NAME

XkbComputeShapeTop - Determines the bounding box of the top surface of a shape

SYNOPSIS

Bool XkbComputeShapeTop (**XkbShapePtr** *shape***, XkbBoundsPtr** *bounds_rtrn***);**

ARGUMENTS

shape

shape to be examined

bounds_rtrn

backfilled with the bounding box for the shape

DESCRIPTION

Xkb provides a number of convenience functions to help use a keyboard geometry. These include functions to return the bounding box of a shape's top surface and to update the bounding box of a shape row or section.

A shape is made up of a number of outlines. Each outline is a polygon made up of a number of points. The bounding box of a shape is a rectangle that contains all the outlines of that shape.

XkbComputeShapeTop returns a BoundsRec that contains two x and y coordinates. These coordinates describe the corners of a rectangle that contains the outline that describes the top surface of the shape. The top surface is defined to be the approximating outline if the *approx* field of *shape* is not NULL. If *approx* is NULL, the top surface is defined as the last outline in the *shape's* array of outlines. *XkbComputeShapeTop* returns False if *shape* is NULL or if there are no outlines for the shape; otherwise, it returns True.

STRUCTURES

```
typedef struct _XkbBounds {
        short    x1,y1;  /* upper left corner of the bounds, in mm/10 */
        short    x2,y2;  /* lower right corner of the bounds, in mm/10 */
} XkbBoundsRec, *XkbBoundsPtr;
```