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/\*

\* GL02Primitive.cpp: Vertex, Primitive and Color

\* Draw Simple 2D colored Shapes: quad, triangle and polygon.

\*/

#include <windows.h> // for MS Windows

#include "glut.h" // GLUT, include glu.h and gl.h

/\* Initialize OpenGL Graphics \*/

void initGL() {

// Set "clearing" or background color

glClearColor(0.0f, 0.0f, 0.0f, 1.0f); // Black and opaque

}

/\* Handler for window-repaint event. Call back when the window first appears and

whenever the window needs to be re-painted. \*/

void display() {

glClear(GL\_COLOR\_BUFFER\_BIT); // Clear the color buffer with current clearing color

// Define shapes enclosed within a pair of glBegin and glEnd

glBegin(GL\_QUADS); // Each set of 4 vertices form a quad

glColor3f(0.2f, 0.2f, 0.2f); // Darkgray.... house

glVertex2f(-0.7f, -0.6f);

glVertex2f(-0.1f, -0.6f);

glVertex2f(-0.1f, 0.0f);

glVertex2f(-0.7f, 0.0f);

glColor3f(1.0f, 1.0f, 1.0f); // white....window

glVertex2f(-0.65f, -0.45f); // Define vertices in counter-clockwise (CCW) order

glVertex2f(-0.5f, -0.45f); // so that the normal (front-face) is facing you

glVertex2f(-0.5f, -0.3f);

glVertex2f(-0.65f, -0.3f);

glColor3f(1.0f, 1.0f, 1.0f); // white...door

glVertex2f(-0.4f, -0.6f);

glColor3f(1.0f, 1.0f, 1.0f); // White

glVertex2f(-0.2f, -0.6f);

glColor3f(0.2f, 0.2f, 0.2f); // Dark Gray

glVertex2f(-0.2f, -0.3f);

glColor3f(1.0f, 1.0f, 1.0f); // White

glVertex2f(-0.4f, -0.3f);

glEnd();

glBegin(GL\_TRIANGLES); // Each set of 3 vertices form a triangle

glColor3f(0.0f, 0.0f, 1.0f); // Blue

glVertex2f(-0.8f, 0.0f);

glVertex2f(0.0f, 0.0f);

glVertex2f(-0.4f, 0.4f);

glEnd();

glColor3f(1.0f, 1.0f, 0.0f); // Yellow

glBegin(GL\_POLYGON); // These vertices form a closed polygon

glBegin(GL\_POLYGON);

glVertex2f(0.5f, 0.6f);

glVertex2f(0.3f, 0.6f);

glVertex2f(0.5f, 0.5f);

glVertex2f(0.4f, 0.2f);

glVertex2f(0.6f, 0.4f);

glVertex2f(0.8f, 0.2f);

glVertex2f(0.7f, 0.5f);

glVertex2f(0.9f, 0.6f);

glVertex2f(0.7f, 0.6f);

glVertex2f(0.6f, 0.8f);

glEnd();

glFlush(); // Render now

}

/\* Main function: GLUT runs as a console application starting at main() \*/

int main(int argc, char\*\* argv) {

glutInit(&argc, argv); // Initialize GLUT

glutCreateWindow("MY HOUSE UNDER THE STARS"); // Create window with the given title

glutInitWindowSize(320, 320); // Set the window's initial width & height

glutInitWindowPosition(50, 50); // Position the window's initial top-left corner

glutDisplayFunc(display); // Register callback handler for window re-paint event

initGL(); // Our own OpenGL initialization

glutMainLoop(); // Enter the event-processing loop

return 0;

}

MY HOUSE UNDER THE STARS