Subject: Re: determining if a point is "inside" or "outside" a shape
Posted by Andrew Kraus on Mon, 18 Oct 1999 07:00:00 GMT
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A method I have used extensively in the past is less elegant, but works like a charm. Create a pixmap of the entire window. Paint it black (ERASE), or any intensity vaue for that matter, then POLYFILL your coordinates with a different color. You can then check the color of the point you are testing. Be sure to color the coordinates (boundary) as well so you know if the point lies on the boundary itself. Pixmaps and polyfill are 2 of the faster functions in IDL, so this goes very quickly. You can see how this handles any shape, except donuts require a bit more thought.

Best of luck,

AK

dmarshall@ivory.trentu.ca wrote in message ...
> I have an interesting problem that I'm betting someone has solved already
> in some form or another.
>
> I have a set of x,y coordinates that describe a polygon, 2d in my case.
> How do I tell if another x,y point is inside the boundary of my polygon?
>
> I had an idea to take the center of my polygon and extend a line from it to
> the point and beyond, seeing if I cross the perimeter an odd number of
> times.
>
> Any other suggestions?
>
> Dave.
>
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