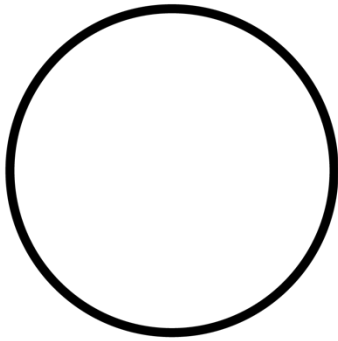Sketching Interface Prototype
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The first iteration of our sketching interface implementation will the bare bones functionality of generating mesh representations of simple geometric shapes drawn by the user.

The system is comprised of two modes; drawing mode and display mode. When in drawing mode, the user is presented with a two-dimensional canvas on which to draw. When a user performs a stroke gesture with the mouse, the stroke coordinates are stored for the mesh generation, and the lines are drawn to the canvas.

The system requires that each stroke be a closed geometric shape. To achieve this effect, the system takes the start and end points of the stroke and interpolates vertices in between to connect the end points.

Once the stroke is determined to be valid, the user can choose to either redo the stroke or switch to display mode, at which point the stroke's vertices will be used to generate a three-dimensional mesh representation of the user's geometry. From this point, the user can switch back to drawing mode and reinitialize the canvas, in order to provide a new shape.