

# Team-Based learning 4

(Note: there are no videos to watch)

# Question 1 – ODD protocol

Below you see a text fragments, extracted from a published ODD protocol. Identify where (in which part of the ODD protocol) you would place this text.

*The model involves a population of reactive agents located in a simplified urban environment (composed of buildings and roads) over which a toxic cloud gradually spreads. The individual behaviours depend both on their degree of assimilation of the official emergency regulations and, for some of them, on their propensity to be influenced by their neighbours.*

it describes entities, state, and scales

does not state how it works

Entities, state variables, and scales.

process overview and scheduling  
basic principles

## Elements of the updated ODD protocol

1. Purpose
2. Entities, state variables, and scales
3. Process overview and scheduling
4. Design concepts
  - Basic principles
  - Emergence
  - Adaptation
  - Objectives
  - Learning
  - Prediction
  - Sensing
  - Interaction
  - Stochasticity
  - Collectives
  - Observation
5. Initialization
6. Input data
7. Submodels

# Question 2 – ODD protocol<sup>sensing</sup>

Below you see a text fragments, extracted from a published ODD protocol. Identify where (in which part of the ODD protocol) you would place this text.

*Agents perceive their environment. They can situate themselves and have a limited visibility of neighbouring individuals. The C2 agents who run away from the cloud know the position of the source of the cloud and know the direction they have to take to run away from it. The C1 agents also know the location and take shelter as quickly as possible.*

process overview and scheduling

adaptation

sensing

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# Question 3 – ODD protocol

initialization

Below you see a text fragments, extracted from a published ODD protocol. Identify where (in which part of the ODD protocol) you would place this text.

*The simulation starts with simple default parameters. The user selects the spatial configuration (Figure 2) and chooses between several environments: a random built-up environment (around 10% density), a regular grid (Manhattan lattice) or a pre-existing raster data set.*

observation?

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