

Each room contains 64 pieces of scenery that are determined using the room location and a seed value for each level.

The exit is initially closed. It opens when the player collects the key. This state is stored in a global variable and is reset at the start of a new level.

The map overview tool examines all possible locations that the player can reach. Rooms that cannot be entered are drawn using a darker palette of colours.

The room drawing and player movement routines are reused to allow the player to enter their name in the high score table without using the keyboard.

The ending screen is stored in the title screen data. It is encoded as data that would appear as red pixels, but the red palette entry is shown as black instead.

Changing something in the foundations of the code will probably break it. Sometimes, the code still works surprisingly well afterwards.

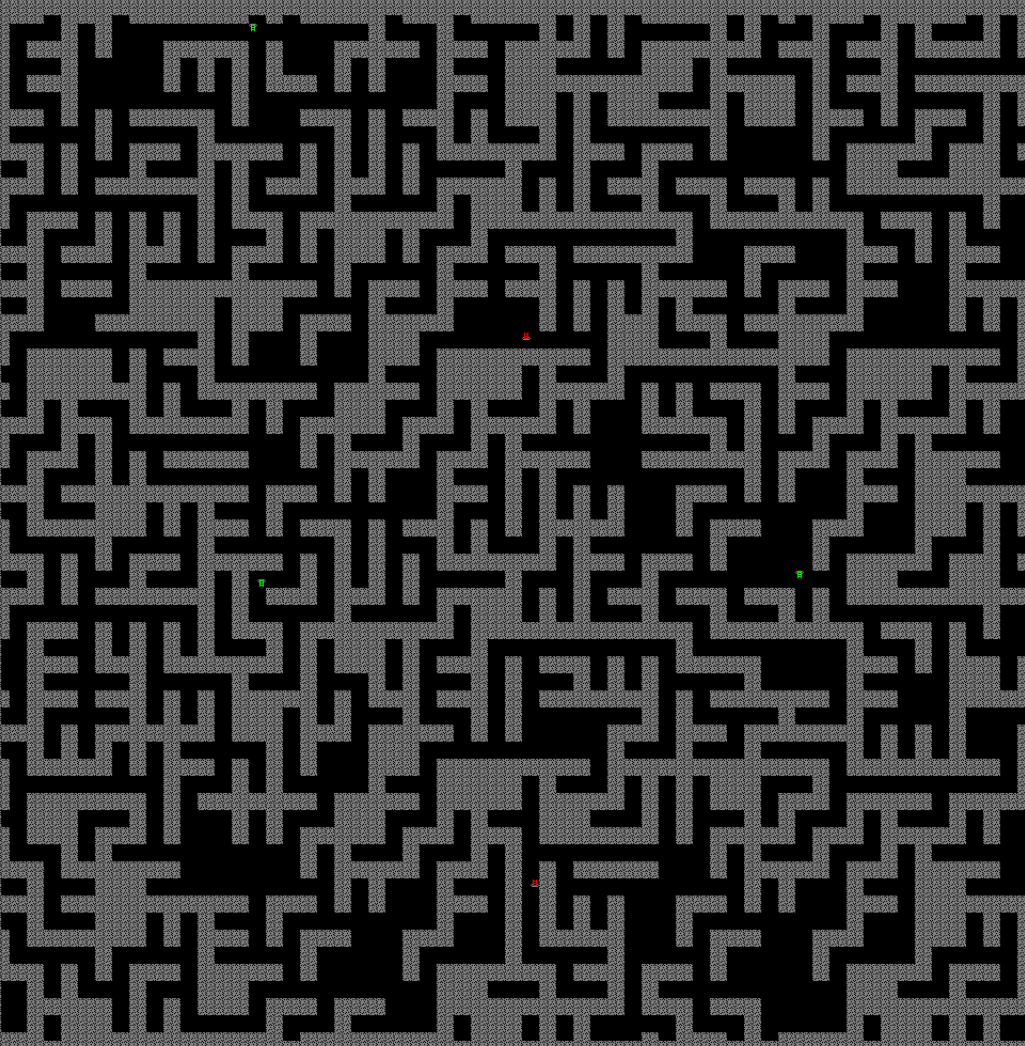
With all the hard work done, some bonus items could be produced. This decorative QR code should lead to more information about the game and how it was made.

The player's start room and the rooms for the key and door are hand-picked for each level.

The initial positions of the monsters are generated using a sequence generation routine like the one used to create the map.

Walls along the edges of rooms are added according to another algorithm. These are actually in the same places on each level.

Only four colours can be shown on screen at the same time: black, green, yellow and one other. The fourth colour is changed for each room to give the illusion that there are more colours in use at any time.



Initial experiments involved a maze generation program that creates a grid of rooms whose characteristics depend only on the position in the grid and a seed value.

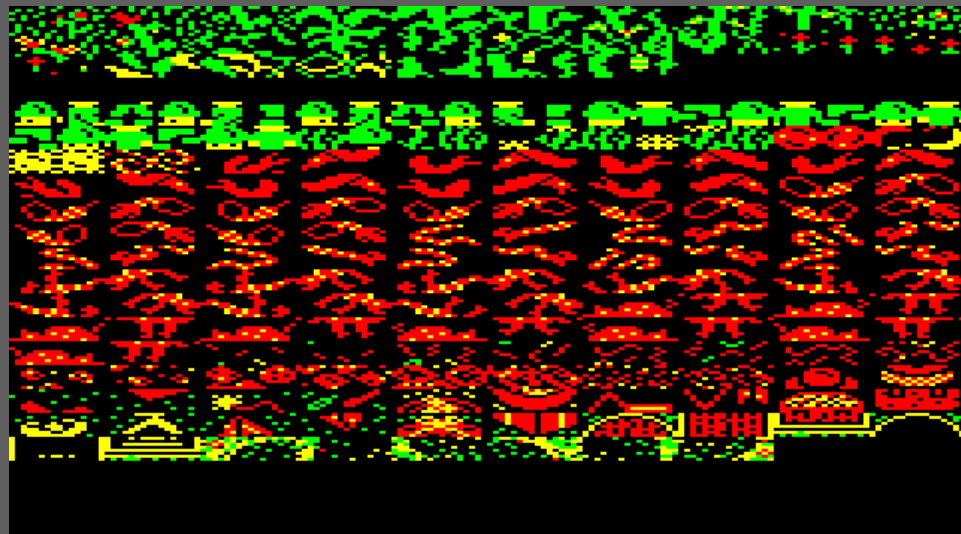
This could be used in a game!



The jungle consists of a grid of rooms containing monsters that materialise and items to collect.

The key must be collected before the player can leave the level. Items like keys are present in each room.

An array of 121 elements keeps track of which kind of item is found in each room. These are cleared when the player collects the items.



The screen mode stores 4 pixels per byte. The size of a sprite is width*height/4.

Piece of scenery: (16*24)/4=96 bytes
Player: (8*24)/4=48 bytes per frame
Monster: (16*16)/4=64 bytes per frame

All sprites together use 5600 bytes.

