



TempleOS

An Operating System From The Heavens

Presented by: James Hurd

Roadmap

- What is TempleOS?
- Terry A. Davis
- Features and Quirks
- Games (Live Demo)
- Tongues and Oracle (Live Demo)
- Where is it now?

Materials: templeos.jameshurd.net

DISCLAIMER

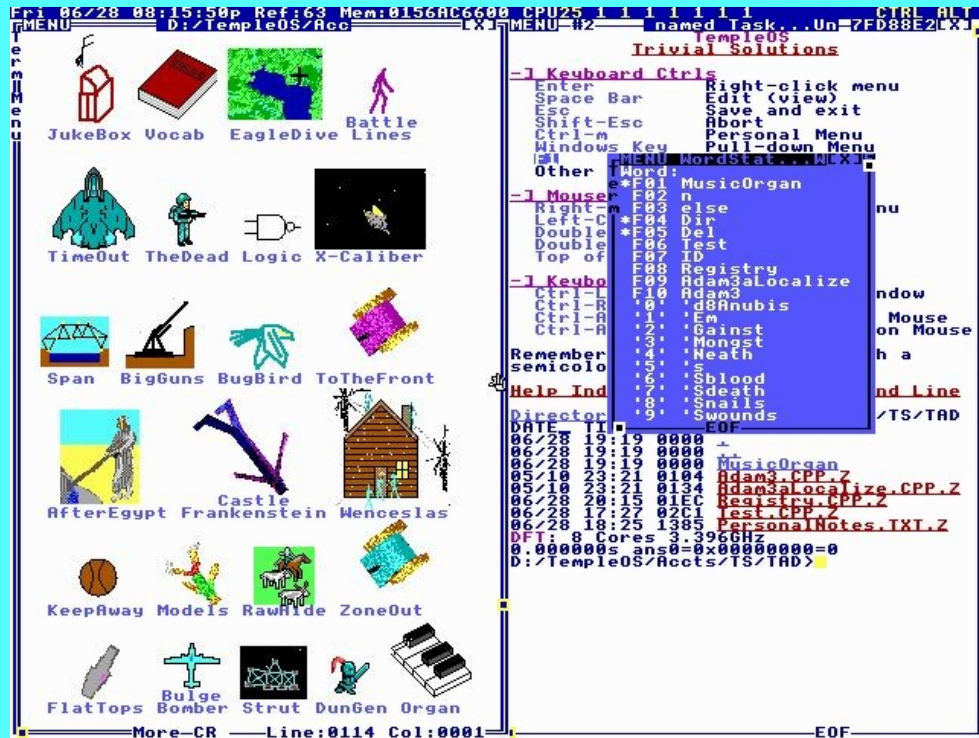
This presentation is not intended to degrade or ridicule the mentally ill. This is also not an endorsement of any of Terry Davis' views: religious, political, or otherwise. During this presentation, my goal is to simply showcase and study his life's work from a technical perspective.

What is TempleOS?

- Created by Terry A. Davis.
- Maintained: 2005-2017.
- x86_64 bit operating system.
- Public domain.
- Designed as a modern-day Commodore 64.
- Built as an shrine to God.



Temp1eOS vs. C64



```

LIST
5 REM MUSICAL SCALE
7 FOR L = 54272 TO 54296:POKE L,0:NEXT
10 POKE 54296,15
20 POKE 54277,7 : POKE 54278,133
50 READ A
55 IF A = -1 THEN END
60 READ B
80 POKE 54273,A:POKE 54272,B
85 POKE 54276,33
90 FOR T = 1 TO 250:NEXT:POKE 54276,31
95 FOR T = 1 TO 50:NEXT
100 GOTO 20
110 DATA 16,195,18,209,21,31,22,96
120 DATA 25,30,28,49,31,165,33,135
999 DATA -1
READY.
RUN

READY.
RUN

READY.

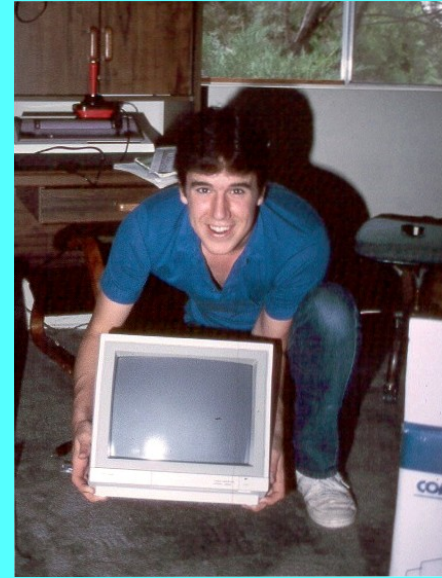
```

TempleOS

Commodore 64

The Man Behind the Madness

- Terry A. Davis (1969-2018)
- Credentials:
 - MS in Electrical Engineering
 - BS in Computer Engineering
- Programmed VAX Machines at TicketMaster.
- "Smartest programmer that ever lived."



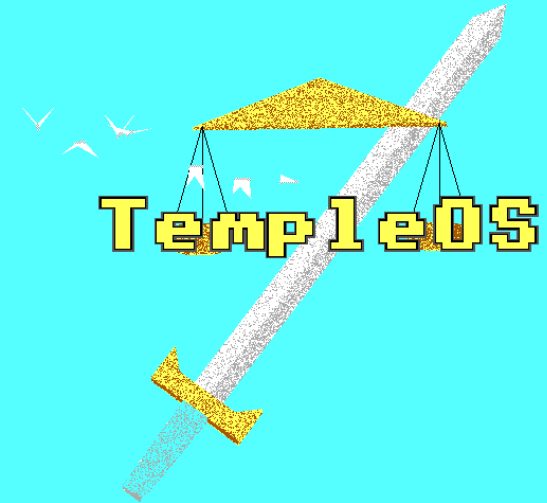
God's Lonely Programmer

- In 1996, diagnosed with bipolar disorder and later schizophrenia.
- Received a "revelation from God" during a manic episode.
- J Operating System
 - LoseThos
 - SparrowOS



God's Lonely Programmer

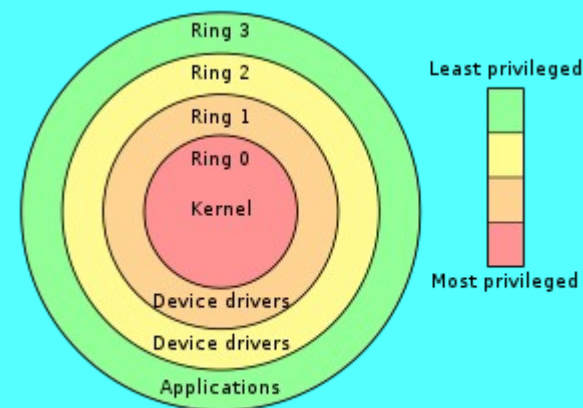
- Terry developed a fear of Aliens and the CIA.
- Finished and released under the name "TempleOS" in 2013.



"God's temple is finished. Now, God kills CIA until it spreads."

What Secrets Await in God's Digital Temple?

- Explicit Instructions From God:
 - 640x480 Resolution
 - 16 Color Graphics
 - Single Voice Audio
- All code runs in ring 0.
- No networking or internet support.



Copy this file to your Home directory and modify it. This version is the default.

```

Cd:Dir:L
Cd("::/Demo"):Dir:L
Cd("::/Demo/Graphics"):Dir:L
Cd("::/Demo/Snd"):Dir:L
Cd("::/Demo/Dog"):Dir:L
Cd("::/Demo/Games"):Dir:L
Cd("::/Demo/MultiCore"):Dir:L
Cd("::/Demo/Hsm"):Dir:L
Cd("::/Doc"):Dir:L
Cd("::/Demo/Lectures"):Dir:L
Cd("::/Apps"):Dir:L

```

Run IOSStdIns() if you wish to use the official staff Home files.

```
Cd("::/Demo/HcctExample"):Dir:L
```

Make all with BootHDIns().

```
Cd("::/Kernel"):Dir:L
```

```
Cd("::/Compiler"):Dir:L
```

The ::/StartOS.HC file is compiled every time you boot.

```
Cd("::/Adam"):Dir:L
```

Welcome Help & Index Demo Index
FastReboot Take Tour Key Map

Fun Games



Titanium



Black



Flap



Vasson



FlatTops

Bomber
Golf

KeepAway



RawHide

Public Domain Operating System

Help & Index, Quick Start: Cmd line

Directory of C:/Home

DATE	TIME	SIZE
03/19	22:53	0000
03/19	22:53	0000
03/20	00:00	0000
06/21	11:11	0000
01/10	23:00	0000
03/30	02:00	0000

System Keys Quick Guide

(Works Everywhere)

<SPACE> Left-Click

<ENTER> Right-Click

<F1> Help

<CTRL-m> Personal Menu

<ESC> Save & Exit

<SHIFT-ESC> Abort & Exit

<WINDOWS> Pull-Down Menu

Tongues

(Works Everywhere)

<F7> God Word

<SHIFT-F7> God Passage

<F6> God Song

<SHIFT-F6> God Doodle

EOF

What Secrets Await in God's Digital Temple?

- HolyC
- RedSea
- Kernel
- Bootloader
- Graphics Library
- Other OS Libraries
- ISO Size: 17MB
- Over 100,000 lines of code.



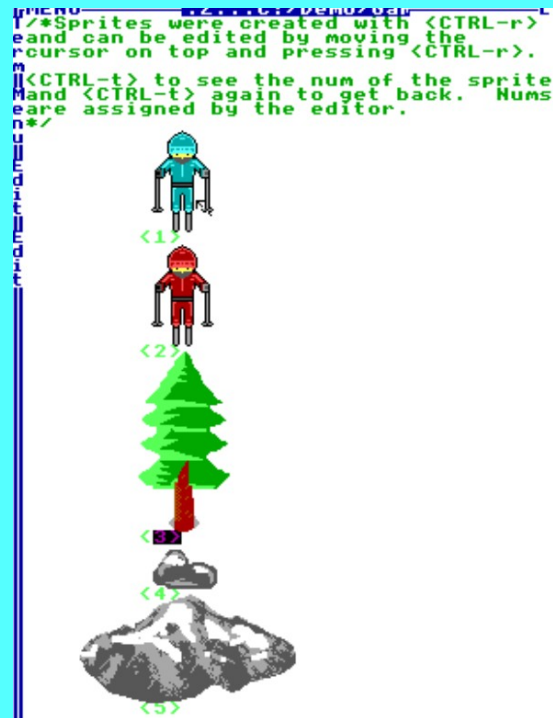
The screenshot displays the TempleOS 05.03 development environment. On the left, a command prompt window shows the directory of C:/Home with a list of files and folders, including 'ex, Quick Start: Cnd line'. Below this, a list of files and folders is shown, including '07/20 14:18 0000', '07/20 14:18 0000', '06/21 11:23 0416', '01/10 23:52 0136', '07/23 00:22 0103', and 'C:/Home>Cd;#include "Unce";'. Below the list, a message states: '* Merge() can be used to see what's changed. The +d flag will show differences of files which have changed and allow you to merge code. (The +r flag will recurse.)'. Another message states: '* You can adjust the mouse movement rate by setting global vars in your start-up file. See mouse_scale.'. A third message states: '* You can set your local time zone by setting the local_time_offset global var in a start-up file. It's units are CDAT_FREQ. See local_time.'. A fourth message states: '* Get rid of this msg here.'. At the bottom, a prompt asks 'Take Tour(y or n)? NO' and shows the time '1:775590s' and the directory 'C:/Home'.

On the right, a 3D map is displayed, showing a complex structure with various rooms and corridors. The map is labeled with 'MONSTER_SCALE' and 'MONSTER_SCALE'.

The Doldoc Text Format

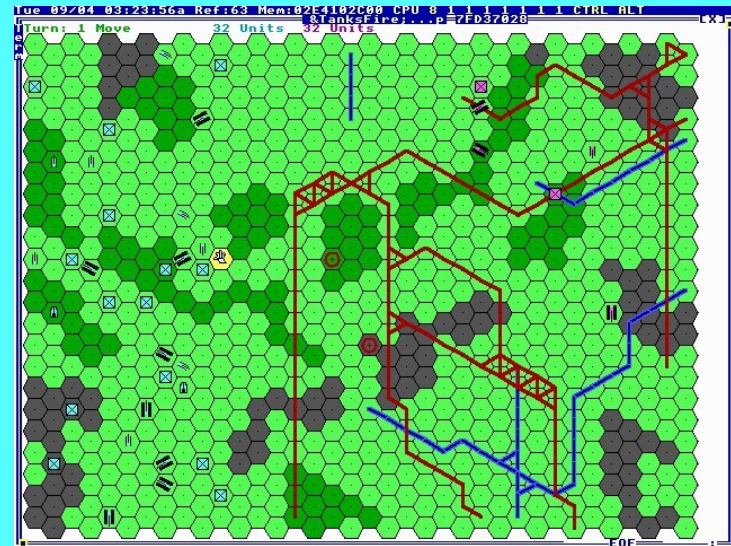
- Embed fun stuff in plain ASCII files!

- Hyperlinks
- Shell Macros
- 3D Meshes
- Sprites



Other Fun Built-Ins

- Flight Simulator
- Differential Equation Solver
- Full Music Making Suite
- Write Your Own AI



Can You Game?

Tongues and Oracle

- Davis thought himself to be in direct contact with God.
- The OS has a host of ways to speak with God.

```
// C:/Adam/God/GodExt.HC.Z
public class CGodGlbls
{
    U8      **words,
           *word_file_mask;

    I64     word_fuf_flags,
           num_words;

    CFifoU8 *fifo;
    // ... snipped
} god;
```

The Legacy of TempleOS

- **Terry Davis:**
 - Became homeless late in life.
 - Stopped taking his medication.
 - Passed Away in 2018 (RIP).



The Legacy of TempleOS

- Active Community
- ZenithOS
 - Modern Fork
- Shrine
 - "A TempleOS Distro for heretics."
- Crocodile
 - Discord Client
- Plus much more!

Shrine and ZenithOS

```
Thu 03/23 08:49:08 FPS:30 Mem:0015CB3A00 CPU:16
MENU greenfetch;...=16A92428CXJ MENU nnamed Task...=16A88A28LXJ
ENTER
e ~ A pkg-list
r pkglist;
megaman
screenfetch
simplecalc
templeos-supl
templeshell
uriele

~ A pkg-install screenfetch
PkInstall("screenfetch");
Package Ver
Dir Size
=====
+ screenfetch 1.0
  ::/Apps/Screenfetch 68k

Is this ok? (y/n) y
Downloading screenfetch...
[=====]
Installing screenfetch
Copying M:/Screenfetch/Screenfetch.HC.Z to
C:/Apps/Screenfetch/Screenfetch.HC.Z
Copying M:/Logo128x152.bmp to
C:/Apps/Screenfetch/Logo128x152.bmp
Copying M:/Shrine128x152.bmp to
C:/Apps/Screenfetch/Shrine128x152.bmp
Installed 1 package(s)
~ A /Apps/Screenfetch/s
Screenfetch.HC.Z
Shrine128x152.bmp
~ A /Apps/Screenfetch/Screenfetch.HC.Z
~ A Screenfetch
Screenfetch;

singleuser@C:/Home:

OS: Shrine 5.03
Kernel: TempleOS
Uptime: 33m 1s
Packages: 8
Shell: Lsh
Resolution: 640x480
DE: Not Present
WM: Default
Palette: Ubuntu
Font: FontStd
CPU: 1 Core(s)
RAM: 162MiB / 510MiB
```

Shrine 5.03
based on TempleOS by Terry A. Davis
Public Domain Operating System
[Help & Index](#), [Quick Start](#), [Cmd line](#)
Directory of C:/Home
DATE TIME SIZE
03/23 00: MENU utocomplete...=169CXJ
03/23 00: Word:Screenfetch
01/26 03: eF01 Screenfetch
01/19 23: r0 Screenings
03/23 08: m1 Screw
22 Screw-cutting
44 Screw-driver
5 Screw
6 Scribble
7 Scribbable
8 Scribbetious
9 Scribble
TX

```
03/22/21/20 03:57:17 FPS:31 Mem:01F5531000 CPU:40 1 1
MENU greenfetch;...=16A92428CXJ MENU nnamed Task...=16A88A28LXJ
ENTER
e ~ A pkg-list
r pkglist;
megaman
screenfetch
simplecalc
templeos-supl
templeshell
uriele

~ A pkg-install screenfetch
PkInstall("screenfetch");
Package Ver
Dir Size
=====
+ screenfetch 1.0
  ::/Apps/Screenfetch 68k

Is this ok? (y/n) y
Downloading screenfetch...
[=====]
Installing screenfetch
Copying M:/Screenfetch/Screenfetch.HC.Z to
C:/Apps/Screenfetch/Screenfetch.HC.Z
Copying M:/Logo128x152.bmp to
C:/Apps/Screenfetch/Logo128x152.bmp
Copying M:/Shrine128x152.bmp to
C:/Apps/Screenfetch/Shrine128x152.bmp
Installed 1 package(s)
~ A /Apps/Screenfetch/s
Screenfetch.HC.Z
Shrine128x152.bmp
~ A /Apps/Screenfetch/Screenfetch.HC.Z
~ A Screenfetch
Screenfetch;

singleuser@C:/Home:

OS: Shrine 5.03
Kernel: TempleOS
Uptime: 33m 1s
Packages: 8
Shell: Lsh
Resolution: 640x480
DE: Not Present
WM: Default
Palette: Ubuntu
Font: FontStd
CPU: 1 Core(s)
RAM: 162MiB / 510MiB
```

ZenithOS v1.00
Public Domain Operating System
[Help & Index](#), [Quick Start](#), [Cmd line](#)
Directory of C:/Home
DATE TIME SIZE
03/23 00: MENU utocomplete...=169CXJ
03/23 00: Word:Screenfetch
01/26 03: eF01 Screenfetch
01/19 23: r0 Screenings
03/23 08: m1 Screw
22 Screw-cutting
44 Screw-driver
5 Screw
6 Scribble
7 Scribbable
8 Scribbetious
9 Scribble
TX

Sources and Thanks

- Websites:
 - templeos.org
 - christine.website
 - wikipedia.org
- YouTube:
 - Fredrik Knudsen
 - SomeOrdinaryGamers
 - Linus Tech Tips

Materials available at: templeos.jameshurd.net

Contact me: jameshurd@ku.edu

Special thanks to Sandy Urazayev for helping me prepare this talk.