Virus Simulator

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Run the simulation and the SimulationDriver will guide you to enter the values of the following parameters:

* Width & Length of grid
* Number of people in the room

Then it will ask if you want to set unique parameters or use the default ones for (default values in parenthesis):

* Duration of the simulation (500)
* Number of initially infected people (1)
* How infectious the virus is (60%)
* How fatal the virus is (4%)
* Number of people that take protective measures (50%)
* Time to recover people and disinfect rooms (50)
* How likely are people to move (70%)

Note that:

* It's half as likely for a room to get infected than a human.
* It's half as likely for a human to get infected from being in an infected room than human to human transition.
* Protective measures make chances of getting infected 1/9 of normal.
* Diseased people are removed from the grid.
* People can also move diagonally

Graphics:

Humans:

Without protective measures:

With protective measures:

|  |  |  |
| --- | --- | --- |
| Healthy  Human | Infected  Human | Recovered  (Immune)  Human |

|  |  |  |
| --- | --- | --- |
| Healthy  Human | Infected  Human | Recovered  (Immune)  Human |

Rooms:

|  |  |
| --- | --- |
| Normal | Infected |

Console Output:

Machine generated alternative text:
OF 
THE 20 INITIAL PEOPLE: 
3 
: GOT INFECTED 
2 
. RECOVERED 
ø 
. PASSED AWAY 
17 : 
NEVER GOT INFECTED 

Limitations:

* Can't have more people than spaces on the grid
* Can't have more infected people than people in general
* Can't have more people that take measures than initially healthy people
* People can't move outside the gird