AgentCubes (tm) Tips and Techniques

Scalable Game Design Project

Thought Amplifier

AgentSheets®

Funded in part by National Science Foundation
AgentCubes Construction Tips - 1

- Use methods and the ‘hand’ tool to change state
AgentCubes Construction Tips – 1a

- Use methods and the ‘hand’ tool to control simulation
AgentCubes Construction Tips – 1b

- Use methods and the ‘hand’ tool to control simulation
AgentCubes Construction Tips – 1c

- Use agent attribute to manage initialization.
AgentCubes Construction Tips – 2a

- Use methods and the ‘hand’ tool to display status – let AgentCubes do the counting for you!
AgentCubes Construction Tips – 2b

- Use methods and the ‘hand’ tool to display status

```plaintext
if
then
  set @Healthy_Persons to agents_with_shape("Healthy_Person")
  set @Sick_Persons to agents_with_shape("Sick_Person")
  set @Total_Persons to agents_of_type("Person")
  set @City_Agents to agents_of_type("City")
  set @Actual_Density to @total_persons/@city_agents
  show message
  ~@healthy_persons Healthy Persons.
  ~@sick_persons Sick Persons.
  ~@total_persons Total Persons.
  ~@city_agents City Agents. Actual density: ~@actual_density
```
AgentCubes Construction Tips – 2c

- Use methods and the ‘hand’ tool to display status

45.0 Healthy Persons. 3.0 Sick Persons. 48.0 Total Persons.
144.0 CityAgents. Actual density: 0.33333334
AgentCubes Construction Tips – 3a

- Use an agent to create more agents – note blank rule
AgentCubes Construction Tips - 3b

- Use an agent to create more agents – new world 36 x 64
AgentCubes Construction Tips - 3c

- Use an agent to create more agents – place 1 agent in lower left corner of the world
AgentCubes Construction Tips - 3d

- Use an agent to create more agents – a few ‘steps’ of the simulation
AgentCubes Construction Tips - 3e

- Use an agent to create more agents – run simulation – world construction completes
AgentCubes Construction Tips -3f

- Remember to place one monitor agent in the world!
AgentCubes Construction Tips – 4a

- Use methods and the ‘hand’ tool to clear agents
AgentCubes Construction Tips – 4b

- Use methods to generate random density of agents.
AgentCubes Construction Tips – 4c

- Use methods to generate random density of agents.
AgentCubes Construction Tips – 4d

- Use methods to generate random density of agents.
AgentCubes Construction Tips – 4e

- Use methods to generate random density of agents.
AgentCubes Construction Tips – 4f

- Use methods to generate random density of agents.
AgentCubes Construction Tips – 4g

- Use methods to generate random density of agents.