

Editing is always on



Sugar, the user interface for the One
Laptop per Child (OLPC)
(Also for the PC on a USB)

Software Freedom Day
Melbourne 18/9/2010

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sugar on a stick



Sugar

www.sugarlabs.org

A Python GUI
On a Linux base

Activities are written in Python too

Some critical code is compiled C

Educational software, primarily for the OLPC (\$100 laptop)
but available on other platforms, notably SOAS (Sugar on
a stick) live USB



<http://laptop.org/en/children/countries/>

OLPC Uruguay	420,000	Spanish
OLPC Peru	290,000+260,000	Spanish
OLPC Rwanda	120,000	English
OLPC G1G1	78,500	English
OLPC Argentina	60,000	Spanish
OLPC Mexico	50,000	Spanish
OLPC Birmingham	15,500	English
OLPC Haiti	13,700	Kreyol
OLPC Small groups	13,500	English
OLPC Mongolia	10,100	Mongolian

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Getting your copy

<http://wiki.sugarlabs.org/go/Downloads>

Live CD or USB is approximately a 500MB download

Downloads

[english](#) | [español](#) | [français](#) | [Norsk](#)

Sugar on a Stick, a Sugar Learning Platform
that you can carry in your pocket.



[\[show ▼\]](#)

sugar on a stick

Sugar on a Stick/Mirabelle



[Sugar on a Stick Mirabelle](#) released 25 May 2010

Are you a Windows, Macintosh, or GNU/Linux user?

1. Following **Download**,
2. *Sugar on a Stick* must be **Installed**,

See specific instructions for your operating system
by clicking its icon below:



3. and then **Booted**,
4. before it is ready to be **Used**.

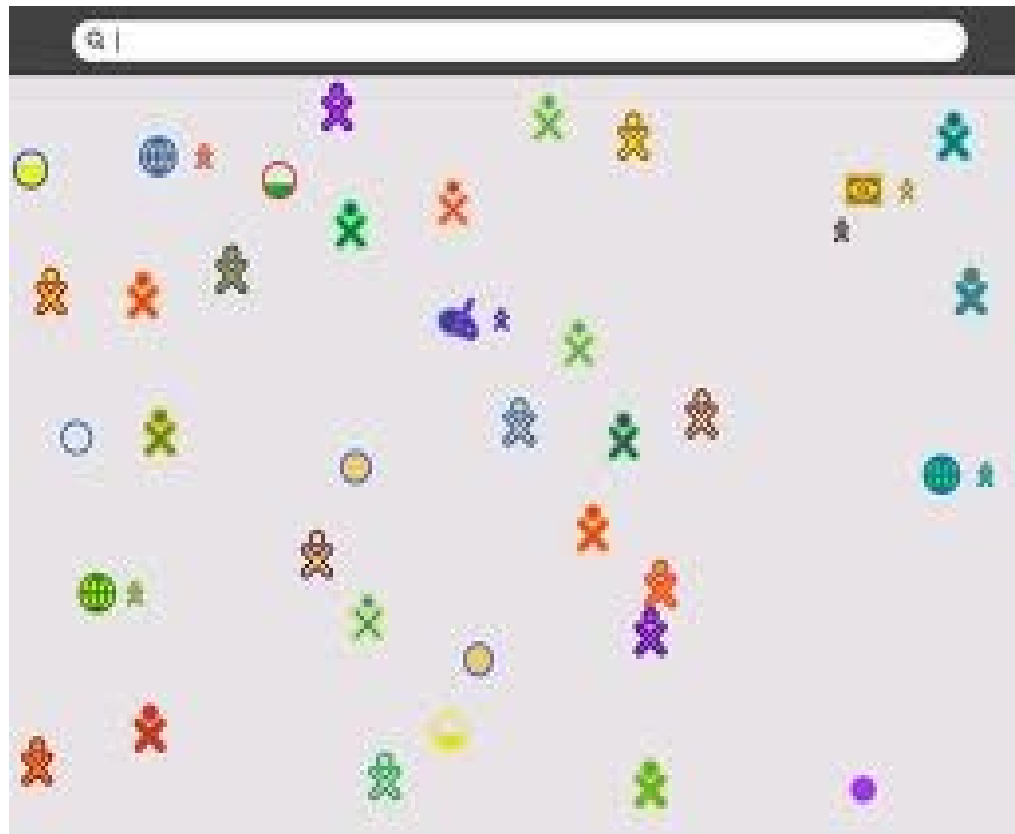
Collaborative

Learning is collaborative

Hardware mesh network supports collaboration

Most Activities (applications) can be collaboratively edited

The neighbourhood below shows a XO for each nearby laptop and a number of Activities which users have started and enabled for sharing



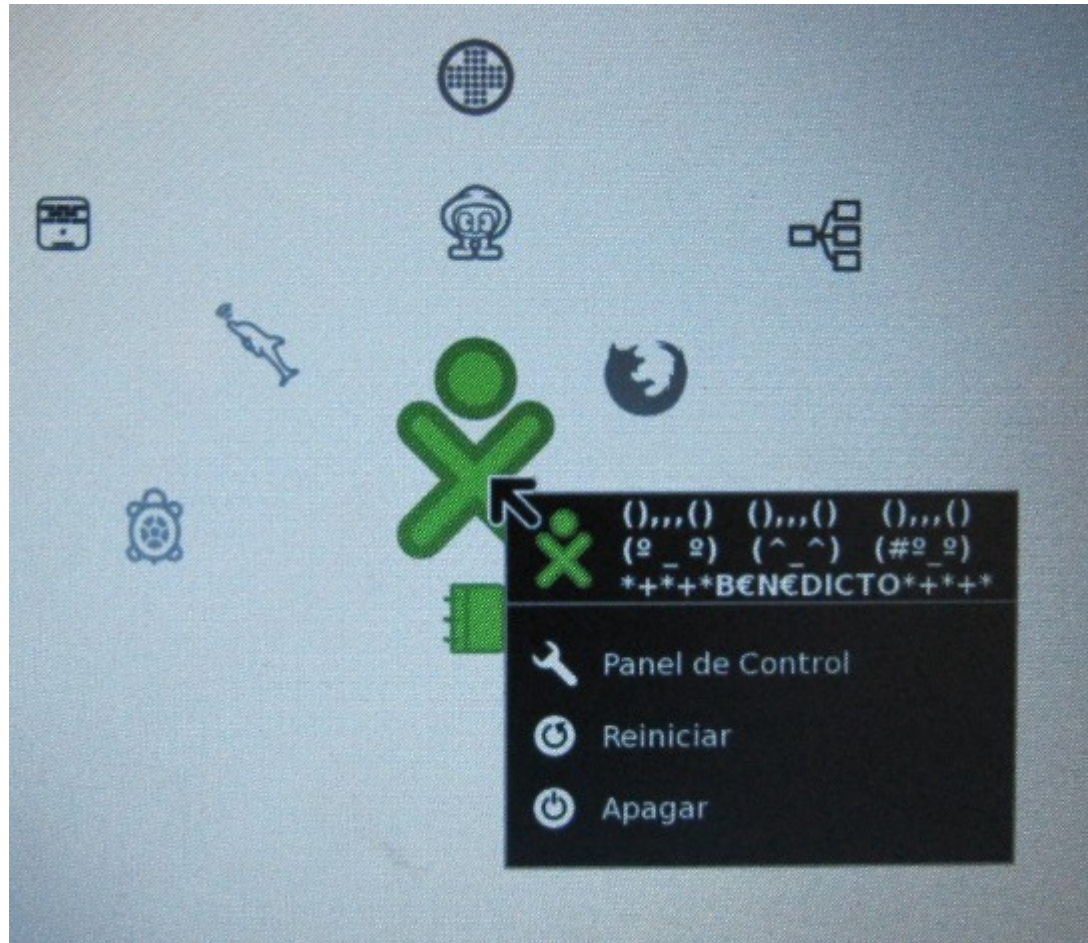
Open source



- Designed to be hacked
- Written in Python
- Open source
- View source
- Editing tools
- Entire laptop easily reflashed

Students are invited to personalise their laptops

to take ownership of their learning



Hardware too! Designed for repair by children.

Yes they can!

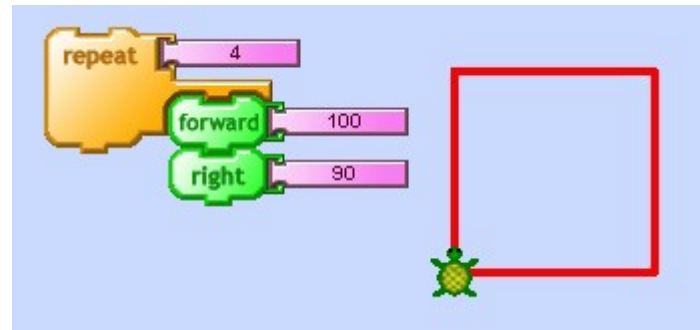


Many educational Activities (programs or applications)



The 'Home' view

Turtle Art is one of the learning Activities which illustrates Sugar's approach to learning



Get the Sugar live CD/USB at <http://wiki.sugarlabs.org/go/Downloads>

Or

Run Turtle Art on Linux/Gnome

<http://activities.sugarlabs.org/en-US/sugar/addon/4027>

(the *.xo bundle is just a zip archive)

Or

Similar Mac/PC Java version www.turtleart.org

Project based learning

'Learning by doing'

'Low entry high ceiling' – easy to get started but enough to keep engaged

Low entry:

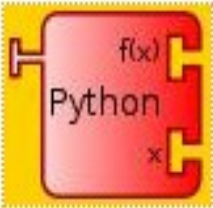
Everything auto saves to the Journal


Tagging but no directories

Single clicks only, no double click

High ceiling:

Infinitely hackable

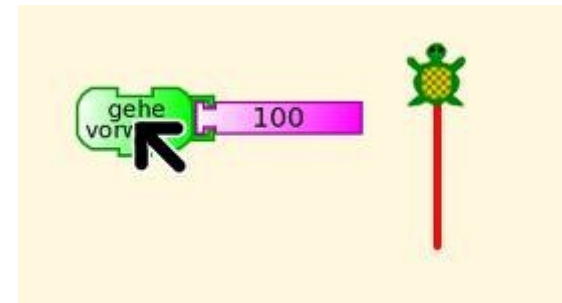
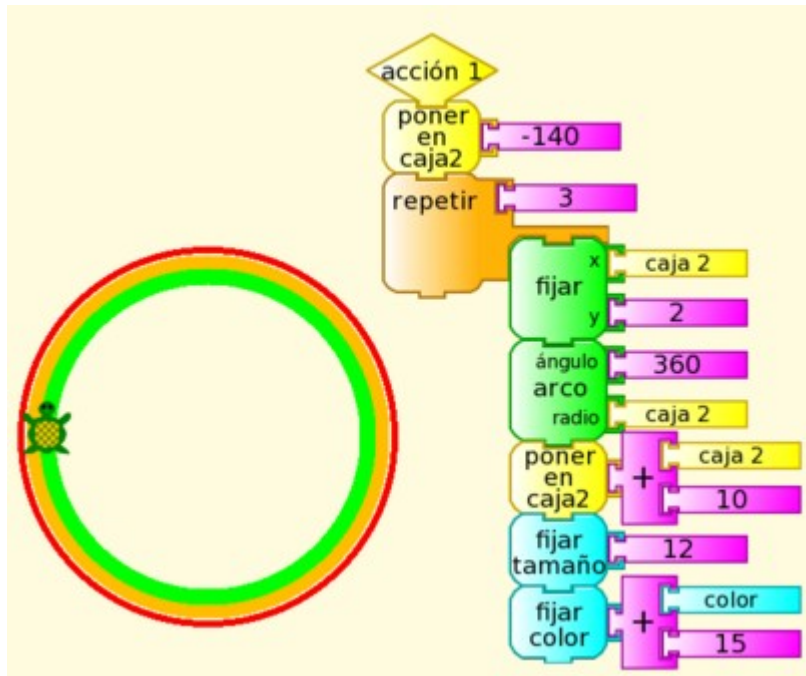
- the Python function block  adds a single line of code,

- the Python code block  supports multi line code.


Bridging from drag and drop to Python in Turtle Art

Localised into many languages

Turtle Art in Spanish and German below




Open translation, jump onto the Pootle server
<http://translate.sugarlabs.org/>
and contribute some strings



This is the translation server for Sugarlabs. Information on how to use this server can be found in the [Translation Team page](#). This server uses Pootle, a free and open source software to enable volunteers to easily translate software into their own lang. If you have any questions, please refer to the [FAQ](#) (Frequently asked questions). For those wanting to jump in as quickly as possible a Pootle primer can be downloaded from [here](#).

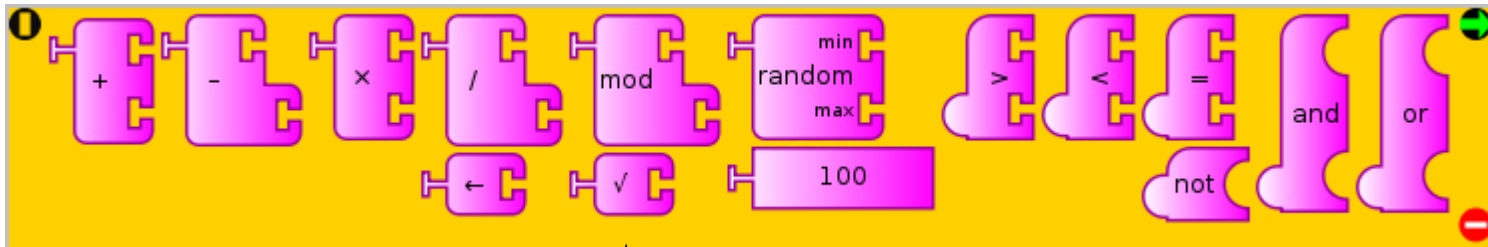
Languages

Language	Overall Completion	Last Activity
Afrikaans		2010-05-30 22:30 (Heleen.Mills)
Albanian		2010-02-19 17:15 (cjl)
Amharic		2010-09-03 15:14 (dbekele)
Arabic		2010-03-28 01:38 (cjl)
Arabic (Syrian Arab Republic)		
Armenian		2010-08-03 12:04 (rubina)
Aymara		2010-07-06 16:46 (rmonroy)
Basque		
Bengali		2010-08-22 03:40 (sayamindu)
Bengali (India)		2010-01-15 22:27 (sayamindu)
Bislama		
Bosnian		
Bulgarian		2010-01-22 21:19 (cjl)
Catalan		2010-05-15 13:36 (ellibre)
Chinese (China)		

Responsive

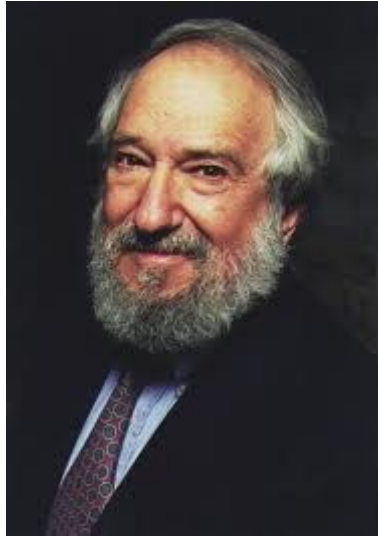
A teacher in Latin America asked for a square root function in Turtle Art

Within days one was added



For teachers -

Sugar is based on constructionist learning principles



Papert coined the word Constructionism

Constructionism--the N word as opposed to the V word--shares constructivism's connotation of learning as "building knowledge structures" irrespective of the circumstances of the learning. It then adds the idea that this happens especially felicitously in a context where the learner is consciously engaged in constructing a public entity, whether it's a sand castle on the beach or a theory of the universe.

Or more simply, the learner is actively involved in their learning, learning is constructed inside their head rather than transferred as a complete thing and

this learning can be constructed while creating something to share

Getting involved

Testing
Debugging
Translating
Writing educational content
Writing Activities
and more

<http://wiki.sugarlabs.org/go>

<http://lists.sugarlabs.org/listinfo/iaep>

<irc://irc.freenode.net#sugar>

<http://www.sugarlabs.org/>

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