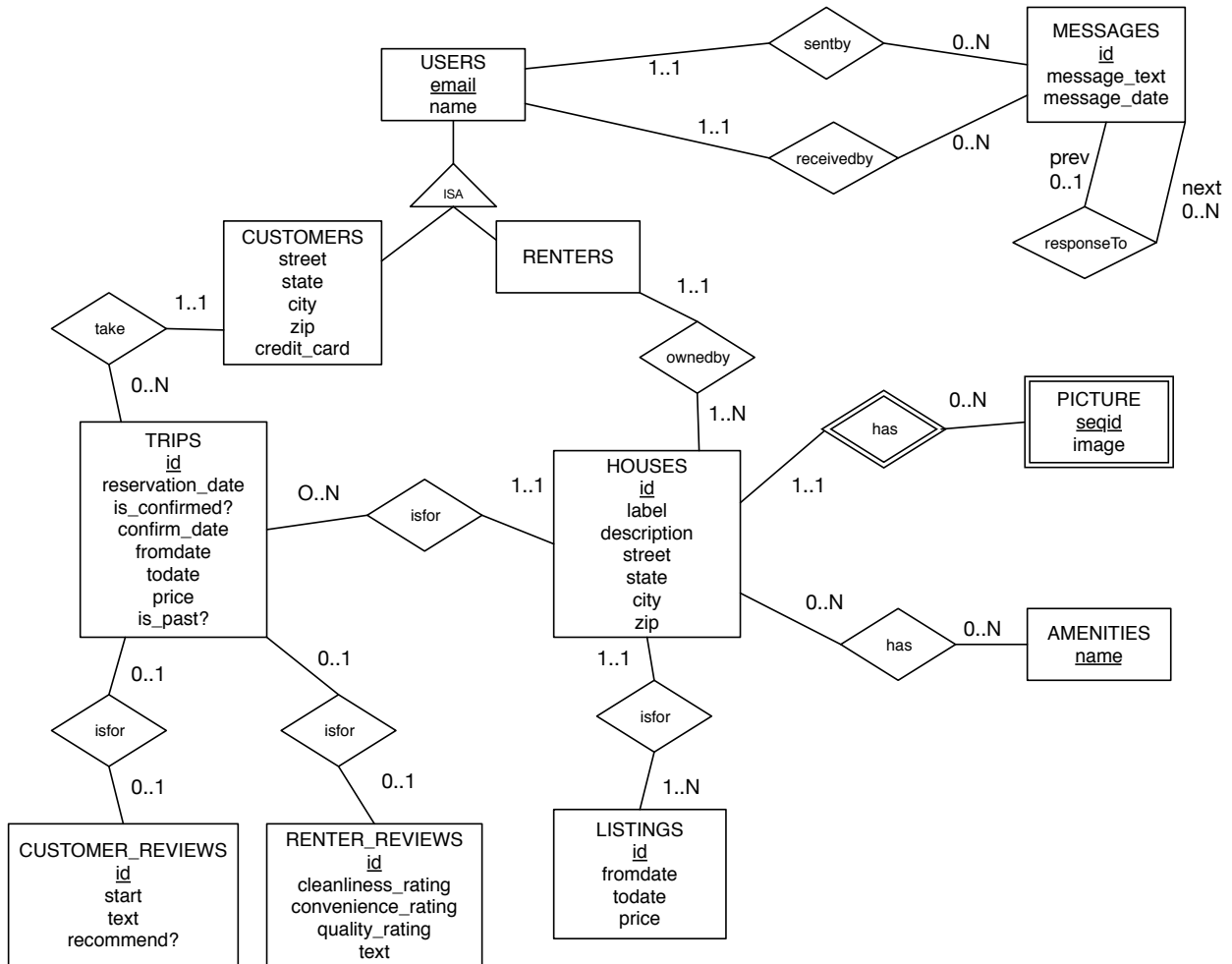


Database Systems, CSCI 4380-01
Homework # 3 Answers
Due Tuesday September 25, 2018 at 11:59:59 PM

Homework Statement.

Problem 1. See Figure for the solution. Note that multiple solutions may exist.



You are creating a database for a house sharing company like Airbnb. The database stores the following information. Customers have name, email, address, credit card. Renters (those who list houses) have name, email, address, a number of property listings for houses. Each house has an id, a label, a description, address (street, state, city, zip), pictures (each picture has image and sequence id) and amenities. Each listing is for a house and has multiple available dates ranges (fromdate, todate) and a price for each date range (while the date ranges should not overlap, this is handled by software outside of the database). Customers have past and upcoming trips. Each trip involves a specific house, a specific date range, the date for the reservation and listed price. For future trips, you also store whether the trip was confirmed or not, and on which date. Past trips may have a review from the renter for the customer with a star value, a yes/no field for whether they recommend the customer and a review text. Past trips may also have a review from

the customer for the renter with star values for cleanliness, convenience and quality of property as well as review text. Each review is for a house. Finally, there is a message board for messages between customer and renter for future trips. Each message has a sender, a receiver (customer or renter), message date, message text. If the message was a response to a previous message, this is also stored.