Vending Machine
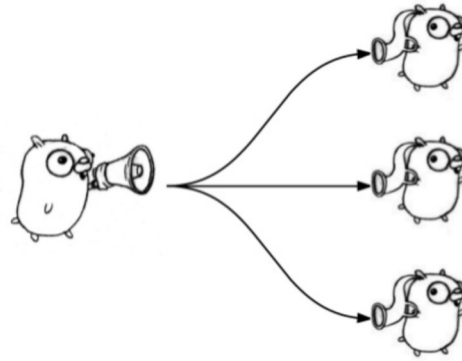
Vending Machine

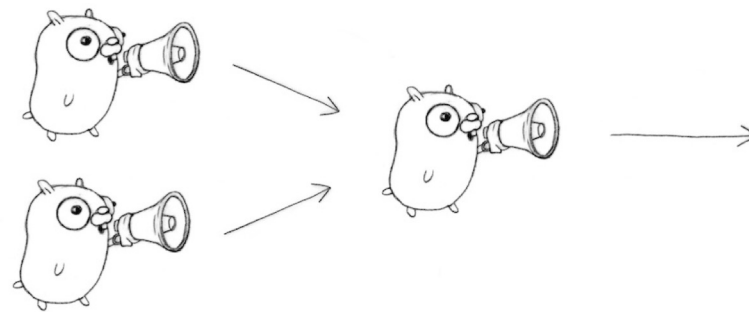Vending Machine

Vending
Machine

Vending
Machine

Vending
Machine

Golang: Fan-out

Fan-in

Load balancer

Classical Inheritance

```
                          ┌──────────┐
                          │  Animal  │
                          └──────────┘
                               ▲
              ┌────────────────┴────────────────┐
        ┌──────────┐                       ┌──────────┐
        │ Mammals  │                       │  birds   │
        └──────────┘                       └──────────┘
              ▲                                  ▲
      ┌───────┼───────┐                  ┌───────┼───────┐
  ┌──────┐ ┌──────┐ ┌──────┐        ┌─────────┐ ┌──────┐ ┌────────┐
  │ Man  │ │Chimp │ │ cat  │        │ Sparrow │ │ swan │ │ cuckoo │
  └──────┘ └──────┘ └──────┘        └─────────┘ └──────┘ └────────┘
                 ...                              ...
```
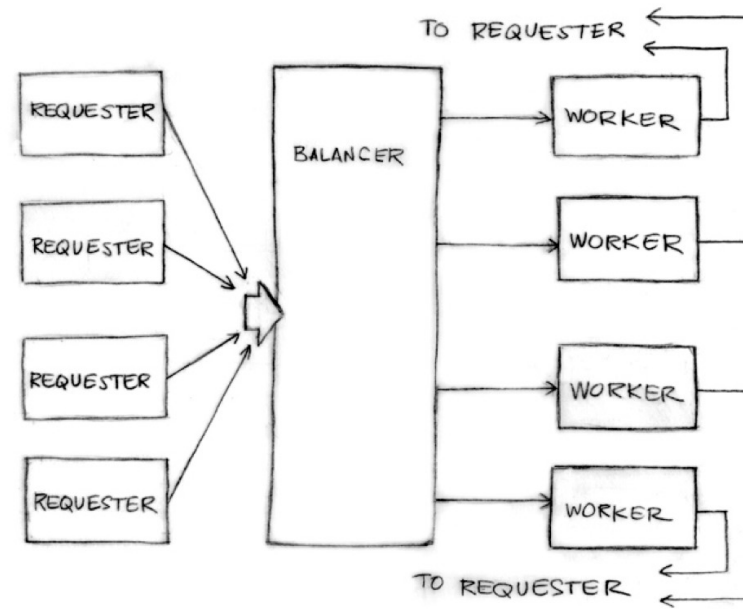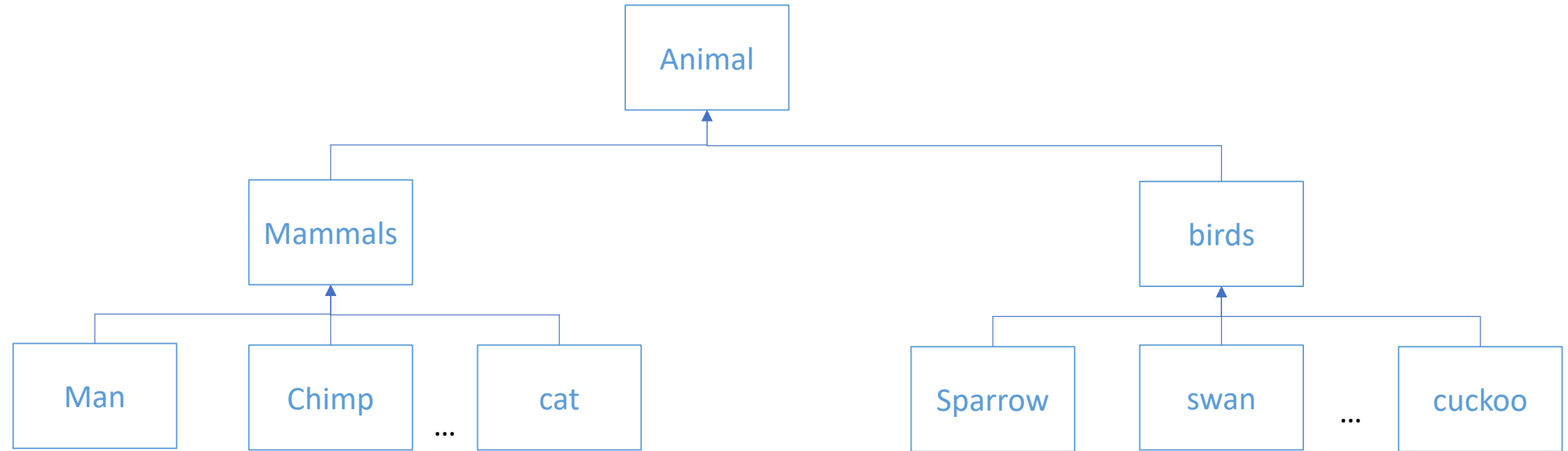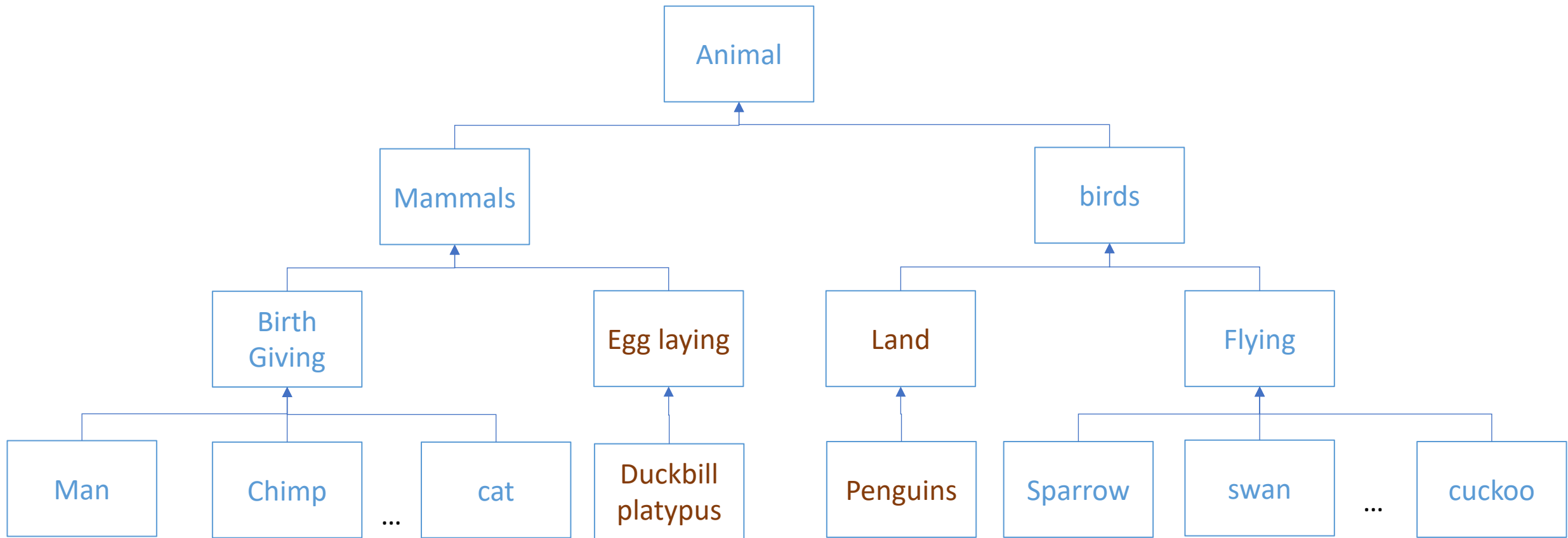
If we consider properties like laying eggs and flying.

Where to fit the exceptions like Duckbill platypus, Penguins & Bats?
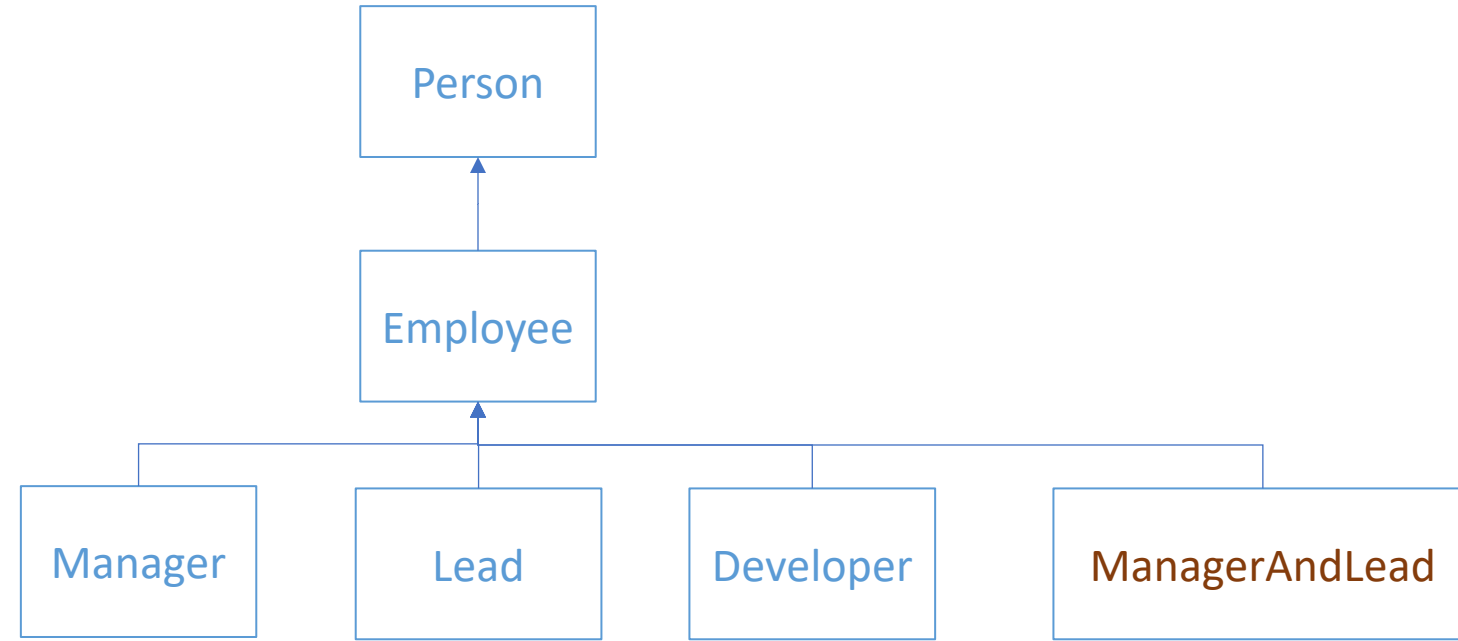
Classical Inheritance

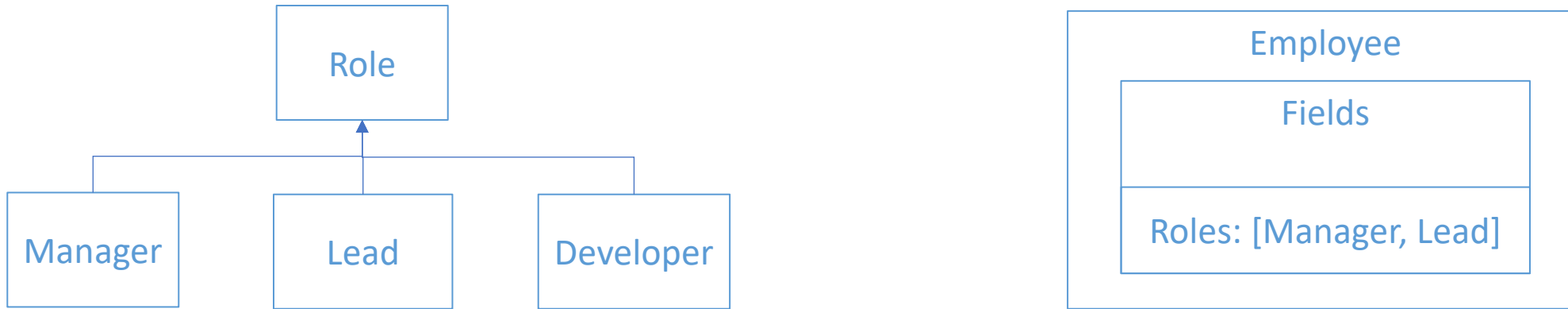The special cases will not have too many children. Probably only one most of the times.

*Still, we have **bats** that are flying mammals*

Classical Inheritance

```
                    ┌──────────┐
                    │  Person  │
                    └──────────┘
                         ▲
                    ┌──────────┐
                    │ Employee │
                    └──────────┘
                         ▲
        ┌────────────────┼────────────────┬──────────────────┐
  ┌──────────┐    ┌──────────┐    ┌──────────┐    ┌──────────────────┐
  │ Manager  │    │   Lead   │    │ Developer│    │  ManagerAndLead  │
  └──────────┘    └──────────┘    └──────────┘    └──────────────────┘
```

Instead, we can have

Flat single level inheritance is not a problem like deep multi level inheritance is.

Since above is like an Enum.

Interfaces are also single level.

Interfaces are way to see things under a collective umbrella based on certain traits that they exhibit or implement

https://talks.golang.org/2012/splash.article#TOC_15.