WHEEL OF FORTUNE

by Kent E. Shafer

     A new, much improved "Wheel of Fortune" game for the Amiga is now available at Slipped Disk, free for the copying. Patterned after the popular TV show, Wheel of Fortune version1.31 features many userselectable options including a choice of human or talking computer players, variable skill levels for the computer players, an option to save your favorite settings, and (of course) "Vanna." The disk includes a library of about 100 puzzles which you can easily change or expand with any text editor.

     I wrote Wheel of Fortune as an exercise while learning to program in C. Since I'm a lawyer with no programming experience, this meant starting with the traditional "hello world" program and plodding on from there. As the project developed, I was introduced to the mysteries of screens, windows, graphics routines, sound, speech synthesis, multitasking, and many of the other special capabilities of our favorite computer. After hundreds of hours puzzling over all this, I am firmly convinced that while games are fun and spreadsheets are invaluable, for sheer enjoyment and personal satisfaction, nothing comes close to writing your own programs.

     The easiest way to learn a new programming technique is to study the code for a working program and then improve and modify it as needed for your project. Wheel of Fortune borrows liberally from a number of freely distributable routines.

     For example, accessing the Amiga's audio device is not well documented in any of the books I have seen. However, "AudioTools" (Fred Fish 94) has everything you need to get going. I modified it slightly to create a general purpose "sound()" function which is as easy to use as the AmigaBasic "SOUND" command. My homebrewed "sound()" function provides all the beeps, clicks, buzzes, etc. required for Wheel of Fortune.

     The talking computer players in Wheel of Fortune are thinly disguised cousins of the everpopular "SpeechToy" (AMICUS 20 also furnished with Lattice C). [Hint: if your SpeechToylike routine sometimes hangs, try calling "Delay(1)" between "SendIO(&[struct narrator_rb])" (which starts the speech) and your loop of "DoIO(&[struct mouth_rb])" calls (which read the narrator device and return the info you need to draw the mouth).

In fact, I have found that a short Delay() often cures intermittent hanging problems, which apparently result from the Amiga's multitasking nature and the resulting lack of total predictability as to the order in which things will happen.]

When I decided Wheel of Fortune needed to be able to load IFF pictures (for different backgrounds), I dug into the IFFstuff on Fred Fish Disk 64. There I found the code for "ShowILBM," a picture viewer, which I changed into another general purpose function, "show()." Show() can be easily called from any C program to read an IFF picture into a window.

Of course, a Wheel of Fortune game <u>must</u> have a Vanna. Mine is made from two machine sprites on top of each other (for 16 colors) as described in Sheldon Leemon's book, <u>Inside Amiga Graphics</u>. Although there are various public domain sprite editors around, it seemed to me that the best graphics tool of all is DPaintII and that it should be possible to convert DPaint brushes to C source code for sprites. I therefore wrote "Brush2Sprite," which does just that. (After all, making some of your own tools is a fine old tradition in many crafts.)

I've included the source code for sound(), show(), Brush2Sprite, and some other odds and ends on the Wheel of Fortune 1.31 disk for anyone who may be interested.

Wheel of Fortune isn't finished and may never be. It still has a couple of small bugs (see if you can find them); more options and better graphics and sound would be nice; Sheldon thinks there should be a puzzle editor; and maybe after that . . . .

For a good time, stop in at Slipped Disk and get a copy of Wheel of Fortune. But if you <u>really</u> want to have some fun, pick up a C compiler and a book or two while you're there. Go home, put on the coffee, and don't forget to wander out and say hello to your family every once in a while.