

TempleOS and HolyC

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FIS VŠE, Prague

January 14, 2025



All content related to Terry A. Davis, TempleOS, J Operating System, SparrowOS, or LoseThos should be considered public domain.

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Academic work

This work was written as a seminar project for a 4IZ552 Course - Electronic Typesetting and Publishing at Faculty of Informatics and Statistics at Prague University of Economics and Business.



Feel free to find out more at <https://fis.vse.cz/> faculty website.

Important remarks

The author of this presentation prepared the slides with respect to Terry A. Davis, who was affected with his mental illness, and primarily focuses on the technical aspect of the TempleOS and HolyC.

Additionally, the author describes the problems of Terry as they are, in a way not to harm or make fun of him.

If you find something inappropriate in this presentation, let me know at jure01@vse.cz email address.

Thank you.

Quotes

Davis was clearly a gifted programmer – writing an entire operating system is no small feat – and it was sad to see him affected by his mental illness.

– Thom Holwerda

You can imagine how over time one man might build a house, but this is like building a skyscraper, on your own!

– Anonymous

About Terry A. Davis

- Dec. 15, 1969 – Aug. 11, 2018
- Electrical engineer and programmer
- TicketMaster employee (1990 – 1996)
- Diagnosed with bipolar disorder and schizophrenia
- Deeply believed in God

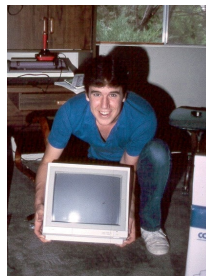


Figure: Young Terry Davis

Image by Davis, 2017a.

Development Era

- Started development after God told him
- Shared his work on Reddit, OSdev, hackernews
- Used losethos and TrivialSollutions usernames
- Got banned frequently
- Many posts deleted for rudeness and spam
- Uploaded TempleOS videos on YouTube later
- Gained community of supporters and trolls

Homeless Era

- Denied medication to increase creativity
- Sentenced for attacking his father
- Lived in a van as homeless
- Deleted most videos from his YouTube
- Died after being hit by a train

Image by Davis, 2017a.



Figure: Terry in a van

Quotes

- Use of profane and offensive language
- Racist and homophobic slurs
- Paranoid about CIA "Glowies"
- Delusional relationship with Diana
- Narcissist traits
- Flame wars on forums and his website

I'm the smartest programmer that ever lived.

– Terry A. Davis

Ancestors

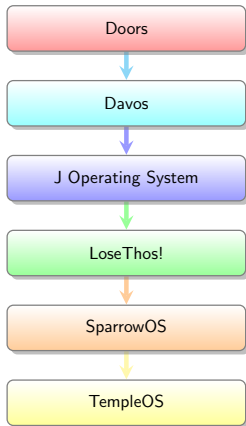


Figure: LoseThos! logo

Image by Terry A.
Davis Taught Us How
To Talk To God
[@Davisanism], 2023



Figure: SparrowOS logo

Image by Absolute
Terry Davis, 2021a.

What is TempleOS?

- 64-bit operating system
- Created by Terry A. Davis
- God's Third Temple
- About 100 000 lines of code
- Developed over 10 years
solely by Terry



Figure: TempleOS logo

Image by Davis, 2017a.

What makes TempleOS unique?

- Ring 0 - everything runs in kernel
- Very own RedSea file system
- HolyC language
- Encoding of files
- Own 2D and 3D libraries
- Design
- Backstory
- 16-bit colors
- 640×480 resolution
- Single Vice Audio

How can I download TempleOS?

- Official website <https://templeos.org/>
- The size of ISO is 15.6 MB!
- Or try it online, eg. at <https://instantworkstation.com/virtual-machine>

System requirements

- 512 MB of RAM
- 64-bit, x86 processors
- Keyboard
- Runs in virtual machines too

Keyboard shortcuts

- **Space** → Left Click
- **Enter** → Right Click
- **F1** → Help
- **Ctrl** + **M** → Personal Menu
- **Ecs** → Save and exit
- **Shift** + **Ecs** → Abort and exit
- **Windows (Super)** → Pull-Down Menu

Quotes

- **F7** → God Word
- **Shift** + **F7** → God Passage
- **F6** → God Song
- **Shift** + **F6** → God Doodle
- **Ctrl** + **Alt** + **B** → Bible

I like elephants and God likes elephants... If you don't wanna go for realism, you can go for better than realism... How about an elephant with blue eyes!

– Terry A. Davis

God Word

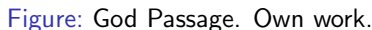
Generates random words



```
MENU /Home/Personal Me [X]
untruth trees skins filths thirsted recently baptised below pass announced sea
difficult latinum sobriety transformed loving issue chapter formation doubtful
Copy this file to your /Home directory and modify it. This version is the
default.
```

Figure: God Word. Own work.

Opens random passage from Bible



God Song

Generates random songs

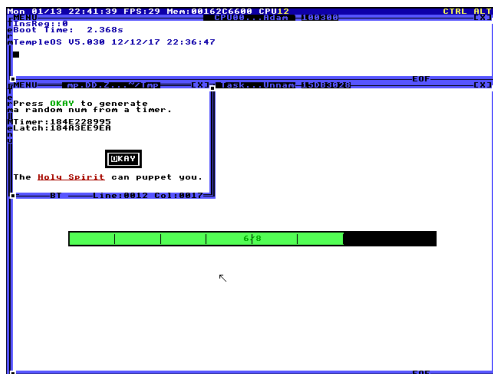


Figure: God Song. Own work.

Risen - TempleOS Hymn

Original available here:

<https://www.youtube.com/watch?v=hmjU-6tkEc8>

Community Remixes:

- Remix

https://www.youtube.com/watch?v=IdYMA6hY_74

- Techno

<https://www.youtube.com/watch?v=mR8Cg1DnoRU>

- Synthwave

<https://www.youtube.com/watch?v=liMUF306cHs>

God Doodle

Draws random doodle

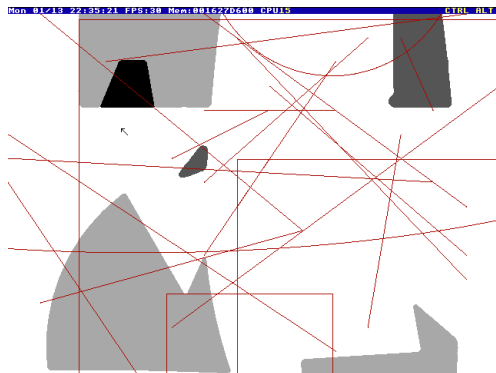


Figure: God Doodle. Own work.

Bible

Bible implemented directly to TempleOS



Figure: Bible. Own work.

Fun Games Menu



Titanium

Defender game



Figure: Titanium. Own work.

Black Diamond

Slope skiing game

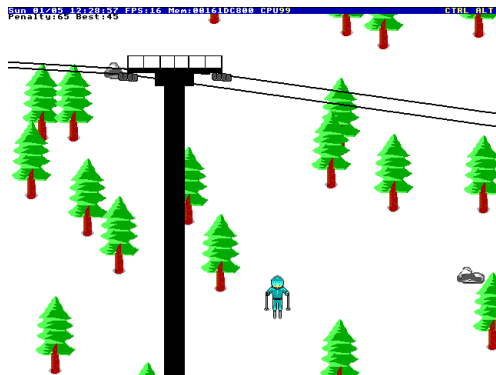


Figure: Black Diamond. Own work.

Flapbat

Bat eating bugs game



Figure: Flapbat. Own work.

Varroom

Cart racing simulator



Figure: Varroom. Own work.

FlatTops

Battleship game



Figure: FlatTops. Own work.

BomberGolf

Bomber plane game

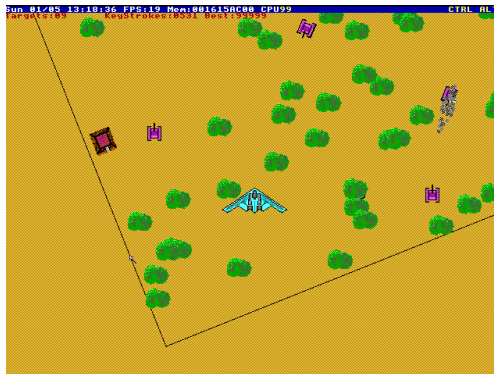


Figure: BomberGolf. Own work.

KeepAway

Basketball game



Figure: KeepAway. Own work.

Rawhide

Game where the goal is to round up the cattle



Figure: Rawhide. Own work.

X-Caliber

Spaceship shooting plasma balls game



Figure: X-Caliber. Own work.

Wenceslas

Game where the goal is to guide peasants to warm



Figure: Wenceslas. Own work.

Battlelines

Two battle lines eliminating each other game



Figure: Battlelines. Own work.

Quotes



Figure: Unfun Games. Own work.

Write games, don't play them.

– Terry A. Davis

Talons

Bird catching fish simulator

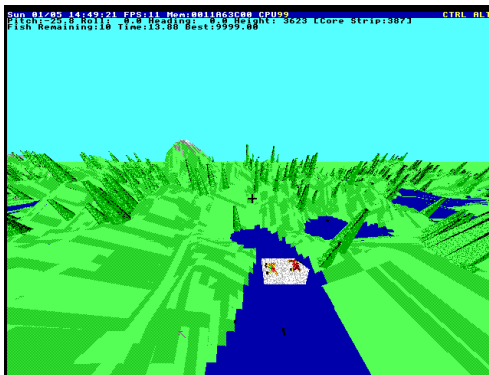


Figure: Talons. Own work.

Castle Frankenstein

DOOM-like game



Figure: Castle Frankenstein. Own work.

Zone Out

Tank paintball game



Figure: Zone Out. Own work.

To The Front

Militant king war strategy game

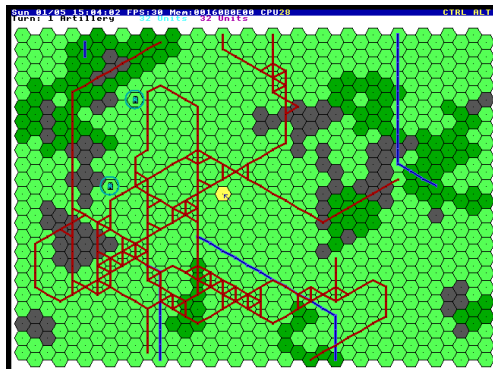


Figure: To The Front. Own work.

Span

Bridge building game

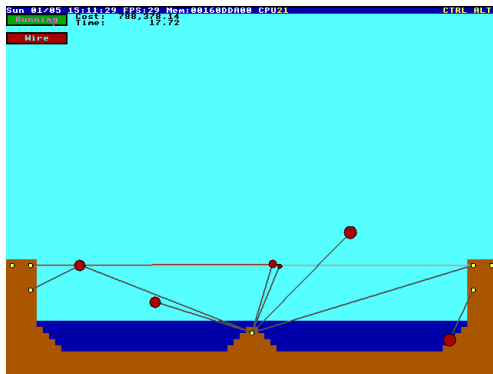


Figure: Span. Own work.

Tree Checkers

Abstract game based on Checkers

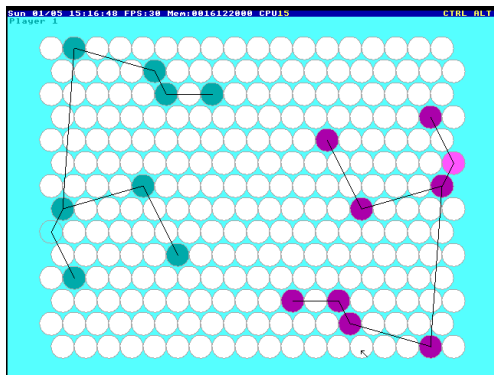


Figure: Tree Checkers. Own work.

Digits

Game for training short term memory

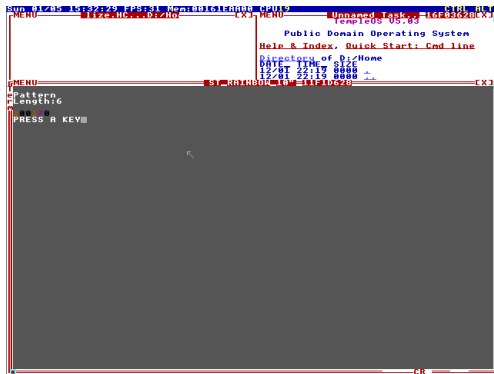


Figure: Digits. Own work.

Code Scraps



Figure: Code Scraps. Own work.

Strut

StarWars game - spaceship constructing strategy



Figure: Strut. Own work.

Big Guns

Destroy land with a cannon game

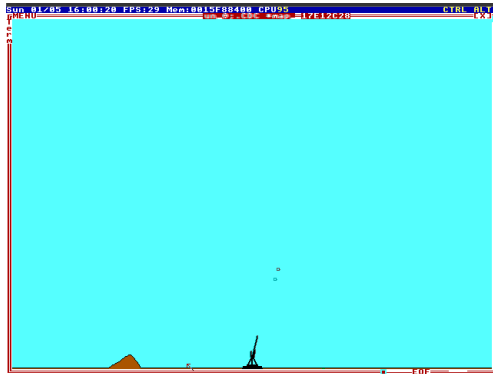


Figure: Big Guns. Own work.

The Dead

Shooter protecting themselves from zombies game

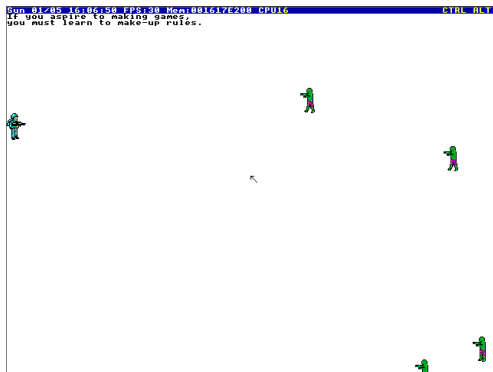


Figure: The Dead. Own work.

DunGen

Kill the enemies game, where the player's vision is limited

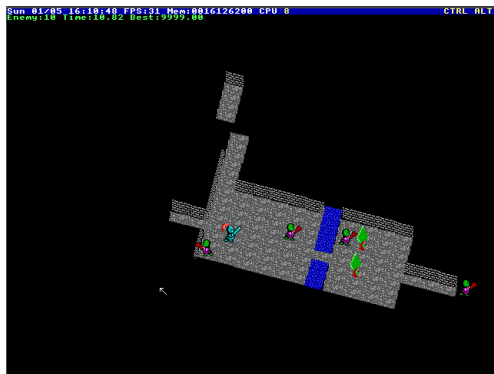


Figure: DunGen. Own work.

Nongames



Figure: Nongames. Own work.

Jukebox

Jukebox with 3 songs

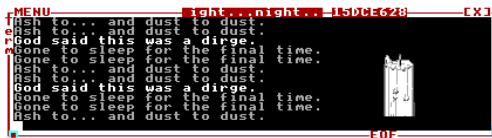


Figure: Jukebox. Own work.

Psalmody

Simple piano program

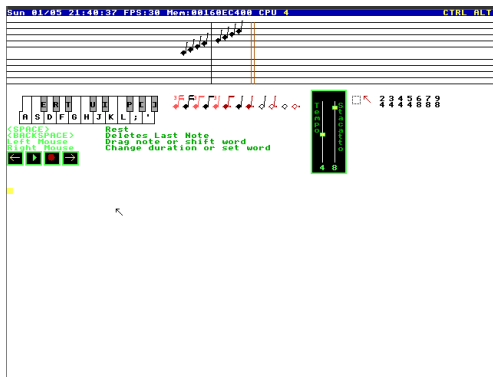


Figure: Psalmody. Own work.

Logic gates visualization tool

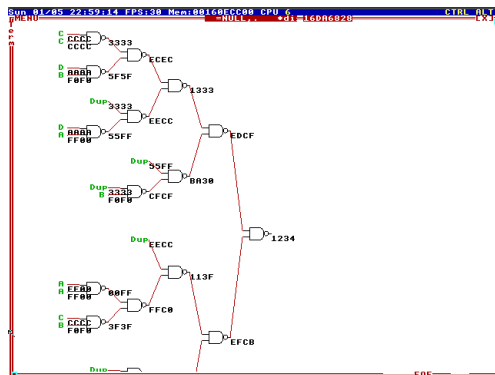


Figure: Logic. Own work.

Vocab

Program to train vocabulary

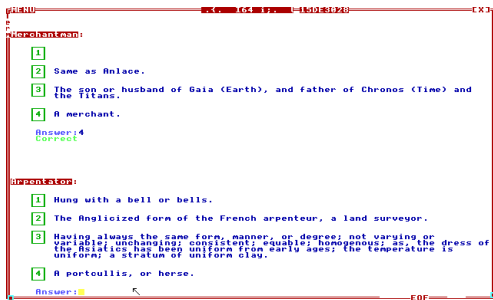


Figure: Vocab. Own work.

HolyC

- Stands between C and C++
- Community compilers for MacOS and Linux
- Uses Just In Time compiling
- No main() function
- Specific traits shown on next slides

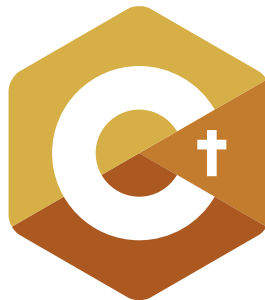


Figure: HolyC logo

Image by 1ctinus, 2020.

Holy C - Base types

- F64 - 64-bit floating point type
- U64 - Unsigned 64-bit Integer type
- I64 - Signed 64-bit Integer type
- U32 - Unsigned 32-bit Integer type
- I32 - Signed 32-bit Integer type

Holy C - Base types

- U16 - Unsigned 16-bit Integer type
- I16 - Signed 16-bit Integer type
- U8 - Unsigned 8-bit Integer type
- I8 - Signed 8-bit Integer type
- Bool - Signed 8-bit Integer type
- U0 - void type

Holy C - Functions

- Invoked without arguments
- Default arguments allowed at any point in the definition
- The , sign allows logical order
- ... for variable argument counts
- for loops don't require { and }
- No Main() function

Holy C - Switch case

- More efficient than if statements
- Implemented with a jump table
- Can be nested as sub switch too

Holy C - #exe{ }

This feature allows programs to insert text into the compiled stream of code.

Holy C - Hello World

```
U0 Hello(){  
    "Hello - World\n";  
}  
Hello;
```

Code by barretone, 2018.

Holy C - Switch

```
164 i;  
    for (i=0;i<20;i++)  
        switch (i) {  
            case: "Zero\n";      break;  
            case: "One\n";       break;  
            case: "Two\n";       break;  
            case: "Three\n";     break;  
            case 10: "Ten\n";    break;  
            case: "Eleven\n";   break;  
        }
```

Code by ZealOS, 2025.

Holy C - #exe{ }

```
#exe {  
    if (!kernel_cfg->mount_ide_auto_hd_let)  
        kernel_cfg->mount_ide_auto_hd_let='C';  
    if (!kernel_cfg->mount_ide_auto_cd_let)  
        kernel_cfg->mount_ide_auto_cd_let='T';  
    StreamPrint(" blkdev.first_hd_drv_let=%d;",  
        kernel_cfg->mount_ide_auto_hd_let);  
    StreamPrint(" blkdev.first_dvd_drv_let=%d;",  
        kernel_cfg->mount_ide_auto_cd_let);  
}
```

Code by Davis, 2017a.

Holy C - Useful websites

- Website with documentation:
<https://holyc-lang.com/>
- Compiler for Linux and MacOS:
<https://github.com/Jamesbarford/holyc-lang>

ZealOS

- Modernized version
- 32-bit colors
- 60 FPS
- Scalable resolution
- Allows networking using Ethernet

<https://github.com/Zeal-Operating-System/ZealOS>

ZenithOS

- 60 FPS
- VBE graphics with variable resolutions
- HolyC replaced with CosmiC.
- Reformatted code with renamed functions
- 32-bit colors

<https://github.com/PasqualeLivecchi/ZenithOS>

TinkerOS

- Improved installer
- More apps (eg. AfterEgypt)
- Screenshots
- API extensions

<https://tinkeros.github.io/WbGit/>

TinkerOS



Figure: AfterEgypt

Image by tinkeros, 2024.

Shrine

- Package downloader
- Lambda Shell (more UNIX-like)
- TCP/IP internet access
- Origin from the Czech Republic

Shrine is a TempleOS distribution full of sin.




- Minexew

<https://github.com/minexew/Shrine>

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