

PLATO: Programmed Logic for Automatic Teaching Operations

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PLATO?!

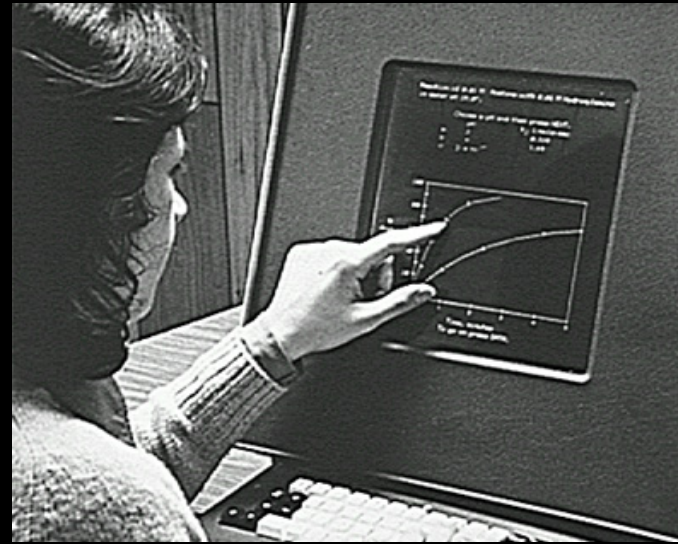
What's PLATO?

- Very early revolutionary computer-based education system
- Development began in 1960 at the University of Illinois Control Systems Laboratory (CSL)
- CSL renamed to the Computer-based Education Research Lab (CERL) around 1966

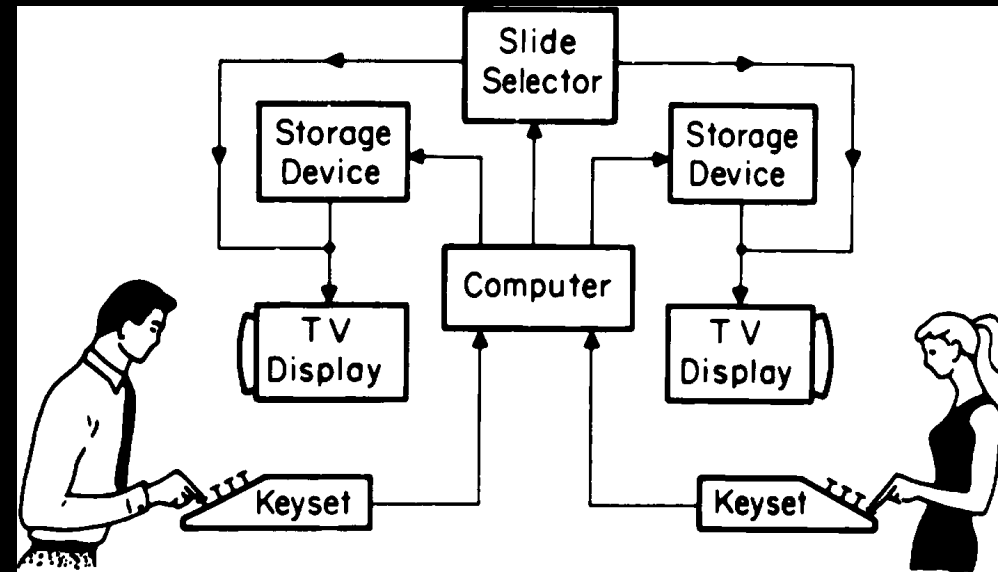


Who used it?

- Over 10,000 hours of lesson material
- Lessons span many subjects, including electrical engineering, occult sciences, acid-base titration, English language grammar, neonatal assessment, and Esperanto
- Between 1978 and 1985, the CERL PLATO system recorded 10 million hours of use
- Inspiration for many other projects, including Castle Wolfenstein, Macromedia Authorware, Lotus Notes, and Microsoft Flight Simulator



How does it work?



PLATO II (circa 1962)

Innovations

- Hardware
 - Gas-plasma display
 - High-resolution (512x512) flicker-free graphics
 - Touch screen
 - Audio
 - Client-side programming (PLATO V, 1977)



Innovations

- Software
 - Timesharing
 - Real-time data processing
 - Notes (e-mail)
 - Message forums
 - Chat
 - Instant Messaging
 - Emoticons
 - Lesson authoring tools
 - Gradebook and course management
 - Context sensitive help and learner feedback
 - Online multiplayer games

Character Design

		0	0	0	0		
	0	0			0	0	
0	0	0	0	0	0	0	0
0		0	0	0	0		0
0		0	0	0	0		0
0		0	0	0	0		0
		0	0	0	0		
		0			0		
		0			0		
		0			0		
	0	0			0	0	

+ move point mode


o store point mode

- remove point mode

i inspect character

B blank character

F full character

This  is your character

\$ 95

BACK to format when you are done

SHIFT-BACK to format and go to main page

SHIFT-HELP to exit without formatting

Press DATA to restore original character

LAB for octal design

What happened to PLATO?

- Last commercial PLATO system, called NovaNET and run by Pearson Education, shutdown in 2015.
- NovaNET focused on the remedial and special-needs education market.



IRATA.ONLINE

An online retro computing community built using even older technology. 700+ registered users.

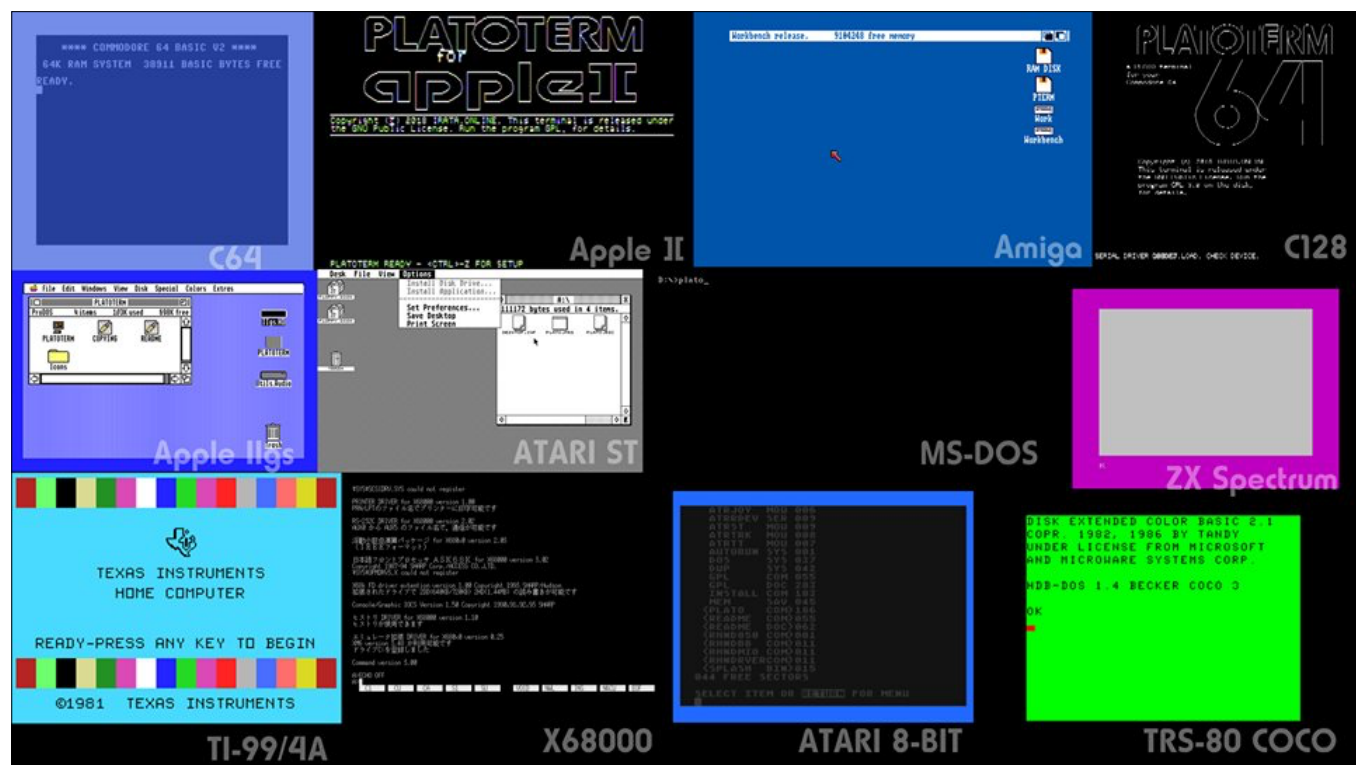


Image from <https://www.facebook.com/irataonline/photos/rpp.2112629878969393/2421433868088991/?type=3&theater>

Thomas Cherryhomes

Demo Time

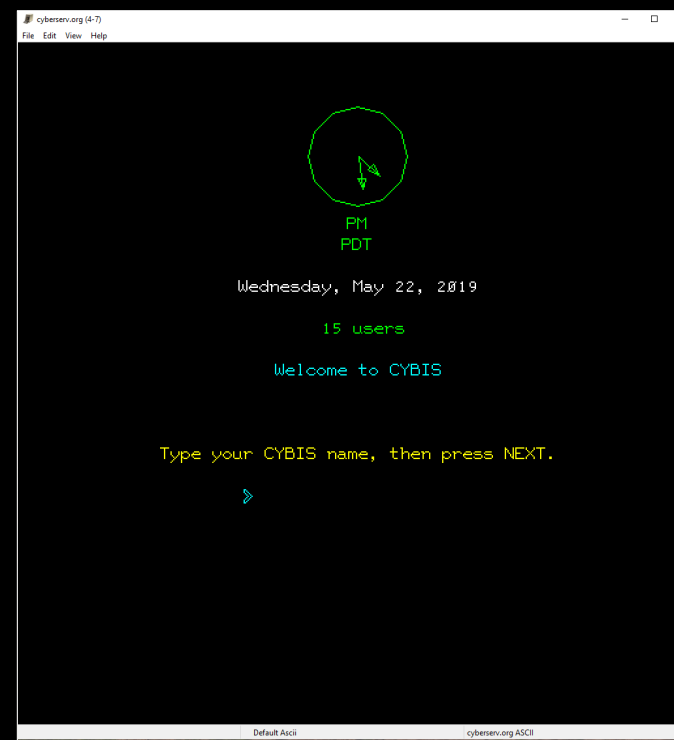
(well, not quite yet)

Getting Connected



Getting Connected: Mac and Windows

- Get PTerm. See <https://www.cyber1.org/> and <https://irata.online/>.
- Or try the work-in-progress <http://js.irata.online>.



Getting Connected: Apple II (8 bit) Hardware

- Apple II or newer with at least 48 KB RAM, a Super Serial Card (SSC) in Slot 2, and a modem emulator (e.g. WiModem232 or tcpser)
- Other slots for the SSC do not work. Ethernet cards do not work.
- On the SSC, enable interrupts (close SW2-6) and enable RS-232-C signaling (open SW2-7 and close SW1-7).
- On the modem emulator, enable hardware flow control with "AT&K3".
- Get the PLATOTerm disk image from <https://irata.online/>.
- Use a monochrome monitor.



tcpser: <https://github.com/FoZZTexx/tcpser>

WiModem232: <https://www.cbmstuff.com/proddetail.php?prod=WiModem232OLED>

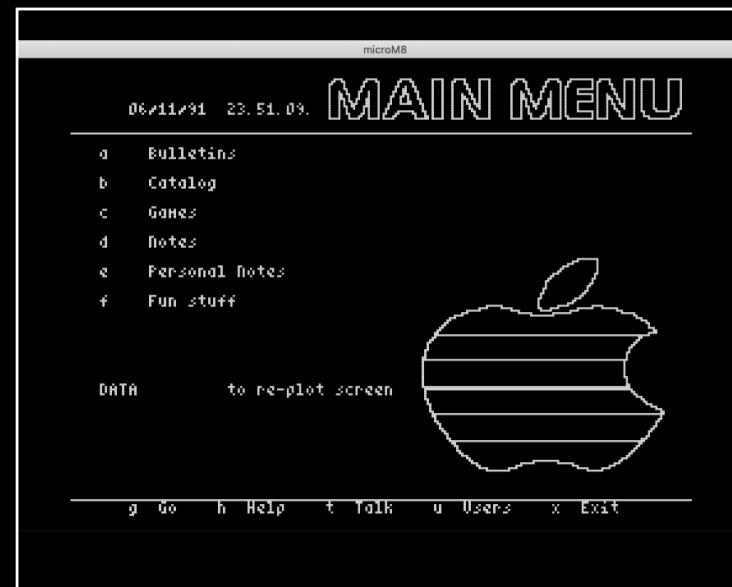
Getting Connected: Apple II (8 bit) Hardware

- Got an enhanced IIe or newer? Try the unreleased DHGR version.
- Got a IIgs? Install an SSC. Or use the IIgs version.
- Got a IIc/IIc+? Hardware flow control doesn't work, but PLATOTerm mostly "works for me" at 1200 baud on the IIc.



Getting Connected: Apple II (8 bit) Emulation

- Get MicroM8. The PLATOTerm disk image is in the internal library and just works.
- AppleWin and probably others with SSC emulation work, too, but require setting up a modem emulator with tcpser and, on Windows, com0com.
 - AppleWin (SSC emulation) -> com0com -> tcpser
 - Be sure to set "emulate baud rate" in com0com.
 - Example: tcpser -d /dev/ttyS3 -s 1200 -i "&K3"
- Get the PLATOTerm disk image from <https://irata.online/>.



microM8: [diskpaks/comms](https://github.com/diskpaks/comms)
tcpser: <https://github.com/FoZZTexx/tcpser>
com0com: <http://com0com.sourceforge.net>

Getting Connected

Instruct the modem emulator (e.g. WiModem232) to connect:

ATDTIRATA.ONLINE:8885



Getting Connected: Apple II (16 bit)

- Apple IIgs with at least 512 KB RAM, Marinetti TCP stack, and a supported network card (i.e. an Uthernet or Uthernet II).
- Get the “alpha” release disk image from <https://irata.online>.



Keymap

See the release notes (<https://github.com/tschak909/platoterm64/releases/tag/PLAT0Term-1.0>)



Picture from <https://www.computerhistory.org/collections/catalog/102730839>



Demo Time

(really)

Demo: PLATOTerm on Ilc, PLATOTerm on Sweet16, PLATOTerm of microM8

[irata.online](#) guest/guest

Things to try:

Subject index: Engineering, electrical: “Kirchhoff’s voltage and current laws for ideal sources” (0kfpb1)

Notice: instant learner feedback, diagnosis of common challenges, context sensitive help

Title index: Seabattle (0battleshi)

What now?

Try it. Contribute content. Improve the PLATOTerm software. Create an online community.

Learn more: Juiced.GS (latest issue), “Friendly Orange Glow”, irata.online