#Left triangle is blue, middle rectangle is yellow and right triangle is green#

#include <GL/glut.h>

#include <stdlib.h>

void init(void){

glClearColor(1.0, 1.0, 1.0, 0.0);

glMatrixMode(GL\_PROJECTION);

glLoadIdentity();

gluOrtho2D(0.0, 600.0, 0.0, 550.0);

}

void hexagonColor(void){

glClear(GL\_COLOR\_BUFFER\_BIT);

glColor3f(0.0, 0.0, 0.5);

int p1[] = {50,200}; int p2[] = {125,50};

int p3[] = {275,50}; int p4[] = {350,200};

int p5[] = {275,350}; int p6[] = {125,350};

glBegin(GL\_TRIANGLES);

glVertex2iv(p1);

glVertex2iv(p2);

glVertex2iv(p6);

glEnd();

glColor3f(0.0, 0.5, 0.0);

glBegin(GL\_TRIANGLES);

glVertex2iv(p3);

glVertex2iv(p5);

glVertex2iv(p4);

glEnd();

glColor3f(0.9, 0.9, 0.0);

glBegin(GL\_POLYGON);

glVertex2iv(p2);

glVertex2iv(p3);

glVertex2iv(p5);

glVertex2iv(p6);

glEnd();

glFlush();

}

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

glutInit(&argc, argv);

glutInitDisplayMode(GLUT\_SINGLE | GLUT\_RGB);

glutInitWindowPosition(100,100);

glutInitWindowSize(500,400);

glutCreateWindow("Hexagon filled with colors");

init();

glutDisplayFunc(hexagonColor);

glutMainLoop();

return EXIT\_SUCCESS;

}

