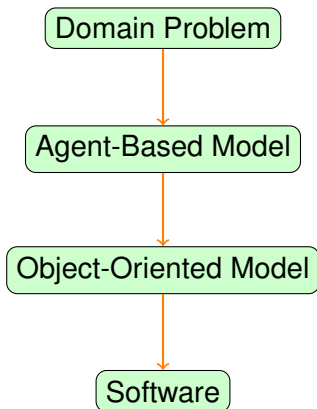




# Agent-Based Programming

- Starting point
  - Model
  - Individual as agent
- Objective
  - Simulation of the model
  - Implementation of each agent
- Agents as objects
  - autonomous agents give autonomous objects

# Modelling Sequence



# Agents

## Objects and Inheritance

Agent

Fox

Rabbit

# Agents and Environment

Agent

Environment

- Discrete time
  - each agent act at each time step
- Do all agents act simultaneously?
  - ... or do they take turns.
- Simultaneous action is harder to implement
  - conflicting actions must be resolved

# Summary

- Agents map well into an object-oriented model
- Additionally
  - 1 model the environment
  - 2 agent-environment interaction
  - 3 clarify time – simultaneous or sequential actions