Simoji Quickstart Guide

Simoji is a tool for anyone to build quick shareable simulations using 😃 's. You write your simulations in a simple language using mostly Emojis and then click play. Simoji is open source and just a few days old.

Example Program

```
comment Define an ant agent
🐜
 comment Ants move one space per tick
 speed 1
 comment Ants pick up food.
 onHit
  🥖
   pickItUp
 onTick
  turnRandomly

comment Define an ant hill
⛰️
 comment On each tick, with 5% odds
 onTick 0.05
  comment Spawn an ant
  spawn 🐜


🥖

comment Set up the board.
insert 3 🥖
insert 1 ⛰️
```

Concepts

Board

The Board is the rectangle on which your simulation takes place. It has a width and height and is divided into a grid.

Agents

Agents are the key concept in Simoji. Everything you see on your board is an agent. In the code above, the ant, hill, and food are all agent types.

Attributes

Agents can have attributes. You can define your own. Some are built in like:

- speed
- health
- angle
- force

Some attributes are booleans with only 2 states like:

- solid
- bouncy

Events

Events are things that can happen to agents.

- onTick
- onHit
- onTouch
- onDeath

Commands

- kickIt
- replaceWith
- spawn
- remove
- pickItUp
- turnRandomly
- turnToward

Board Setup

You can setup your board with the following commands.

- insert
- paste

Agent Palette

You can drop new Agents onto your board using the Agent Palette on the right side of your screen.

Tree Notation

Simoji the language is a TreeLanguage. There are no visible syntax characters. Indentation is used for parent/child relationships.

Keyboard shortcuts

Combo	Command
?	Toggle Help
Spacebar	Play/Pause

Sharing Your Simulations

At the top of the page you should see a link that you can copy and paste to share your sim. When you update your simulation code that link will update.

Getting Involved

The source code for Simoji and all development happens on Github.

Printable Version

This cheat sheet is also available as a printable version.

Article source