A photograph of a steep, green mountain slope. A narrow, light-colored path or stream bed winds its way down the hillside, dotted with small rocks and patches of dark soil. The upper part of the slope is covered in dense green grass, while the lower slopes show more exposed rock and scree. The sky above is a clear, pale blue.

Smalltalk - Historia

Smalltalk que usaremos

- CuisUniversity:
 - <http://www.cuisuniversity.org/>
- Basado en Cuis:
 - <https://github.com/Cuis-Smalltalk/Cuis-Smalltalk-Dev>

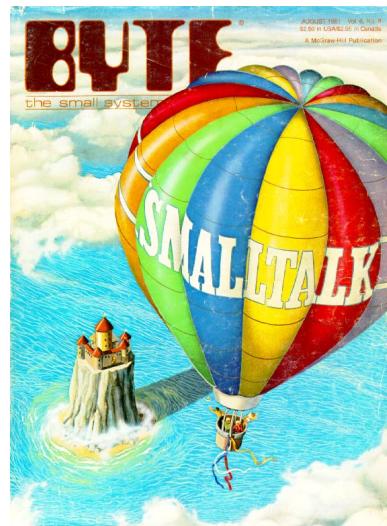
Historia

➤ Historia

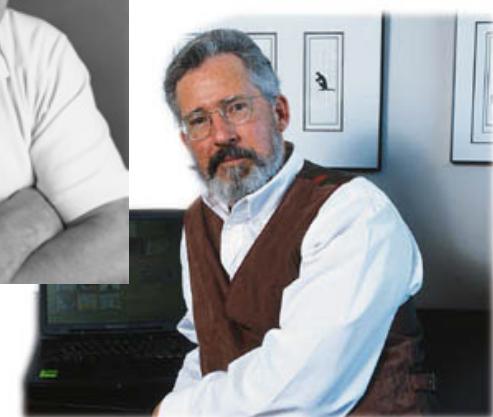
- Simula 67 (Nygaard y Dahl)
 - Previo al paradigma Estrucuturado
 - *Goto Considered Harmfull* – '68
 - Structured Programming – '71
(using Simula 67 as prog. lang.!!)

➤ Smalltalk

- Alan Kay
- Dan Ingalls
- Adele Goldberg



Dahl and Nygaard at the time of Simula's development



Smalltalk

DynaBook



Augment Children
Comprehension

Smalltalk
(72,74,76,78,80)

Simula 67

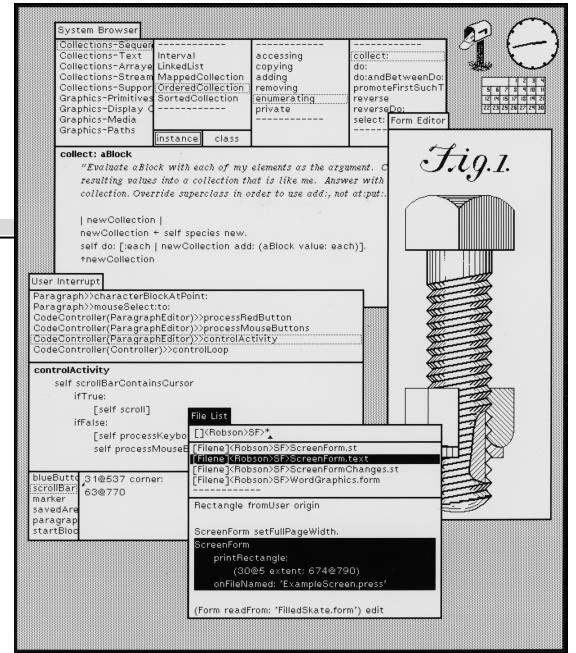
Lisp

Flex Machine

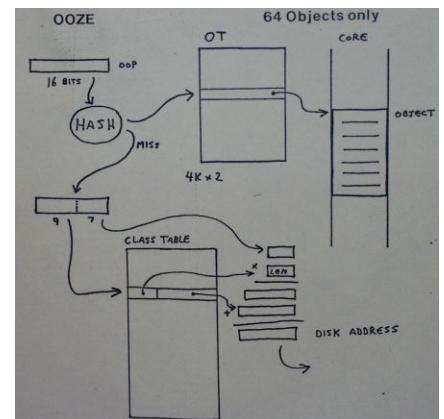
Object Oriented

GUI - IDE

VM



➤ <http://www.youtube.com/watch?v=AuXCc7WSczM>





A black and white photograph of Steve Jobs, co-founder of Apple. He is wearing a dark suit, a white shirt, and a dark tie. He is looking directly at the camera with a slight smile. The background is blurred, showing what appears to be a large screen or a wall with text. In the upper left corner of the image, there is a semi-transparent white box containing the text "APPLE'S BID TO STAY IN THE BIG TIME".

APPLE'S BID TO STAY IN THE BIG TIME

Libros

- Dealers of Lightning: Xerox PARC and the Dawn of the Computer Age
<https://www.amazon.com/Dealers-Lightning-Xerox-PARC-Computer/dp/0887309895>
- The Dream Machine: J.C.R. Licklider and the Revolution That Made Computing Personal
<https://www.amazon.com/Dream-Machine-Licklider-Revolution-Computing/dp/0670899763>
- The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution
<https://www.amazon.com/Innovators-Hackers-Geniuses-Created-Revolution/dp/1476708703>
- History of Programming Languages II
<https://www.amazon.com/History-Programming-Languages-Thomas-Bergin/dp/0201895021>

Papers y Revistas

- Byte Magazine, August 1981
<https://archive.org/details/byte-magazine-1981-08/mode/2up>
- The Early History of Smalltalk – Alan Kay
<http://worrydream.com/EarlyHistoryOfSmalltalk/>
- Design Principles Behind Smalltalk – Dan Ingalls
<https://www.cs.virginia.edu/~evans/cs655/readings/smalltalk.html>
- Back to the Future: The story of Squeak
https://www.vpri.org/pdf/tr1997001_backto.pdf
- The Evolution of Smalltalk from Smalltalk-72 through Squeak - Daniel Ingalls
(por salir en la HOPL IV)

Videos

- The Dynabook/Past, Present and the Future
 - Parte 1: <https://www.youtube.com/watch?v=7RI4Zx3pg2Y>
 - Parte 2: https://www.youtube.com/watch?v=TvHAcfFE9_k
- Yesterday's Computer of Tomorrow: The Xerox Alto | Smalltalk-76 Demo
https://www.youtube.com/watch?v=NqKyHEJe9_w

Filosofía de Smalltalk

- Ambiente de Aprendizaje, de Investigación
- Basado en las ideas de Piaget (constructivismo) y Bruner
- Se prioriza la investigación propia, aprender descubriendo, viendo lo que hizo otro
- ¡Todo el Código Fuente disponible desde los '70!

Filosofía de Smalltalk

- Principios de diseño:
 - Feedback Inmediato
 - Bret Victor: Inventing on principle
 - » <http://vimeo.com/36579366>
 - Simple
 - Consistente
 - Mucha importancia a la interacción Hombre-Máquina

Instalación

CuisUniversity

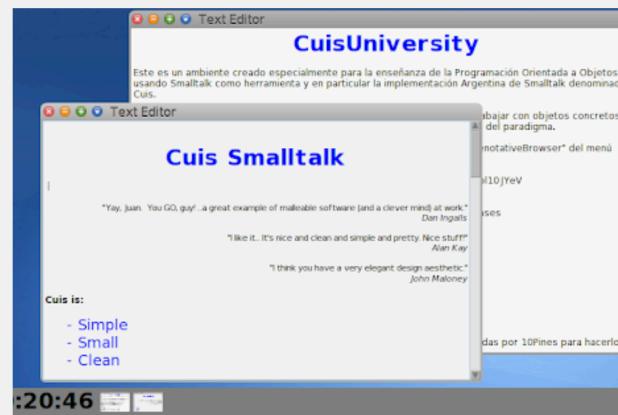
Inicio Novedades Descargas Tutoriales 

CuisUniversity

Un ambiente creado especialmente para la enseñanza de la Programación Orientada a Objetos. Basado en [Cuis Smalltalk](#)

Google group (para enterarte de novedades)

<https://groups.google.com/forum/#!forum/cuis-university>



Cuis-University/Cuis-University

Cuis-University – Repo that contains all changes to Cuis for teaching purposes and dependencies with

Desarrollado por

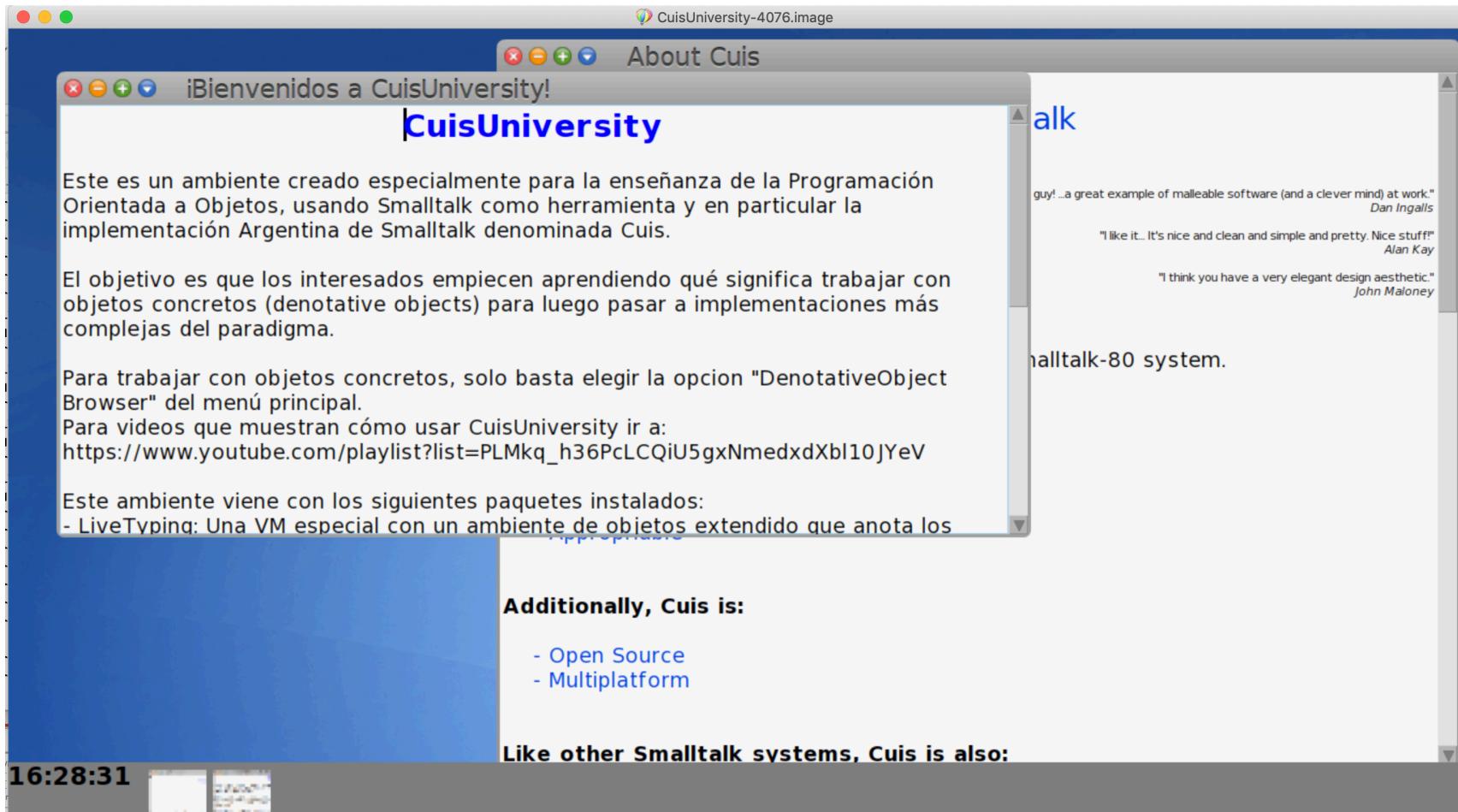


Utilizado en



Arquitectura

- VM:
 - Windows: Squeak.exe
 - Linux: squeak
 - MacOs: Squeak
- Imagen: (4109 es la version)
 - CuisUniversity-4109.image
- Código Fuente:
 - CuisV5.sources
 - CuisUniversity-4109.changes



Uso de Recursos

Activity Monitor (All Processes)						
Process Name	Memory	Threads	Ports	PID	User	
Google Chrome Helper (Rend...	91,8 MB	19	247	487	hernan	
Google Chrome Helper (Rend...	83,9 MB	16	180	559	hernan	
Google Chrome Helper (Rend...	81,1 MB	19	367	2794	hernan	
Google Chrome Helper (Rend...	79,5 MB	18	201	21644	hernan	
Google Chrome Helper (Rend...	76,8 MB	15	236	455	hernan	
Atom Helper	75,4 MB	9	146	22411	hernan	
Spotify Helper (GPU)	75,3 MB	8	154	46767	hernan	
 Squeak 5.0	74,3 MB	5	299	27717	hernan	
Google Chrome Helper (Rend...	71,4 MB	10	172	565	hernan	
Process Name	Memory	Threads	Ports	PID	User	
Google Chrome	1,33 GB	34	1.351	393	hernan	
Google Chrome Helper (GPU)	966,6 MB	13	674	438	hernan	
Atom kernel_task	808,1 MB	176	0	0	root	
airpo Google Chrome Helper (Rend...	538,6 MB	24	532	478	hernan	
com. WindowServer	510,4 MB	10	2.586	255	_windowserver	
Google Eclipse	482,8 MB	63	395	28095	hernan	
Process Name	Memory	Threads	Ports	PID	User	
Google Chrome	1,34 GB	35	1.359	393	hernan	
Google Chrome Helper (GPU)	964,2 MB	13	673	438	hernan	
kernel_task	886,1 MB	176	0	0	root	
 IntelliJ IDEA	747,1 MB	60	361	28307	hernan	
Google Chrome Helper (Rend...	535,6 MB	21	523	478	hernan	
WindowServer	484,7 MB	11	2.611	255	_windowserver	
Eclipse	478,5 MB	170	1.026	111	hernan	

Características

- Smalltalk = Lenguaje de Objetos + IDE
 - Dinámicamente tipado
 - Meta-circular
-
- En particular CuisUniversity es LivelyTyped