

Constraints

- 1) Every Account is identified by its email. Its password and name should also be recorded.
- 2) Every Account is either a PCSAdmin or a User.
- 3) Every User has a location.
- 4) There are two types of Users -- PetOwner and CareTaker.
- 5) PetOwners must have at least one Pet, and we do not need to track the Pets if the PetOwner deletes his Account.
- 6) PetOwner may register a credit card.
- 7) Pets are identified by a pld and they must have one PetOwner. Their specialRequirements can also be recorded if applicable.
- 8) Each Type is identified by a name and its baseDailyPrice should also be recorded.
- 9) Each Pet may only belong to one Type.
- 10) Different pets can have the same Type.
- 11) The monthlyPetDays, monthlySalary, rating, bankAccount and maxConcurrentPetLimit of a CareTaker should be recorded.
- 12) CareTakers may take care of more than one Type of Pets, and the dailyPrice for each Type should be recorded.
- 13) Every CareTaker is either a PartTimer or a FullTimer.
- 14) Each Availability should be identified by a startDate, endDate and the accountId of the PartTimer.
- 15) Each PartTimer can indicate multiple Availability, and we do not need to track the Availability if the PartTimer deletes his Account.
- 16) Each Leave should be identified by a startDate, endDate and the accountId of the FullTimer.
- 17) Each FullTimer can have multiple Leave, and we do not need to track the Leave if the FullTimer deletes his Account.
- 18) Each Bid is identified by a bidId and it's isSuccessfull, startDate and endDate should also be recorded.
- 19) PetOwners can make Bid(s) for their Pet(s) to be cared for by a CareTaker.
- 20) Each PetOwner can make a Bid for a caretaker to take care of one or more of his pets in the same Bid.
- 21) Each Transaction is identified by transactionId and the numPetDays (number of pets multiplied by number of days), totalCost, status, methodOfPayment, methodOfPetTransfer should be recorded.
- 22) When a bid is successful, the PetOwner will hire the CareTaker to take care of their Pet and a Transaction is created for the hiring.
- 23) PetOwners can make a Review for the Transaction after it is completed.
- 24) Each Review is identified by the rating and transactionId of a Transaction.
- 25) Each Review should have a rating and text recorded.
- 26) Each Transaction may have at most one Review and we do not need to track the Review if the Transaction is deleted.

Justification for Serial Types

Pet (pId) - We cannot uniquely identify each pet with any combination of name, special requirements and types. This also allows for a pet owner to have multiple pets of the same name.

Bid (bidId)- We cannot uniquely identify each bid with a combination of the other attributes - isSuccessfull, endDate and startDate because multiple bids can have the same isSuccessfull (yes/no) status and same start and end dates.

Transaction (transactionId) - We cannot uniquely identify each transaction with a combination of the other attributes - numPetDays, totalCost, status, methodOfPetTransfer, methodOfPayment. The same PetOwner and Pet pair might hire the same CareTaker at different times in a year, but for the same duration (thus resulting in the same numPetDays), same totalCost, same methodOfPetTransfer and same methodOfPayment.