
Handling Input Events

You can use the following routines to register callback commands that are invoked when specified events occur:

- **glutReshapeFunc**(void (**func*)(int *w*, int *h*)) indicates what action should be taken when the window is resized.
- **glutKeyboardFunc**(void (**func*)(unsigned char *key*, int *x*, int *y*)) and **glutMouseFunc**(void (**func*)(int *button*, int *state*, int *x*, int *y*)) allow you to link a keyboard key or a mouse button with a routine that's invoked when the key or mouse button is pressed or released.
- **glutMotionFunc**(void (**func*)(int *x*, int *y*)) registers a routine to call back when the mouse is moved while a mouse button is also pressed.

Managing a Background Process

You can specify a function that's to be executed if no other events are pending—for example, when the event loop would otherwise be idle—with **glutIdleFunc**(void (**func*)(void)). This routine takes a pointer to the function as its only argument. Pass in NULL (zero) to disable the execution of the function.

Drawing Three-Dimensional Objects

GLUT includes several routines for drawing these three-dimensional objects:

| | | |
|--------------|-------------|-------------|
| cone | icosahedron | teapot |
| cube | octahedron | tetrahedron |
| dodecahedron | sphere | torus |

You can draw these objects as wireframes or as solid shaded objects with surface normals defined. For example, the routines for a cube and a sphere are as follows:

```
void glutWireCube(GLdouble size);
```

```
void glutSolidCube(GLdouble size);
```

```
void glutWireSphere(GLdouble radius, GLint slices, GLint stacks);
```

```
void glutSolidSphere(GLdouble radius, GLint slices, GLint stacks);
```