

You're All Heart

Nick Dawkins' implementation of the Hearts card game is reviewed by Damian Walker.

Long-term users of Windows will be familiar with the game of Hearts, which was supplied with Windows for Work Groups 3.11, and retained in later versions of that operating system. It is a card game for four players, in which the object is to avoid collecting penalty cards by losing the tricks that contain them. Penalty cards are all the hearts, and the queen of spades. Each heart earns you a point, and the queen earns thirteen. Each round continues until the players have played all their cards, and the game continues until one player has scored 100 points. The winner of the game is the one to score the *least* number of points.

Hearts by Nick Dawkins is the only EPOC32 implementation of this game, released as Shareware. The computer plays three of the hands, with the human player taking the fourth. The unregistered version allows free play, but the human player scores 75 if he takes the queen of spades, more or less losing the game. Some may consider this cripple-ware, rather than shareware. I've been unable to verify whether this can be registered; certainly the on-line services no longer exist, but for anyone keen on registering there is a postal address (from 1997) that may or may not be current.

Graphics are limited and not very well drawn. While a card game doesn't demand a great deal of artistic skill to create, the cards and other graphics in Hearts look like they were drawn at a smaller scale and expanded. Pixels are blocky but not uniformly so. There is sound, but in the supplied

archive the volume is set very low, and is also inaudible. This can be rectified, on machines other than the Revo, by editing the supplied sound files in Record. Other than this, the user interface is generally straightforward and easy to use.

Hearts is quite fun to play, and the presence of opponents—albeit computer controlled—makes this a more enjoyable and challenging game than patience for some players. As with all card games, if you enjoy playing it once, you'll enjoy playing it again, as every deal is different. Hearts doesn't, however, have quite the attraction as Bridge or Whist as a multi-player card game, and as far as playability is concerned can perhaps be compared to the average patience game.

The game follows the hearts rules fully, except where the unregistered version differs deliberately. There are a number of options available. As well as setting up the player names, you can change from 100 the score at which the game ends, setting it at 90, 80 or any multiple of ten down to 50. Sound can be turned on or off, but the volume remains quiet as already described.

The game was written in 1997, when the Series 5 was the only machine available. Therefore, not unreasonably, it doesn't support the smaller screen sizes of the Revo and Osaris. It does run in letterbox mode, however, on the Series 7 and presumably the Geofox too, though on the Series 7 the graphics are monochrome. The game does integrate well with EPOC, however, responding to Close events from the system screen and from the backup process.

I would only recommend Hearts for someone who is really a fan of this particular game, and who really wants to play it on the move. Due to the quality of the game, those interested in card games in general might prefer to look elsewhere.



By Nick Dawkins
URL psion.cynningstan.org.uk
Licence Shareware
Compatibility S5 S5mx
Rating ★★☆☆



EPOC Entertainer was launched exactly one year ago. In the past twelve issues we've had twenty-one reviews, twelve programming tutorials and miscellaneous other articles. As a necessary side project I've developed the EPOC32 game database, and set up the web site to host it, from which anyone can download the games. On a personal level, these activities have spurred on my increasing collection of Psion machines. All of this has been tremendous fun so far, and I hope you've been enjoying the results of it too.

In the past month the magazine has moved to a new home on the web. You'll

probably know about this already if you've picked up the PDF from source. Note that the email address has also changed.

This month I have a couple more reviews and the start of a new programming tutorial about adapting your OPL game screens for various display sizes. I have plans for new series and articles of different types at a less busy time for us in the new year, but in the mean time, I hope you enjoy this issue and the rest of the delights of this festive season. Have a Merry Christmas and a Happy New Year!

entertainer@cynningstan.org.uk

The Small Screen

Damian Walker introduces a new programming series, on scaling your games up or down for various screen sizes.

Back in 1997, the only EPOC32 machine available was the Series 5 "classic", a monochrome machine with a screen resolution of 640×240. Then Geofox brought out their short-lived Geofox One, with a bigger screen of 640×320. Then there followed a range of machines with different screens: the Osaris with its diminutive 320×200 screen, the Series 7 with its relatively massive 640×480 in colour, and the little Revo at 480×160.

Designing graphical games was

relatively simple in the early days, when you knew exactly what size the screen was. But with the addition of larger and smaller screens to the range, things started to get more complicated. Some developers ignored this, and continued to develop for 640×240 only, making games unusable on the Osaris and Revo. Others were limited by what they had; a number of Revo owners had no way to test anything that used a larger display.

Many authors, though, managed to

surmount this problem. Before I became a prolific collector of Psions I used to use the “emulator” in the OPL SDK to test my software for machines I didn't have. I still do this for Geofox support. Others wrote their programs to test for the screen size and scale accordingly, trusting to luck that their programs would work on larger and smaller screens; many were completely successful, though some have been unaware of the fact.

This programming tutorial series looks into various ways of adapting a game to use many different screen sizes, using an example project. This project contains the seed of a simple game, a playing field upon which rocks are strewn at random. Revo owners will need to install Sketch and Program to follow this project, both of which are available at the *EPOC Entertainer* web site. Owners of other machines have these programs built in.

To prepare the groundwork, you'll need to create a simple bitmap to start off with, the rock. It should be of a size 20x20, and should look something like this:



The resulting drawing should be exported as an MBM file, called *Rock.mbm*. You may at this point want to create a folder for this project, say, *C:\Documents\Rockfield*, and put the MBM in there. The initial code for this project is relatively long, at least by the standards of an *EPOC Entertainer* article. So I'll present just the first half of it in this month's article:

```
CONST KFieldSize%=768

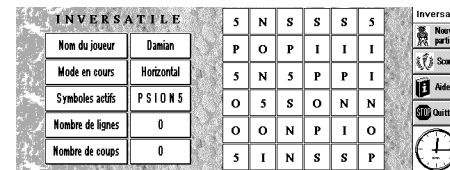
PROC Rockfield:
    GLOBAL
        ↗rocks%(KFieldSize%),
        ↗rockSize%,gridWidth%,
        ↗gridHeight%
    SETPATH CMD$(1)
    GenerateField:
    DrawField:
    DO UNTIL GET=27
ENDP

PROC GenerateField:
    LOCAL count%,position%
    WHILE count%<KFieldSize%/10
        position%=
            ↗INT(RND*KFieldSize%)+1
        IF rocks%(position%)=0
            rocks%(position%)=1
            count%=count%+1
        ENDIF
    ENDWH
ENDP
```

This code should be saved under the name *Rockfield.opl*. It won't run as is, because the procedure *DrawField:* is currently missing. I'll present this procedure next month, along with an explanation of what the program does.

All in a Row

A review by Damian Walker of Gérard Millet's Inversatile puzzle game for the Series 5.



One of the games from the prolific Gérard Millet is *Inversatile*, a puzzle game. The game is played on a grid of six rows of six columns, which is filled with six each of six different characters, for example, the letters A to F. The object is to create as many lines of six identical characters as possible, in the fewest possible moves. The moves available to the player include reversing the order of a row or column, and swapping two rows or columns.

The game offers a number of options at the start of a game. There are three different game modes available: horizontal, where you make rows of identical characters; vertical, where you make columns; or anagram mode, where you make sequences of letters. If I sound vague about that last mode, it's because the game is only available in French; as a non-French speaker I managed to pick up most of the rules from the available help, but some aspects still evade me. I'm sure the various automatic translation tools available on-line will clear up the details.

You also have a choice of characters at the start of the game. In most cases this is just a gimmick. You can choose the letters A to F, the numbers 1 to 6, or other sequences like P, S, I, O, N, 5. But there are combinations with duplicate symbols, like 3 + and 3 * characters, or two each of 5, M and X. Using these sequences with duplicate characters makes it easier to form lines.

The graphics are limited. The game could have been made a lot more attractive by using graphics rather than characters in the grid. These might have included stylised letters and numbers as bit maps, as well as more interesting symbols. Sound is very limited; one could be forgiven for thinking there was no sound, were it not for a relevant configuration item on the menu.

Some aspects of the user interface are a little awkward. The program uses standard EPOC menus and a toolbar, but the moves are made exclusively using the keyboard. It would have been difficult, but not impossible, to devise an intuitive way of using the stylus to make these moves.

Behind the spartan interface is an intriguing puzzle along the same lines as the Rubik's cube. You cannot think in terms of putting single characters into place, as every move affects an entire row or column. It takes a little while to get used to the tactics of the puzzle, but once you form your first line, the game becomes quite addictive. Each game is set up at random, so if you manage to solve the puzzle, there is still some replay value in the game.

Inversatile runs on the Series 5 and on the Revo. The game runs at a good speed on the Series 5, but uses about 400k when running. Reliability is a problem, however. There are occasional annoying screen glitches, and after a system crash the program refused to run again until the saved game and high score files were deleted.

Inversatile is recommended for those who like the aforementioned Rubik's cube and similar puzzle games. It is relatively compact, free and easy to install, coming as a SIS installation file. For enthusiasts of this type of game, *Inversatile* can provide hours of entertainment.

By	Gérard Millet
URL	psion.cynningstan.org.uk
Licence	Freeware
Compatibility	S5 S5mx
Rating	☆☆