Hotel-ERM

A database has to be implemented for a hotel business. Draw the following facts in an ER diagram in Chen notation and create a relational model No zero values are allowed. Use the attribute names in brackets. **Hotel rooms** are uniquely identified by a number (NUMBER). It is also stored whether it is a single room or a double room (PERSONS). Each room is assigned to a **category**. **Categories** have a unique ID (ID) and a description (NAME). **Employees** are identified by a unique social security number (SVNR). Name (NAME) and address (ADDRESS) of the **employee** are also known. Room attendants and **caretakers** are **employees**. The system stores which room is cleaned by which room attendant. For **caretakers**, a subject area (e.g. sauna, masseur, swimming pool, kitchen, ...) is also stored. A **guest** has a unique customer number (CustomerNR), a name, (NAME) and an address (ADDRESS). A guest can make several **bookings**. A **booking** depends on the **room** and on a date of arrival (FROM) and departure (TO). The hotel also offers service **packages**. A unique designation (DESIGN) and a price (PRICE) are stored. There are basic packages and luxury packages. A luxury package contains at least one or more basic packages. Any number of different service packages can be ordered for each booking, whereby the quantity ( QUANTITY) must also be noted. For each service package, one or more carers are responsible.

Relational Model:

**Entity primary key** secondary key

**room** (**number:int**, persons:int, cleaner:SVNR:int)

**category** (**ID:int**, description:varchar(32))

**employee** (**SVNR:int**, is\_room\_attendant:boolean, is\_caretaker:boolean, subject\_area:varchar(32))

**person\_detail** (SVNR:int, customer\_nr:int, name:varchar(32), address:varchar(32), phone\_number:int, email:varchar(32), bank\_details:varchar(32))

**guest** (**customer\_nr:int**)

**booking** (room(number:int), date\_of\_arrival:date, date\_of\_departure:date, quantity\_of\_packages:int)

**package** (**designation:varchar(32)**, price:int, is\_basic:boolean, is\_luxury:boolean, consist\_of:designation:varchar(32), caretaker:SVNR:int)