

This is a little program I wrote while I was taking a break from the work on the Orion Space Flight Simulator. It is a "MANDELZOOM" program inspired by the Computer Recreations column in the Scientific American of this past August. The program draws pictures of a "fractal" called the "Mandelbrot set"; you should read the article if you want to find out what the Mandelbrot Set is.

The program is fairly simple to use - it has boxes with icons in them for all the major functions.

The four arrow buttons are for scrolling. The two large buttons beneath the arrows are "zoom in" and "zoom out". (by a factor of 2 in each case) The four small buttons below the zoom buttons select the size of pixels to use - large pixels make the drawing process faster but give you less resolution. The four buttons below the resolution buttons have the numbers "100", "250", "500", and "1000" written on them - these buttons set the cutoff point at which the algorithm stops iterating $Z'=Z^2+C$ (see the article for explanation.) The five unlabeled buttons on the right choose one of five "shading tables" to use when drawing the pictures.

Note that while the program is drawing it displays a wristwatch cursor. However, you can click on another control at any time and the program will stop drawing and execute the new command.

Hope you like it...

Robert P. Munafo

P.S. Version 1.1 of Orion coming soon...