# Z-code Text Adventure Collection #5 for Commander X16

Many of us played and loved the text adventures (AKA interactive fiction) produced by Infocom in the 1980's. They were rich in story and puzzles, and contained some excellent writing. In the years since Infocom's demise in 1989, there have been a lot of good games produced using Z-code - the game format that Infocom was using. Many of these games run fine on the Commander X16, using a Z-code interpreter. There is currently only one Z-code interpreter available for the Commander X16 - Ozmoo.

I decided to create a collection of some great Z-code games for the Commander X16. All in all, this collection holds ten games, which were initially released in 1995-2023.

If you want more of a background on Infocom and the game format they used, you should read the chapter about The Zork Machine at the end of this document. There is also a chapter about building other Z-code games for play on Commander X16 and, finally, a chapter about writing your own games.

If you are new to text adventures, you may want to start by reading a short guide on how to play at https://www.microheaven.com/ifguide/step3.html or you could start by playing The Dreamhold, which was written to guide new players. The Dreamhold is part of Z-code Text Adventure Collection #1 for Commander X16, which can be found at https://microheaven.com/ztac/ . Or you could play The Mystery of Winchester High, which is part of this collection. It starts off in Tutorial Mode, meaning it'll try to help you figure out how to play.

I created this documentation as a PDF, so that you could easily print it out and keep it nearby as you're playing the games on your Commander X16.

You will always find the latest version of this collection at https://microheaven.com/ztac/

Enjoy!

Fredrik Ramsberg, June 2024
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# The Games

## A1RL0CK

Folder name: A1RL0CK
Genre: Science Fiction
Year: 2023
Release / Serial No: 3 / 230402
Author: Marco Innocenti
Link: https://ifdb.org/viewgame?id=2q8n2qeq5s3sdv4

"Your hands. They hit the reinforced metal. They're starting to hurt. There's nothing to do. The safety lock is engaged.

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A1RL0CK is a survival text adventure about a child and some voices. Also, a lot of proteins. If you are looking for the kind of game that goes: "This is what happened and this is what you must do", A1RL0CK is probably not for you as it has an in media res approach and may result obscure to many players until quite far in the playthrough. It's a story meant to unfold step by step and it is intended to work like this.

*** CONTENT WARNING ***

May contain scenes not suitable for all audiences, like physical violence and psychological torment. No children were harmed in the making of this game."
[--author's blurb]

# Christminster

Folder name: MINSTER
Genre: Collegiate / Mystery
Year: 1995
Release / Serial No: 4 / 961117
Author: Gareth Rees
Link: https://ifdb.org/viewgame?id=fq26p07f48ckfror

"When your brother Malcolm sends you a telegram inviting you to visit him at Biblioll College in the ancient university town of Christminster, you imagine that the mysterious `discovery' he alludes to is nothing more than some esoteric bit of chemistry, and that you'll have a pleasant day out in beautiful surroundings. But when you get to Christminster, nothing is as you expect. Where has Malcolm vanished to? What are the unpleasant Doctor Jarboe and the positively repulsive Professor Bungay up to? And what do long-forgotten alchemical treatises have to do with the modern day?"
[--blurb from The Z-Files Catalogue]

# Heroes

Folder name: HEROES
Genre: Fantasy
Year: 2001
Release / Serial No: 2 / 011130
Author: Sean Barrett
Link: https://ifdb.org/viewgame?id=j1uj9pygpuw3v9pc

"Five stories in a fantasy city setting. You play five stock fantasy characters, each pursuing the same goal, but with different abilities and limitations and (most interestingly) different ways of perceiving the world. You'll have to see things from everyone's perspective to understand what has happened and what is about to happen, and even then, the details of the backstory can be confusing. Good design and puzzles. Each chapter can in theory be solved alone, but each contains information that makes other chapters easier; it's suggested that you switch between characters frequently."
[-- Carl Muckenhoupt]

# Hunter, In Darkness

Folder name: HUNTDARK
Genre: Fantasy / Game
Year: 1999
Release / Serial No: 4 / 991119
Author: Andrew Plotkin
Link: https://ifdb.org/viewgame?id=mh1a6hizgwjdbeg7

"The plot--you're exploring a cave, hunting a mysterious beast called a Wumpus--is derived from the ancient minimalist BASIC game Hunt the Wumpus, but the similarity ends there. This is arguably the most richly described cave in the history of IF, and your experience of it is thoroughly and harrowingly described. In fact, the cave is as much your adversary as the Wumpus itself, and it takes just as great a toll on you. The puzzles are fairly conventional (though the last one is rather elegant), and they include a maze that isn't really a maze. But the story is brilliantly executed--the plot branches and rejoins so seamlessly that you're unlikely to notice that there are multiple ways through the game--and the writing is terrific; Plotkin is adept at using all the senses. Hunter... breathes new life into a very tired genre, no small feat."
[--Duncan Stevens]

Andrew Plotkin has written a wide array of interactive fiction games, and won many awards. He has also done professional game development, including the highly polished IF game Hadean Lands which can be found on Steam.

# Insight

Folder name: INSIGHT
Genre: Espionage / Mystery / Science Fiction
Year: 2003
Release / Serial No: 4 / 030209
Author: Jon Ingold
Link: https://ifdb.org/viewgame?id=enfw92zc3tf92xn6

"You're interrogating a man suspected of the murder of his wife, but you also have other, more complicated goals. Packed with surprises, most of which will prove very confusing if you haven't been reading carefully, and requires learning-by-screwing-up (though there's a built-in explanation for that, of sorts). Some twists toward the end force you to reevaluate what's come before, but not quite as satisfyingly as other games that have pulled similar twists; the pacing doesn't work quite as well. Still, it works well and keeps you guessing."
[-- Duncan Stevens]

Jon Ingold has moved on from his hobbyist roots in interactive fiction to co-founding Inkle Studios where he is also the narrative director. He has been involved as a writer in critically acclaimed games such as 80 Days, Heaven's Vault and Overboard!

Jon Ingold has claimed on IFDB that Insight is his personal favourite among the IF games he has made.

# The Mystery of Winchester High

Folder name: WINCHEST
Genre: Mystery / Children's
Year: 2023
Release / Serial No: 1 / 230531
Author: Garry Francis
Link:https://ifdb.org/viewgame?id=y6kdlr6q8c95u5g6

"Frederick H Winchester III was a rich man who lived in the city of Dunedin in New Zealand. When he died, his mansion was bequeathed to the city to be turned into a high school. Apart from the mansion, the remainder of Winchester's vast fortune was never found and its whereabouts became known as The Mystery of Winchester High.

You play the part of a 13-year old student who sets out to solve the mystery and find the lost fortune after hearing that the school will be closed due to funding issues and you will be transferred to a worse school."
[--blurb from IFDB]

# Rameses

Folder name: RAMESES
Genre: Slice of Life
Year: 2000
Release / Serial No: 3 / 061023
Author: Stephen Bond
Link: https://ifdb.org/viewgame?id=0stz0hr7a98bp9mp

"You're an unhappy teenager in an unpleasant Irish boarding school, remembering your happier younger days and putting up with the present as best you can. It's not very interactive, but it's an noninteractivity that serves the purposes of the story--the central character doesn't have the courage to speak honestly with others, so he hardly speaks at all, and the frustration the player feels mirrors the PC's frustrations. There are no puzzles, and the game essentially progresses whatever you do, but as a story and a characterization, it works extremely well."
[--Duncan Stevens's review on Baf's Guide]

# Risorgimento Represso

Folder name: RISORG
Genre: Fantasy
Year: 2003
Release / Serial No: 6 / 171114
Author: Michael J. Coyne
Link: https://ifdb.org/viewgame?id=t0pidhghzbo91i12

"You play as an Oxbridge student who, during a particularly boring lecture, falls through a green portal under their desk into the cluttered library of the wizard Ninario. Ninny was trying to summon a wizardly apprentice from the Oxbridge University in his reality but got you by mistake. Mm-yes. So you're going to be a wizard's apprentice until he can figure out how to send you back."
[--blurb from IFDB]

# Tristam Island

Folder name:TRISTAM
Genre: Mystery
Year: 2020
Release / Serial No: 4 / 220107
Author: Hugo Labrande
Link: https://ifdb.org/viewgame?id=6gtq9ahrolz2ry2

"After crashing your plane at sea, you end up drifting to a small island, with not much to survive. You explore, and find out the island was inhabited, years ago. But why did the people leave? And why is there a fence around the white house at the top of the hill?

TRISTAM ISLAND is a text adventure made from the mold of Infocom; expect a large geography to explore, lots of prose, a rich parser, diverse puzzles, some humor and some darkness. To use Infocom's classification, I'd rate the game's difficulty as "Standard"; however, the game's design is modern and eschews all the frustrations commonly associated with 1980s text adventures. No hunger timers, no frustrating mazes, no blocking situations that force you to restart!"
[--blurb from IFDB]

# Weird City Interloper

Folder name: INTERLOP
Genre: Fantasy
Year: 2014
Release / Serial No: 1 / 140613
Author: C.E.J. Pacian
Link: https://ifdb.org/viewgame?id=wrt29d4nlm71udll

"An interactive tale of strange conspiracy.

Pull up your hood, lower your gaze and enter the city of Zendon. If you can gather enough information, you may just be able to change the course of history.

(Weird City Interloper is a shallow but broad conversation game.)"
[--blurb from IFDB]

# Technical Information

Here you can find a bit more information about Infocom, the game format they developed, how you can find more Z-code games and make them playable on the Commander X16, and what you need to write your own text adventure.

## The Zork Machine - past and present

In 1977, a few guys at Massachusetts Institute of Technology played Adventure, which is widely considered to be the first text adventure. They decided to write their own adventure game, first called Zork, then Dungeon, then Zork again. In 1979, they started a company called Infocom, to make business software. They needed a source of income as they were starting up, and they thought Zork could provide that, if they could only get it to run on the micro computers of the time. The game was about 1 MB in size, and the computers they needed to run it on typically had 32 KB of memory. Also, the game was written in Fortran, which wasn't available for micro computers. On top of all this, there were new computer models coming out all the time, and they wanted the game to run on as many different platforms as possible.

To solve this equation, they designed a virtual machine, an imaginary computer never meant to be built, but to be emulated. The machine was called the Z-Machine (Zork Machine), and it was designed only for running text adventures. They then created their own programming language called ZIL (Zork Implementation Language), heavily inspired by MDL, the language they wrote the first version of Zork in. They wrote a compiler called Zilch, which compiled ZIL programs to Z-code, programs ready to be run on the Z-machine. They then wrote a separate ZIP (Z-machine Interpreter) to emulate the Z-machine on each platform they wanted to support. The end result was that they could, after the hard work of writing all this software was done, release their text adventures for many different platforms without rewriting any of the code.

While the Z-machine was heavily optimized to make text adventures compact in size, Zork was still too big. They split up the game into three parts, added some pieces and removed others, to make three different games, each one of them playable on a micro computer with a disk drive attached. An entire game would fit on a disk, and the computer would use virtual memory, copying the parts of the game that it needed at the moment from disk to memory. In this way, games of up to 128 KB in size could be played on a computer with only 32 KB of memory. Zork I was released in 1980, and became a commercial success. Infocom kept on making text adventures for about ten years, producing some of the finest games of the eighties.

Fast forward to the nineties. Infocom had been bought by Activision and eventually shut down. Some fans gathered together over the now emerging Internet, and started figuring out just exactly how the Z-Machine worked, by reading the machine code of the interpreters

used (ZIP:s). They called themselves The Infocom Taskforce. A guy in England called Graham Nelson saw what was happening and started to write his own programming language, compiler and text adventure programming library, based on the findings of the Infocom Task Force. He called his system Inform. While he was developing it, we also wrote his own game in Inform, called Curses. When Inform hit version 5, it had matured enough for a much wider audience to use it. Graham made Inform available for free, along with Curses.

Since Curses was using the same virtual machine as Infocom had used, it could also be played with the same ZIP:s that Infocom had produced, but soon enough other people started to write new Z-machine interpreters, for modern computers. Graham also created two new versions of the Z-machine, called version 7 and 8 (Infocom created versions 1-6), which allowed for bigger games. A version 8 game can be up to 512 KB in size, which allows for truly huge text adventures. It has been estimated that Infocom's first two trilogies (Zork 1, 2, 3 + Enchanter, Sorcerer and Spellbreaker) could be combined into a single game without hitting this limit.

Inform 5 was used to produce a dozen games or so. Then came Inform 6, which has been used to write hundreds of games. After that came Inform 7, which is *very* different from the earlier versions. It has been used to create hundreds of games as well. To allow for even larger games, and to make it easier to incorporate graphics and sound into text adventures, a new virtual machine, Glulx, was designed by Andrew Plotkin. Inform 7, as well as the more recent versions of Inform 6, can produce both Z-code and Glulx games.

## Building Z-code games for play on Commander X16

There is currently only one Z-code interpreter for the Commander X16 - Ozmoo.

Ozmoo and instructions on using it can be found at https://ozmoo.online

To use Ozmoo, you go to the website, upload a Z-code file, specify your build options, and press a button. This produces a zip archive which you can then download and play on your Commander X16.

All games produced by Infocom except the four titles with graphics (Zork Zero, Arthur, Shogun and Journey) should work fine on the Commander X16.

As for Z-code games produced post-Infocom, you can generally expect all games that weren't built using Inform 7 to work well. Some lightweight Inform 7 games may also work reasonably well, but most Inform 7 games are just too slow. Inform 7 typically produces code that is very demanding for the computer, and an 8 MHz 8-bit computer isn't up to the task.

A few modern games show some Unicode characters which can't be displayed on a Commander X16. These characters will just be omitted in output when playing on a Commander X16. If you want to play a game in German, French, Spanish, Italian, Danish or Swedish, Ozmoo has you covered though, as it can use a custom font which replaces some graphic characters with the accented characters you need.

# Writing your own text adventures

You can of course write your own text adventures as well. Some popular tools include Inform 7, Twine, ChoiceScript, TADS 3 and Adrift.

If you want to produce Z-code games, and have them playable on retro computers, these are the obvious options today:

- ZIL: Use the Lisp-like language used by Infocom. The compiler and some pointers can be found at  https://foss.heptapod.net/zilf/zilf
- Dialog: A language inspired by Prolog. It's quite advanced and powerful, but the games produced are a bit too heavy to run on your typical 8-bit machine. 16-bit machines and newer machines are better suited to run these games. Find out more at https://www.linusakesson.net/dialog/
- Inform 6 with its standard library: Similar to C in syntax. Games produced are a bit too heavy for most 8-bit machines, but most of them run fine on Commander X16 and 16-bit machines. There is a (no longer maintained) site at https://www.inform-fiction.org/
- Inform 6 with the PunyInform library: With a much more lightweight library, you can produce games that run fine on all sorts of 8-bit computers for which there are Z-code interpreters (~30 different platforms). Of course, the games will also run fine on newer computers. The homepage is located at https://github.com/johanberntsson/PunyInform

I am a co-author of PunyInform and perhaps not surprisingly, I think PunyInform is the easiest option for writing Z-code games for retro computers. While the library is designed to be much smaller and faster than the standard library, it has most of the functionality of the standard library, plus some that the standard library lacks.

No matter which system you choose, or even before you choose a system, I recommend the friendly forum at https://intfiction.org/ as a place to get support, encouragement, feedback, playtesters, and all sorts of useful pointers.