c:\Users\perry\Desktop\FillTest\GPUTest\main.cpp

/ / F /	ilename: main.cpp
/ / N	otes:
/ + / / /	An internal path is created from an ADFPath by the CPU. The ADFPath is transformed from font units to floating point image coordinates and curves are tesselated into line segments. The resulting internal path (which consists of line cells and corner cells) is then processed by the GPU.
/ + // // // // // // //	We exploit the depth buffer of the GPU to process line cells and corner cells as follows. A fragment shader computes the distance from a sample point to the line segment of a line cell or to the corner point of a corner cell, maps the distance to a density value, and stores the density value as the output color of the fragment. The shader can also store the distance value (scaled to [0,1]) as the output depth of the fragment. Scaling is easy: just divide the distance by the filter radius (we actually precompute 1/filterRad and pass the inverse to the shader as a constant). The end result is that the fragment will have a Z value that is in the range [0,1] and this Z value is a scaled version of the real, true distance value. Consequently, we can just turn on GPU depth testing with the standard LESS (i.e., <) compare function, and the GPU will simply keep only the fragments with the smallest Z values, which correspond exactly to the sample points with the minimum distance values. In summary, the GPU depth buffer acts as a pseudo-distance buffer, and the GPU color buffer ends up holding the density values associated with the sample points with the minimum distances.
/ / + / /	To determine interior pixels via the GPU, we use the stencil buffer to perform a fence fill algorithm on the internal path.

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