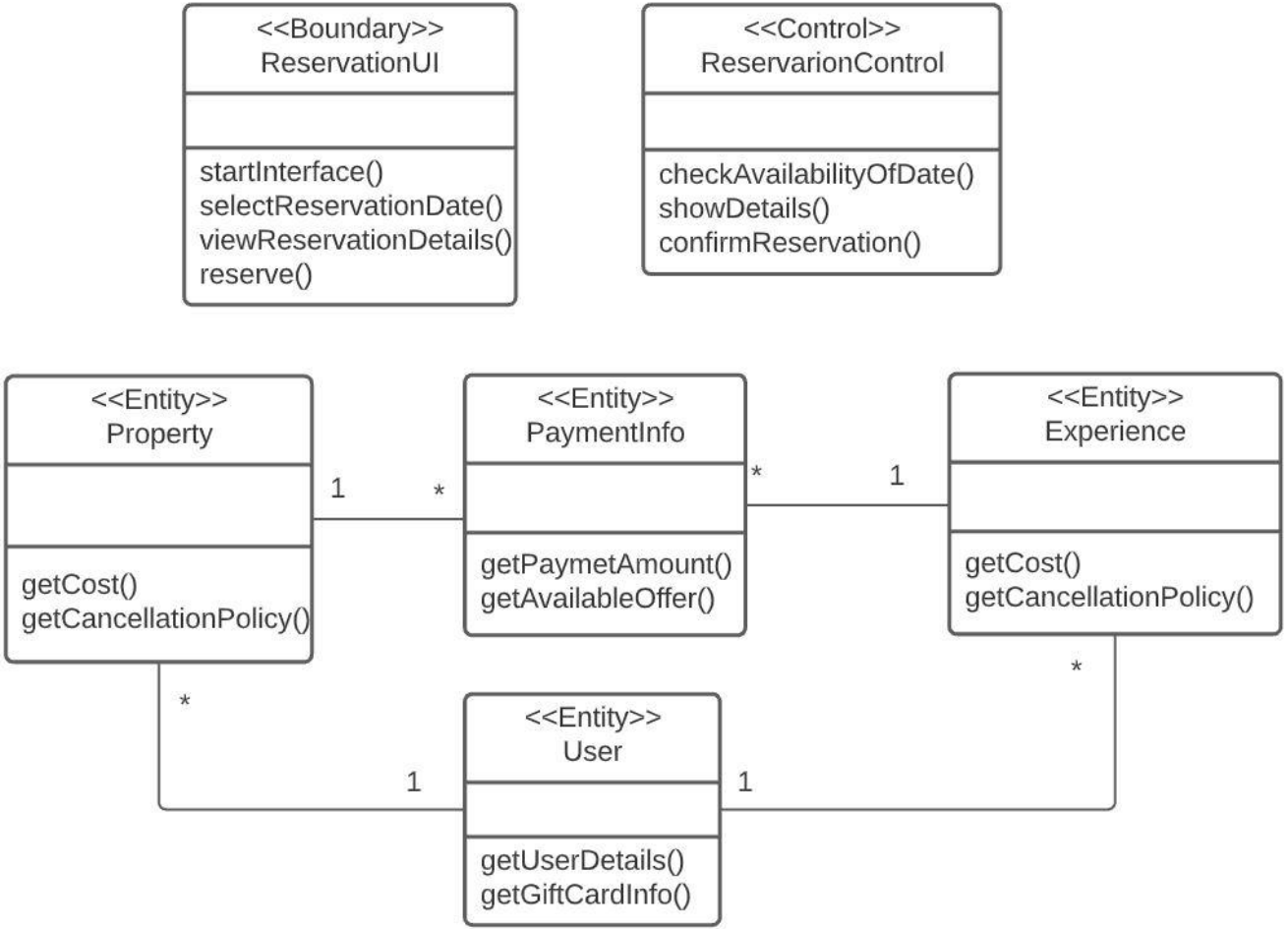
Login/Register



Search System

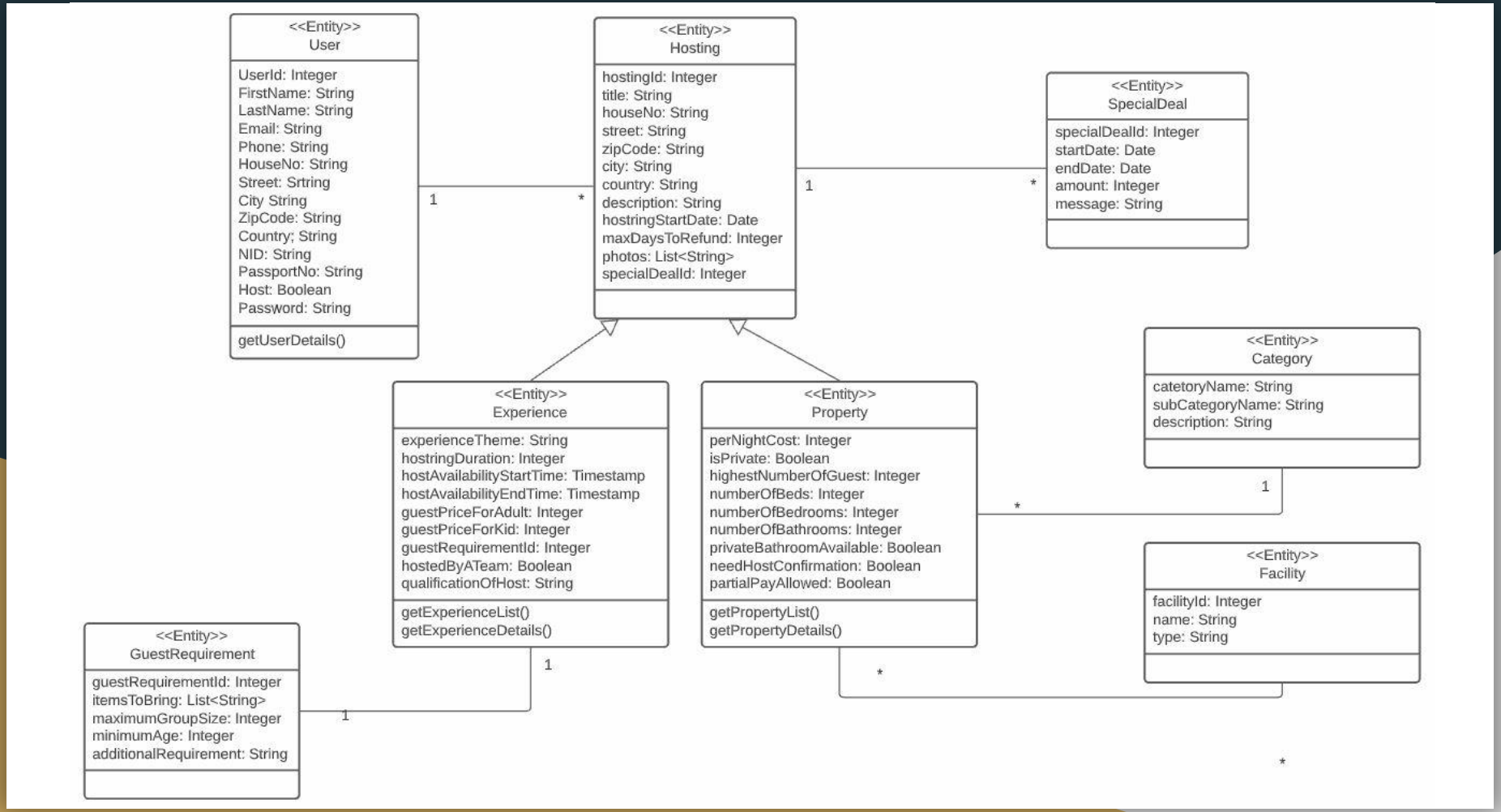


Reservation

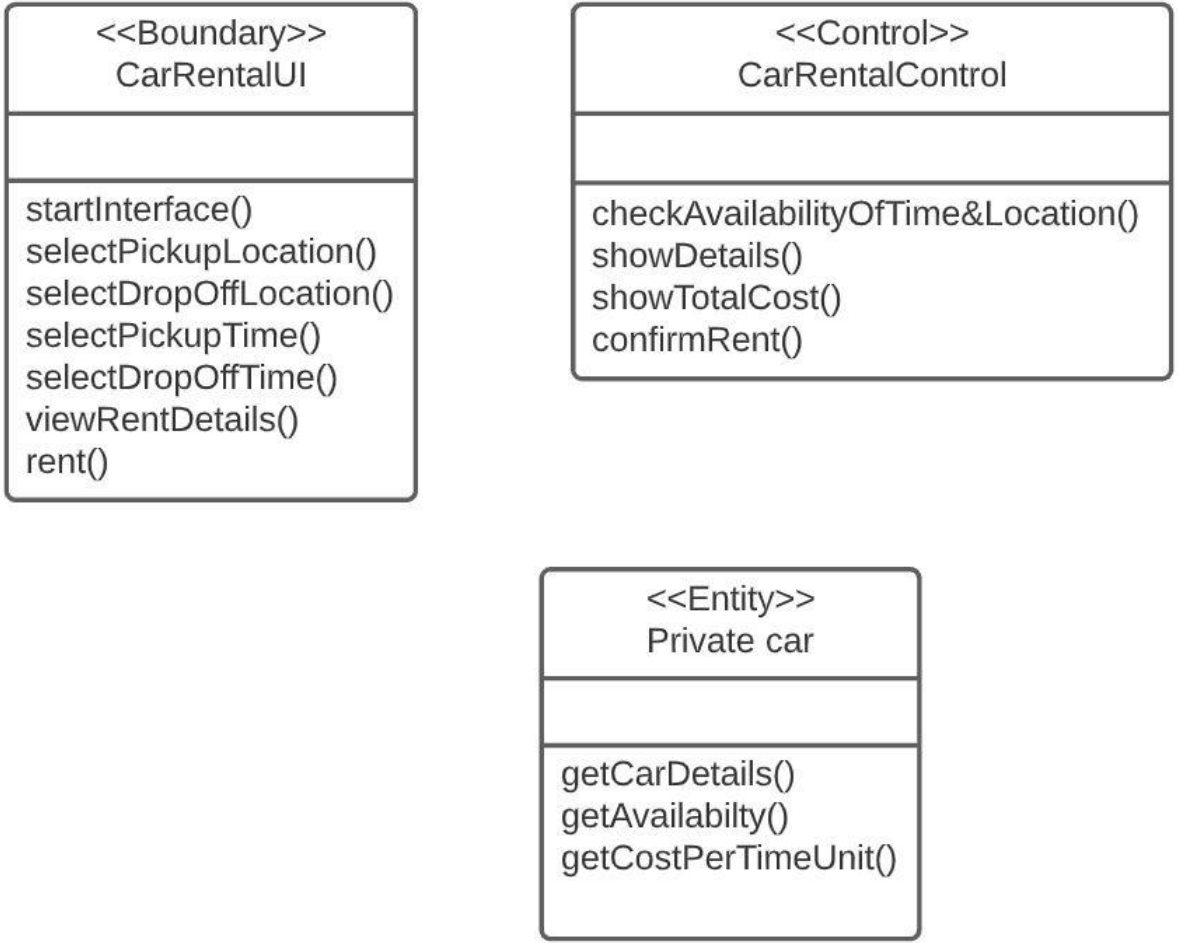


Hosting

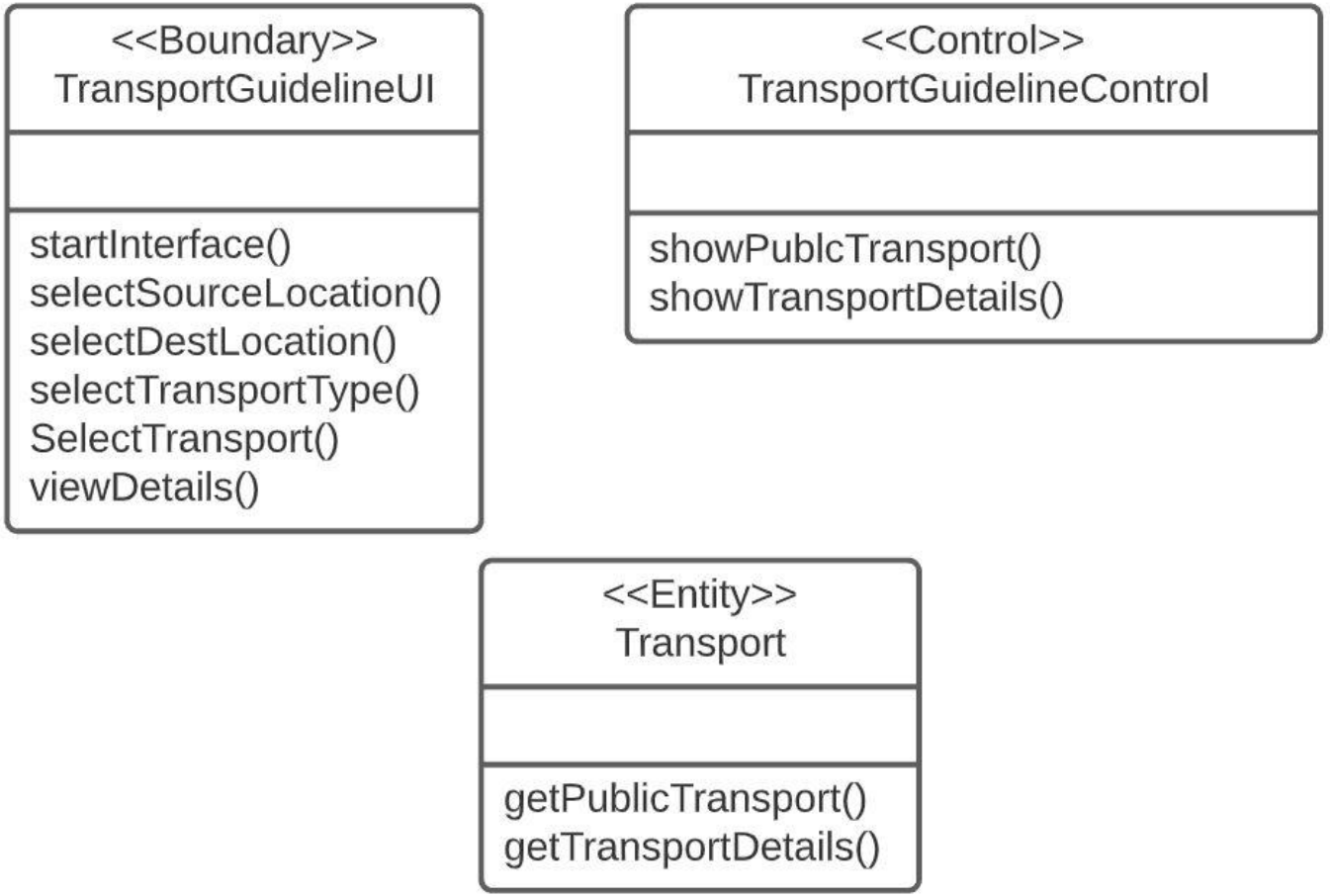
<<Boundary>>
ExperienceHostingUI
startInterface()
setTitle()
setLocation()
addDescription()
specifyRefundPolicy()
selectExperienceTheme()
specifyHostingDuration()
specifyHostAvailability()
setGuestPricing()
specifyGuestRequirements()
setIfHostedByTeam()
addHostQualification()
addPhotos()
setSpecialDeal()
<<Control>>
HostingControl
showExperienceThemeList()
showPropertyCategories()
showCommonFacilities()
saveAndPublishHosting()
<<Boundary>>
PropertyHostingUI
startInterface()
setTitle()
setLocation()
addDescription()
specifyRefundPolicy()
specifyIfPrivateOrShared()
setHighestGuestNumbers()
setNumberOfBeds()
setNumberOfBathrooms()
setNumberOfBedrooms()
specifyCostPerNight()
setIfPrivateBathroomAvailable()
setIfPartialPayAllowed()
addFacilities()
specifyPropertyCategory()
addPhotos()
setSpecialDeal()


<<Entity>>
User
UserId: Integer
FirstName: String
LastName: String
Email: String
Phone: String
HouseNo: String
Street: Srtring
City String
ZipCode: String
Country; String
NID: String
PassportNo: String
Host: Boolean
Password: String
getUserDetails()
<<Entity>>
Hosting
hostingId: Integer
title: String
houseNo: String
street: String
zipCode: String
city: String
country: String
description: String
hostringStartDate: Date
maxDaysToRefund: Integer
photos: List<String>
specialDealId: Integer
<<Entity>>
SpecialDeal
specialDealId: Integer
startDate: Date
endDate: Date
amount: Integer
message: String
<<Entity>>
Experience
experienceTheme: String
hostringDuration: Integer
hostAvailabilityStartTime: Timestamp
hostAvailabilityEndTime: Timestamp
guestPriceForAdult: Integer
guestPriceForKid: Integer
guestRequirementId: Integer
hostedByATeam: Boolean
qualificationOfHost: String
getExperienceList()
getExperienceDetails()
<<Entity>>
Property
perNightCost: Integer
isPrivate: Boolean
highestNumberOfGuest: Integer
numberOfBeds: Integer
numberOfBedrooms: Integer
numberOfBathrooms: Integer
privateBathroomAvailable: Boolean
needHostConfirmation: Boolean
partialPayAllowed: Boolean
getPropertyList()
getPropertyDetails()
<<Entity>>
Category
catetoryName: String
subCategoryName: String
description: String
<<Entity>>
Facility
facilityId: Integer
name: String
type: String
<<Entity>>
GuestRequirement
guestRequirementId: Integer
itemsToBring: List<String>
maximumGroupSize: Integer
minimumAge: Integer
additionalRequirement: String
1
*
1
*
1
*
1
*
1
*
*

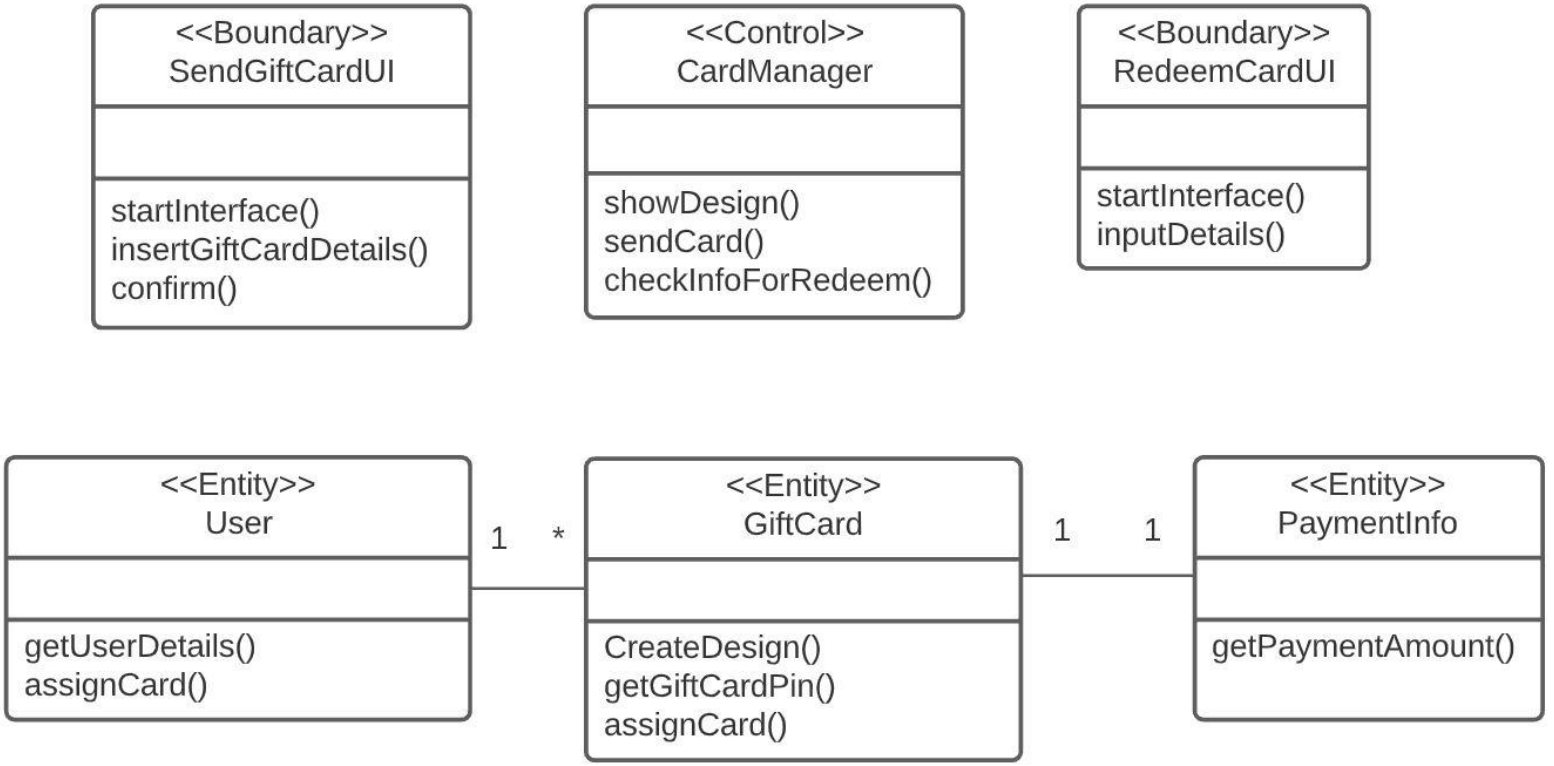
Car Rental


<<Boundary>>
CarRentalUI
startInterface()
selectPickupLocation()
selectDropOffLocation()
selectPickupTime()
selectDropOffTime()
viewRentDetails()
rent()
<<Control>>
CarRentalControl
checkAvailabilityOfTime&Location()
showDetails()
showTotalCost()
confirmRent()
<<Entity>>
Private car
getCarDetails()
getAvailabilty()
getCostPerTimeUnit()

Transport Guideline



GiftCard


<<Boundary>>
SendGiftCardUI
startInterface()
insertGiftCardDetails()
confirm()
<<Control>>
CardManager
showDesign()
sendCard()
checkInfoForRedeem()
<<Boundary>>
RedeemCardUI
startInterface()
inputDetails()
<<Entity>>
User
getUserDetails()
assignCard()
1
*
<<Entity>>
GiftCard
CreateDesign()
getGiftCardPin()
assignCard()
1
1
<<Entity>>
PaymentInfo
getPaymentAmount()

Thank You