

Mightier than the Sword

Damian Walker continues the programming tutorial on pen-based input.

In last month's tutorial I gave you the graphics that would be used to play the *Mole Hunt* game. This month I'm going to give you the program's main routine and explain its logic. You'll need to use the *Program* editor that's built into all EPOC32 machines except the Revo. Revo owners can download the editor from the *EPOC Entertainer* web page.

So, let's make a start. Create a new Program file in the Mole Hunt directory you created last month, called *MoleHunt.opl*. In it you need to place the following code:

```
INCLUDE "Date.oxh"

PROC MoleHunt:
  GLOBAL mole%,mask%,window%,
    ↻windowx%,windowy%
  LOCAL time&,hit%,
    ↻hits%,misses%
  time&=2000000
  DrawGraphics:
  DO
    hit%=MoleUp%:(time&)
    IF hit%
      hits%=hits%+1
      time&=.9*time&
    ELSE
      misses%=misses%+1
    ENDIF
  UNTIL misses%=3
  DrawScore:(hits%)
ENDP
```

This won't run yet—the procedures it calls are missing. This is how it works.

The score and number of moles missed (tracked by the variables *hits%* and *misses%*)

are initially set to 0 automatically when they are defined. The *time&* variable is then set to 2 seconds: this is the length of time you'll be given to hit the first mole when it appears.

The program then calls a *DrawGraphics:* procedure which I'll give you next month. This will draw the lawn and load the bitmaps for the mole and its mask.

Next comes the main game loop. In each repetition, a mole will appear and you'll be given time to hit it. This is controlled by the *MoleUp%* procedure, which will return a value of -1 if you hit the mole or 0 if you miss.

Once the mole has appeared and disappeared, the program will check whether you hit the mole. If you did, it will increase your score and reduce the amount of time the next mole stays on the screen by 10%. If you miss a mole, the *misses%* variable will be increased by 1.

The *UNTIL* statement at the end of the loop ensures that the game continues until you have missed three moles. Once you miss your third mole and drop out of the loop, the *DrawScore* procedure is called to show you how well you've done.

Though the program won't run, I recommend you translate it at this stage just to correct any typing errors that the OPL translator may be able to pick up.

This routine shows how simple the logic for a game can be. All the routines yet to come will be dealing with the details of graphics and pen input, but the main logic of the game is all here. It doesn't contain any frills like a high score table. It doesn't even ask you if you want to play again. But these are things that can easily be added once the main game is working.

In next month's tutorial I'll add the procedure to draw the graphics, and a few dummy procedures to allow you to run the program.

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In this issue: *Dark Horizon*



This month *EPOC Entertainer* is very late. In fact it's so late that it can barely be called the June issue. But I just made it, so here it is.

One of the reasons for the lateness is that I've been very distracted playing with some earlier Psions. Not the EPOC16 devices, but the even older Psion Organiser II 8-bit computers. The good news is that my playing has resulted in a strategy game, *Barbarians*, which is almost ready for release on those machines. It's my hope that I'll be able to port this little game to the EPOC16 and EPOC32 devices before the end of the year.

But back to the present: I've brought you an issue with the usual two reviews, one big

game and one small one. Both games have been mentioned before in *EPOC Entertainer*, but this is the first time they've been subjected to a full review. Thanks to the help of John Spillett, Richard van Stappershoef and Thomas Ullrich, I can review Eric Schrafstetter's *Blocks* this month. And I've finally got around to reviewing J S Greenwood's *Dark Horizon* game.

In addition to these reviews, the *Mightier Than the Sword* programming tutorial continues. Any feedback is appreciated. In particular this month I'd like to know if anyone really does enjoy playing matching card games... read my *Blocks* review to see why I ask.

entertainer@cynningstan.org.uk

In the spotlight: Purple Software

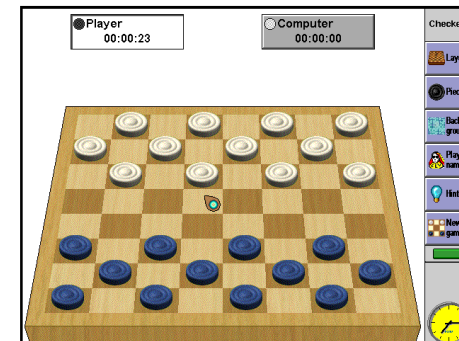
This month Damian Walker takes a look at the board, card and dice games of Purple Software.

I surprise myself by not having done a "spotlight" article on Purple Software yet. Most of the games were available until recently as freeware from ZingMagic. Purple Software had an impressive range of software based on various traditional games.

Board games were represented by Backgammon, Checkers (pictured), Chess, Chinese Chess, Enigma, Four In A Line, Go, Gomoku and Theole.

There were also a few card games too. BridgePro I hope to review some time in the near future. HomeRun is an EPOC32 version of the Patience game built into the Psion Series 3a, and Terrace is another patience game. Dice games are also represented in the game of Yacht, a Yahtzee game.

Purple software games were of very good quality, and their graphics are shown at their best by the Checkers game in the picture. I hope to review more of them in future.



Beyond the Horizon

Damian Walker reviews
J S Greenwood's *Dark Horizons* Sci-fi strategy game.

Being a fan of space conquest games, I've sometimes bemoaned the fact that these are few and far between on the EPOC32. The traditional style of space conquest game is exemplified on the PC by games like *Master of Orion*, *Star General* and *Spaceward Ho*, but there are many others. *Second Conflict*, an old DOS game that uses ASCII graphics, is playable on the XTM editor.

The closest thing on EPOC32 is *Dark Horizon*, a shareware game by J. S. Greenwood. Though it lacks a map of space to explore, it contains all the other elements of these games:

colonising new planets, gathering their resources, and building and sending out forces to attack the enemy. Those who remember the old game *Supremacy* on the PC and Amiga will find the game play—and some of the graphics—instantly recognisable.

The action takes place in a single star system, with eight planets. For game purposes, these are in a straight line. You start with a planet at one end, while the enemy starts at the other end. At first you will build agriculture stations and other industrial units to start gathering resources from your planet. Soon you will be able to buy a terraformer and cargo transporters, to colonise other planets. Eventually you will need battle cruisers to take on the enemy, and troops to invade his planets.

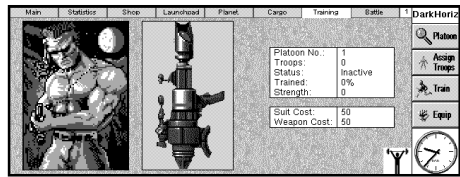
Dark Horizon is a real-time game. Time is measured in days, but you don't get to regulate their length. If the enemy is attacking one planet and you're running out of food on another, you'll have to act quickly to resolve both the issues. The game won't give you time to think.

The most impressive aspect of this game is the graphics. They are of the same quality you'd

expect from a desktop game of the early 1990s. The ships in the "Shop", and the panoramic "Planet" view are particularly good compared to what we're used to on EPOC32. Sound is more limited, though, consisting of some introductory music and short clips played at key moments.

The user interface uses standard EPOC elements like drop down menus and the Toolbar. It takes a while to learn how to perform particular tasks, like landing an agriculture station and setting it to work. You might benefit from reading through the excellent help file first. I recommend this anyway, as the story line and playing tips are useful. One very irritating aspect of the user interface is that, due to its sluggishness, screen taps are often missed altogether. You'll find yourself having to tap on things twice, sometimes even three times, to get a response. This is even the case on a Psion 5mx, not just on the slower machines.

Dark Horizon is very addictive once you



get into it. The evaluation version in particular is difficult to put down, because the save game option ("Backup") is disabled!

The game can be paused from the menu, though, if more pressing concerns interrupt your game.

The game is optimised for the screen of the Revo and for the Series 5, and also runs on the Geofox. A colour version exists for the Series 7 and netBook, too. Only the *Osaris* is unfortunately left out, which is a shame as the original *Supremacy* ran in a similar resolution. I'd recommend readers take a look at this game as a rare illustration of what EPOC32 can really do.

Author	J S Greenwood
URL	www.altervisitor.com
Licence	Shareware
Systems	Revo S5/5mx Geofox S7/netBook
Rating	★★★★

Blocks Away!

Eric Schrafstetter's *Blocks* memory game is reviewed by Damian Walker.

Games of matching cards or tiles were popular presents for children in the days before computers and games consoles became the more usual forms of entertainment. A player deals the shuffled deck face down in a grid, and then picks two cards at a time, removing them from the grid if they match. Non-matching cards are returned face-down to their positions. The aim of the game is to remove all the cards from the grid. The "strategy" is to remember as many of the non-matching cards as possible, so they can be quickly relocated when the match is found. The game is more interesting if two play, the one who finds the most matched pairs winning the game.

These games have made their way onto computer screens. They're simple to play, making them good for children. In a PDA format they can be played to while away a few minutes without having to think deeply. Computer versions often offer a score table, so the player is his own competitor from one game to the next. EPOC32 has a number of these games, one of which is *Blocks* by Eric Schrafstetter.

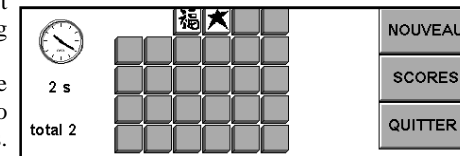
Blocks is optimised for the Revo screen. It runs in a small window at the top left of bigger screens, but it is too big to fit properly on the *Osaris* screen. The graphics of this game are workmanlike and unexciting, and there is no sound. A few of the images on the blocks, while easily distinguished, are unidentifiable. One looks like it might be a clover, but about some others I have no idea. Most are fine, though: butterflies, floppy disks, trees and stars are among those I've seen. A nice touch is that there are more images than appear in any one

game, so you might see new images popping up occasionally during your first few games.

The game has no options at all, which is disappointing. And it's surprising, given that there is some blank space on the screen. I'd have thought an option to play with more or less blocks dealt out would have been an obvious one. EPOC conventions are completely ignored, with only a non-standard toolbar giving you the ability to restart, see the high scores or quit the game. Given the limited functionality though, this isn't much of a problem.

Scoring is done by a timer, the players finishing the game in the quickest time making it to the top of the high score table. Unfortunately the timer doesn't stop if you switch to another application.

The game is varied in how it treats your machine. On the one hand, it takes very little memory and is completely reliable. But on the other hand it ignores the operating system entirely, so you'll have to make sure yourself that



it's not running if you backup your machine or install software with PsiWin.

The biggest drawback of this game is probably subjective. I simply don't find matching card games entertaining. Not even for a few minutes. I am left wondering if such games are really as popular as their widespread availability suggests. Or are they merely popular with programmers because they're easy to write? With *Cascade* being built into the Revo, games need to aim a bit higher to attract the attention of Revo users.

So for that reason, I wouldn't really recommend that you spend time on this. If you have a Revo, and you really *do* find matching card games entertaining, then your opinion might reasonably differ.

Author	Eric Schrafstetter
URL	psion.cynningstan.org.uk
Licence	Freeware
Systems	Revo
Rating	★★