

### Ingegneria del Software

Corso di Laurea in Informatica per il Management

### Analysis model - domain model

#### Davide Rossi

Dipartimento di Informatica Università di Bologna



# The domain model

In OOA the domain (object) model represents the **concepts** in the problem domain, their **features** and how they **correlate** with each other.

It is a visual dictionary for the problem domain.

# Designing the domain model

- The resulting artifact is (usually) a UML class diagram
- The most basic approach to identify the **classes** starts with the analysis of all **nouns and noun phrases** that are part of the problem description (this is also where having a glossary comes in handy)
- Verbs are then analyzed to identify responsibilities and collaborations
- These steps are then iterated to refine the model (decompose classes, aggregate them, transform classes into properties, ...)

## Exercise

The City of Duckburg activates an initiative that allows dogs hosted in the kennels of the district to enjoy a walk in the Sunday afternoons. Citizens interested in taking custody of the animals register their availability specifying the Sunday and the area, among the many that make up the Municipality, in which they are willing to collect a dog (there are several kennels located in various areas). Given this availability the kennels assign dogs to citizens creating appointments which are then communicated to the volunteers.