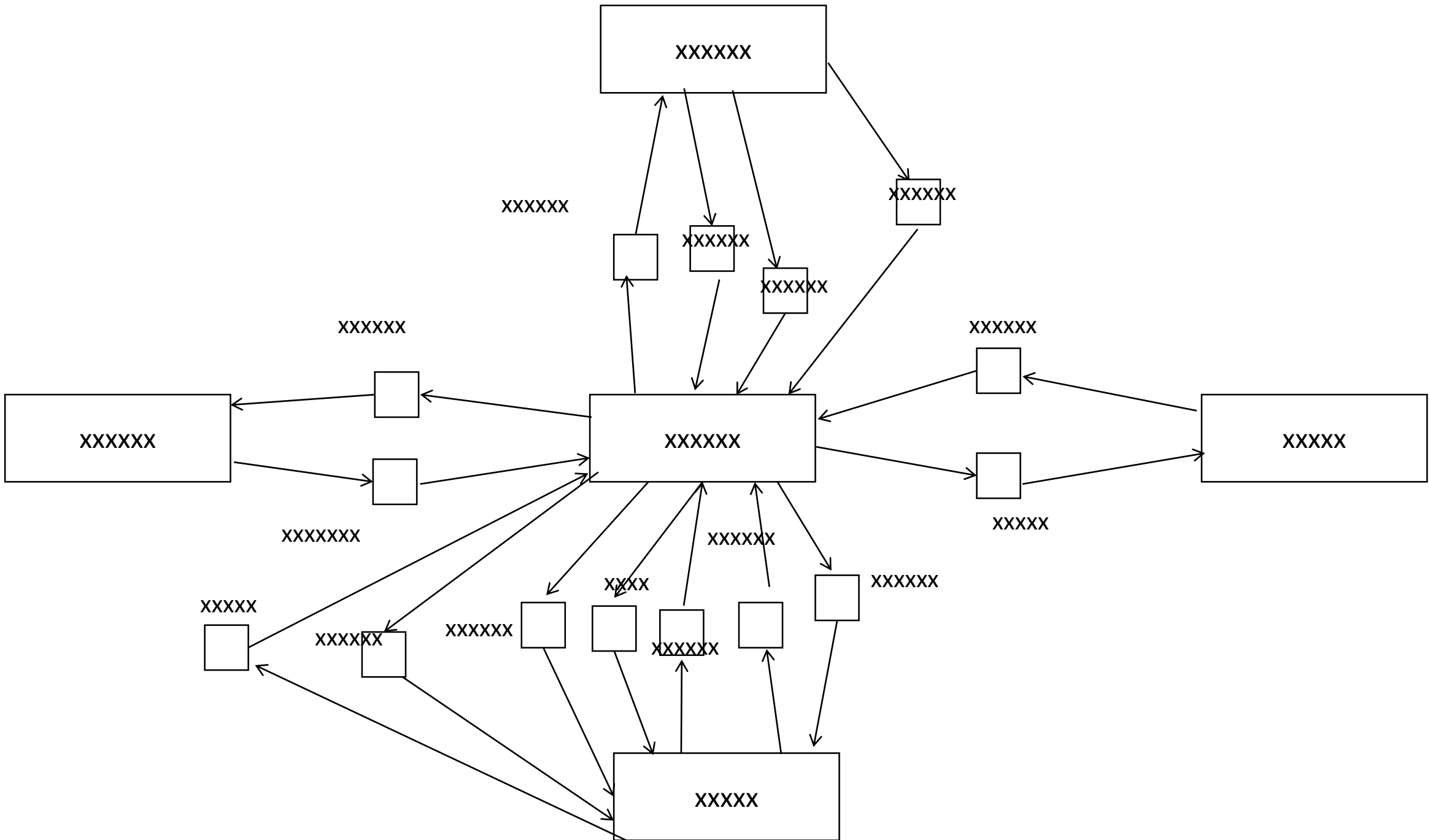


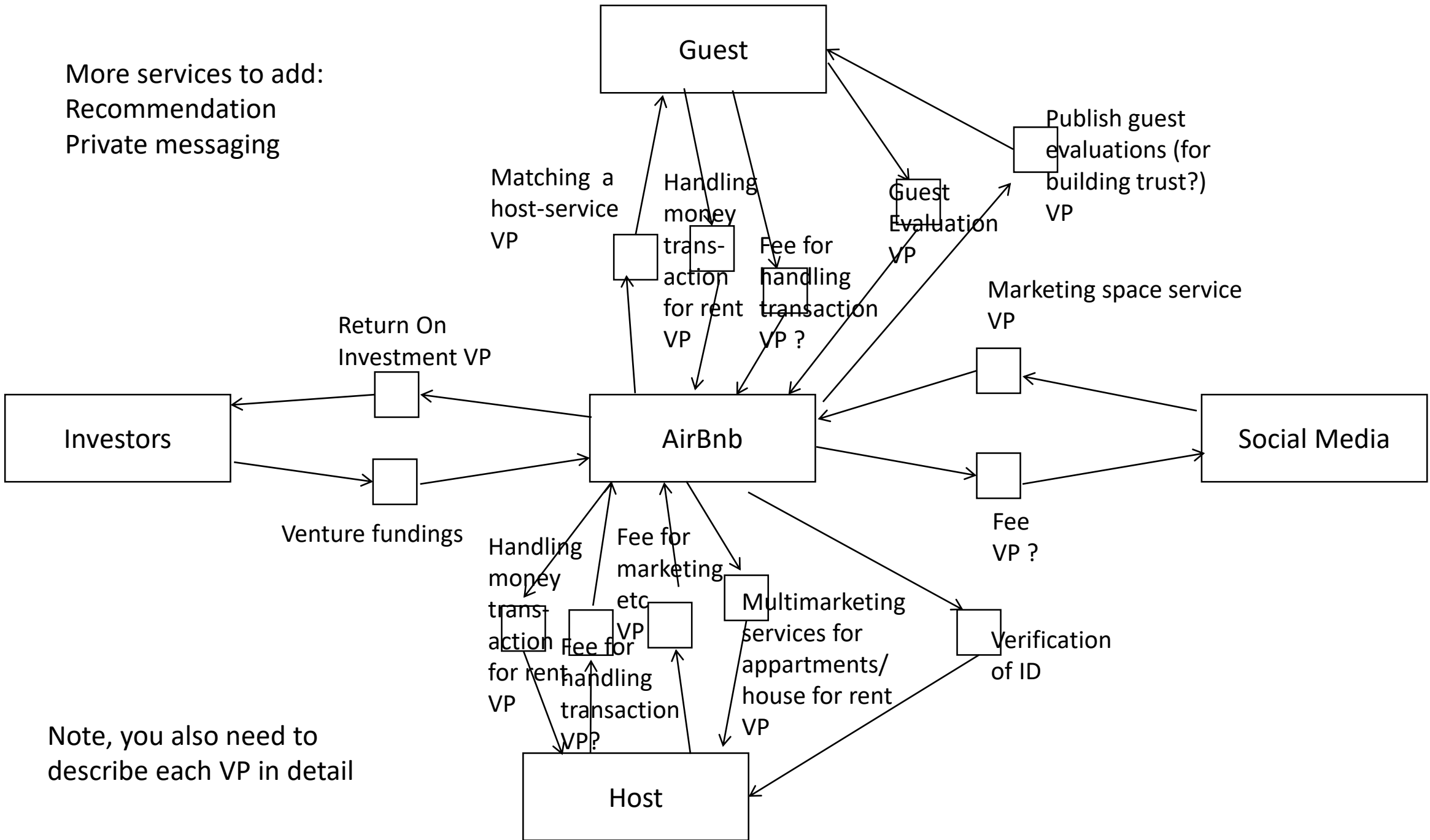
IS1 exam answers

EXAM Nov 1 2015

Question 3 - VDML

- You have been hired to design a new business model for Airbnb, see question 2.
- Construct a VDML model for the value network around Airbnb. Make sure to describe the value propositions clearly. (You may make your own assumptions for solving this.)





More services to add:
 Recommendation
 Private messaging

Matching a host-service
 VP

Handling money transaction for rent
 VP

Fee for handling transaction
 VP ?

Guest Evaluation
 VP

Publish guest evaluations (for building trust?)
 VP

Return On Investment
 VP

Marketing space service
 VP

Venture fundings

Fee
 VP ?

Handling money transaction for rent
 VP

Fee for handling transaction
 VP ?

Fee for marketing etc
 VP

Multimarketing services for appartments/ house for rent
 VP

Verification of ID

Note, you also need to describe each VP in detail

Question 4 (a, b and c) - REA model

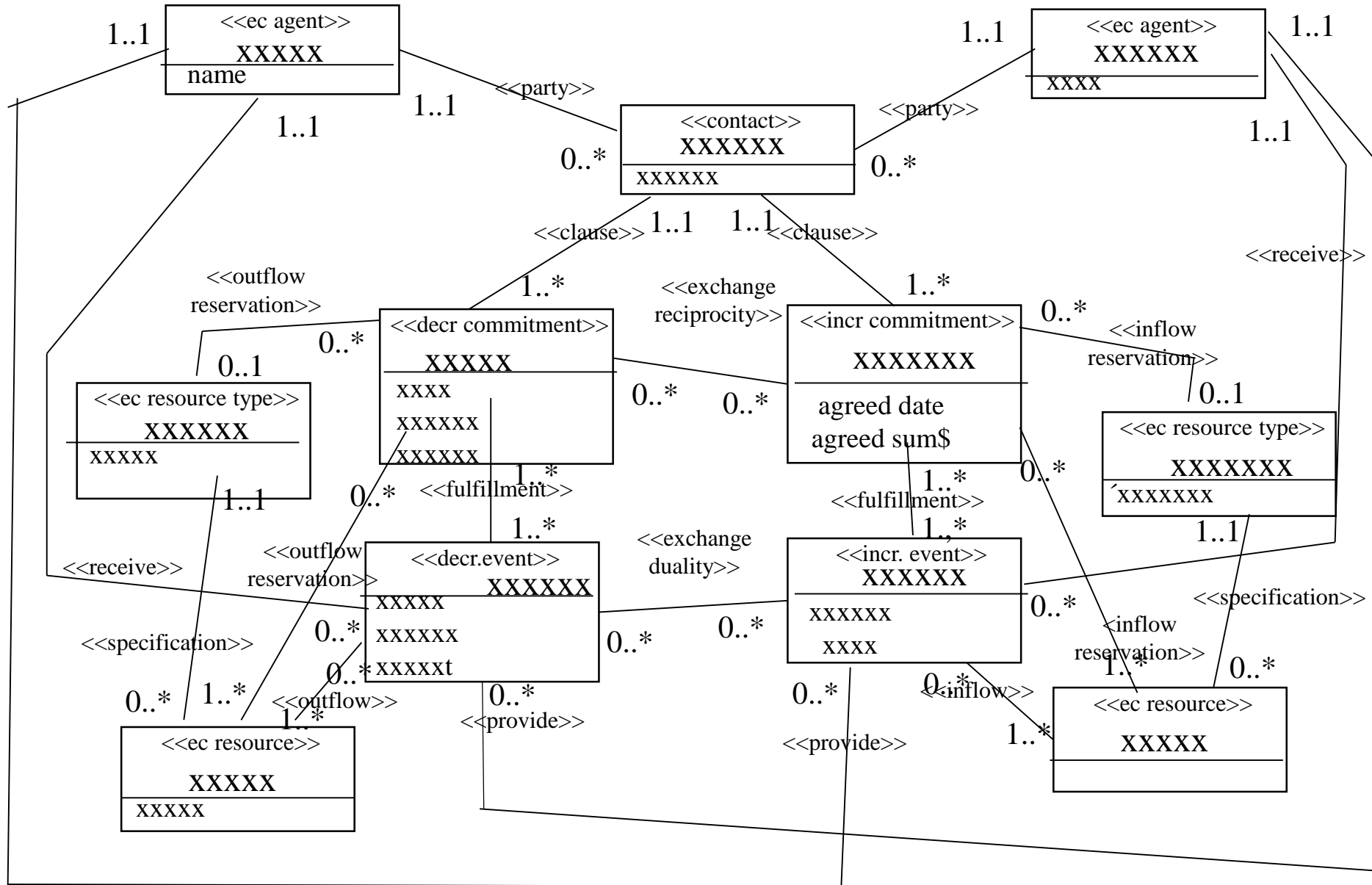
There are two different ways in which a guest can rent a room at Airbnb:

1. The customer wants a room of a certain size in a certain city, but he or she does not care about exactly which room. For example, she says “I want a room for two persons in Amsterdam”. A contract will then be established with Airbnb and later on Airbnb will provide a room fulfilling the requirements given by the guest.
2. The customer wants a specific room at a specific place. For example, she says “I want the room at the third floor of Hoijenstrasse 15 in Amsterdam”. Airbnb will then provide her this room.

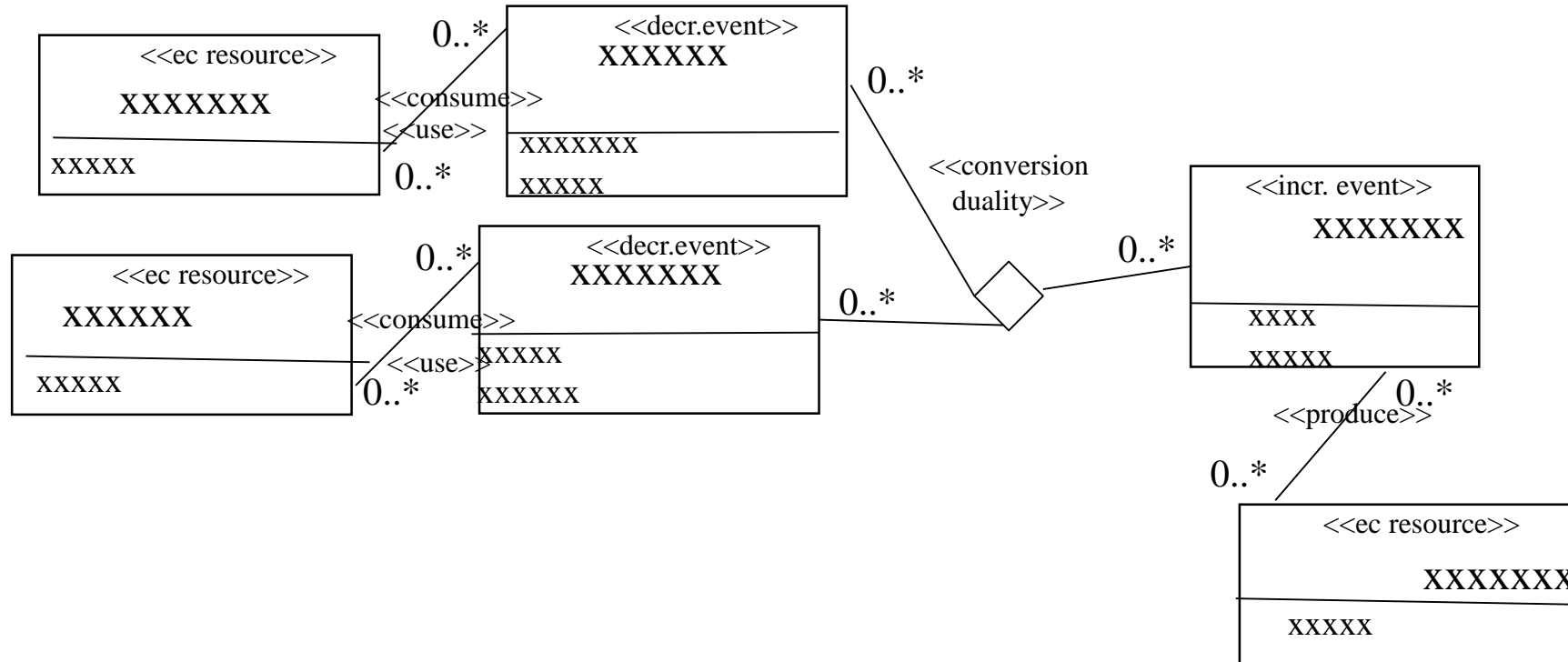
Question 4 (a, b and c) - REA model

- a) Construct an exchange diagram (including commitments and contracts) for case 1. above. Relate your diagram to REA using stereotypes.
- b) Construct an exchange diagram (including commitments and contracts) for case 2. above. Relate your diagram to REA using stereotypes.
- c) Identify a conversion process that can occur at Airbnb. Construct a diagram for this process. Relate your diagram to REA using stereotypes.

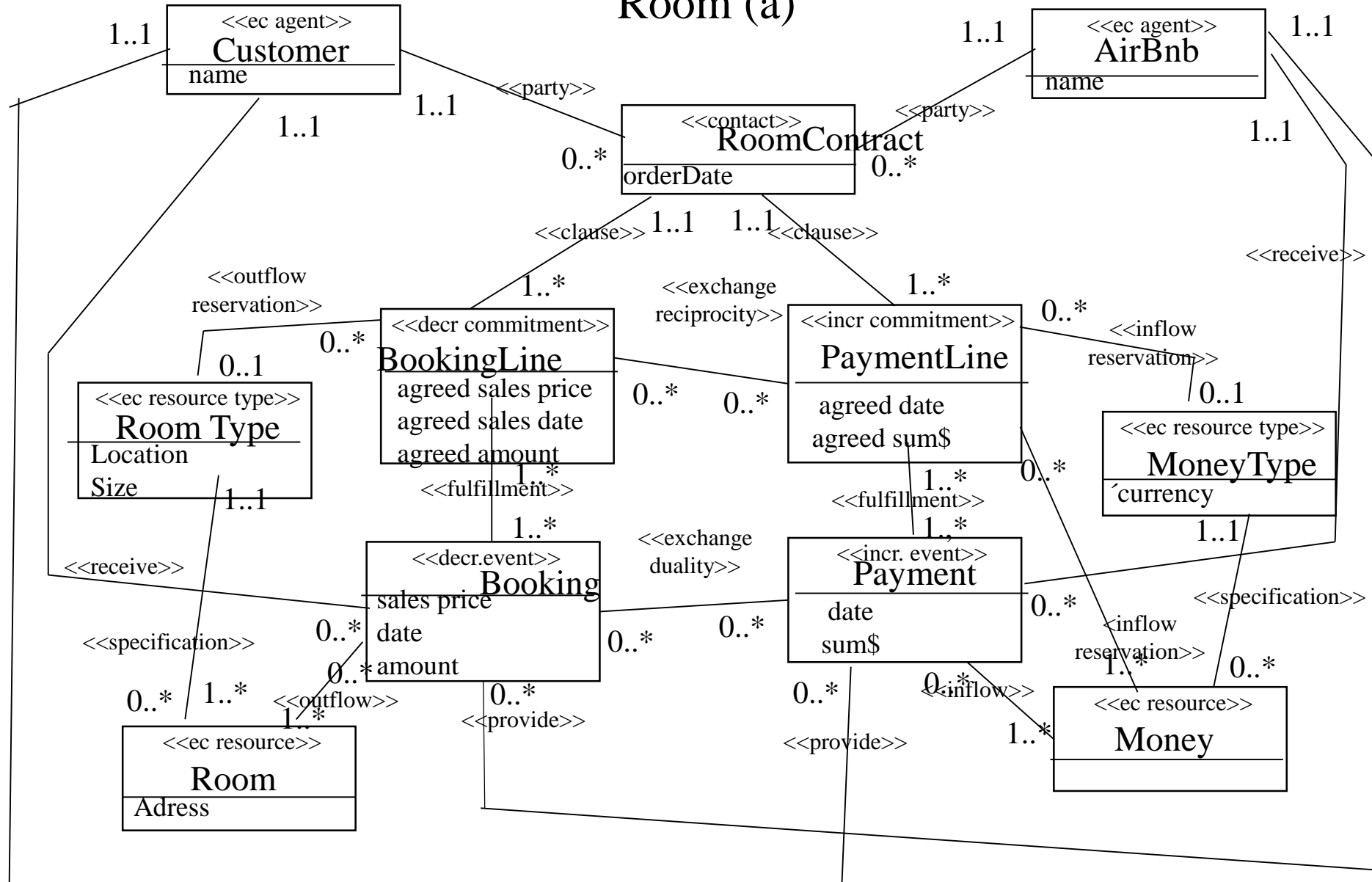
XXXXXXXX



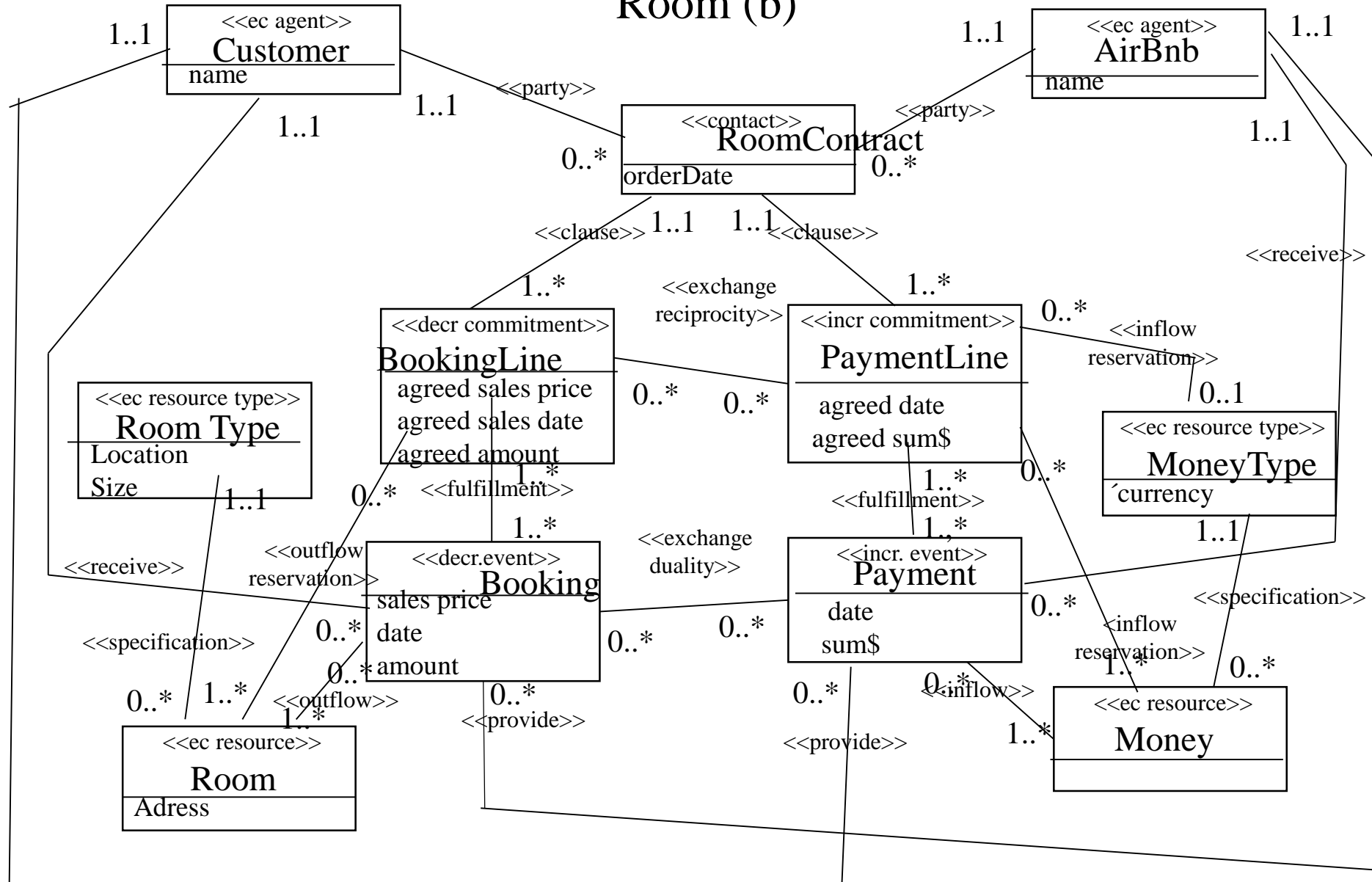
XXXXXX



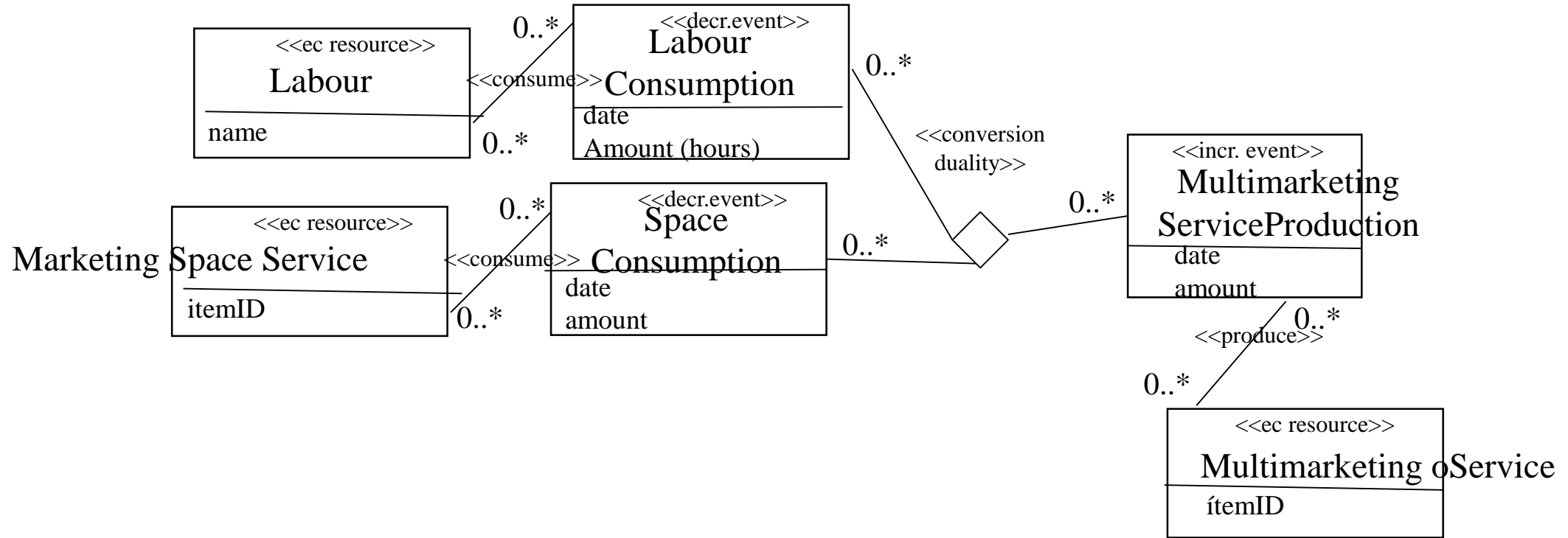
Hiring Room (a)



Hiring Room (b)

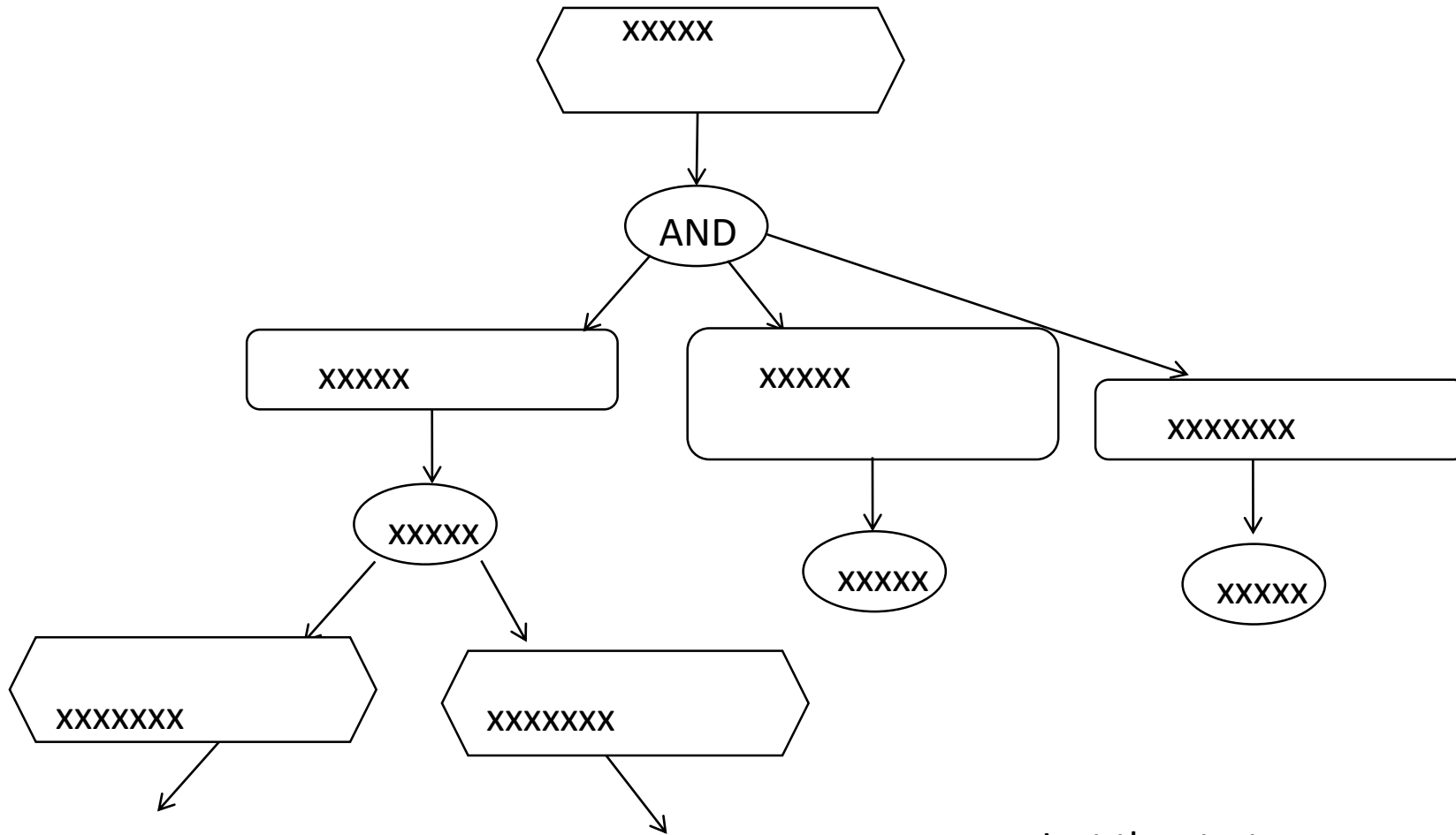


Multimarketing ServiceProduction



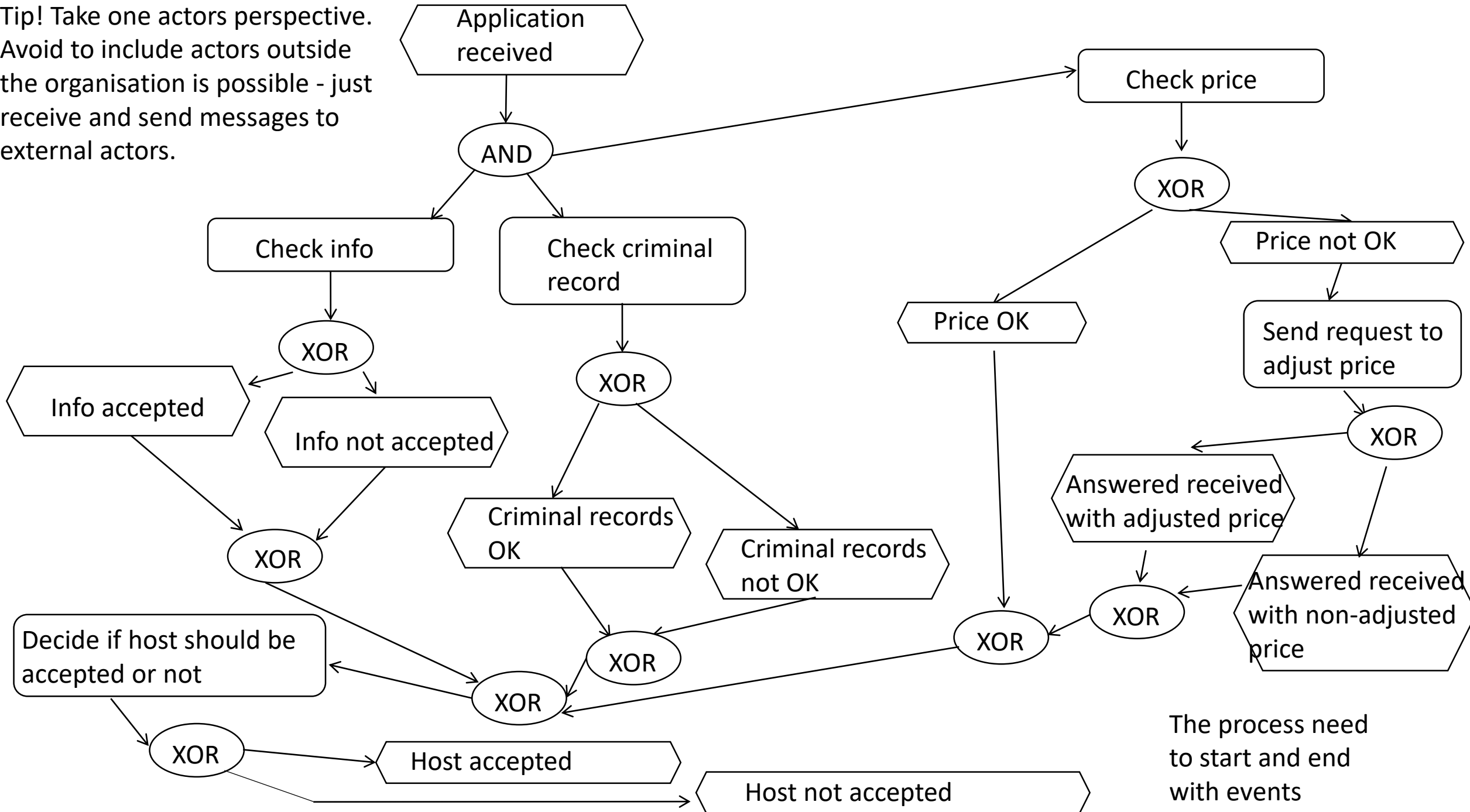
Question 4 (d) - EPC

- Airbnb uses the following process for accepting new hosts. First, a potential host sends in an application, which contains information about address, room size, bathroom availability, etc. The potential host also suggests a price. Airbnb checks that the information seems reasonable. Airbnb also checks that there are no criminal records. Furthermore, Airbnb checks the price. If it seems too low or high, Airbnb asks the potential host to adjust the price. And the potential host may or may not agree to the adjustment. Finally, Airbnb decides whether to accept the potential host or not.
- Construct an EPC diagram for the process above. The text is incomplete, so you need to make your own assumptions.



Just the start
of the EPC

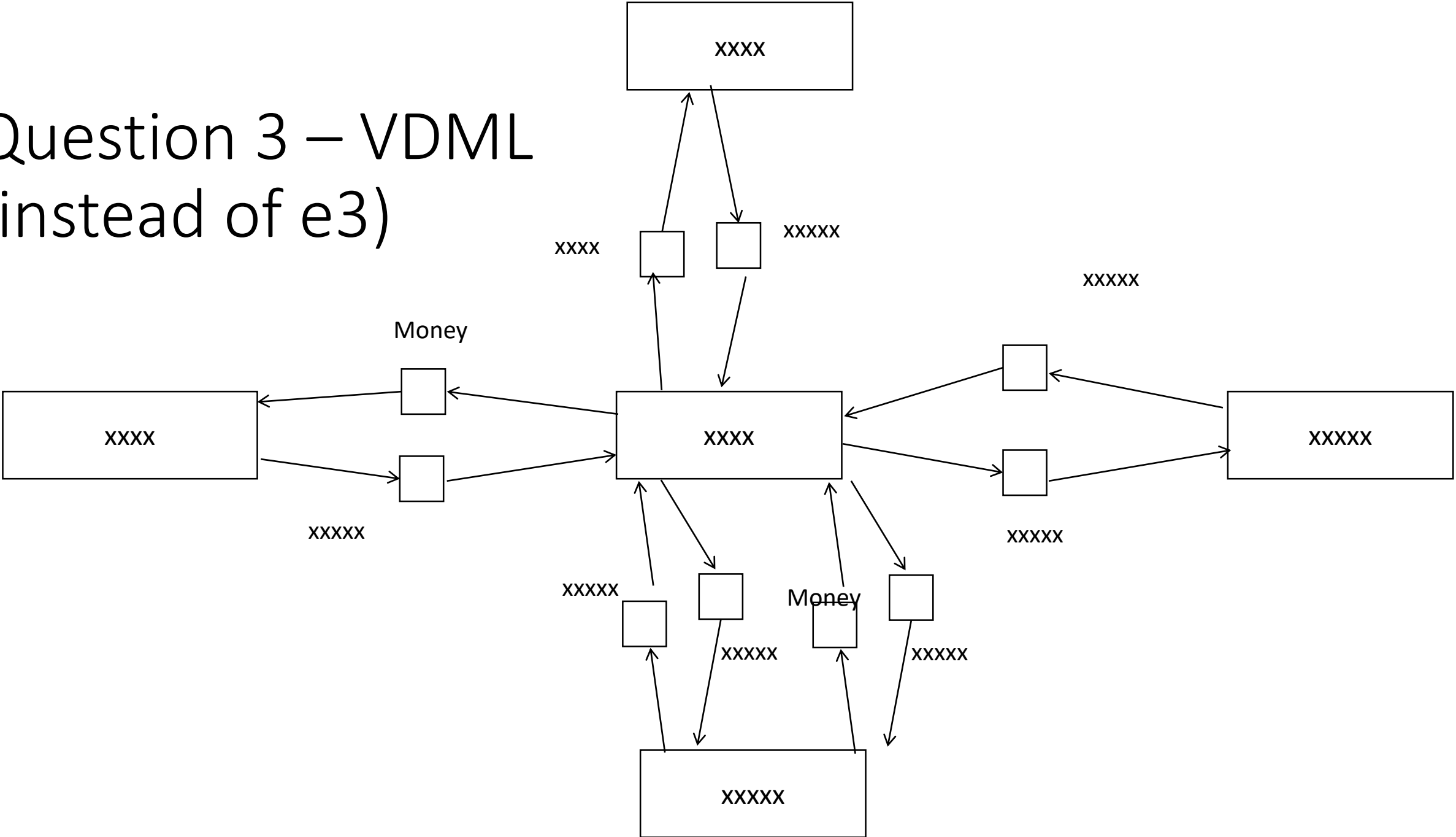
Tip! Take one actors perspective.
 Avoid to include actors outside
 the organisation is possible - just
 receive and send messages to
 external actors.



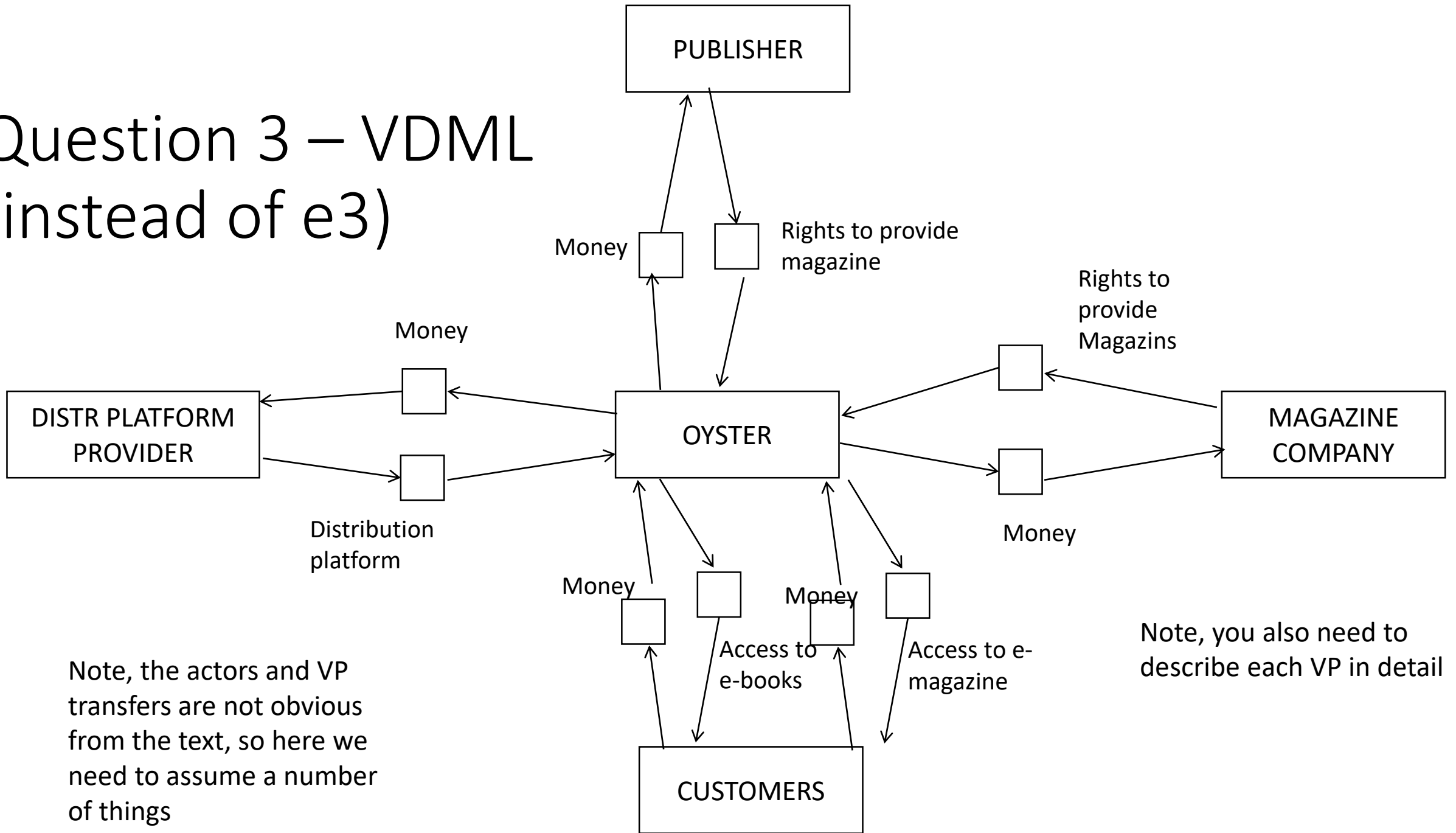
The process need
 to start and end
 with events

EXAM Oct 28 2014

Question 3 – VDML (instead of e3)



Question 3 – VDML (instead of e3)



Note, the actors and VP transfers are not obvious from the text, so here we need to assume a number of things

Note, you also need to describe each VP in detail

Question 4 - REA based conceptual model

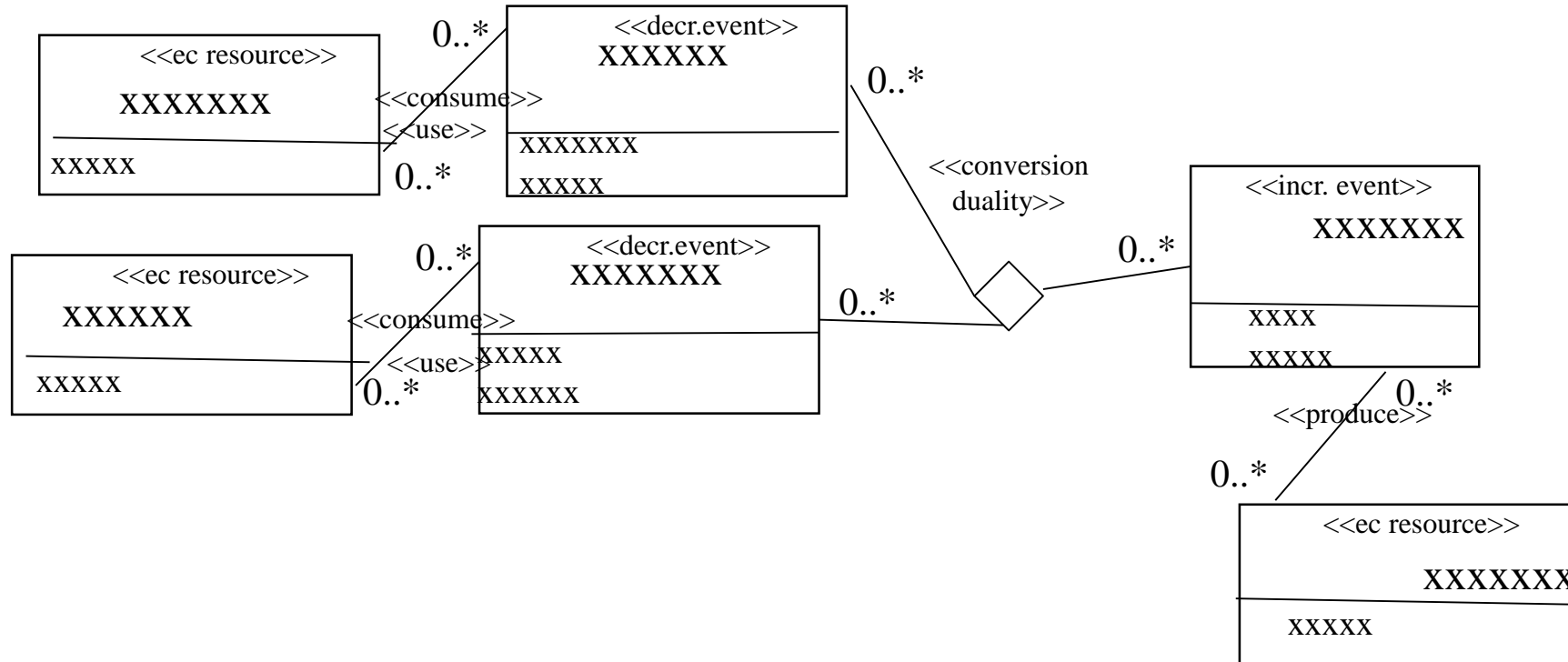
A company produces and sells jewelry, such as necklaces, earrings and bracelets. As it produces the jewelry itself, it needs to procure material, such as gemstones, coins and other precious material. It also needs to procure more inexpensive items, including glass, beads and wire. Identify at least two exchange processes and at least one conversion process for the company. Describe these processes by means of one (or several) class diagram(s) using the REA pattern. Make explicit which classes in your model that correspond to which classes in the REA pattern

Question 4 - REA based conceptual model

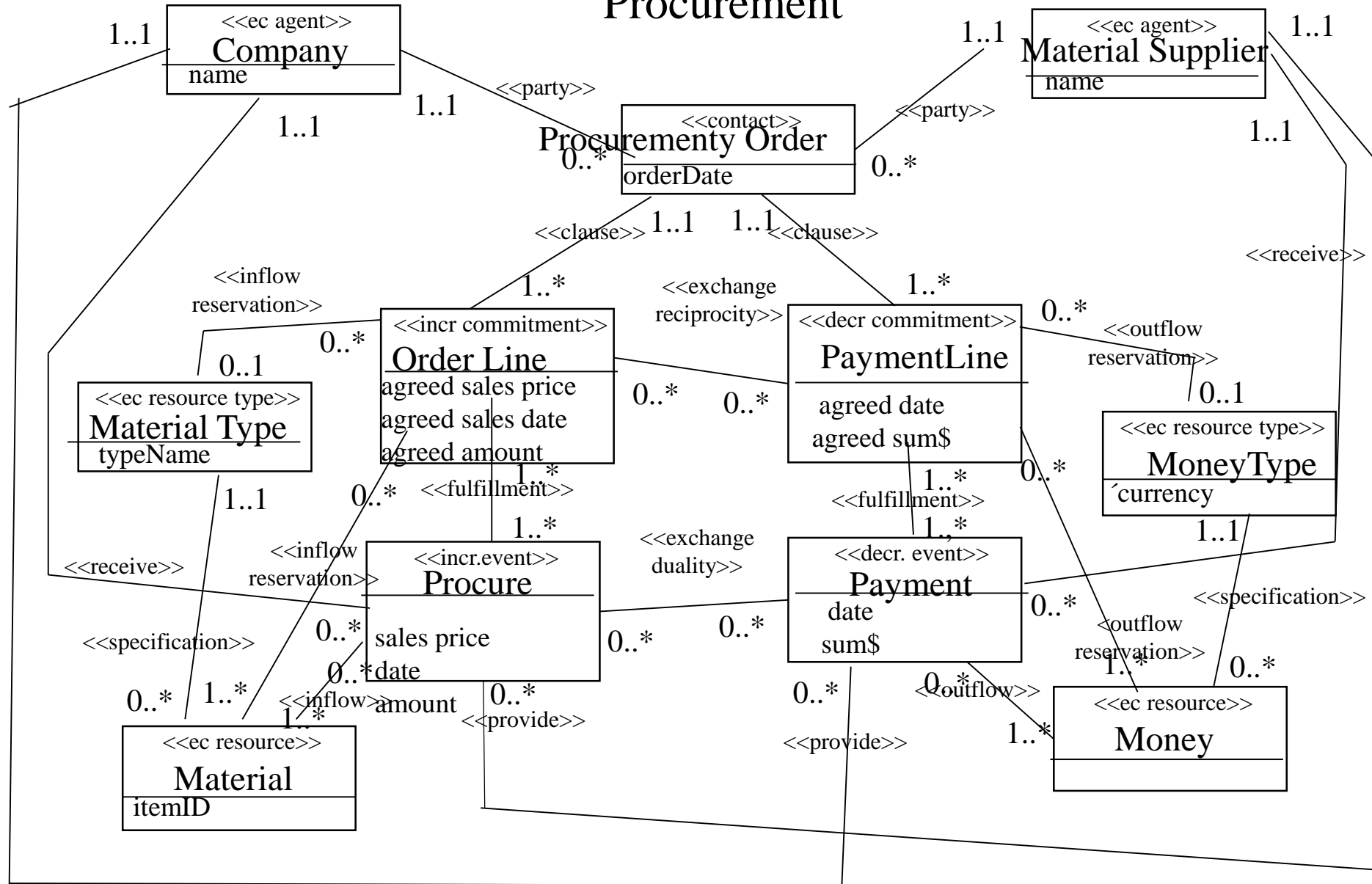
Your model must be able to handle the following information requirements:

- How many diamonds has the company purchased?
- How many customers have ordered earrings that cost more than 100 euros?
- How many necklaces have been produced during 2013?
- How many earrings with beads have been produced during 2013?
- Which is the most ordered necklace?
- How many suppliers have sold beads to the company?
- Which necklaces include beads that cost more than 10 euros each?
- Which purchase orders have not yet been fulfilled (i.e. the deliveries have not been made to the company)?

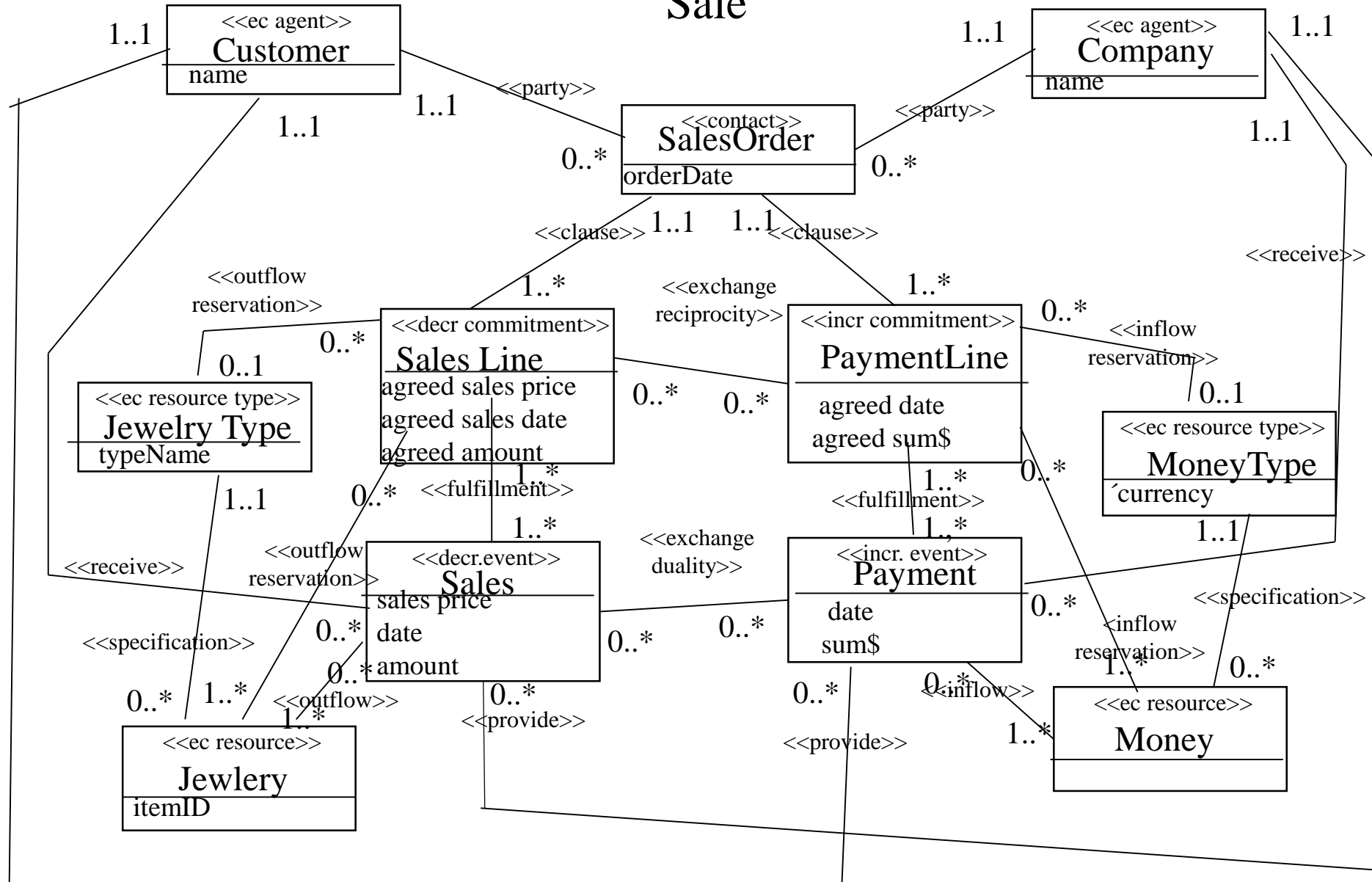
XXXXXX



Material Procurement



Jewelry Sale



Jewelry Production

