GAMA 1.6.1

A spatially explicit multi-scale agent-based simulation platform

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http://gama-platform.googlecode.com

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Qué es?

gama-platform
Agent-based, spatially explicit, modeling and simulation platform

- Una plataforma de modelado y simulacion, espacialmente explicita, basada en agentes.

- GAML agent-oriented language (Java/Smalltalk)

- Crear instancias de los agentes de cualquier tipo de datos y simulaciones a gran escala.

- Visualización 2D/3D

Donde?

- **Desarrollado por varios equipos de la unidad de investigación internacional UMMISCO del IRD/UPMC**

- **Año: 2007**

- **1.6.1**

- **Activo**

Instalación

- Muy sencillo.

- Basado en eclipse

- Tutorial

- Multiplataforma

7 cycles elapsed

Gama Projects ✕

- ▷ 📂 Road Traffic
- ▲ 📂 Stupid Model
  - ▷ 📂 data
  - ▲ 📂 models
    - 📄 result.csv
    - 📄 Stupid Model 01.gaml
    - 📄 Stupid Model 02.gaml
    - 📄 Stupid Model 03.gaml
    - 📄 Stupid Model 04.gaml
    - 📄 Stupid Model 05.gaml
    - 📄 Stupid Model 06.gaml
    - 📄 Stupid Model 07.gaml
    - 📄 Stupid Model 08.gaml
    - 📄 Stupid Model 09.gaml
    - 📄 Stupid Model 10.gaml
    - 📄 Stupid Model 11.gaml
    - 📄 Stupid Model 12.gaml
    - 📄 Stupid Model 13.gaml
    - 📄 Stupid Model 14.gaml
    - 📄 Stupid Model 15.gaml
    - 📄 Stupid Model 16.gaml
- ▷ 📦 Shared models (0)
- ▷ 📦 User models (0)

Console ✕

stupid_display ✕

Parameters ✕

Model StupidModel1_model *Parameters for experiment 'stupidModel'*

Random number generator   'mersenne' ▾   *among [cellular, xor, java, mersenne]*

Random seed ☑ Define: 0.0   ▬ ✚

Agent Inspector ✕

Agent *bug79*

name	'bug79'
host	StupidModel1_model0
shape	{59.5,27.5,0.0} as geometry
location x	54.5 y 23.5 z 0.0
my_place	cell2354
highlight	☑ true

🔍 Inspect   ✏ Change...
🔍 Inspect   ✏ Change...

🌐 GAMA   📄 Stupid Model 01.gaml ✕

Run : Experiment stupidModel   In project: ▾

```
1  model StupidModel1
2
3  global torus: true{
4      init {
5          create bug number: 100 {
6              my_place <- one_of(cell);
7              location <- my_place.location;
8          }
9      }
10 }
11
12 grid cell width: 100 height: 100 neighbours: 4 {
13     list<cell> neighbours4 <- self neighbours at 4;
```

128M of 361M 🗑

```
 1  model StupidModel1
 2
 3⊖ global torus: true{
 4⊖     init {
 5⊖         create bug number: 100 {
 6              my_place <- one_of(cell);
 7              location <- my_place.location;
 8          }
 9      }
10  }
11
12⊖ grid cell width: 100 height: 100 neighbours: 4 {
13      list<cell> neighbours4 <- self neighbours_at 4;
14  }
15
16⊖ species bug {
17      cell my_place;
18⊖     reflex basic_move {
19          cell destination <- shuffle(my_place.neighbours4) first_with empty(each.agents);
20⊖         if (destination != nil) {
21              my_place <- destination;
22              location <- destination.location;
23          }
24      }
25⊖     aspect basic {
26          draw circle(0.5) color: #red;
27      }
28
29  }
30
31⊖ experiment stupidModel type: gui {
32⊖     output {
```

Conclusiones

- Actualizado

- Complejo

- No muchos usuarios

- Multiplataforma

G A M A is developed by several teams under the umbrella of the IRD/UPMC international research unit UMMISCO:

- MSI Research Team, Vietnam National University, Hanoi, Vietnam (2007 – 2014)
- UMR 6228 IDEES, CNRS/University of Rouen, France (2010 – 2014)
- UMR 5505 IRIT, CNRS/University of Toulouse 1, France (2010 – 2014)
- DREAM Research Team, University of Can Tho, Vietnam (2011 – 2014)
- UMR 8623 LRI, CNRS/University Paris-Sud, France (2011 - 2014)

Recent activity

Revision 11718: fix a bug concerning the advanced driving skill.
de patrick.taillandier - 15 Oct 2014
Changed Paths: ...

Revision 11717: [No log message]
de alexis.drogoul - 12 Oct 2014
Changed Paths: Modify   /branches/GAMA_CURRENT/msi.gama.ext/images/splash.png [No log message]

Revision 11713: Add a new operator to create explicit geometry collections and fix a bug concern
de patrick.taillandier - 10 Oct 2014
Changed Paths: Modify   /branches/GAMA_CURRENT/msi.gama.core/.settings/org.eclipse.jdt.launching.prefs ...

Revision 11711: add a new replace operator for string
de patrick.taillandier - 08 Oct 2014
Changed Paths: Modify   /branches/GAMA_CURRENT/msi.gama.core/src/msi/gaml/operators/Strings.java add a new replace ...

Revision 11710: remove get_URL_content, this feature exist in URL_file, by accessing its content
de hqnghi88 - 06 Oct 2014
Changed Paths: Modify   /branches/GAMA_CURRENT/msi.gama.core/src/msi/gaml/operators/Files.java remove ...

Revision 11709: add get_URL_content operator . get contents of URL as String
de hqnghi88 - 04 Oct 2014
Changed Paths: Modify   /branches/GAMA_CURRENT/msi.gama.core/src/msi/gaml/operators/Files.java add get_URL_content ...

Revision 11708: 1. SocketSkill - communicate online through socket TCP/IP 2. URLFIle - read file

Preguntas?

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