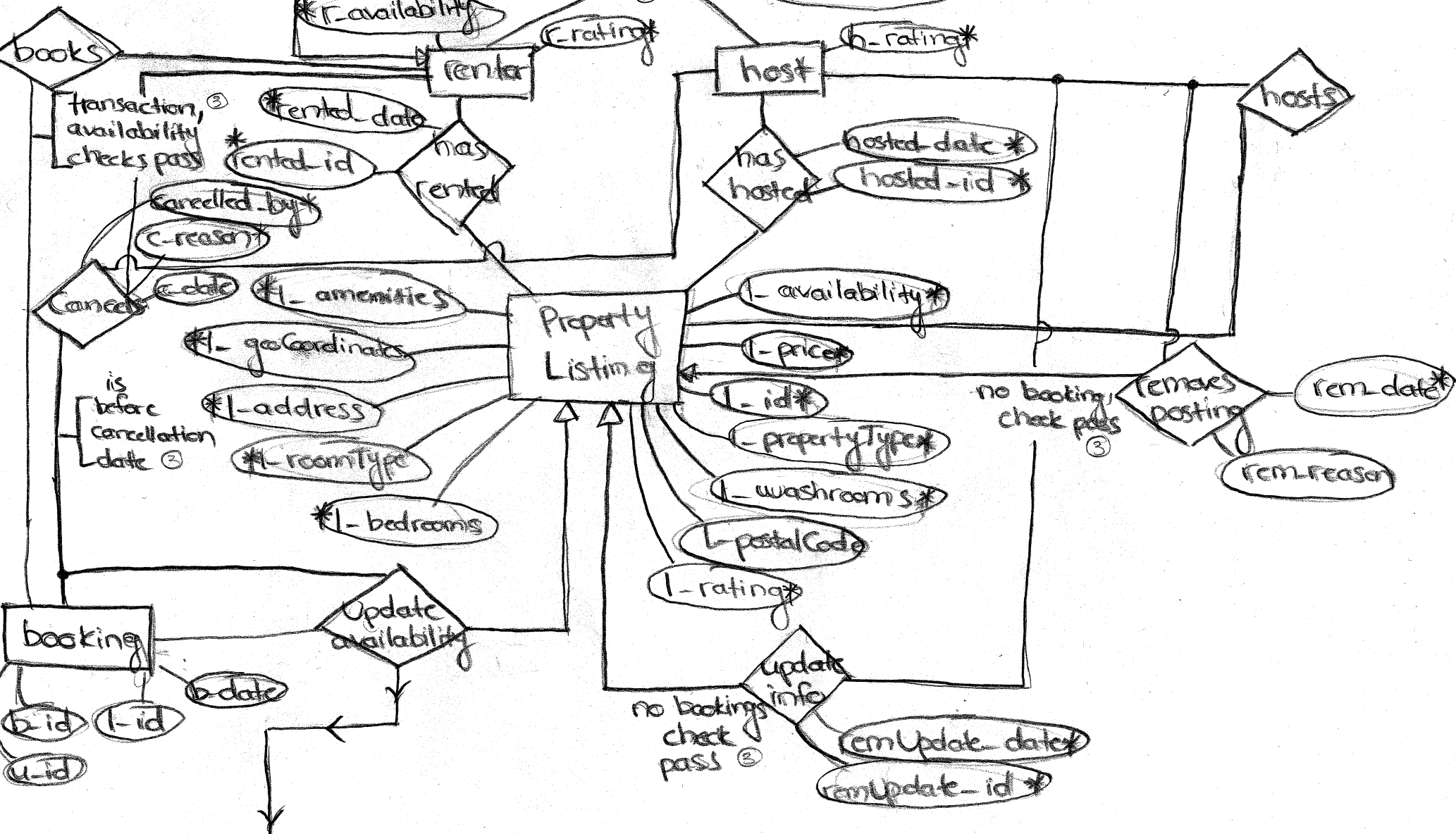


* - cannot be NULL

ER Diagram for Airbnb

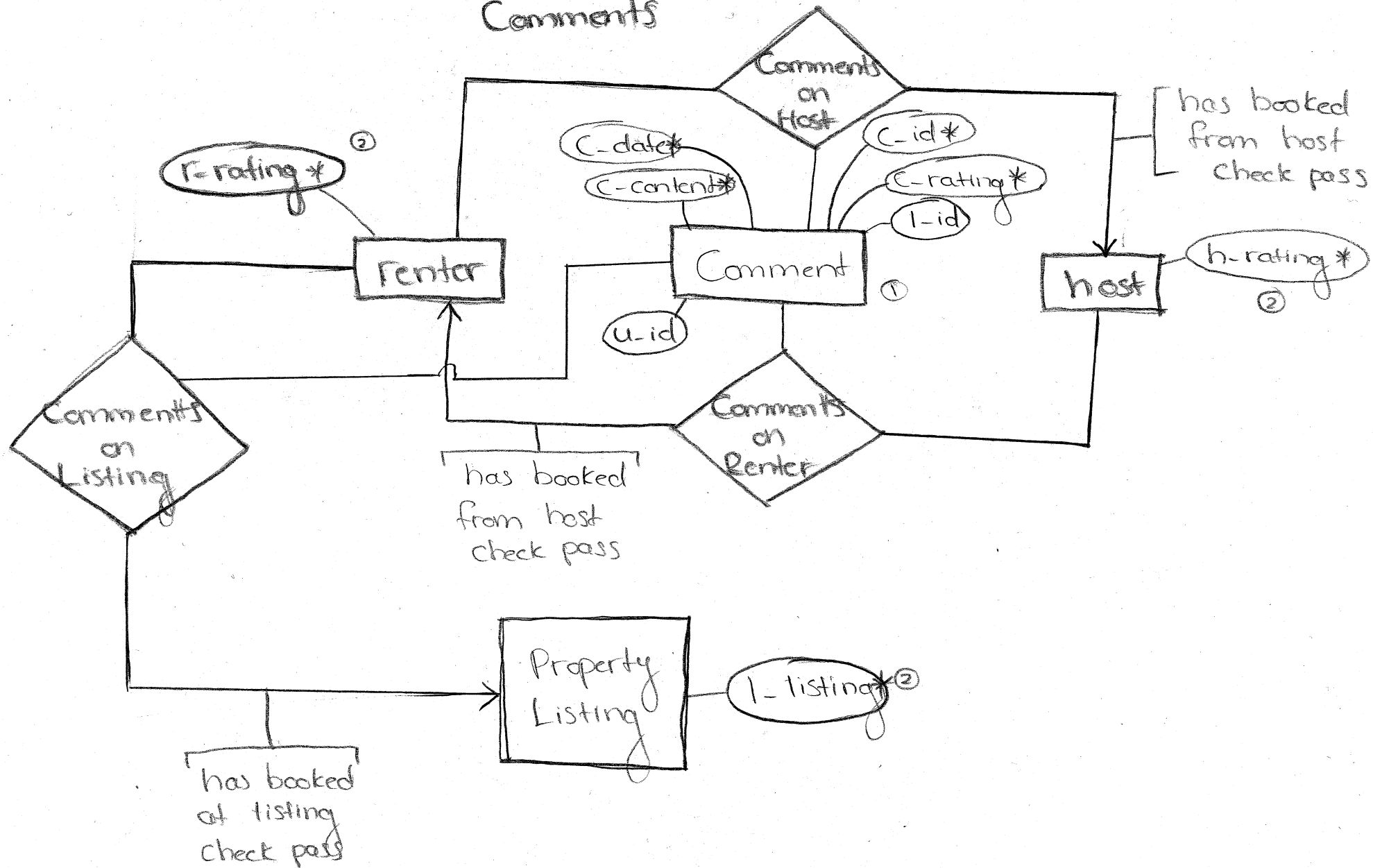
(Comments will be drawn on another diagram as this one is full.)



* - Cannot be null

Partial ER Diagram for Comments

rest of diagram on other sheet.



ER Diagram Details

Points of Interest for original E-R Diagram:

① User Creation: When someone is creating a user, they must provide the following data:

- first/last name
- Social Insurance Number (SIN)
- address
- E-mail
- date of birth
- Username and Password.

- The user's id will be automatically generated once the account has been created. All accounts must have a unique id, hence why it cannot be NULL.

- I chose to have the phone number optional, as some people may choose not to give it away. As a minimum, however, everyone must provide an email address so communication can be established.

- Occupation can be null since that information is private and not absolutely needed to apply for listings.

② ISA: A user may choose to be a renter or a host, but not both, for sake of simplicity. If a user wants to be both, they may create two separate accounts, one for renter and one for host.

③ Validation: Consider the following conditions:

- A renter should only be able to book a listing when:

- a. It is available at the wanted date
- b. Renter is free (does not have any other booking) on that date.

- A host cannot change availability (ie when it is booked) of listing when it is being used. This process is automatic but should be checked in order to make sure no mistake was made.

- A host cannot change a listing's information (ie price) when it is booked.

The above should be made sure they are satisfied before a transaction gets approved.

- Descriptions for Comments

E-R Diagram on next
page -

E-R Diagram Details (Continued)

Partial E-R Diagram for Comments:

Please note this diagram is intended as an extension to the original diagram, and should not be taken as a representation of the whole schema.

① Comment: I chose to make a comment object as listing all the attributes repeatedly for all 3 types of comments proved repetitive. Instead, I have linked all 3 relations (commenting on a host, commenting on a renter and commenting on a property listing) to the object as all 3 types of comments essentially have the same material. It just depends on where it's directed, in this case, according to the relation.

② When a check (see ③ on description page for the original diagram) is completed and approved, the rating of the entity is recalculated based on the rating the user provided. The user can rate a host even if they have appointed and cancelled, but only if the booking has been cancelled by the host. This way, hosts cannot get away from posting fake ads, and cancelling all bookings straight away when they are appointed.