**NAME**

glutDisplayFunc - sets the display callback for the current window.

**SYNTAX**

void glutDisplayFunc(void (*func)(void));

**ARGUMENTS**

*func*                    The new display callback function.

**DESCRIPTION**

glutDisplayFunc sets the display callback for the current window. When GLUT determines that the normal plane for the window needs to be redisplayed, the display callback for the window is called. Before the callback, the current window is set to the window needing to be redisplayed and (if no overlay display callback is registered) the layer in use is set to the normal plane. The display callback is called with no parameters. The entire normal plane region should be redisplayed in response to the callback (this includes ancillary buffers if your program depends on their state).

GLUT determines when the display callback should be triggered based on the window's redisplay state. The redisplay state for a window can be either set explicitly by calling glutPostRedisplay or implicitly as the result of window damage reported by the window system. Multiple posted redisplays for a window are coalesced by GLUT to minimize the number of display callbacks called.

When an overlay is established for a window, but there is no overlay display callback registered, the display callback is used for redisplaying both the overlay and normal plane (that is, it will be called if either the redisplay state or overlay redisplay state is set). In this case, the layer in use is not implicitly changed on entry to the display callback.

See glutOverlayDisplayFunc to understand how distinct callbacks for the overlay and normal plane of a window may be established.

When a window is created, no display callback exists for the window. It is the responsibility of the programmer to install a display callback for the window before the window is shown. A display callback must be registered for any window that is shown. If a window becomes displayed without a display callback being registered, a fatal error occurs. Passing NULL to glutDisplayFunc is illegal as of GLUT 3.0; there is no way to ''deregister'' a display callback (though another callback routine can always be registered).

Upon return from the display callback, the normal damaged state of the window (returned by calling glutLayerGet(GLUT_NORMAL_DAMAGED) is cleared. If there is no overlay display callback registered the overlay damaged state of the window (returned by calling glutLayerGet(GLUT_OVERLAY_DAMAGED) is also cleared.

**SEE ALSO**

glutCreateMenu, glutPostRedisplay, glutOverlayDisplayFunc

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