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#include<Windows.h> // for MS Windows
#include<GL\glut.h> // GLUT, include glu.h and gl.h
//Note: GLglut.h path depending on the system in use
void init()
{
    // Set display window color to as glClearColor(R,G,B,Alpha)
    glClearColor(1.0, 1.0, 1.0, 1);
    // Set projection parameters.
    glMatrixMode(GL_PROJECTION);
    // Set 2D Transformation as gluOrtho2D(Min Width, Max Width, Min Height, Max
Height)
    gluOrtho2D(0.0, 800, 0.0, 600);
}
void home()
{
    glClear(GL_COLOR_BUFFER_BIT);
    // 1 main wall
    glColor3f(1.0, 1.0, 0.0); //base wall color//
    glLineWidth(20);
    glBegin(GL_POLYGON);
    glVertex2i(100, 250);
    glVertex2i(650, 250);
    glVertex2i(650, 100);
    glVertex2i(100, 100);
    glEnd();

    //2 Partition Lines(Main Wall / Sides)
    glColor3f(1.0, 0.0, 0.0);
    glLineWidth(5);
    glBegin(GL_LINES);
    glVertex2i(400, 100);
    glVertex2i(400, 400);
    glVertex2i(100, 250);
    glVertex2i(100, 100);
    glVertex2i(650, 100);
    glVertex2i(100, 100);
    glEnd();
    //3 Left Side Window
    glColor3f(0.752941, 0.752941, 0.752941);
    glBegin(GL_POLYGON);
    glVertex2i(150, 200);
    glVertex2i(250, 200);
    glVertex2i(250, 150);
    glVertex2i(150, 150);
    glEnd();
    //4 Front Door
    glColor3f(0.52, 0.37, 0.26);
    glBegin(GL_POLYGON);
    glVertex2i(300, 230);
    glVertex2i(370, 230);
    glVertex2i(370, 100);
    glVertex2i(300, 100);
    glEnd();
    //5 Front Door Lock
    glColor3f(0.0, 0.0, 0.1);
    glBegin(GL_POLYGON);
    glVertex2i(320, 160);
    glVertex2i(340, 160);
    glVertex2i(340, 150);
    glVertex2i(320, 150);
    glEnd();
    //6 Right Side Window

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glColor3f(0.752941, 0.752941, 0.752941);
glBegin(GL_POLYGON);
glVertex2i(470, 200);
glVertex2i(600, 200);
glVertex2i(600, 150);
glVertex2i(470, 150);
glEnd();
//7 Upper Wall
glColor3f(1.0, 1.0, 0.0);
glBegin(GL_POLYGON);
glVertex2i(400, 400);
glVertex2i(650, 400);
glVertex2i(650, 250);
glVertex2i(400, 250);
glEnd();
//8 Right Upper Side Window
glColor3f(0.752941, 0.752941, 0.752941);
glBegin(GL_POLYGON);
glVertex2i(470, 350);
glVertex2i(600, 350);
glVertex2i(600, 300);
glVertex2i(470, 300);
glEnd();
//9 Small Upper Door
glColor3f(0.52, 0.37, 0.26);
glBegin(GL_POLYGON);
glVertex2i(350, 350);
glVertex2i(400, 350);
glVertex2i(400, 270);
glVertex2i(350, 270);
glEnd();
//10 Left Upper Side Window
glColor3f(0.752941, 0.752941, 0.752941);
glBegin(GL_POLYGON);
glVertex2i(290, 330);
glVertex2i(330, 330);
glVertex2i(330, 300);
glVertex2i(290, 300);
glEnd();

//11 Reling line
glColor3f(0.60, 0.40, 0.12);
glLineWidth(3);
glBegin(GL_LINES);
glVertex2i(130, 270);
glVertex2i(400, 270);
glEnd();
//11.1 Reling Divider lines 1/2/3/4/5
glColor3f(0.60, 0.40, 0.12);
glLineWidth(3);
glBegin(GL_LINES);
glVertex2i(150, 270);
glVertex2i(150, 250);
glVertex2i(200, 270);
glVertex2i(200, 250);
glVertex2i(250, 270);
glVertex2i(250, 250);
glVertex2i(300, 270);
glVertex2i(300, 250);
glVertex2i(350, 270);
glVertex2i(350, 250);
glEnd();

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//12 Roof Line Borders
glColor3ub(102, 51, 0);
glLineWidth(10);
glBegin(GL_LINES);
glVertex2i(531, 571);
glVertex2i(151, 401);
glVertex2i(151, 401);
glVertex2i(101, 251);
glVertex2i(101, 251);
glVertex2i(401, 401);
glVertex2i(401, 401);
glVertex2i(651, 401);
glVertex2i(651, 401);
glVertex2i(661, 471);
glVertex2i(661, 471);
glVertex2i(531, 571);
glEnd();
//13 Back Wall Right Side
glColor3f(1.0, 1.0, 0.0);
glBegin(GL_POLYGON);
glVertex2i(650, 400);
glVertex2i(660, 470);
glVertex2i(660, 150);
glVertex2i(650, 100);
glEnd();
//14 Partition line upper and lower Floors / Partition line top to bottom (
right Back Wall )
glColor3f(1.0, 0.0, 0.0);
glLineWidth(2);
glBegin(GL_LINES);
glVertex2i(100, 250);
glVertex2i(650, 250);
glVertex2i(650, 400);
glVertex2i(650, 100);
glVertex2i(660, 470);
glVertex2i(660, 150);
glVertex2i(660, 150);
glVertex2i(650, 100);
glEnd();
//15 Roof
glColor3f(0.55, 0.09, 0.09);
glBegin(GL_POLYGON);
glVertex2i(530, 570);
glVertex2i(150, 400);
glVertex2i(100, 250);
glVertex2i(400, 400);
glVertex2i(530, 570);
glVertex2i(400, 400);
glVertex2i(530, 400);
glVertex2i(530, 570);
glVertex2i(650, 400);
glVertex2i(530, 400);
glVertex2i(530, 570);
glVertex2i(660, 470);
glVertex2i(650, 400);
glEnd();

glFlush();
// Process all OpenGL routine s as quickly as possible glFlush();
}
int main(int argc, char** argv)
{

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// Initialize GLUT
glutInit(&argc, argv);
// Set display mode
glutInitDisplayMode(GLUT_SINGLE | GLUT_RGB);
// Set top - left display window position.
glutInitWindowPosition(100, 100);
// Set display window width and height
glutInitWindowSize(800, 600);
// Create display window with the given title
glutCreateWindow("2D House in OpenGL ");
// Execute initialization procedure
init();
// Send graphics to display window
glutDisplayFunc(home);
// Display everything and wait.
glutMainLoop();
}
```