Commonly used GLUT functions

GLUT (OpenGL Utility Toolkit) is a library for creating windows, handling input, and managing OpenGL contexts. Here are some commonly used functions provided by GLUT:

1. `glutInit()`: This function initializes the GLUT library and parses command line arguments.

2. `glutCreateWindow()`: This function creates a new window with the specified title.

3. `glutDisplayFunc()`: This function registers a function to be called whenever the window needs to be redrawn.

4. `glutReshapeFunc()`: This function registers a function to be called whenever the window is resized.

5. `glutKeyboardFunc()`: This function registers a function to be called whenever a key on the keyboard is pressed.

6. `glutSpecialFunc()`: This function registers a function to be called whenever a special key, such as an arrow key, is pressed.

7. `glutIdleFunc()`: This function registers a function to be called when the application is idle.

8. `glutMainLoop()`: This function enters the main loop of the application and handles events such as user input and window resizing.

9. `glutSwapBuffers()`: This function swaps the front and back buffers of the window, which is necessary for double buffering.

10. `glutTimerFunc()`: This function registers a function to be called after a specified amount of time has elapsed.

11. `glutGet()` and `glutSet()`: These functions allow you to get and set various properties of the GLUT window, such as the size and position.

12. `glutMouseFunc()`: This function registers a function to be called whenever a mouse button is pressed or released.

13. `glutMotionFunc()` and `glutPassiveMotionFunc()`: These functions register functions to be called whenever the mouse is moved, either actively (while a button is pressed) or passively (without any buttons being pressed).

14. `glutIgnoreKeyRepeat()`: This function disables the repeating of keyboard events when a key is held down.

15. `glutPostRedisplay()`: This function marks the current window as needing to be redrawn, even if no events have occurred.

16. `glutInitDisplayMode()`: This function sets the display mode of the window, such as whether it should use single or double buffering, and whether it should use a color or monochrome display.

17. `glutBitmapCharacter()`: This function draws a single character from a built-in bitmap font.

18. `glutStrokeCharacter()`: This function draws a single character from a built-in stroke font.

19. `glutSolidSphere()`, `glutWireSphere()`, `glutSolidCube()`, and `glutWireCube()`: These functions draw primitive shapes, such as spheres and cubes, with solid or wireframe edges.

20. `glutSolidTeapot()`: This function draws a 3D model of a teapot, which is often used as a standard test object in computer graphics.

21. `glutFullScreen()`: This function toggles the window between full-screen and windowed mode.

These functions, along with the ones mentioned earlier, form the core of the GLUT library and are commonly used by developers to create simple OpenGL applications with minimal code.

Overall, GLUT provides a simple and easy-to-use API for creating OpenGL applications, and these functions are commonly used by developers to handle input, redraw the window, and perform other common tasks.