

DRAG'N'DROP

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Winter 2022
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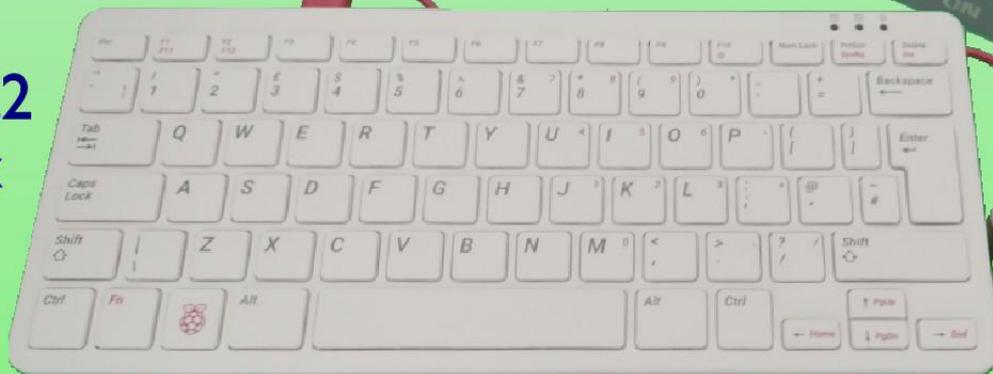
RISC OS **Pi** and all RISC OS 5 machines

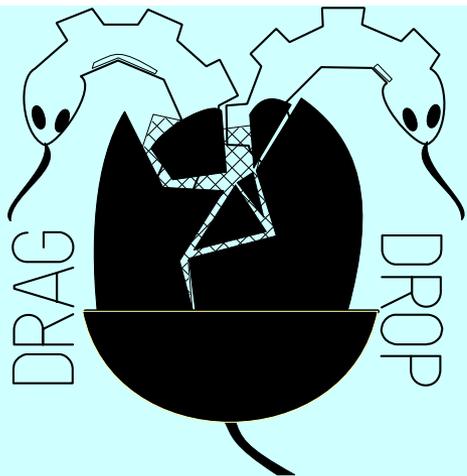
Reviews

DVD Writers



Schema2
Toolbox
WaveSynth





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Produced on RISC OS computers

This issue has been blessed with contributions from the following people:

- Norman Lawrence (Schema2)
- Jeroen Vermeulen (Coding the Classics)
- Gavin Wraith (The Uses of Literacy)
- Christopher Dewhurst (everything else)

The views expressed in this magazine are not necessarily those of the editor. Alternative views are always welcome and can be expressed by either writing an article or a short editorial.

All articles and advertisements are published in good faith. No materials in this publication are meant to be offensive or misleading. If you come across something you believe is either of the above please contact the editor using the details below.

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EDITORIAL

Welcome to the Winter 2022 edition of *Drag 'N Drop*. I'm very grateful to everyone who has submitted articles for this issue. And I am really pleased at the interest shown in the latest *Drag 'N Drop* book (Applications and Tutorials Listings) from both the established RISC OS community and newcomers. Starting in the Spring edition there'll be a column featuring people's efforts in programming their own applications.

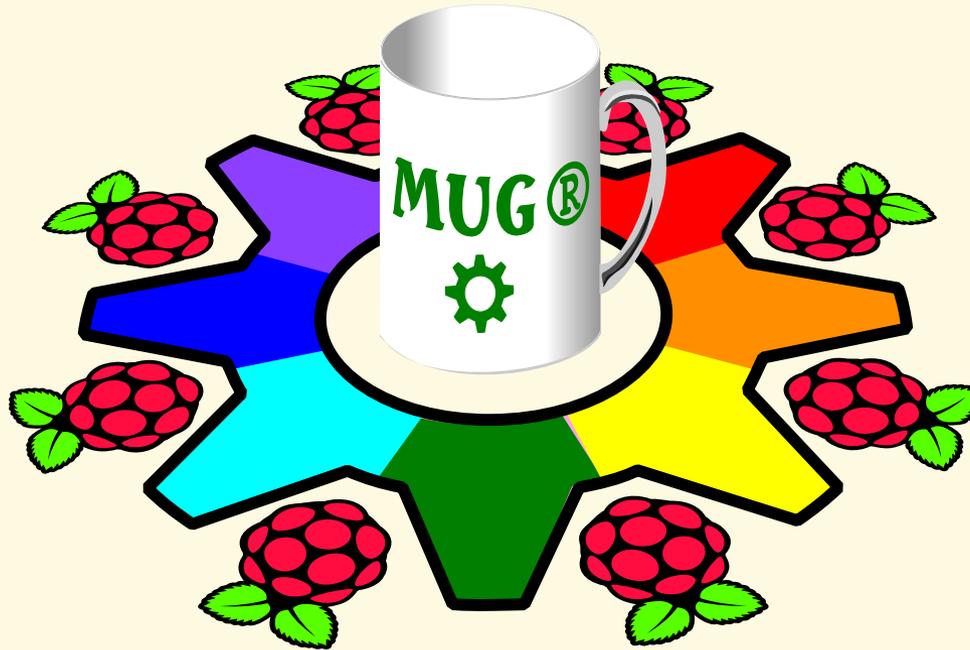
Please do show your support for RISC OS developers like Cloverleaf by purchasing their products. Only recently it hit home that, from a climate change point of view, the low power Arm machines which have run our favourite OS since the 1980s are were streets ahead of their time.

Chris.

Editorial	2
Beginner's Page	4
News and App Updates	5
Schema2.....	7
Recoding the Classics	15
DVD Drive Survey	18
Sound for Musicians	20
Toolbox with Basic	27
The Uses of Literacy	30
Reviews	32
Weblog – Template Maker	35

Midlands User Group Virtual Midsummer Show

Saturday 2nd July 11.00 – 4.00



Entirely free but for your time!

RISCOS and Raspberry Pi™

On Line via Zoom in Virtual rooms that include
Getting started with RISCOS, How to demo's , Fixit workshops,
Details on our website

<http://mug.riscos.org>

<http://raspberrypi.org>

How do I get the BBC Basic prompt?

Press F12 and type *BASIC and press Return. You can change the screen mode with MODE n where n is a number e.g. MODE 7 or MODE 0.

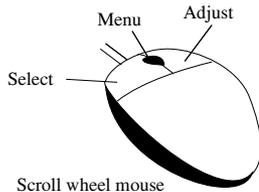


Type AUTO for automatic line numbering. Press Escape to stop and type SAVE "myprog" followed by Return to store *myprog* on hard disc. To return to the desktop type *QUIT.

Programs listed in *Drag 'N Drop* are assumed to work on all machines with RISC OS 5 e.g. Raspberry Pi, unless otherwise stated.

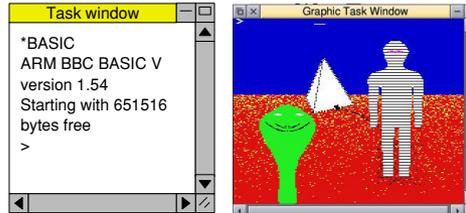
How do I open a Task window?

Menu click over the Raspberry icon on the right side of the iconbar and select click on Task window. Or press Ctrl+F12.



You may need to reserve more memory for the task. Adjust-click on

the Raspberry icon and under *Application tasks* click and drag the *Next* slide bar out to the right.



You can also type programs in a *task window*, press Ctrl and F12. You can't use the cursor editing facility or change MODE so you might like GraphTask from armclub.org.uk/free/. It allows you to type in and run Basic programs that use simple graphics (not sprites) in a window on the desktop.

To run Basic programs from the desktop, double-clicking with select on the filer icon runs it. Holding down Shift and double clicking loads it into a text editor like !Edit.



What does 'currently selected directory' mean?

Articles may tell you to set the CSD (currently selected directory). Click menu over filer window and choose *Set directory ^W*. It's where the computer stores the file when you

type SAVE "myprog".

How do I open an Application Directory?

Application directories begin with a ! called 'pling'. Hold down the shift key and double click select to open the directory.

I get a blank screen when running games listings

Check you have the Anymode module installed, download it from www.pi-star.co.uk/anymode. It goes in !Boot.Choices.Boot. Predesk.

Open the !Boot application directory, in the root directory of the SD Card, that is SDFS::RISCOSPi.\$.!Boot. Locate the *Loader* file and with Shift held down double click it to open it. Create a text file in Edit with the following line (press Return at the end):
disable_mode_changes
Save it inside Loader as CMDLINE/TXT and restart your machine.



Sounds are strange

Some listings need the free RDSP module installed. Download it from www.amcog-games.co.uk/rdsp.htm where you'll find instructions on how to install it.

News and Application Updates

New RISC OS Show Dates

Owing to overrunning refurb works at the Cedar Court hotel, the date of the Wakefield show has been moved to 21st May 2022 at the same venue.

There's no South West show this year but Midlands User Group are hosting an online show on 2nd July 2022.

Iris update

Version 1.016 of the modern browser ported to RISC OS has been released. You will be able to access the download by logging in to www.riscosdev.com/special with the credentials you were given in the OB-readme file when purchasing from !Store.

CloverLeaf

Kickstarter supporters of German developer CloverLeaf will have received download links (or physical machines and software).

An SD image of the CloverLeaf RISC OS distro can be downloaded



Being an alternative to and not a replacement for the default RISC OS filer, there's currently no option to open the file in Edit because shift click renames a file instead and you can't drag and drop between the two filing systems.

with the link supplied in the email out to funders, and burned onto physical media (using !SystemDisc on RISC OS). We'll be taking a closer look at in the next issue of the magazine.

Supporters can download the new CloverLeaf Filer (CLFiler) using the link in the Project Update #14 newsletter.

It installs itself on the left of the iconbar and when clicked a tree-style filer display is shown. It will feel familiar to new users of RISC OS, perhaps used to Windows.

Impression Guide

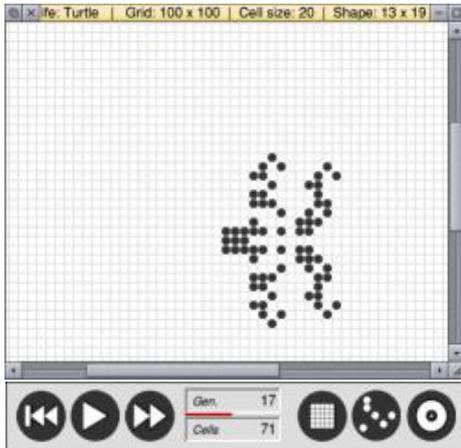
A 166-page book advertised as an installation guide plus description of third party applications supplementing Impression (eg Wordwork, TableMate) has been released by RISC OS author Christopher Hall. Buy your copy at www.lulu.com/spotlight/signalboxregister for £12.00 + P&P.

Wifi Developments

Secure Digital Input/Output (SDIO) drivers are pieces of software which

enable communication with the onboard wifi chip of modern devices like the Raspberry Pi and as a step toward proper WiFi RISC OS Developments have announced upload of initial drivers to GitLab.

Git refers to a version control system devised in 2005 which makes it easier to see who changed what, why and when. You can find out more about the RISC OS Git at gitlab.riscosopen.org/groups/RiscOS/.



Game of Life

John Conway's simulation of single-celled organisms has been doing the rounds on computers since the 1970s and this implementation of

the Game of Life by Paul Sprangers lets you drag dozens of intriguing pre-set conditions like "Space ships" or "Queen Bee Turn", place your own cells or start with a random design. Then click to move through generations a step at a time or fast forward to watch the animation. GoL can be downloaded for free from riscos.sprie.nl/sprang.riscos/Pages/GameLife.html.

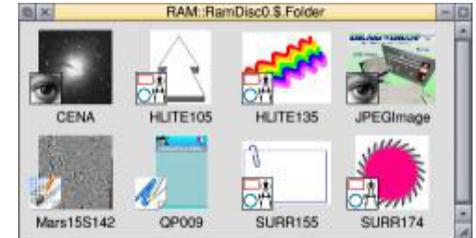
DeskWatcher

This application released by Stader Software Development allows sharing of screen contents through a network, taking control of the distant RISC OS computer if needed. Deskwatcher costs 60 Euro (£50 at the current exchange) and can be purchased at www.stader-softwareentwicklung-gmbh.com/de/.

Thump 1.56

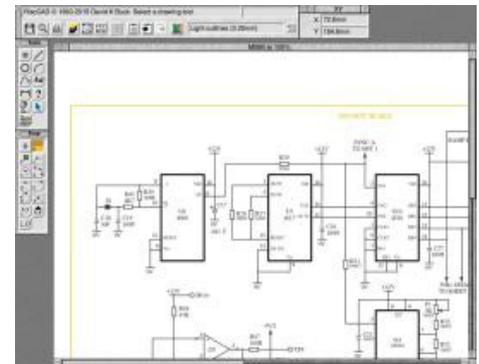
Thump is an image viewer which can produce thumbnails of a range of vector and bitmap graphics formats including Draw, Artworks 'on the fly', all you need to do is drag and drop a directory onto Thump's icon. This is handy for quickly browsing collections of clipart or your store of

photos. Download Thump for free from www.users.on.net/~belles/software/thump/.

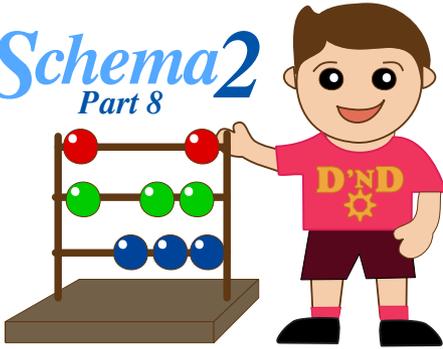


RiscCAD 10

Version 10.04 of the professional 2D Computer Aided Design (CAD) package can now be purchased from !Store for £40.00. RiscCAD allows drawing of complex engineering diagrams with pattern hatching, page rulers, automatic measuring, drawing libraries and lots more.



Schema2 Part 8



Interactive Graphics

In our final article we'll be equipping Schema2 with the capability to plot a data set against linear, parabolic or cubic curves with the objective of establishing the relationship with the independent variable.

There are alternative (and perhaps easier) ways to provide this capability but our objective is to explore the world of Schema2 interactive graphics.

Before we begin it's important to understand what is meant by *interactive graphics*. In Schema2, graphs that have been hotlinked into the spreadsheet can be reopened and decorated with text and graphic shapes such as lines, circles and squares.

The new graph can be hotlinked

back into the spreadsheet and any changes to the original data will be reflected in the embedded graph as they occur.

Our approach will be modest but establishes techniques for the more adventurous readers to explore.

The following code fragment illustrates the minimum required for an interactive graphics macro.

```
MACRO Poly_Second_Order(a(),s)
GRAPHMACRO "Poly Second Order",0x19F
  F, ""
  local w
  ON_ERROR_EXIT
  w = GSTART(500,600)
  REM code required
  =w
ENDMACRO
```

Running the code

If we compile the above macro and click the compiled code icon for Poly_Second_Order and choose the chart button from the ribbon menu, Poly Second Order will be listed among the chart options, as shown in Figure 1. If it doesn't appear in the menu selection then click again on the compiled code icon to ensure it's loaded.

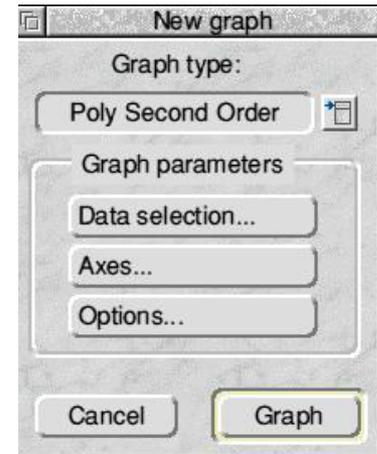


Figure 1. Menu item displayed for Poly Second Order macro.

A click on the graph button in Figure 1 would produce a graph window with the caption "Nothing Selected".

This caption is a standard heading and refers to the fact that nothing's been selected in the graph. The graph window is empty because we need to add code to produce a one so we need to take a closer look at Schema2 requirements for code used to draw a graph.

As in previous examples, $w = GSTART(500,600)$ is used to create an empty drawfile with a window 500×600 OS units big.

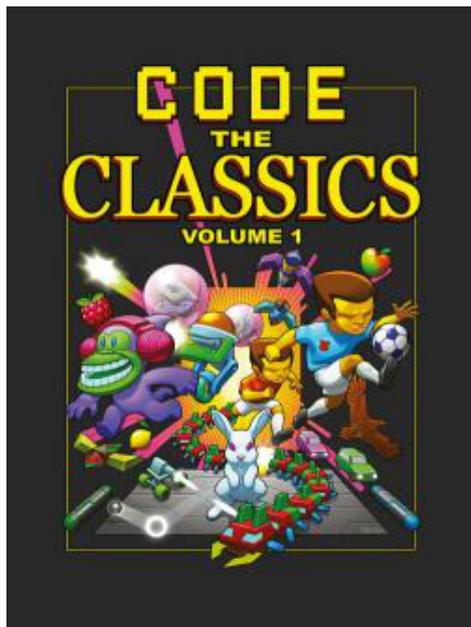
The function returns a handle (w), or graph identifier, which is used to

Recoding the Classics

In the ROUGOL meeting of January 17th 2022 I talked about converting games from the Raspberry Pi Organization's book "Code the Classics" to RISC OS.

A very nice surprise was that one of the contributors to the book – Eben Upton – was present in the meeting!

In case you missed the talk this article will give you a summary.



Code the Classics tells the stories of several seminal video games of



Infinite Bunner, left, and Cavern converted to BBC Basic and free from !Store

the 1970s and 1980s – Pong, Bubble Bobble, Frogger, Centipede and Sensible Soccer.

These five games are remade as part of the book into a modern day variants, giving code listings together with explanation, design tips and tricks as well as interviews with expert graphics and audio creators.

The book itself can be bought / downloaded from here: <https://wireframe.raspberrypi.org/books/code-the-classics1>.

Back in 2020 when I bought the book I wasn't familiar with Python and Pygame, I decided that first remaking a game from the book in

BBC Basic would be a good way to make the learning experience a really hands-on one.

The games offered a fixed scope with regards to gameplay, levels, sounds and graphics so risk of going in wrong direction was minimal. 'Mission creep' can lead to long development cycles or even unfinished games! So, only the technical challenge remained, or so I thought.

Both Infinite Bunner (Frogger) and Cavern (Bubble Bobble) were converted using BBC Basic and the AMCOG Development Kit available from <http://www.amcog.co.uk/> in late 2020 and

DVD Drive Survey

Although much software is distributed via download nowadays, DVD writers are still very popular.

Some people choose to keep their data (and audio) collections on physical discs for access during interruptions to the internet, for keeping back-up copies, or perhaps just because it's human nature to need tangible objects.

Nowadays when we say "DVD writers" we mean the majority of modern drives that can read and write CDs (about 700 MB data) and DVDs (approx 4.7 GB data).

Discs are called CD-R or DVD-R if they can only be written to or 'burned' only once. CD-RW and DVD-RW discs can be erased and burned time and again.

DVD writers seem to always come with a disc of software, unfortunately usually only for Windows machines.

Currently there's only one software package on RISC OS capable of burning DVDs and that is !CDVDBurn from Hubersn

Software, now on version 3. It can be purchased for £50.00 (as a download) from www.hubersn-software.com/cdvdburn3.html.

Hubersn give details of a limited selection of supported drives and here we survey four external USB-powered DVD drives on the market that work with !CDVDBurn on the Raspberry Pi.

Of course you may be able to save yourself some money by searching for these models on the second hand market, for example eBay or Shpock, often in nearly new condition.

Due to the power requirements you should always use a powered USB hub instead of plugging a DVD drive directly into a USB socket of your Pi. All the drives surveyed here connect via a short (less than 60cm) lead with a mini-USB at one end and either one or two USB plugs at the other.

RISC OS is generally user friendly but when it comes to less-than-perfect DVDs the system throws up distinctly unfriendly errors. "Target Status – Check Condition" generally means the DVD drive isn't ready so hang on a few seconds whilst "Target error –

Illegal Request" means, unfortunately, the DVD is faulty.

LiteOn eBAU108 Ultra Slender DVD/CD Writer

Price: £27.48 (Amazon)

When it was released, LiteOn claimed the eBAU108 to be the world's slimmest and lightest DVD/CD writer. It's 14mm thick and weighs 220g, available in black or white. It has the benefit that discs can be viewed on a television, which is to say if your TV has a USB port, discs containing JPEG pictures can be viewed on your TV by plugging the drive into the TV instead of your Pi's USB hub.



This can be useful for a just slideshow of the family snaps or for



One aspect of computing which can seem quite opaque and inaccessible is sound synthesis.

Many dry articles go into unnecessary detail about scary subjects like trigonometry, computer science and engineering.

These things do underpin what we're looking at but if you are a musician, it can be daunting. In fact you don't really need to understand them in much detail to have fun making new musical sounds on your computer.

So in this short series of articles we approach the subject from a musician's point of view.

We'll improve the bog standard 'beep' and StringLib (string library) on RISC OS to make orchestral sounds. We can play them with BBC Basic's SOUND statement and also use them in Maestro, the notation application which has come bundled

with every RISC OS.

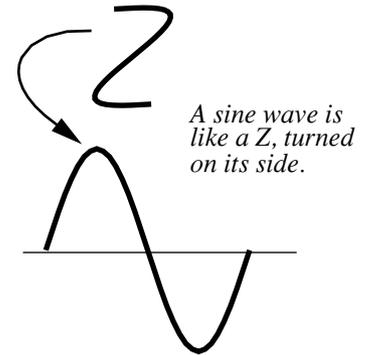
You don't even need assembly language to make new instruments – well this time anyway!

There's a small amount of theory to get through. Occasionally I'll provide some supplementary boxes on maths and computer science which explains things in depth if you'd like to know more – but it isn't essential reading.

So let's quickly cover the theory. As you may already know, sound travels in waves. Air molecules disturbed by the movement of something such as the striking of a hammer against piano strings or the reed in a clarinet reach our eardrums which vibrate and our brain registers it as sound.

Machines can simulate this air movement usually with a speaker cone. The rubbery circular thing behind the gauze of your Hi Fi or speaker attached to your computer moves it in and out to a greater or lesser extent, many thousands of times per second.

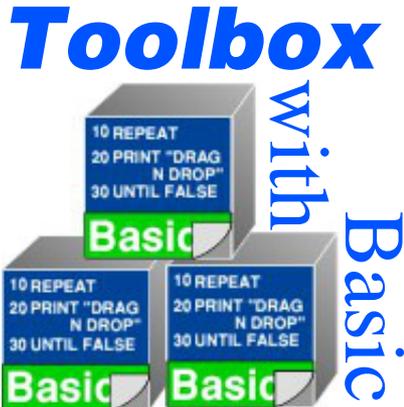
We envisage this in and out (or up and down) movement as happening around a central line, which at its simplest looks like a curvy letter Z on its side, or a *sine wave*.



Because we measure things digitally (that is in discrete numbers) in computing we say the maximum displacement of the wave about the central line is 127 units one way and up to 128 units the other way. Sines and the significance of 127 and 128 are explained in the box at the end of this article.

The 'beep' on your computer is a made up of single sine wave. The speaker cone moves out 127 units, back 127 units to the central (or zero) line, out 128 units in the other way (or minus 128 in the same direction) and back to zero. This is one cycle.

How quickly the cycle happens over time controls the *pitch* or *frequency* of the sound. Concert A plays at 440,000 cycles per second, usually abbreviated to A-440 or 440kHz. kHz stands for kilo Hertz,



In this instalment of the series we will implement a simple 'Save As' dialogue box using the Toolbox like the one shown below.



The Save As box is an integral part of the desktop experience on RISC OS. It is one aspect which makes RISC OS so easy and enjoyable to use compared to other platforms. On Windows, for example, the user has to navigate through menu structures every time he or she saves a file but on RISC OS we simply drag the

icon out to a filer window or directly into another application, or even edit the pathname before clicking save or pressing Return.

In traditional application (Wimp) programming getting this to work is very tricky, involving code to deal with dragging sprites, examining and manipulating filenames stored in memory, and passing messages back and forth to the system.

With the Toolbox, however, this is extremely easy. After setting up the block of memory and filling it with whatever data we want such as a Draw file, we get Toolbox to do the rest. In fact just one line of code is all that's needed to achieve the save to the destination chosen by the user.

As before, first set up an application directory and fill it with the necessary files which are shown in figure 1. The res and !RunImage are shown later. My application sprite is a flower using the techniques described in Fast Icons article in the Winter 2021 edition of *Drag 'N Drop*. Only because being battered by storms under skies that look like wet cement here in the UK I like to think ahead spring! Of course you can design any sprite

you fancy but it shouldn't be more than about 60×60 pixels.

```
Wimpslot -min 16k -Max 32k
Set APP$DIR <Obey$Dir>
Run <APP$DIR>.!RunImage
```

```
Iconsprites <Obey$Dir>.!Sprites
```



```
_TaskName:Save As Demo
```



Figure 1.

The four prototypes in the Res file are shown in Figure 2. If you're

The Uses of Literacy

Back in the April 2011 edition of Drag 'N Drop I presented an article called *Scripting with and without StrongED*.

This article is a belated sequel. Firstly I recommend you read the Wikipedia article on Literate Programming at https://en.wikipedia.org/wiki/Literate_programming

Literate Programming is an idea that was first promoted by Donald Knuth in 1984. Until then the status of comments in a program had been a lowly one.

Although the importance of documenting programs had always been stressed as a virtue by pundits, the balance between code and comment had been one-sided.

Comments were treated as afterthoughts; the stress was on the program. Knuth turned this upside down. Illiterate programs (the usual sort) have a special notation for comments e.g. REM in Basic, /* .. */ in C and so on.

Literate programs, by contrast, are actually just ordinary text but with a special notation for embedded code. Haskell was the first programming language to accommodate both literate and illiterate formats. I'll use the popular convention that lines starting with > followed by a space are code, and parts of a line between dollar (\$) symbols are variables.

Let's consider a business letter, which might start:

```
Dear $So_and_so$
$Standard_apology$
```

and contain somewhere else (say at the bottom or top)

```
> So_and_so = [[Lady Wainetta Thoroughgood]]
> Standard_apology = [[
> We were disappointed to hear of your complaint about
  our product,
> Our Medical Department will be in touch shortly.]]
```

The relative order of these lines is significant but where they occur in the letter isn't. They could occur together or interspersed by lines of text.

The [[..]] notation denotes text, possibly split over lines. The words on the left of the equals sign must be variable-names and they must start with a letter and contain only letters a-z, A-Z, digits 0-9 and underscores (_). To the right of the = must be valid expressions, of which [[...]] is an example.

Another example is a date in the text as \$date\$ so long as we have a defining code line

```
> date = os.getenv "Sys$Date"
```

os.getenv evaluates the system variable given by its string argument.

If the letter is loaded into StrongEd all you need to do is Shift-drag the Eval script (Listing 1) to the Apply icon to remove the code lines and evaluate the variables. You don't need to understand the script to use it.

It reads the text in the StrongED window line by line, storing the code lines in table x and the remaining text lines in table y.

The code lines in x are concatenated into a program

Extended Pixels

Product: Acorn – A World In Pixels – Extended Edition

Price: £34.99 or £5.00 (download*)

Publisher: Idesine.com

Back in the Winter 2021 edition of *Drag 'N Drop* we reviewed *Acorn – A World in Pixels*, a sumptuous, glossy hardback book bringing back memories about BBC Micro games.

The publishers have followed this up with more interviews, graphics and stories from the 8-bit games rooms. You can buy either a 113 megabyte download which is a 291-page PDF supplement to *World in Pixels* or whole new printed edition.

We bought the PDF which also contained a 19-page 'digital bonus'. I was disappointed to find !PDF on RISC OS asking for a password, I wasn't given one when I ordered. This didn't happen on my smartphone so I think there's a bug in !PDF.

The extra pages are in the same style as the original, mainly white text on black with stunning colour reproductions of game graphics. There's even digitally remastered

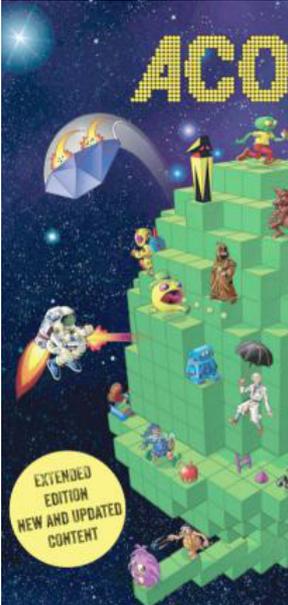
cover art from the old cassette tape inlays plus complete maps of arcade adventures. I just had to fire up some of those games I'd played 30 years ago!

There are a number of new interviews with 8-bit bedroom coders of the 80s, clearly these people were tracked down (or were they allured by Idesine?) since the original edition. Other text seems to be rehashing or supplemental to previous interviews.

The publishers have listened to feedback since there the early 90s Archimedes/RISC OS games scene has been amplified a little.

Amazingly, new BBC games are being written (though they seem to be freeware) and at the back of the book are articles on developers in today's retro movement.

● If you didn't buy the first edition of *World in Pixels* you should definitely get the extended edition. Even if you did, apart from accessibility issues, £5 for an extra 291 pages of BBC Micro nostalgia is a bargain.



ACO

Interview with Tony Oakden

This was the end of the glory years of the BBC Micro games market. Tony Oakden was nearly prolific producing games for Superior Software, including *Quest*, *Starport* and *Cyborg Warriors*. He now lives in America.

You got in the Acorn world pretty by chance?

There were no computers at my school, but I was interested in technology, so I enrolled on a night course at a local technical college to do A-level computer science. I got interested in programming pretty much straight away and spent a while doing a variety of Pac-Man in BASIC on an old IBM machine. It had a built-in graphics screen monitor that only displayed characters, so the graphics didn't look much like the Pac-Man but played OK. When I finished the course, I started looking around for other courses or jobs and I realised it was much to choose from really.

I bought my first Acorn completely by chance. I was walking past the Cera electrical store and I saw a handwritten sign in the window advertising heavily discounted Acorn Electronics complete with five games. I bought one because it was the cheapest computer I could find and I had heard they were pretty good.

I learned to program in BASIC, but I did a bit of assembler quite early on as well and I found it more than BASIC. I started programming a game on the Electron because I liked playing games and it seemed like something I could do on my own.

My original intention was to make a computer game in BASIC and send it to one of the Acorn magazines as a review. I was then convinced though that the big thing I was making was going to be too big to be type-in, and so I converted another commercial game I'd need to rewrite in assembly language. The Electron had an assembler built into the BASIC language, so it was relatively easy to start writing 6502 assembly. It took me a while to get to the point where I was able to do anything useful though.

Your first published game was Quest. Why choose that game?

As you say I loved Camelot by Superior. I'd played a few games before Camelot but the only one where I'd take any real care to play were text adventures, which I loved.

Camelot combined the exploration and puzzle-solving of an adventure game with such reactions. The thing I loved most of all was that each level was a self-contained puzzle where the player had to find a sequence of moves that would lead to success but also have to fit into a much larger puzzle.

I could see immediately that the main game loop would be structured so it was fairly quick for me to get a version working in BASIC.

Your next game was Camelot, which was more ambitious than Quest?

After Camelot I wanted to make something more ambitious with a lot more screens but it's hard to do that with about 20K of useful memory. The solution came up when I had a core game engine and I had some more ideas for the level layout and some more reactions. I got between games from an excellent idea but I was fairly excited by the idea but on a tape, it would have meant investing the tape or having two tapes.

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290

“For my development set-up for the first six months of Quest, I had an Acorn Electron, black and white TV and tape drive. Looking back, it was a crazy way to work!”

a world in pixels

IDESINE

Haunted Exposure

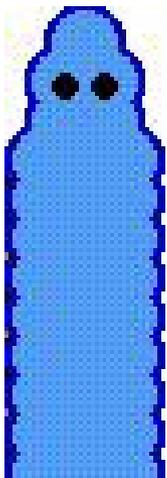
Product: Mamie Fletcher's House

Price: £4.99 from !Store

Publisher: Richard Murray

In this game you've been lured to a haunted house just to prove to your mates that you're not afraid of the dark. You're going to take pictures to prove it, on your old-fashioned camera. The sort that takes rolls of film (remember them?). Or so the game's synopsis goes.

This is a sideways scrolling ladders and platforms affair. Your character can move and jump and 'fire' a flash from your camera at the



ghosts to make them disappear.

Extra rolls of film scattered around the levels (of which there are 22 apparently) top up your ammo.

If you collide with a spider or ghost your fear factor goes up. Maybe there are other nasties but I haven't got that far into the game to find them.

Should your fear factor reach a critical level or if you fall too far through a gap you lose a life.

The graphics are rather crudely drawn but this adds to the charm and simplicity of the game. You seem to glide along rather than walk but the control keys are responsive. An enchanting guitar tune plays in the background at a pleasant volume level. Sound effects are sparse but well done.

Pressing Escape quits the game

and returns you to the title page.

You can return to the desktop with another tap of Escape. I was amused to find if you do this when you first load up the game you get a suitable message about being a coward!

Rolls of film and cups of tea (with hidden keys?) make Mamie Fletcher's a fun game although I did find the early levels a bit repetitive. It's really enjoyable, though and at the bargain price of a fiver you can't go wrong with this one. ■



Night terrors in the hotel

Product: Haunted Tower Hotel

Price: £9.99 from !Store

Publisher: AMCOG

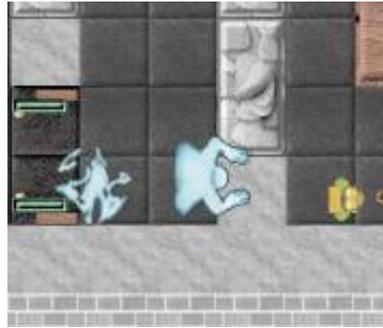
www.amcog.co.uk

The latest release from Ambiguous Contrasts is so compelling that I forgot I was supposed to be writing a review until about one o'clock AM.

In Haunted Tower Hotel you go back to retrieve some mysterious old books you bought on holiday but left behind. But when you enter the hotel it's like you've walked into a nightmare with the bedrooms now full of phantoms.



After a highly illustrated introduction outlining the game's scenario (which you can always skip) the action begins and is a four-way scrolling maze type with an



overhead view of your character.

A control panel on the right of the screen shows your health and objects you've picked up. Ghosts and ghouls (one type even homes in on you) must be avoided. You can collect keys to open doors, fruit to restore your strength and other

objects I've yet to discover the purpose of.

Coloured keys and doors feature in a hundred other games but what makes Haunted Tower different is when I jumped out of my chair hearing a creepy whispering coming out of my Raspberry Pi, it was a character in a nearby room of hotel

and I realised a multiple-choice question had appeared on the panel. It took me a few tries to work out the right answers, getting it wrong resulted in instant death and the game was over.

There is some superb atmospheric music accompanying the game, all original I gather.

● I found Haunted Tower Hotel thoroughly absorbing and it's scarily refreshing. Even if you're afraid of the dark go out (or stay in) and buy it!