The owner of a veterinary clinic wants to create a database to store information about all veterinary services performed. After some research he came up with the following requirements:

- For each admitted animal, its name, breed (if any) and owner must be stored. Each animal should be given an unique numeric identifier.
- For each owner, its name, address and phone number should be stored. An unique numeric identifier should also be generated for each one of them.
- An animal might be owner-less. This happens frequently as the clinic often rescues abandoned dogs from the streets in order to treat them and get them new owners.
- It should be possible to store information about a specific breed even if no animals of that breed have been treated at the clinic.
- Each appointement always has a responsible physician. All appointements start at a certain date and time; and are attended by an animal (and of course its owner).
- For each physician, his name, address and phone number should be stored. An unique numeric identifier should also be generated for each one of them.
- In an appointement, several medical conditions might be detected. Each condition has a common name and a scientific name. No two conditions have the same scientific name.
- It should be possible to store information about the most common conditions for each different breed in the database.

@startuml

```
class Animal {
    +int id
    +String name
    +Breed breed
    +Owner owner
}

class Owner {
    +int id
    +String name
    +String address
    +String phoneNumber
}

class Breed {
    +String name
    +String description
    +MedicalCondition commonConditions
}

class Appointment {
    +DateTime dateAndTime
    +Animal animal
    +Physician responsiblePhysician
}
```

```
class Physician {
    +int id
    +String name
    +String address
    +String phoneNumber
}

class MedicalCondition {
    +String commonName
    +String scientificName
}

Owner "0..*" -- "0..*" Animal : owns >
Animal "1" -- "0..*" Appointment : attends >
Physician "1" -- "*" Appointment : responsible >
Breed "1" -- "0..*" Animal : characterizes >
Breed "0..*" -- "0..*" MedicalCondition : hasCommonConditions >

@enduml
```